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MATERIALS MANAGEMENT REVIEW



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Let's **SAVE**
the **world**
together



5th June, 2019
WORLD ENVIRONMENT DAY

Theme - Air Pollution

DISHA 2019 - 17th-18th APRIL 2019, MUMBAI



Celebrity Speaker - Capt. Raghu Ram addressing the gathering



Chairman IIMM Mumbai - Satish Palekar addressing the gathering



Digitories after lighting the lamp



DISHA 2019 Organising Committee



Mr. Rai IIS, Dy. CEO explaining GeM Portal



National President address



Past President Bala Iyer addressing the gathering



Pradyot Sinha moderating Panel discussion

From the Desk of The National President



Dear Professionals,

Greetings from National President!!!

As of now, we have reached mid of summers and every citizen of this country is feeling scorching heat waves and significant level of air pollution in the atmosphere, methane gas in particular, which absorbs the heat rays and keeps the environment hot. 5th June is the World Environment day and each one of us should take resolution to keep our environment clean and healthy.

Speaking about IIMM, I am pleased to apprise you that, CRIMM, research wing of IIMM has signed a MoU with Acharya Bangalore Business School, Bangalore for carrying out research activities in Supply Chain Management.

IIMM NC meeting on various important education and administrative points, was concluded recently at Trivandrum. I congratulate Chairman, IIMM Trivandrum Branch and his team for successful conduct of NC Meeting.

By the time, this Journal reaches you, we would have entered new admission cycle for July 2019 session. I request all the IIMM Branches and Members to put all out efforts in enrolling maximum no. of students in PGDMM and PGDSCM&L Programs.

I look forward for your continued support.

Regards



G. K. SINGH

National President - IIMM

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From the Desk of Chief Editor



Dear Members,

One of the major global concern today is the issues related to environment which enables the life on earth. World Environment Day is a UN Environment-led global event, which emphasizes on the need and practice of preserving the environment for future generations and marks serious issues concerning importance of clean, hygienic, sustainable environment.

This year World Environment day is being hosted by China on the theme “Beat the Air Pollution”. Understanding the different types of pollution, and how it affects our health and environment will help us take steps towards improving the air around us. Often you can’t even see it, but air pollution is everywhere. We can’t stop breathing, but we can do something about the quality of our air.

The World Health Organisation (WHO) estimate that 4.2 million people die prematurely each year as a result of exposure to ambient air pollution and that 91% of the world’s population lives in places where air quality exceeds WHO guidelines. The WHO describes air pollution as “the world’s biggest environmental health risk”.

Nine out of ten people worldwide are exposed to severe levels of air pollutants that exceed safe levels set by the World Health Organization. There is little doubt - we are faced with an urgent task. According to a new UN report on air pollution in Asia and the Pacific, implementing 25 technology policies could see up to a 20 per cent reduction in carbon dioxide and a 45 per cent reduction in methane emissions globally, leading to a third of a degree Celsius saving of global warming.

Action to control Air Pollution is required on highest priority. The role of Supply Chain Manager and Materials Manager is eminent for this gigantic task. He has to play a pivotal role to control Air Pollution by reorganizing and optimising the Logistics, Transportation and infact the entire supply chain functions which has got significant impact on the emissions and the Air Pollution.

World Environment Day provides us an important opportunity to create awareness among masses about the impact of Air Pollution on productivity, health & GDP of the country and build up the public opinion and support for initiating urgent action by the Govt., NGOs and community as a whole so as to reduce the risk to public health and incoming generation.

Some of the steps initiated by the Govt. in this direction for upgradation of transport sector like E-Vehicle and to reduce dependence on conventional fuel and systematic phasing out of diesel vehicle. A lot more needs to be done in this direction so as to provide better and sustainable environment for our future generations.

A handwritten signature in black ink, appearing to be 'M.K. Bhardwaj', written in a cursive style.

(DR. M.K. BHARDWAJ)



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CHINA TO HOST WORLD ENVIRONMENT DAY 2019 ON AIR POLLUTION

The head of Chinese delegation, Zhao Yingmin, Vice Minister of Ecology and Environment, and Joyce Msuya, Acting Head of UN Environment, jointly announced that China will host the global World Environment Day celebrations on 5 June 2019 with a theme of air pollution.

Approximately 7 million people worldwide die prematurely each year from air pollution, with about 4 million of these deaths occurring in Asia-Pacific. World Environment Day 2019 will urge governments, industry, communities, and individuals to come together to explore renewable energy and green technologies, and improve air quality in cities and regions across the world.

The Government of China has committed to organizing World Environment Day celebrations across multiple cities, with Hangzhou, in the province of Zhejiang, to host the main event.

The announcement comes as environment ministers from across the globe participate in the world's highest-level environmental forum in Nairobi. Negotiations at the Fourth UN Environment Assembly 11-15 March are expected to tackle critical issues such as stopping food waste and promoting the spread of electric cars. It also follows the publication of a review report of 20 Years' of air pollution control in Beijing.

"China will be a great global host of 2019's World Environment Day celebrations," said Joyce Msuya at the announcement on Friday. "The country has demonstrated tremendous leadership in tackling air pollution domestically. It can now help spur the world to greater action. Air pollution is a global

emergency affecting everyone. China will now be leading the push and stimulating global action to save millions of lives."

China with its growing green energy sector, has emerged as a climate leader. The country owns half the world's electric vehicles and 99 percent of the world's electric buses. By hosting World Environment Day 2019, the Chinese government will be able to showcase its innovation and progress toward a cleaner environment.

According to a new UN report on air pollution in Asia and the Pacific, implementing 25 technology policies could see up to a 20 per cent reduction in carbon dioxide and a 45 per cent reduction in methane emissions globally, leading to a third of a degree Celsius saving of global warming.

World Environment Day is a UN Environment-led global event, which takes place on June 5 every year and is celebrated by thousands of communities worldwide.

Since it began in 1972, it has grown to become the single largest celebration of our environment each year.

Air Pollution facts:

- 92 per cent of people worldwide do not breathe clean air
- Air pollution costs the global economy \$5 trillion every year in welfare costs
- Ground-level ozone pollution is expected to reduce staple crop yields by 26 per cent by 2030

Source: UN Environment News & Media





INDUSTRY 4.0: BASIC UNDERSTANDING AND READINESS OF INDIA

CHIRAG KALARIA, PROCUREMENT PROFESSIONAL - AMUL INDIA

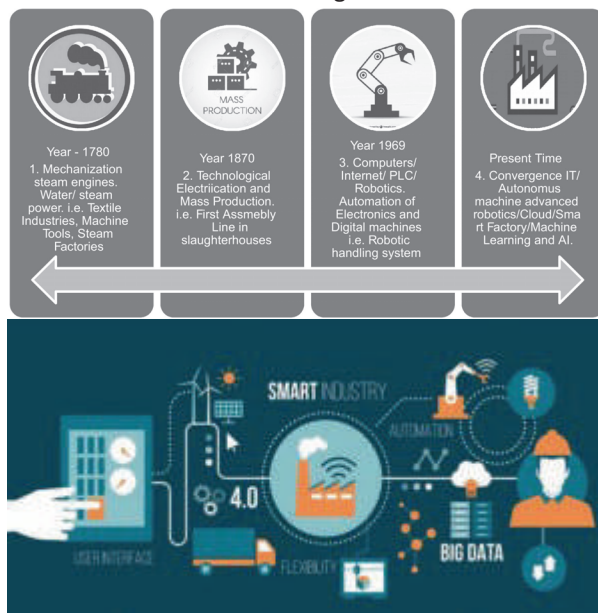
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Mankind has witnessed 3 industrial revolution between 17th to 20th century starting from first revolution in which machine operation from steam engine in power loom industry. Subsequently mankind has invented electricity which has changed the way of life and gave birth to assembly lines and mass production concept and give momentum to industrialization worldwide.

However, all operations of assembly lines and industry were still totally dependent on manpower and labours which may cause dependence and some errors as well depending on variation in skills of one labour to another. In this time, technology has increased its importance and with invention of computers and robotics, conventional manpower has been replaced with robotics. Further, synchronization of operation with computer to do repetitive task without errors and better speed. It gave birth to 3rd revolution in Industrialization.

Now, we are fortunate enough to witness the 4th phase of industrialization which is renowned as "Industry 4.0" particularly term given by Germany and same can be referred as "Internet of Things (IoT)" by many English-speaking countries including USA.

Industry 4.0 is all about optimization of smart, flexible supply chains, factories and distribution models where machines capture and convey more data via machine-to-machine communications and to human operators. Industry 4.0 aims at enabling businesses to make quicker, smarter decisions, all while minimizing costs and minimum human interventions. Timeline of industrialization evolution is given below.



Ref: What is Industry 4.0 and is India prepared for the change?

Following are the three key trends in Industry 4.0 that are changing the way of life for industrial companies and their employees today are

- 1) **Digitize:** Production processes in all sectors from high tech to industrial equipment are being transformed today through digital technologies.
- 2) **Industrialize:** Companies are already integrating these technologies to improve and evolve.
- 3) **Optimize:** State of the art manufacturers identify that enhancing the manufacturing process for even the simplest of the products presents new opportunities for growth.

India is on the verge of start its journey of becoming economic, industrial and defense superpower in next 3 decades looking to its current growth trajectory of continuous GDP growth at around 7.0% plus annually and vision of "Digital India", "Make in India" and "Smart Cities" projects. For this vision, Indian industry need to understand the importance of "Industry 4.0" and make themselves equip and gear up for 4th industrial revolution. In this dream of India, Supply Chain Industry will play crucial role. Before analyzing the "Readiness for Industry 4.0 - 6-dimensional model", we first understand 9 major technological components which foundation stones of Industry 4.0 are.

- 1) **Huge Data Quantum:** System gathers too much data makes it difficult to identify the relevant information and trends that can lead to some intelligent analysis. In this juncture, huge data analysis techniques come into picture. They make it possible to identify the performance of an individual component and its operating restrictions in order to prevent future production issues and take preventative action.
- 2) **Cloud computing:** The industry has seen a large shift in utilizing cloud solutions and the cloud is being used for applications such as remote services and performance benchmarking and its role in other business areas will continue to expand. With continuous advancements in technology, machine data and functionality will only continue to shift towards cloud solutions. The cloud allows for a much faster roll out of updates, performance models, and delivery options than standalone systems.
- 3) **Internet of things (IoT):** The IoT is a key functionality in Industry 4.0 driven solutions. IoT is a system of interrelated computing devices, mechanical and digital machines, objects and people that are provided with unique identifiers and the ability to

transfer data over a network without requiring human-to-human or human-to-computer interaction. For instance, smart watches in the market have turned our wrists into smartphone holsters by enabling text messaging, phone calls, and more. Devices such as Fitbit and Jawbone have helped revolutionize the fitness world. With the proper connections and data, the IoT can solve traffic congestion issues, reduce noise and pollution.

- 4) **Simulation:** The simulations of systems allow assessment of various scenarios. Once the scenarios are assessed, cost effective solutions can be developed, tested and implemented much quicker leading to reduced cost and time to market.
- 5) **Autonomous robots:** They are used to automate production methods across the various sectors and are powered by the concept of Internet of Things (IoT). This connects devices and computer machines to communicate with each other. Materials can be transported across the factory floor via autonomous mobile robots (AMRs), avoiding obstacles, coordinating with fleet mates, and identifying where pickups and drop offs are needed in real-time. By connecting to a central server or database, the actions of robots can be coordinated and automated to a greater extent than ever before. They can complete tasks intelligently, with minimal human input. i.e. ASRS stacker cranes, shutter cars etc.
- 6) **Augmented reality (AR)** Augmented reality grows in use by providing real-time information in an effective manner to allow humans to better integrate and interact with electronic systems. Examples can include the transmission of information on repairs for a part that can be viewed through different devices or the training of personnel using simulations and 3D views of the facility or equipment.
- 7) **Cyber security:** The security of information becomes paramount as we move away from closed systems towards increased connectivity from the IoT and cloud. Security and reliability enable the successful implementation of a truly modern and digitized production workflow, leveraging all of the benefits of a connected environment.
- 8) **System Integration:** Mostly systems are highly automated within their own operations and struggle to communicate with other systems. Standards and open architecture support the easy transfer of information both to the business and to the customer/end user. This can involve defining common languages for data exchange such as JDF for job information.
- 9) **Additive manufacturing:** This continues to become increasingly important for small-batch applications or for the production of individual parts or personalized products. This will be used either directly with the customer or by suppliers to improve designs with increased performance, flexibility, and cost effectiveness.

Readiness: Industry 4.0 : It is necessary to assess the Industry 4.0 readiness of industrial enterprises as manufacturing sector is currently facing substantial challenges. These challenges are in regard to disruptive concepts such as the IoT, cyber physical systems or cloud-based manufacturing. Subsequently, increasing complexity on all firm levels creates uncertainty about respective organizational and technological capabilities and adequate strategies to develop them. A Foundation for mechanical engineering, plant engineering, and information technology of German Engineering Federation (VDMA) has coined a six-dimensional model to assess the readiness of the enterprises, wherein VDMA experts and some industry representatives served in an advisory capacity in the development of the study.

The potential, especially for Germany is mechanical engineering industry and plant engineering sector, is indeed great, both for providers and for users of technologies across the spectrum of Industry 4.0. But there are still many unresolved questions, uncertainties, and challenges. The readiness study seeks to address this need and offer insight. It also highlights the challenging milestones that many companies must still pass on the road to Industry 4.0 readiness.

Six-Dimensional Model : As per the current understanding of Industry 4.0 the readiness of the enterprises can be assessed on the below mentioned six dimensions:

INDUSTRY 4.0 - Six-Dimensional Model

INDUSTRY 4.0 - Six-Dimensional Model	
Operational Excellence <ul style="list-style-type: none"> Enhanced efficiency through greater automation Product Customization at the cost of mass produced products. 	Enhanced Services <ul style="list-style-type: none"> Higher revenues from digitally reined products Access to new markets
Physical Elements	Virtual Elements
Smart Factory <ul style="list-style-type: none"> Digital Modeling Equipment Infrastructure Data Usage IT Systems 	Strategy and organization <ul style="list-style-type: none"> Strategy Investments Innovation Management
Smart Product <ul style="list-style-type: none"> ICT add-on functionalities Data Analytics in usage phase 	Smart Operations <ul style="list-style-type: none"> Cloud usage IT security Autonomous Processes Information sharing
Employees <ul style="list-style-type: none"> Skill acquisition Employee Skill Sets 	Data driven services <ul style="list-style-type: none"> Services Shares of revenue Shares of Data used

Based on above six dimensional models, India's rank on the Network Readiness Index in 2013 was 61. In 2016, India ranked 91 out of 139 countries. At 91, India was ahead of Pakistan (110) and Bangladesh (112), but behind Sri Lanka (63), Malaysia (31), and China (59). Singapore topped the rankings for second year in a row. The US was placed at 5th position.

India's Position:

- According to Indian Brand Equity Foundation (IBEF), the Government of India has set an ambitious target of increasing the contribution of manufacturing output to 25 percent of Gross Domestic Product (GDP) by 2025, from 16 percent currently.

- IoT, being one of the most important aspects of Industry 4.0 for India, is expected to capture close to 20 percent share in global IoT market in the next five years. According to IBEF forecast, the IoT market in India is projected to grow at a CAGR of more than 28 percent during 2015-2020.
- Government of India has taken initiatives such as Green Corridors and 'Make in India'

Today, in an Industry 4.0 factory, machines are connected as a collaborative community. Such evolution requires the utilization of advance prediction tools, so that data can be systematically processed into information to explain uncertainties, and thereby make more "informed" decisions.

Industry 4.0 is expected to be a huge boon to companies that fully understand what it means for them. Change of this nature will transcend company's boundaries where they operate. The focus in the forthcoming segment will be laid on the importance of the fourth industrial revolution on the Indian economy, the major steps taken by the OEMs, government and the customers to adapt the new trend and recent technological developments.

Is India ready to jump into Industry 4.0?

According to International Yearbook of Industrial Statistics 2016- published by United Nations Industrial Development Organization (UNIDO) with its ranking going up by three places, India has now been ranked sixth among the world's 10 largest manufacturing countries. India is no exception to this global trend and is steadily increasing its share of Global Manufacturing GDP. All leading countries are embarking on major initiatives to promote manufacturing by adopting the advancements in Internet and Information Technology arenas. German government announced "Industry 4.0" while governments in China and India have their own focused programs, "Made in China 2025" and "Make in India" respectively.

Idea is to encourage multinational, as well as national companies to manufacture their products in India. With a plethora of crippling regulations and under-developed infrastructure, the Government is focusing more on enabling policies and improving infrastructure for certain key sectors.

According to IBEF, the Government of India has set an ambitious target of increasing the contribution of manufacturing output to 25 percent of Gross Domestic Product (GDP) by 2025, from 16 percent currently. There is no escape from integrating principles of Industry 4.0 with the "Make in India" initiative, if Indian Manufacturing has to win against global competition. India has a unique opportunity to innovatively pave its own road to Smart Manufacturing. Industry 4.0 is expected to transform manufacturing in India by bringing operational efficiencies to manufacturing industries like automotive, electrical and electronics.

The major area of focus shall be the technological advancement across various industries. IIOT (Industrial Internet of Things), 3DP (3-dimensional printing) 3D sensors, social software, augmented reality, location awareness is considered to user in the next era of smart

production. These automation technologies collectively are moving the manufacturing industry towards the next phase of technological advancement.

Industry 4.0 is a holistic automation, business information, and manufacturing execution architecture to improve industry with the integration of all aspects of production and commerce across company boundaries for greater efficiency.

Internet of Things, being one of the most important aspects of Industry 4.0 for India is expected to capture close to 20 per cent share in global Internet of Things (IoT) market in the next five years. The global market is expected to touch US \$ 300 bn by 2020.

Major Indian states are taking initiatives to adapt to Industry 4.0. Andhra Pradesh has taken an initiative to capitalize on the IoT potential in the country. The state government has approved the first-of-its-kind IoT policy with an aim to turn the state into an IoT hub by 2020 and tap close to 10 per cent market share in the country.

The Indian government has created Green Energy Corridors to bring in more renewable energies, to make smart grids that will support the variable input of renewable energies and create storage. India has committed over US\$ 1 bn in this initiative and has started projects in many states, such as Andhra Pradesh, Rajasthan, Tamil Nadu, Gujarat and Himachal Pradesh.

India's first smart factory, moving from automation to autonomy, where machines speak with each other, is being set up in Bengaluru. It is making progress at the Indian Institute of Science's (IISc) Centre for Product Design and Manufacturing (CPDM) with an investment from The Boeing Company. A smart factory, armed with data exchange in manufacturing and the Internet of Things (IoT) is the future and experts are calling it revolution Industry 4.0. Reports peg the smart factory industry to touch US\$ 215 bn by 2025 and all major economies are likely to accept it.

Various Indian companies are increasing their focus and partnering with other companies for developing new IoT and M2M solutions, the Digital India initiative from the Government of India is expected to enhance the focus on IoT in tackling the domestic challenges.

India's competitive landscape : The manufacturing landscape is changing. Countries are constantly being challenged on technical capabilities and manufacturing value adds. Specifically, India faces competition from China and Europe and there is a risk of her being crowded out by the increasing technical capabilities of these regions as they are focusing on medium-value segment where India has always been prominently operating. Historically, China has focused on the low technology-low manufacturing value add space while Europe has focused on high technology – high value add segment. India's manufacturing zone of comfort has been in the middle, both on the technology and value add axis.

Now, a significant push from China to move up from the low technology – low value add zone and expand into the medium technology zone has been noted, thereby expanding the market for Chinese companies.

Concurrently, there is a push from Europe to move down from the high technology – high value add zone and expand into the medium technology zone thereby expanding the market for European companies.

India's strengths over others:

- A growing working population and an expanding middle-class are expected to remain key demand drivers.
- India has the world's 12th largest number of high-net-worth individuals, with a growth of 20.8%, the highest among the top 12 countries
- Disposable incomes in the rural Agri-sector shows increasing trends
- There is a presence of a large pool of skilled and semi-skilled workers and a strong educational system
- Favourable government policies like GST, the constitution of NEMMP (National Electric Mobility Mission Plan 2020), FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicle) are advantageous for the sector.

Conclusions : Industry 4.0 will revolutionize manufacturing around the globe, as did the first three industrial revolutions. With global supply chains and highly interactive markets, this revolution will be vastly different from the previous ones: being much faster and generating results that were heretofore unexpected. It will highlight the fact that small changes in one area of the manufacturing ecosystem will create significant ripples throughout the ecosystem, due to connectivity throughout the supply chain and the speed at which information propagates. Furthermore, Industry 4.0 will enable information to flow not only from manufacturer to product, but between producers, products and, most importantly, customers. The ability to embrace Industry 4.0 and use the opportunities that will rapidly (and, in many instances, unexpectedly) present themselves will be a key to success in the new

global market. Enabling that innovation to proceed from a concept to a mass-produced product will be critical for success; and ensuring a talent pool in the manufacturing workforce that can move those innovations rapidly forward will be equally important.

India has a number of programs to enable innovation and ensure the talent pipeline for manufacturing. Some are well established, and others are quite new and very innovative. It is clear that Industry 4.0 presents tremendous opportunities, and this fact highlights the need for a highly trained and flexible workforce and production capacity that can answer the needs of tomorrow as well as those of today.

India stands ready for that future: not only to participate, but also to lead!

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- Supply Chain Digital
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COMMODITY INDEX

Commodities	Days's Index	Prev. Index	Week Ago	Month Ago
Index	2661.2	2662.0	2648.9	2622.8
Bullion	4639.6	4652.3	4669.2	4692.7
Cement	2431.1	2431.1	2431.1	2264.0
Chemicals	2493.3	2619.5	2619.5	2619.5
Edible Oil	1557.4	1556.8	1542.4	1556.3
Foodgrains	2434.2	2424.4	2372.1	2302.3
Fuel	2611.1	2605.8	2611.1	2637.1
Indl Metals	1919.0	1919.0	1919.0	1919.0
Other Agricom	2159.2	2159.2	2155.9	2084.7
Plastics	1734.7	1734.7	1734.7	1678.6

Source: ETIG Database dated 20th May, 2019



FUTURE OF BUSINESS: CIRCULAR ECONOMY: ROLE OF SUPPLY CHAIN

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Abstract : This paper highlights that the future of business, circular economy and the role supply chain. The paper is written on conceptual basis considering the secondary data. The subject experts' views and professionals' from industry opinions were considered. Manufacturing shifts such as. Economics of production, Consumer demand, Nature of products and Economics of value chain were discussed. Emerging areas of future business were also discussed. Further, circular economy and its relevance were discussed. The restorative or regenerative by intention and design principle also discussed. The value creation process in circular economy was highlighted with examples. Finally, the role of supply chain was discussed. The Berkeley Supply Chain Management in Bear Buy process and key activities involved were discussed. The paper also talks about the four Vs in supply chain management. Industry 4.0 technologies such as IoT, AI, machine learning, deep learning, data analytics, data security and safety, virtual stores etc were highlighted. The paper has been concluded by high lighting digital technology and its relevance to supply chain management.

Key words: digital technology, circular economy, manufacturing shifts, Industry 4.0 technologies.

Introduction : Business is not going to stay same in the future. Business firms are going to face challenges in terms of technology, practices in commerce and trade and emerging new areas of business. According to Sprint Business's Ivo Rook, Senior Vice President, Internet of Things and Tom Andriola, Chief Information Officer at the University of California System the most significant trends and technologies that will be impacting businesses over the next few years, are: Internet of Things, Security and privacy, Drones and autonomous vehicles, Artificial Intelligence and software bots, Self service automation, Mobile apps for communications, collaboration and reporting, Robotics in manufacturing and service. Technology is advancing in those areas. So, the companies are more concentrating to invest in those areas for better results.

In these times, when the digital revolution is no longer novel and technology has penetrated every aspect of our lives, it goes without saying that disruption is the name of the game. And that's in virtually every industry. Technology has changed everything from taxi cabs to gambling, even dramatically altering

the way we socialize with one another. As we fast approach the third decade of the 21st century, there are four schools of technology that hold the promise to not just disrupt, but transform the way we all approach day-to-day business. They are: i. Artificial Intelligence, ii. Internet of Things (IoT), iii. Data Science and Data Analytics and iv. Block chain.

Right now, the biggest issue is data breaches," Beck (CEO and founder of Optherium, a global research and development company) said. "All companies dealing with centralized data storage, any kind of data storage, they'll adopt blockchain tech first to get away from liability of storing data in one location." "Next few years more and more companies will start implementing blockchain in their phase one," Beck said. "It has already started and it will continue going [1].

Future of Business: Manufacturing : Manufacturing is no longer simply about making physical products. Changes in consumer demand, the nature of products, the economics of production, and the economics of the supply chain have led to a fundamental shift in the way companies do business. Customers demand personalization and customization as the line between consumer and creator continues to blur. Added sensors and connectivity turn "dumb" products into "smart" ones, while products increasingly become platforms—and even move into the realm of services.

As technology continues to advance exponentially, barriers to entry, commercialization, and learning are eroding. New market entrants with access to new tools can operate at much smaller scale, enabling them to create offerings once the sole province of major incumbents. While large-scale production will always dominate some segments of the value chain, innovative manufacturing models—distributed small-scale local manufacturing, loosely coupled manufacturing ecosystems, and agile manufacturing—are arising to take advantage of these new opportunities.

Meanwhile, the boundary separating product makers from product sellers is increasingly permeable. Manufacturers are feeling the pressure—and gaining the ability—to increase both speed to market and customer engagement. And numerous factors are leading manufacturers to build to order rather than building to stock. In this environment, intermediaries that create value by holding inventory are becoming

less and less necessary. Together, these shifts have made it more difficult to create value in traditional ways. At the same time, as products become less objects of value in their own right and more the means for accessing information and experiences, creating and capturing value has moved from delivering physical objects to enabling that access. Four important shifts in manufacturing are: i. Economics of production, ii. Consumer demand, iii. Nature of products and iv. Economics of value chain [2].

Figure 1. Four shifts in manufacturing



Source: Center for the Edge

Graphic: Deloitte University Press | DUpress.com

Figure 1 Four Shifts in Manufacturing

What are the trends during the future of business?

According to research findings: i. Collaboration will help to shape firms shared future – high level of collaboration is the key. ii. Who will do the work: Robots or Humans?. Companies are going to face many challenges in terms of people performance, purpose, potential and personalized plan. One size will not fit many people. iii. What will drive changes in production? Make vs Buy decisions, economics of scale, outsourcing vs insourcing etc. iv. How must be respond as consumption habits change? Data driven decision making is more prevalent than heuristic approach.

Circular Economy : The linear economy has to change. We must transform all the elements of the source-make-delivery- return /waste system: how we manage resources, how we make and use products, and what we do with the materials afterwards. Only then can we create a thriving economy that can benefit everyone within the limits of our planet.

Circular economy it's a new way to design, make, and use things within planetary boundaries. Shifting the system involves everyone and everything: businesses, governments, and individuals; our cities, our products, and our jobs. By designing out waste and pollution, keeping products and materials in use, and regenerating natural systems we can reinvent

everything.

A circular economy is an industrial system that is restorative or regenerative by intention and design. It replaces the end-of-life concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse and return to the biosphere, and aims for the elimination of waste through the superior design of materials, products, systems and business models.

Such an economy is based on a few simple principles, as shown in Figure 2. First, at its core, a circular economy aims to design out waste. Waste does not exist: products are designed and optimized for a cycle of disassembly and reuse. These tight component and product cycles define the circular economy and set it apart from disposal and even recycling, where large amounts of embedded energy and labour are lost. Second, circularity introduces a strict differentiation between consumable and durable components of a product. Unlike today, consumables in the circular economy are largely made of biological ingredients or 'nutrients' that are at least non-toxic and possibly even beneficial, and can safely be returned to the biosphere, either directly or in a cascade of consecutive uses. Durables such as engines or computers, on the other hand, are made of technical nutrients unsuitable for the biosphere, such as metals and most plastics. These are designed from the start for reuse, and products subject to rapid technological advance are designed for upgrade. Third, the energy required to fuel this cycle should be renewable by nature, again to decrease resource dependence and increase systems resilience (to oil shocks, for example).

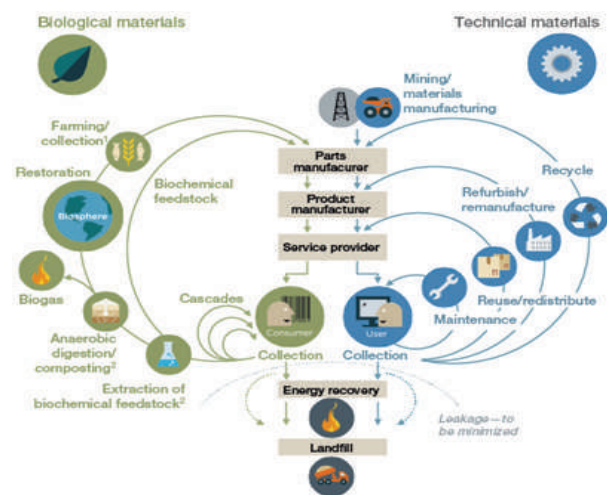


Figure 2: The circular economy—an industrial system that is restorative by design

These principles all drive four clear-cut sources of value creation that offer arbitrage opportunities, i.e. ways to take advantage of the price difference between used and virgin materials in Figure 3.

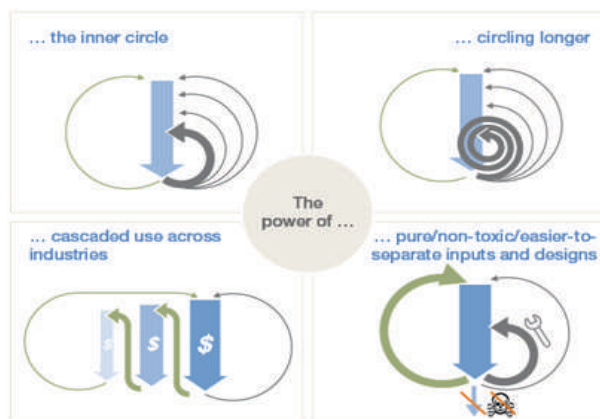


Figure 3: Sources of value creation for the circular economy

These four ways to increase material productivity are not merely one-off effects that will dent resource demand for a short period of time when these circular setups are introduced. Their lasting power lies in changing the run rate of required material intake. They can therefore add up to substantial cumulative advantages over a classical linear business-as-usual case.

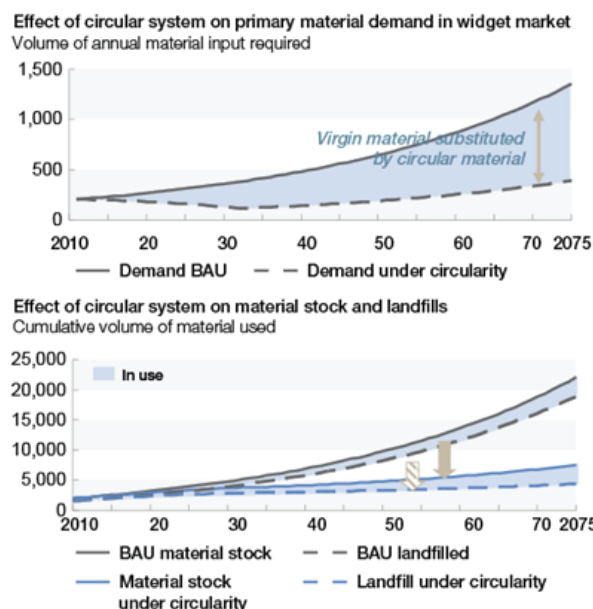


Figure 4: A circular economy would not just ‘buy time’ but also reduce the amount of material consumed to a lower set point

A number of businesses are already thriving on it. Innovative products and contracts designed for the circular economy are already available in a variety of forms—from innovative designs of daily materials and products (e.g. biodegradable food packaging and easy-to-disassemble office printers) to pay-per-use contracts (for tyres for instance) [3].

Role of Supply Chain : Manufacturers are facing intensifying challenges from both local and international competitors in the marketplace. In order to survive, manufacturers must be able to manage the dynamic market variables and satisfy their customers better than their competitors. Recent investigations have started to look in a more detailed manner at particular management techniques and practices to provide better advice on how these manufacturers should react to this challenge. One of the alternatives that seek to leverage manufacturers’ ability to compete is developing a high standards relationship starting with their customers and ending with their vendors, which defines the term supply chain management (SCM) [4].

According to SCOR model, the major process components of supply chain are: plan- source- make-deliver- return. The cost containment is possible by adopting the right strategy in sourcing. i.e., bulk buying, system contract, strategic partnership by signing long term business agreements (LTBAs) / Rate Contracts etc. By adopting lean distribution channel, further cost reduction is possible. Backward integration and Forward integration are more relevant strategies to adopt for cost reduction and uninterrupted supply of material.

Berkeley Supply Chain Management in Bear Buy process talks about various process components in it. The details are shown in Table 1 below. [5]

Table 1 Bear Buy Process Flow

Activity	Process Flow
Cart	Shopping
Requisition / Purchase Requisition	Requisition Creator, Authorization, Approval, Purchasing
Purchase Order	Supplier
Order Fulfilment	Receiving Goods / Services
Voucher Entry, Review & Approval	Invoice, 2way match (Voucher matching and PO matching, Voucher Approval)
Payment Status	Payment

(Source: Berkeley Supply Chain Management, 2018)

In future, companies are not going to compete by offering products and services, but their supply chains are going to compete. Companies are going to concentrate both on upstream and downstream supply chains. Collaboration and adoption are important, companies are already in the process of implementation. Four Vs in a supply chain are: velocity, variability, variety and value. FMCG Companies are more concentrating on distribution side, whereas

engineering companies are more concerned about supply side (sourcing) to gain competitive advantage.

Conclusion : Business firms are going to face many challenges in the coming years in terms of technology, business practices and concentrating on new emerging areas of business. Industry 4.0 technologies are also going to bring more challenges and commitments to manufacturing sector in particular. Technology challenges such as IoT, AI, Machine Learning, Deep learning, Data driven decision making etc are the focus areas for the firms. It is also seen that there is a shift manufacturing such as i. Economics of production, ii. Consumer demand, iii. Nature of products and iv. Economics of value chain. Linear economics should change with circular economy. A circular economy is an industrial system that is restorative or regenerative by intention and design. This brings lot of alternate material usage in product development and material processing. Customer expectations are increasing day by day, low price, more varieties, low supply lead time and more customization further brings challenges to business firms. In this area, supply chain is going to play a vital in gaining competitive advantage and earn business excellence. Supply chain configuration, metrics driven supply chain performance and all the business entities should be seamlessly integrated. Technology and business should be properly embedded. Supply chain role is vital for future business and to improve the economic growth and development.

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Expression of Interest (EOI)

Reliance Industries Limited (RIL), invites "Expression of Interest" from vendors desirous of registering for purchase of following items from Reliance Industries Limited (Jamnagar, Vadodara, Surat, Silvassa, Dahej, Nagothane, Patalganga & Mumbai) and also from other associated group sites.

- Used IT hard ware (Servers, Laptops, Computers etc.)
- Used Construction enabling items (Scaffolding material, welding machines etc.)
- Used commercial and passenger vehicles and all other misc. waste items.
- All type of Scrap Items (MS, SS, Alloys, Copper Cables, Aluminium cables, Furniture etc.)
- Used Packing Material (Paper, Plastic, Wood, Drums, Carboys)
- Used Plant/Machineries, Equipment, Spare Parts
- Used Catalyst (Ni,Mo,Cu,Co,ZN,W) / Used chemicals / Oil / Alumina / Battery / E-waste
- Used construction machineries (Crane / Hydra / Dumper / Miller / Paywlelder / Pipelayers etc.)

Interested parties are requested to send duly filled registration form along with supporting on or before 30.06.2019. Registration form can be collected by sending their credential by email to CentralDisposalCell.RCP@ril.com



Used IT Servers for Sale

Reliance Industries Limited invites offers from the prospective buyers for the sale of used IT servers available at Hyderabad and Mumbai on **As Is Where Is** basis.

Genuine buyers may collect tender document by sending their requirement by email to CentralDisposalCell.RCP@ril.com along with credentials papers.

Inspection Schedule: 15th MAY to 30th MAY 2019

Offer Submission Date along with EMD: 31st MAY 2019





“WAY FORWARD BEAT THE AIR POLLUTION FOR SUSTAINABLE FUTURE” “AIR POLLUTION 5TH JUNE WORLD ENVIRONMENT DAY 2019”!

RABI NARAYAN PADHI

FELLOW IN RESEARCH MATERIALS MANAGEMENT

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World Environment Day 2019 will be hosted by China, with a theme of “Air Pollution”. We can’t stop breathing, but we can do something about the quality of air that we breathe.

Approximately 7 million people worldwide die prematurely each year from air pollution, with about 4 million of these deaths occurring in **Asia-Pacific**. **World Environment Day 2019** will urge governments, industry, communities, and individuals to come together to explore renewable energy and green technologies, and improve air quality in cities and regions across the world.

Air Pollution facts:

- 92 per cent of people worldwide do not breathe clean air
- Air pollution costs the global economy \$5 trillion every year in welfare costs
- Ground-level ozone pollution is expected to reduce staple crop yields by 26 per cent by 2030

Environmental conservation became a major concern. Pollution is the major threat in most of regions in the world. India is also witnessing the environmental pollution due to rapid economic growth and insufficient implementation of environmental pollution control measures. Though the measurement of air quality is complicated, there are a few pollutants which regulators keep under supervision through regular monitoring. The most observed pollutants includes PM, NO₂, SO₂, CO₂ etc. This paper aims to provide an overview of environmental pollution especially air pollution and concentration pollutants (PMs, SO₂, NO₂ etc.).

Keywords: Environmental pollution, air pollution, trend and status.

Today, air pollution has emerged as a **global public health problem** and is identified as a major

environmental health hazard by agencies such as the World Health Organization (WHO) and governments around the world. An increase in concentration of pollutants - both gaseous and solid - is among the largest health risk in the world and according to the latest data released by WHO, indoor and outdoor air pollution were responsible for 3.7 million deaths of people aged under 60 in 2012.

Major Causes of Air Pollution in India : As of Jan 2015, **coal-powered** thermal power plants account for **60.72%** of India’s total power generation, according to data available from Central Electricity Authority (CEA). Coal plants happen to be one of the leading sources of SO₂ and NO₂.

As per Census 2011, **87%** of rural households and 26% of urban households depend on **biomass for cooking**. Burning of biomass is a leading cause of indoor air pollution and is responsible for respiratory and pulmonary health issues in approximately 400 million Indians.

Growing number of cars in Indian cities - Private & commercial vehicles account for **66.28%** of the total consumption of diesel. Low standards for vehicle emissions & fuel have resulted in increased levels of Nitrogen Oxides & Sulphur. The proportion of rural households using kerosene as a primary source of energy for lighting is **almost 30%**. Kerosene lanterns used in rural areas are a primary source of emission of black carbon soot and cause significant health impact, particularly in the case of women and children.

Impact of Air Pollution in India

1. **Air pollution is among the leading causes of death in India**
2. **Negative impact on agricultural productivity**
3. **Cost of Air pollution amounts to 3% of the GDP**

Key Initiatives to tackle the issue

Amid growing concerns pertaining to rising air pollution, government of India has taken various initiatives as well as introduced policies to address the issue. In order to prevent and control air pollution, the Parliament of India enacted the **Air (Prevention and Control of Pollution) Act, 1981** on 29th March 1981, which came into force on the 15th May of the same year.

The Central Pollution Control Board (CPCB), a statutory organization under the Ministry of Environment & Forests (MoEF) has been entrusted with the responsibility of ensuring ambient air quality and has been conferred and assigned the power and functions to achieve the stipulated objective.

Thereby, the CPCB in association with various State Pollution Control Boards (SPCBs) **monitors the ambient air quality according to the National Ambient Air Quality Standards (NAAQS) with the help of 580 manual stations established in 244 cities, towns and industrial areas.**

I) Steps to curb vehicular emission : With the increase in number of vehicles on Indian roads, air pollution resulting from vehicular emissions has become the main source of air pollution in the urban centres of the country.

1. Adopting emission norms and fuel regulation standards
2. Promotion of cleaner technologies and alternate sources of energy to run vehicles

National Mission for Electricity Mobility (NMEM) is aimed at enhancing penetration of efficient and environmentally friendly hybrid and electric vehicles; GoI earmarked 1,000 crores for the Plan in 2015 with an eye to decrease CO₂ emissions by 1.2-1.5% in 2020. Promotion of the cultivation, production and use of biofuels to substitute petrol and diesel in automobiles. Indicative target of 20% blending of bio-fuels such as bio-diesel and bio-ethanol by 2017 is proposed; Ethanol run bus launched in Nagpur under 'Green Bus' Project.

National Urban Transport Policy: Encouraging greater use of public transport in urban areas

Most Indian cities are increasingly relying on motorized personal transport; in cities like Pune & Ahmedabad, motorized personal transport (in the form of cars and two-wheelers) accounts for a 48% and 44% share in the modes of transport used, respectively.

II) Reducing the dependence on biomass burning in rural households : Biomass – fuel wood, agricultural residue and animal waste – is among the most prevalent sources of energy in India, with almost 87% of rural households and 26% of urban households dependent on biomass for cooking. These fuels are burned in outdated cook stoves as a result of which they emit harmful pollutants, contributing to indoor air pollution in rural areas.

III) Renewable Energy – the new area of focus to reduce dependency on coal : India is extremely rich in renewable energy (RE) sources, such as wind, solar and small hydro, however, green energy accounts for only **12.14%** of India's total installed power capacity.

Conclusion : Air Pollution is a complicated issue and negatively impacts the health of citizens as well as the economy of the country. Both indoor and outdoor air pollution have emerged as one of the leading causes of deaths in India and while recent reports highlight the worsening outdoor air pollution in urban centres, indoor air pollution due to biomass burning and inefficient 'chulhas' is also an area of concern. The Government of India and the state governments have recognized the adverse effect of air pollution and there is increased seriousness about addressing the air quality issue among all the stakeholders.

Furthermore, recent efforts such as the launch of National Air Quality Index point to the need for enhancing public awareness on the quality of air they are breathing. A shift towards renewable energy is part of the plan to reduce dependency on fossil fuels as well as provide clean energy to households, which are currently using kerosene for lighting purposes. It is important that a comprehensive, integrated and long-term plan of action, involving coordination between different ministries and departments, is drawn to address the issue, reduce air pollution and ensure that citizens breathe clean air. Reference: Google.co.in

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SUPPLY CHAIN MANAGEMENT IN DIGITAL TRANSFORMATION ARENA

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As we all are aware, the Supply Chain Management is under rapid digital transformation. The manual processes, which were ruling in the companies are getting faded away and giving a way to the new technologies, like cloud computing and advanced analytics. The opportunities are many and open, which may be difficult to make prioritisation.

Make good use of the technology for supply chain innovation and also, improve the business profits in future, supply chain technology has to be adapted and optimised to suit our business trends and goals in this era of digital technology.

TODAY		TOMORROW
Manual Data Gathering across Systems/Roles		Real-time Connections
Manual Collaboration		Digitize Collaboration & Scenarios
Manual "what-if" Scenario Creation		Automatic Simulation
Cadence-based Planning and Decision-making		Continuous Event-driven Planning and Decision-making

We should maximise the value of our data using advanced analytics: Many supply chain technology programs, are standardised with efficient data management, which enables the application of advanced analytics to unlock the potential values in our ERP data. Most of Business Leaders and Researchers, believe that advanced analytics would be very crucial and important to the supply chain operations in the years to come. Before any such thing takes place, it is very important that we should consider the data standardisation. This process is extremely intensive and requires the data expertise specialists. In routine day to day management, making time for this process and also, investing huge money may be difficult but, if one should foresee the future of the company, this extra effort and the finance would be worthwhile. The biggest problem any company might face in this transformation is that, " the data transparency " as the individual functionaries of the company, may not like to lose their false importance by holding the data not to disclose and as we see, such situations in any company are plenty..!! However, though it is a duplication, we may have to obtain third party services, who can offer additional expertise, staffing and technology to build the required data foundation. In addition, once the data is ready for processing analytics solutions, it will be amazing to realise the value of our own data.

The data standardisation is the first step to this journey of digital transformation, and the insights gained from advanced analytics, make the original investment fruitful. Further, one more simple step is talking to a vendor to help to take off our digital transformation in present times and beyond.

We should increase visibility across our supply chain:

One major problem is supply chain visibility in any company, though in today's times it is mandatory and becoming increasingly important in every company/business. Most of the procurement executives lack visibility of the direct suppliers. Still, the increasing concern lies in ethical sourcing of products, understanding of origin of goods will become very very important in the digital arena.

Cloud-based computerised shipping combined with tracking technologies can provide accurate, real-time visibility across the supply chain. These tools help us to keep an eye on a supply chain by consolidating all of its aspects into one place. By doing this, there will be a great reduction in lead time and the resources spent on shipping, receiving, tracking and compiling order data. Not only that the disputes between the shippers and carriers regarding the condition of the goods shipped, will be reduced in view of both of them having the real-time accessibility to the data. Very important point in terms of business is – adopting the new cloud technology earlier will help us go ahead of our competitors – isn't it...!!!?? There are many evidences, eg: where an early launch of new products outperforms the competitors, in terms of meeting the consumer needs for such products and also, making good sales.

Though, it is looking so simple, requesting visibility from suppliers in many ways of supply chain requires a major investment and bears significant cost. Here the buyer companies should come forward to request the suppliers to join new platforms and integrate their processes and data, which has to be worked in realistic way and support the suppliers, wherever possible. We have these kind of activities already in place in our pharma industry, where the Indian leading pharmaceutical companies already extended their such support to their suppliers and this has been going from many years. Not only supporting in investments, the early payment releasing system also help to improve their liquidity position. This way, the suppliers will be able to invest in their own processes and feel encouraged to do so, in line with the buyer companies. Often this kind of investment support and early payments, make the suppliers more bonding with the

buyer companies and have strong long standing strategic relationship with suppliers.



We should pay our suppliers on-time as agreed: As we all know, we have been (many of the companies) making the payments to suppliers as we wish, means a very slow payment processes. Since, most of us already into such situations, at times, we mention “x” days in the Purchase Order and release payments “xx” days/ “xxx” days, and so on. Some organisations even went a step further that, they even think, it’s not thinking, treat the suppliers as they supplied because they are waiting for the opportunity to supply the goods, irrespective of whether they get payment on-time, no time, etc. This way, we are losing many potential / long standing suppliers from our vendor base.

Many of our companies (nothing but people!!!) think that paying as per terms is not a good practice. But, paying timely is just a matter of fairness to suppliers and it is a good business practice and business ethics. Have seen in my previously working (some) companies, where there is no need of any supplier to follow up for payments and suppliers never sent any reminders to us. Happy working in such companies, where the procurement people to mind procurement as per the principles and guidelines without having the supplier payments on mind!!

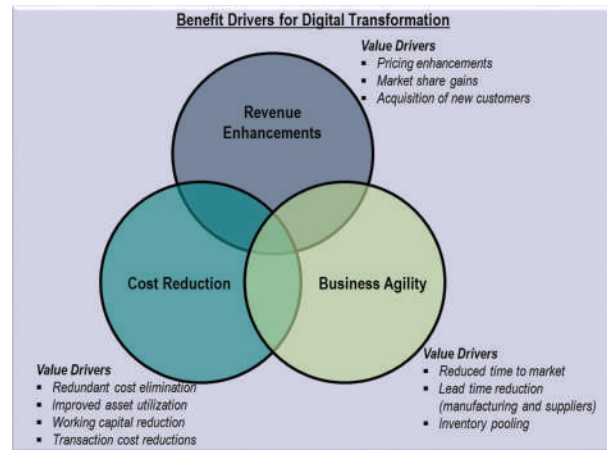
We often treat the smaller suppliers very casually and make them wait longer than the big suppliers. One should understand that the smaller suppliers are the ones, who need the money most for their working capital. But, we never bother for such payments and as per company’s policy the payments will get released, that’s it! With this attitude and the internal issues faced by buyers for release of payments, making us to lose the negotiation strength and also, the good / regular suppliers and searching for new suppliers. Please note, new suppliers will cost to the company, in terms of quality, price, uncertainty in delivery lines, etc. The companies should visualise these parameters and all the functions should work with an integrated approach to streamline the operations. Retaining the suppliers in the supply chain is very important in order to keep the business running smoothly.

Here one more threat associated with the slow payments – is spreading of bad payment matters in the industry by which, the company’s reputation will be at stake. We have many examples of these supplier payments related in our industry. Still, neither the procurement function nor the management working towards this aspect with a positive note. Some how, procurement personnel could not educate and explain the situations to the management, could be.... because of their mind set – thinking that the management may not like taking the payment requests or management does not have the time to listen to such matters, or insecurity of jobs, and many other influencing factors...

The best way to over come such situations is adopting the smart technology and with the use of ERP data, companies can enable even the smallest suppliers are paid on time, which will not only fetch the companies good savings on the procurement processes, but also make the companies run in a profitable way. This kind of processes (like shared services) are already in place in many pharma companies in India. These companies get the best from the suppliers as always.

Conclusion:

All these years, our industry is facing critical situations with the suppliers, due to the above reasons and now, it is time to change and stick to the agreed terms and pay on-time to the suppliers. Then, our supply chain would be very successful and ready to take off in the digital arena.



Ø A request to the readers of this Article: To please forward your valuable views and perceptions to the Author (to understand and update the knowledge) and Editor of MMR, to improve on the future articles.

References: Internet; Self Experience and The Senior Associate’s Review.

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ETHICS IN CONTRACT MANAGEMENT – AN OVERVIEW

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1.0 Introduction : Indian Railways alone purchases materials worth Rs.43347 crore during 2016-17 towards the requirements for operation, maintenance and production etc. (excluding cost of ballast, track related items, materials supplied by contractors for civil construction works).

Zonal Railways and production units mostly procure the materials they need, but they depend on railway board for purchase of a few items. Certain purchases are reserved for procurement through the DGS&D. Of the total purchases, 70% was done by zonal railways and production units, 28% by railway board and the balance 2% through DGS&D and other sources. Stores worth Rs 4028 crore were also purchased from the small scale and Khadi and Village Industries. Public sector undertaking contributed 28% of the supplies and 74% from other industries.

Considering that huge public money involved and large number of stakeholders' e.g. political executives, bureaucracy, public and private firms, public at large with varying and at times conflicting interests; it is worthwhile to examine ethical issues in contract management. Ethical aspects of contract management are similar in other central government departments too.

2.0 Legal Aspects of Purchase and Contract : Purchasing constitutes a legal contract between the buyer and the seller. Such contracts are governed by Indian Contract Act – IX of 1872. As per this act, for an agreement to become a legal contract there must be :-

1) Free consent of parties : Consent of a person is said to be free when it is not obtained by Coercion, Undue influence, Fraud, Misrepresentation of facts or Mistakes.

2) Between Parties competent to enter into contract :

2.1 Rights of Equal Opportunities : According to rulings of Supreme Court, in view of rights of equality before law (Art. 14) and of carrying out a profession (Art. 19 (1) g), every citizen of India has a right to get equal opportunity to bid for a government contract. Extending these rights, courts expect that decision making in Government, including in purchasing should not be discriminatory or arbitrary. This of course also follows from the canons of financial propriety.

However, it also allows a reasonable criterion for

eligibility of tenderers to be laid down.

The specifications and conditions of tender should therefore be carefully framed so as not to violate these rights while ensuring supply of material from only a right source.

2.2 Objects of Contract : Object of a contract in purchasing is receipt of material or services by the Purchaser. Consideration (payment in most cases) is what the supplier gets for fulfilling the object of the contract. A contract without any consideration is not a legal contract. Such consideration and also the object of contract to be lawful these must not be forbidden or expressly declared void by law and of such nature that if permitted, it would defeat the provision of any law is fraudulent. Any contract which involves or implies injuries to the person or property of another is immoral or opposed to public policy;

Broadly speaking, a contract is an agreement between two parties enforceable by law, which confers personal rights and imposes personal obligations, which the law protects and enforces against the parties to the agreement. Accordingly, a general law of contract has been conceptualized. It has been influenced over a period of time, by a number of factors, amongst which

- (a) The moral factor and
- (b) Economic/business factor, are of greater importance than all others.

Squandering of public money in contracts has become an all-pervasive problem in India. Hence the moral factor of a contract assumes greater significance than the business factor and due importance needs to be given on transparency, systematic methods, clarity in perception, commitment to conform and finally, emphasis on good governance.

2.2.1 The Why of It : Although law and morality are distinct, yet, the law reflects, to a considerable extent, the moral standards of the community in which it operates. Two reasons have driven ethics to the foreground in the law of contracts –

- (1) The increasing demand for transfer of property from one to another and for the performance of services by one for another, both carried out through the law of contract
- (2) The growth of the institution of credit that has led to greater reliance than before on promises and

agreements.

One of the most fundamental features of the law of contract is that the test to an agreement is objective and not subjective. The sanctity of contractual agreements is driven by a moral principle that one should not take advantage of an unfair contract, which one has persuaded another party to make under any kind of pressure. To this extent, it becomes incumbent on both parties to ensure that they contract in a most trustworthy and amicable manner so as to promote the 'free consent' concept of the Law. Such 'free consent', occurs when it is not caused by coercion, undue influence, fraud, misrepresentation or mistake.

"Ethical contracts, therefore, are the harbingers of good corporate governance and promoters of stakeholders' interest besides ensuring successful completion of projects, supplies, operations and services etc."

2.3 Government Contracts : What often distinguishes Government contracts from private contracts are the methodologies adopted in selecting the vendor, justifying the rate awarded and choosing the nature/quality of workmanship or supplies. There often tends to be a conservative approach in the Governmental procedures in all these methodologies, largely driven by a need for equality and the fact that the opportunity to serve an organization funded by the public must be open to all competent bidders to the contract provided they are able to supply / perform the contract at the least cost to the public and the requirements of the supply or the work are not extravagantly luxurious. These considerations bring out the ethical aspects of Governmental contracts sharply, in contrast to those executed for private parties where there is little or lesser emphasis on the ethical aspects of the exercise.

3.0 Ethics in Buying : The following code of ethics for buyers has been drawn by the Indian Association of Materials Management.

- o To consider first the total interest of the organization, in all transactions.
- o To be receptive to competent counsel and to be guided by such Counsel without impairing the dignity and responsibility of his office.
- o To buy without prejudice, seeking to obtain the maximum ultimate value for each rupee of expenditure.
- o To strive consistently for knowledge of the materials and process of manufacture and to establish practical methods for the conduct of office.
- o To abstain from malpractices.
- o To eschew anti-social practices.
- o To accord prompt and courteous reception, so far as conditions will permit, to all who call upon him, on a legitimate business mission.

- o To respect his obligations and to require that obligation to him and his concern are respected, consistent with good business practice.

3.1 Ethics of Tendering : Every contracting agency must have a lawfully evolved Vision and Mission statement, wherein there is an explicit commitment to uphold ethical values of the business. Then and then only, can there be a likelihood of contracts and supplies getting executed in time and as per requirements originally estimated. Going by the essential traits of an executable contract, it becomes necessary for the party inviting tenders and, finalizing them to follow certain rules, regulations, assumptions and transparency in evaluation and awarding methodologies. These come into sharp focus when any vendor is denied an opportunity to quote for a work being executed and funded through funds raised through public taxation.

These rules and regulations must generally be evolved in a transparent manner, must be tested in law, executable in action and logical in content. They must be evenly biased towards both parties in the event of a need for interpretation and must also be free from ambiguity. Such being the case, tendering as a form of contract enabling mechanism, has all the characteristics of an ethical exercise which not only ensures right quality and quantity at the right price but also enable selection of the right vendor. Contract management becomes less complex and more goals oriented if the relationship between both parties are based on ethical principles.

4.0 Unethical Practices in Contract Management

4.1 Vendor Driven Contracts : Squandering of public money in contracts is not normally difficult to identify because, when either the rates are very high or the quality of work is poor, one is able to easily conclude that there is wastage of valuable taxpayers' money. What about works/supplies, which are not required at all in the first place? There is a carefully nurtured nexus between the supplier and a certain category of the buyer (more pronounced in the Government organization) which thrives on the projection of a false requirement of whatever supplies of material or type of work, which the vendor wishes to execute / supply (for reasons ranging from outdated models/versions, other cancelled orders, rejected stocks, or simply items of works / supplies where margins are relatively higher than other items).

A slightly varied version of this sort of unnecessary procurement or procurement in excess of requirement, driven by the vendor, is the ploy to indent and procure material of a specification which is much higher or superior to that actually required, merely because the margins in such items are higher.

4.2 Estimations : Very often, pressurized by the urgency to float tenders, the estimation wing of the buyer, finds if convenient to include clauses like "actual design and execution standards will be finalized as approved by the engineer at site, whose decision shall be final". This is no doubt, a careful strategy to save time but what is

actually happening is that the ambiguity could cost the seller a fortune in reality, later on. He is however, helpless and plays along in order to get the order, thus promoting the indecisiveness, lethargy or even the mischievous intent of the buyer who has legally safeguarded his interests through a clause, which supposedly has the mutual consent of both parties - a legally acceptable stand but one which smacks of unethical standards.

4.3 Tender Opening : Elaborate procedures exist for revealing to one and all, the comparative quotes of all bidders - usually, this is done in the presence of representatives of all bidders. What goes unnoticed is the fact that while all quoted rates is read out; special terms or counter offers are not - items, which have financial implications.

It is also necessary that when bidders try to coerce or prevent other competitors from bidding, arrangements are made to enable fair and open competition and participation through different strategies including making available the tender boxes at different locations / cities which are safely guarded and the much more recently introduced e-tendering system. Such measures instill all round confidence and enhance the ethics of the contracting efforts.

4.4 Evaluations : In many organizations, evaluation of offers is done by a team of officials who compose a tender committee and whose main role is to -evaluate the offers, recommend a suitable vendor and justify the rates at which the recommendation is being made including suggestion whether there is a need for negotiations in the event of the rates being higher.

The committee relies largely on a tender evaluation brief prepared with background information of the tender. The ethical issues in the briefing note centre around the need to be totally unbiased in the presentation of the details relating to the tenderer and the past rates. Ethics demand that a dispassionate view be taken both at the time of collecting data as well as analyzing it for making recommendations. Yet another ethical irregularity is committed when opportunity is denied to new vendors on grounds of inexperience or to existing working contractors on grounds of them being already overloaded

4.5 Unworkable / Low Rates : When quoted rates are far lower than estimated, there is hardly any attempt to ascertain from the vendors as to why they do so. Ethically and more so from the financial view point, it is necessary that the buyer benefits from the assessment of a seller quoting lower before condemning the low rate as unworkable. Denial of competition by this costly lapse actually is triggered by a preconceived notion that estimates are sacrosanct. New technologies, better financing means and other business strategies would often encourage vendors to quote low, especially in a cut throat competitive environment.

4.6 Negotiations : When it comes to quoted rates being higher than estimated, however, negotiations in some

organizations become the rule and are done in almost a very routine manner. When the first recommendation is invariably made for going in for a round of negotiations (even in cases where the rates are reasonable) for obtaining a further reduction, there is an inflationary tendency by even reasonable tenderer to quote high at the first instance. Ethics demand that such tendencies are curbed and efforts made by both parties to be true to their conscience – vendors would quote realistically and buyers would evaluate reasonably.

The unethical angle in negotiations wherein the lower suitable offer(s) is/are overlooked and higher (perhaps unsuitable) offers are recommended for negotiations has led to the CVC (Central Vigilance Commission) banning negotiations except where absolutely essential and that too only with the lowest. This cardinal rule has some exceptions and may not be suitable in all cases, but at least, it has helped curb certain unethical practices of “somehow, anyhow” placing orders on suppliers / sellers who do not deserve, both on the legal and contractual basis, any consideration, much less, an order.

CVC has issued guidelines on negotiation only with L1 due to incorrect practices in some of the central govt. depts., it was a system that if there are several manufacturers participating in open tender, counter offer would be given and the quantity would be rationalized over several vendors in proportion to the competitiveness of their bid. This rationalizing method adopted by govt. dept. was defective, as L1 would not get everything, which is due to him. Effective implementation of the policy to negotiate only with L1 ensured no hanky panky and brought transparency in procurement process.

5.0 Role of Technology in Improving Transparency: Unethical practices can be curbed to a large extent by bringing in more transparency and better security (lesser chances of corrupt practices) in the system of procurement through electronic tendering (e-tender) and electronic auctioning (e-auction). Electronic auctions (or reverse auctions) are conducted using internet-based software. ‘Reverse auctions’ are auctions where sellers bid to provide specified goods or services to a buyer. At core, the system provides the means for buyers to issue pre qualification questionnaires and invitations to tender by e-mail. Suppliers then respond via an internet-based interface to the system. The system can ensure that suppliers’ electronic responses are held securely until a particular time (the equivalent of “tender opening time”) when they are made available to the buying organisation.

While the system also offers additional functionality (such as document management and evaluation tools), organisations can choose the extent to which they make use of the system beyond its core functionality. The e-tender and e-auction system is fully password-protected- buyers and suppliers can only access it with a valid account name, user name and password. Suppliers are only able to access the system in respect

of tender exercises in which they have been invited to participate- they cannot “browse” tender activity. Materials Management Deptt. on Indian Railways has fully switched over to e-tendering and integrated Materials Management System has been adopted to ensure better transparency, uniformity, speed and paperless working.

6.0 Ethics in Purchase Practices at International Level : Government procurement guidelines of World Bank basically sum up the approaches in public procurement by various governments. The same has been adopted in WTO as guide line for government procurement. It mentions three types of tendering:

- a) Open tendering procedures are those procedures under which all interested suppliers may submit a tender.
- (b) Selective tendering procedures are those procedures under which, those suppliers invited to do so by the entity may submit a tender. This deals with short listing or registration of suppliers.
- (c) Limited tendering procedures are those procedures where the entity contacts suppliers individually, only under exceptional circumstances in view of urgency etc.

To ensure fairness, stress has also been placed on transparency aspect which includes publishing of contract award details etc.

7.0 Analysis of Contract Management in the Framework of Ethical Theories : The traditional approach to procurement is transactional approach. Indian railways also follow this approach. This approach can be categorized under Deontological approach to social contract theories. As per this theory an action is right if it conforms to the terms agreed upon, or rules for social well being negotiated by competent parties. Here competent authority enters into the contract by mutual consent in three steps:

- 1) A proposal (a tender notice) - This lays down the object of the contract and conditions relating to it.
- 2) An offer in response – This brings out considerations and conditions relating to it for performing the object of the tender
- 3) Acceptance of the offer – This completes the contract. In case acceptance is not exactly as per offer, it will become a counter offer – which needs to be accepted by the tenderer to become a contract.

However, this approach has its limitation because it is based on short term goal, exploiting competition, knowledge and expertise of supplier is not utilized to the fullest extent etc. This approach although is best suited for obtaining most favorable price but it does not exploit the capabilities of supplier. The relational approach adopted by private companies/ organizations to buying which exploits the potential of cooperation, stresses upon collaboration and “team effects”,

combine resources and knowledge between both supplier and purchaser. It results in more openness between supplier and purchaser as supplier is required to reveal his costing etc. and then only purchaser agrees for increase in cost.

Several developed countries especially Australia, UK and New Zealand etc. have started adopting approaches, which even go beyond the relational approach. Following conditions are being added in government procurement documents:

- Contract with tenderer who treat their employees in ethical employment standard.
- Assess a tenderer ethical employment behavior while maintaining fair opportunity for the market to compete.
- Influence cultural change in way contractors treat their employees.
- Reward competitive businesses that satisfy the ethical employment standard with government business.

Ethical theory applicable in above context is Extra-Organizational Ethics under System Development Ethics theories, which holds that an action is good if it promotes or tends to promote the improvement of collaborative partnership and collective global justice, creativity in the human and natural environments.

In future this will have impact on procurement done by railways because the advantages of relational approach far out weighs its disadvantage in obtaining lower price.

8.0 Conclusions : The ethical framework behind the existing procedure obviously has a strong deontological base. This is, although, very important in view of preventing fund leakages and optimum utilization of the public money in the process of purchase and contract, yet, it often makes the system too rigid and the greater objective of ‘ultimate good’ for the organization is missed. In order to take care of such greater goal, the procurement and contract procedure should have a strong element of teleological concepts in it and this may be possible by a gradual shift from the existing rule based contract to relation based contract with built in checks and balances and surveillance mechanism in it to guard against possible frauds. Design of such a system may be made practically feasible through involvement of all the stakeholders and sharing of risk and responsibility equally amongst them. Another important aspect in procurement and contract management is to see that the whole process always meets the triple bottom line needs in respect of social, environmental and economic requirements arising out of the procurement and contract. The ethical framework based on stakeholder concept has a great potential in curbing the problem of ethical egoism of an individual in the process of procurement and contract.

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TRANSPORT AND MARKETING ASSISTANCE (TMA) AN INCENTIVE SCHEME TO BOOST AGRI-EXPORTS

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As a part of implementation action plan of Agriculture Export Policy, 2018, which the Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved in December 2018, with an aim to double the shipments to \$60 billion by 2022 and integrating Indian farmers and agricultural products to the global value chain, the government now announced the scheme for providing Financial Assistance for Transport and Marketing of Agriculture Products to boost Exports of such commodities to certain countries in Europe and North America.

There is a huge potential to increase agri-exports from India which need to be explored by providing proper financial incentives, lower cost of doing business and market support to boost exports. Indian agricultural/horticultural and processed foods are exported to more than 100 countries/regions; chief among them are the Middle East, Southeast Asia, SAARC countries, the EU and the US. However, till date, India's agriculture exports were more opportunistic or accidental in nature without proper policy backup, which did not necessarily create additional value for farmers.

Now with the new policy measures proposed, it may instill new enthusiasm, and confidence to exporters as it is expected to provide stability in export policy by ending restrictions for exports, providing institutional ways for market access and bringing better predictability and give impetus for exports of agri and agri-based produces. Stable policy framework will allow all stakeholders to build business models with medium-to long-term plans, creating a strong USP for an India Agri-export Product which is crucial to success and to put firmly Indian agriculture produce on the global map.

The commerce ministry has laid out a detailed procedure for claiming benefits under the newly introduced Transport and Marketing Assistance (TMA) scheme, which aims at boosting agricultural exports. Under the TMA plan, the government will reimburse a certain portion of freight charges and provide assistance for marketing of agricultural produce.

Ø Under the scheme Financial Assistance shall be provided for transport and marketing of agriculture products to boost exports of such commodities to certain countries in Europe and North America.

Ø DGFT Notification No 58/2015-2020 published on

29 March 2019 (Click Here) regarding addition of a new chapter 7(A) added in FTP on Transport and Marketing assistance (TMA) for Specified Agricultural Products

Ø DGFT Public Notice No 82/2015-20 published on 29 March 2019 regarding procedure and ANF for availing Transport and Marketing Assistance (TMA) for Specified Agriculture Productions.

Ø Transport and Marketing Assistance (TMA) for export of Specified Agriculture Products to specified destinations would be available as per Department of Commerce's Notification No. 17/3/2018-EP (Agri.IV) dated 27.2.2019

Transport and Marketing Assistance" (TMA) - Objective

Ø The "Transport and Marketing Assistance" (TMA) for specified agriculture products scheme aims to provide assistance for the international component of freight and marketing of agricultural produce which is likely to mitigate disadvantage of higher cost of transportation of export of specified agriculture products due to trans-shipment and to promote brand recognition for Indian agricultural products in the specified overseas markets.

Coverage of the Scheme

Ø All exporters, duly registered with relevant Export Promotion Council as per Foreign Trade Policy, of eligible agriculture products shall be covered under this scheme.

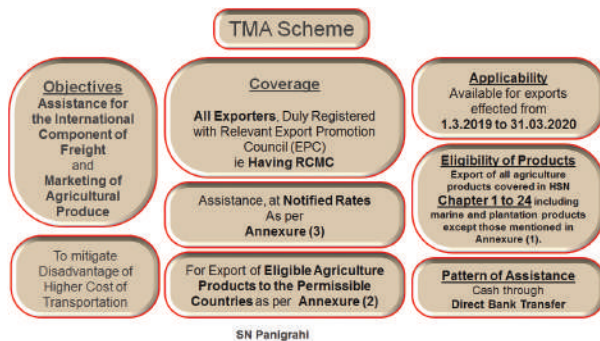
Ø The assistance, at notified rates, will be available for export of eligible agriculture products to the permissible countries, as specified from time to time.

Applicability of the Scheme:

Ø The Scheme would be applicable for a period as specified from time to time. Presently the Scheme would be available for exports effected from 1.3.2019 to 31.03.2020

Eligibility of Products:

Ø The assistance will be provided on export of all agriculture products covered in HSN chapter 1 to 24 including marine and plantation products except those mentioned in Annexure (1).



Pattern of Assistance

- Assistance under TMA would be provided in **cash through direct bank transfer** as part reimbursement of freight paid. **FOB supplies where no freight is paid by Indian exporters are not covered under this scheme.**
- The level of assistance would be different for different regions** as notified from time to time for export of eligible products. List of export destinations/countries in each region eligible for assistance under TMA are mentioned in **Annexure (2)**.
- The assistance shall be admissible only if **payments for the exports are received in Free Foreign Exchange through normal banking channels.**
- The scheme shall be admissible for the **exports made through EDI ports only.**
- The scheme covers freight and marketing assistance for **export by air as well as by sea (both normal and reefer cargo).**
- For export of products by sea, TMA will be based on the freight paid for a full Twenty-foot Equivalent Unit (TEU) containers. The assistance will not be available for (i) Less than Container Load (LCL) and (ii) a container having both eligible and ineligible category of cargo. Further, no TMA is available where the cargo is shipped in bulk/break bulk mode. A forty feet container will be treated as two TEUs.
- Assistance for products exported by air would be based on per ton freight charges on net weight of the export cargo, calculated on the full ton basis, ignoring any fraction thereof.
- The assistance will be provided at the rates as notified in **Annexure 3.**



Categories of Export Ineligible for TMA : The following exports categories / sectors shall be ineligible under this scheme:

- Products exported from SEZs/ EOUs/ EHTPs/ STPs/ BTPs/ FTWZs
- SEZ/EOU/EHTPs/STPs/BTPs/FTWZs products exported through DTA units
- Export of imported goods covered under paragraph 2.46 of the FTP;
- Exports through trans-shipment, i.e. exports that are originating in third country but trans- shipped through India;
- Items, which are restricted or prohibited for export under Schedule-2 of Export Policy in ITC (HS), unless specifically notified.
- Export products which are subject to Minimum Export Price or export duty, unless specifically notified.
- Export of goods through courier or foreign post offices using e-Commerce

Procedure for Availing Assistance under the Scheme

- TMA would be reimbursed through the Regional Authorities of DGFT as per the procedure laid down in **Chapter 7(A) of Handbook of Procedures (2015-2020)**.
- Mechanism for Scrutiny of the claims, audit, recovery and penal action.**
- DGFT will lay down procedure for scrutiny of the claims, audit of the payments made, recovery of the ineligible/excess paid assistance, interest on such recoveries. The defaulters shall be liable for penal action under the provisions of Foreign Trade (Development & Regulation) Act, 1992, Rules and orders made thereunder.

Procedure for Claiming TMA : Para 7(A).01 of HB

- Application by Registered Eligible Exporter having Valid RCMC from EPC
- Application to be Filled with RAs Headed Additional DGFT
- Application to be Filled Online on DGFT website: www.dgft.gov.in , on a Form ANF – 7(A)A with Application Fee
- Manually Submit to Concerned RA, Physical pdf Copy of Printout of Form ANF – 7(A)A along with prescribed documents within 30 Days
- Application shall be made on Quarterly basis
- Claim shall be made within one year from the completion of the quarter
- All claims for shipments made in a quarter shall be bunched together and submit a single application along with Chartered Accountant or Cost Accountant or Company Secretary Certificate.

Documents to Submit :Para 7(A).02 of HB

Along with Application in Form ANF – 7(A)A, following Documents should be attached

- EP Copy of Shipping Bill(s) / Airway Bills
- Commercial Invoices

- Ø On Board Bill of Lading in case of Shipment by Sea
 - Ø Certificate of Chartered Accountant or Cost Accountant or Company Secretary Certificate in Annexure A to Form ANF – 7(A)A .
 - Ø Proof of Landing as per Annexure B to Form ANF – 7(A)A
- Application Fee
- Ø Public Notice No 02/2015-2020 dated 5 April 2019 notifies Rs. 1000 application fee for reimbursement of benefits under Transport and Marketing Assistance (TMA).
- Other Conditions :Para 7(A).03 of HB
- Ø The Assistance shall be paid only to the Exporter Exporting the cargo and in whose name Payment is realized in Free Foreign Exchange through Normal Banking Channels.
 - Ø FOB Supplies where No Freight is Paid by Indian Exporters are Not Covered in the Scheme
 - Ø The Scheme is Admissible for Exports made through EDI Ports only
 - Ø Claim should be made only for Full Container Loads (FCL) in case of shipments by Sea and in Multiples of Metric Tons (ignoring any fraction thereof)
 - Ø A Forty Feet Container shall be treated as Two TEUs
 - Ø Less than Container Load (LCL) shipments and TEUs Containing both Eligible and In-eligible cargo shall not be Considered under the Scheme
 - Ø In case of Return of the Consignment by customer, the applicant who claimed the assistance should refund the amount along with Interest of 15%

Annexure (1) :List of agriculture products not eligible under TMA

Chapter	HS Codes	Description
Chapters 1, 2 & 5	All HS Codes	- Live animals - Meat and Edible Meat Offal - Products of Animal Origin, not elsewhere specified or included
Chapter 3	030617	- Other shrimps and prawns :
Chapter 4	0401	-Milk and cream, not concentrated nor containing added sugar or other sweetening matter
	0402	- Milk and cream, concentrated or containing added sugar or other sweetening matter
	0403	- Buttermilk, curdled milk and cream, yogurt, kephir and other fermented or acidified milk and cream, whether or not concentrated or containing added sugar or other sweetening matter or flavoured or containing added fruit, nuts or cocoa
	0404	- Whey, whether or not concentrated or containing added sugar or other sweetening matter; products consisting of natural milk constituents, whether or not containing added sugar or other sweetening matter, not elsewhere specified or included
	0405	- Butter and other fats and oils derived from milk; dairy spreads
	0406	- Cheese and curd
Chapter 7	0703	- Onions, shallots, garlic, leeks and other alliacious vegetables, fresh or chilled
Chapter 10	1001, 1006	-Wheat And Meslin -Rice
Chapters 13 & 14	All HS Codes	- Lac; Gums, Resins and other Vegetable Saps and Extracts - Vegetable Plaiting Materials; Vegetable Products not elsewhere specified or included
Chapter 17	1701, 1703	-Cane Or Beet Sugar And Chemically Pure Sucrose, In Solid Form - Raw Sugar Not Containing Added Flavouring Or Colouring Matter ; -Molasses resulting from the extraction or refining of sugar
Chapters-22 & 24	All HS Codes	- Beverages, Spirits and Vinegar - Tobacco and Manufactured Tobacco Substitutes

Annexure (2) :List of Export destinations/countries in each region under TMA

Region	Country Name
WestAfrica	Benin, Mali, Burkina Faso, Mauritania, Ivory Coast, Niger, Cape Verde, Nigeria
EU	Albania, Andorra, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, Vatican City
Gulf	•Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates
North America	Antigua and Barbuda, Bahamas, Barbados, Belize, Canada, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, United States of America
ASEAN	Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam
Russia & CIS	Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan
Far East	Japan, North Korea, South Korea
Oceania	Australia, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, New Zealand, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu
China	PRC China, Hong Kong, Taiwan
South America	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Peru, Paraguay, Suriname, Uruguay, Venezuela

Annexure (3) :Differential Rate of Assistance under TMA (Amount in Indian Rupees)

Region	Amount Per TEU (Normal)	Amount Per TEU (Reefer)	By Air Amount per tonne
WestAfrica	11200	19600	840
EU	9800	21000	1120
Gulf	8400	14000	700
North America	21000	28700	2800
ASEAN	5600	12600	700
Russia & CIS	12600	22400	700
Far East	8400	12250	840
Oceania	16800	24500	2800
China	0	12600	840
South America	23800	31500	3500

PPT can be Viewed @ the below Link

<https://www.youtube.com/watch?v=sSp-H46rp0U>

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

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DISHA 2019 – A REPORT

IIMM MUMBAI BRANCH

Next edition of Disha - annual signature event of IIMM, Mumbai was held in Mumbai on 17, 18 April 2019. Theme selected was “Supply Chain Management – Value Drivers for Business Technology, Innovation, Talent Management, Stakeholder Alignment”.

The event was extremely well received by the delegates with over 90% rating of Good or Excellent.

Extracts of the sharing by various speakers is captured for all who could not be present in person.

Mr. Satish Palekar, Chairman, Mumbai Branch, set the context by sharing a series of expectations of SCM, strategic leadership disconnect and silos. Further elaborated on how Supply Chain can create value thru Technology (Predict / Automate / Protect), Innovation (Disrupt / Adapt / Perform), Talent (Leadership / Orient / develop) and Stakeholders (Collaborate / Firm specific advantage / Co create).

The National President, Mr. G.K. Singh, touched upon SCM as an umbrella term with focus on achieving business goals. SCM as a profit center and its contribution to achieve sustainable development goals.

Mr. Balakrishnan Iyer, Convener for Disha, Past National President shared his thoughts on Supply security, Risk mitigation, Code of conduct, Compliance, Market intelligence, Savings and Manage working capital. He also talked about Digital transformation, block chain and how to encourage disruptive methods in SCM team. And shared a key skill for SCM Professionals today i.e. to learn, unlearn & re-learn.

Chief Guest was Mr. B. Narayan, Group President, Projects and Procurement - Reliance Industries Ltd. In his address, he shared a number of examples of how technology can add value. Some of them are - System cost instead of item cost, automated status check thru Chatbots, Block chain for Transaction with Triconenergy, monitoring loss of productivity based

on technology.

In his address by the Guest of Honor, Mr. Amit Kumar, President and Chief Supply Chain Officer (Chemicals, Fertilizer, Insulators) - Aditya Birla Group, touched upon Industry Challenges such as Volatile supply, Geography based challenges, Commoditization of products and Emerging Trends such as Partnership and Innovation. He also stressed the importance of nurturing talent & culture.

Another Guest of Honor Mr. Mrugank Paranjape, Managing Director – MCX introduced use of Hedge contract to tackle volatility.

Key Note was delivered by Mr. Kumar Gaurav, Partner - A T Kearney. Key points in his sharing were - Complexities in consumer industry, Customization to personalization, Falling technology cost and new business models to transform ways of working, collaboration between counter seasonal industries, new business models in shared economy; Fourth industrial revolution with IOT, AI, wearables, Advanced Robotics and 3D printing. And need to balance customization vs. consolidations

The Executive Director Planning - Mumbai Metro Rail Corporation Ltd, Mr. Ramana Rachaprolu talked about how they achieve Supply Chain Stakeholder Alignment in Mumbai Metro Rail.

Mr. Amit Verma, Head Digital Transformation for Procurement and Contracting, Reliance Industries Ltd, presented case study of using Chatbots for internal and external stakeholders; use of “Bill Lite” to avoid invoice discrepancy developed by Jio and “Smart Reliance Fleet Management” – Visibility on fleet utilization and end to end tracking with multiple business purposes.

“Realizing Commercial Excellence through Intelligent Category Management’ was the next sharing by Mr. Srivatsa Anchan, Partner - Advisory Services - Ernst & Young.

This was followed by a high impact Panel Discussion. Panel consisted of Mr. Ashok Sharma, Executive Director, Chief Procurement Officer – Marketing – BPCL, Mr. Kartik Santhanam, Executive Vice President (Corporate Sourcing) - Deepak Fertilisers, Mr. MVR Krishna Swamy, Executive Director - Central Procurement – HPCL and Mr. K S Harish, Group Country Head - HR, South Asia - Bayer Crop Sciences Ltd. Mr. Pradyot Sinha (Moderator), Ex Global Head & Senior Director Procurement Shared Services - Royal Philips moderated the panel. Major points covered included training vendors for maximum participation, disruptive technologies, cost optimization, customer satisfaction through service delivery, Predictive Analysis, Talent management, workforce agility.

In an absorbing presentation by Mr. Rai, IAS, Additional CEO - (GeM), explained contours of Government eMarketplace. There was a significant learning for delegates across industry sectors.

A case study on successful implementation of GeM in ONGC was presented by Mr. Ashwini Nagia, Executive Director, Chief of Materials Management – ONGC.

Mr. Vivek Arya, Managing Director - Rhenus Logistics Ltd, presented a snapshot of how Infrastructure Development is fuelling Business Growth in India.

Digitizing and Simplifying Trucking Logistics through Technology was presented by Mr. Prashant Soni, Business Head - Shipper Services – BlackBuck. He talked of digitalization, challenges to percolate strategy at ground level, fragmented vendor base leads to perceptive pricing, unpredictable leakages and lack of transparency.

Another keynote was by a celebrity speaker, Capt. Raghu Raman, President (Risk, Security and New Ventures) - Reliance Industries Ltd. In a powerful sharing he talked of how organisations have Arthritis (Loss of agility), Alzheimer (Loss of culture) and Cardiac issues (getting smart but loosing heart).

This was followed by a spontaneous speech by Rear Admiral Pradeep Joshi, Indian Navy, touching upon how disruptions caused big players like Xerox, Kodak to lose business, shared value system, team building and delegation. He also stressed the

importance of logistics for capacity & stability.

Mr. Vinod Giri, Vice President, Commercial – Flipkart enlightened audience on Managing Stakeholder Alignment in SCM.

How to achieve Procurement Leadership in Digital Age was shared by Mr. Ravindra Sharma, Director, value Realization - SAP – Ariba. He touched upon need for the CPO to be ready for disruptions, the CPO Charter of Efficiency, Visibility and Compliance Savings. He also talked of Importance of strategy, experience, collaboration and agility; clarity in purpose; employee experience; smart contracts with IOT and high sea warehouse with AI.

An excellent sharing on “GST - Challenges faced by Industry and Way Forward for Successful Implementation” by Mr. Santosh Dalvi, Partner – KPMG, followed.

Dr. V. Shunmugam, Head Research – MCX, elaborated on “Cost Management in Supply Chain with Futures and Derivatives”

“Democratization of supply chain thru digitalization” was the next talk by Mr. V Rangarajan, Practice Head-Chemicals & Operations Excellence - Tata Strategic Management Group. He touched upon Evolution and trends in SCM; below zero- future of supply chain and rise of digital delivery ecosystems.

Concluding session was a Fire side chat on theme with Mr. Somnath Chatterjee, Head - Procurement and Logistics - ITC Ltd (Foods Division).

Five selected delegates from Reliance, OPAL, Indian Oil, Bayer and L&T Hydrocarbon also presented success stories in SCM, in their own organizations and they were suitably rewarded.

The event was attended by the National President IIMM Shri G.K. Singh, Vice President West IIMM Shri Jitesh Gupta, Past World President of IFPMM Shri Ashok Sharma, a good number of Chief Procurement Officers from leading companies and many delegates.

IIMM Mumbai thanks all the speakers, Guests, Delegates and Sponsors for their support.



17th-18th April 2019, Mumbai Branch



DISHA 2019 -17th-18th April 2019, Mumbai Branch



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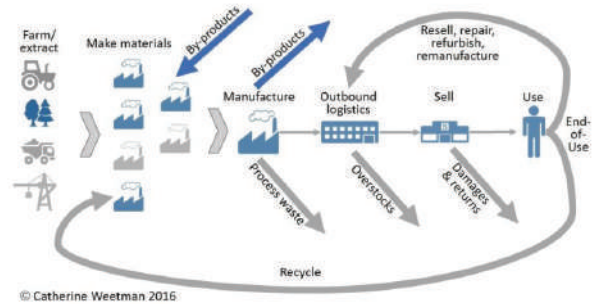
AN INTRODUCTION TO THE CIRCULAR ECONOMY: OPPORTUNITIES FOR BUSINESSES TO CREATE NEW VALUES THROUGH SUPPLY CHAIN

ZIAUDDIN, HONY. SECRETARY & COURSE
COORDINATOR, IIMM HYDERABAD BRANCH
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1. **INTRODUCTION:** The Supply chains crucial role, needing to become circular to drive smarter strategies, eliminate waste and enable companies to maximize the value of their products and in the present trends as linear processes are getting replaced by “digitally driven networks” coupled with Circular Economy with sweeping advances in technology, capturing new value for business, and adding extra dimensions to Supply Chains.
 - 1.1. The digitally driven networks referred above, need to be known, hence mentioned hereunder, (i.e. eleven technologies) - as vital information, though, will not be dealt in this paper.
 - 1.1.1. Robotics & Automation
 - 1.1.2. Predictive Analytics
 - 1.1.3. Internet of Things
 - 1.1.4. Artificial Intelligence
 - 1.1.5. Block Chain
 - 1.1.6. 3D Printing
 - 1.1.7. Cloud Computing & Storage
 - 1.1.8. Inventory & Networking Optimisation
 - 1.1.9. Sensors & Automatic identification
 - 1.1.10. Wearable & Mobile Technology
 - 1.1.11. Driverless vehicles & Drones
 - 1.2. Digital Transformation, undoubtedly is a major thrust for companies/ manufacturers, inspired to instigate CHANGE, that will ultimately transform Supply Chain to the desired levels.
2. **Circular Economy – an Overview**
 - 2.1. The circular economy creates and captures new value for businesses, and adds extra dimensions to supply chains.
 - 2.2. Circular Economy Action Plan has established targets for the reduction of waste, waste management and recycling, for transition to a more circular economy, requiring changes “throughout value chains”, from product design to new business and market models, from new ways of turning waste into a resource and, to new models of consumer behaviour.
 - 2.3. In a circular economy, there are open production systems – in which resources are extracted, used to make products and become waste after the product is consumed and are replaced by systems that retain resource value and conserve energy. A circular economy keeps resources in use as long as possible, maximising their utility and minimising waste. Material wastage comes at significant environmental and economic cost. Easily obtainable raw materials and low waste disposal costs have incentivised a linear ‘take-make-consume-throw away’ model, but growing resource scarcity and better understanding of the benefits of resource efficiency are presenting opportunities for innovative companies to integrate circular concepts into their product design, manufacturing and end-of-life.
3. **Circular Economy – Unlocking new values – Through Supply Chain Revolution:**
 - 3.1. Our world is changing ever faster, and ‘mega trends’ predictions include 3 billion new consumers getting ready to enter the market by 2030 and the internet-connected strength doubling to 5 billion in the next 5 years, leading to extraordinary business opportunities. For example - Amazon has even filed a patent for “aerial warehouses”. Most businesses operate on “throughput” principles i.e. take some materials, make a product, sell it and work out how to sell the next one. But this approach shackles the growth for many businesses as demand for resources, land and water outstrips supply.
 - 3.2. Hence, how can business survive and thrive in these challenging conditions? Across the globe, in every sector, start-ups and big businesses are exploring the ‘systems thinking’ approaches of the circular economy. Some businesses are trying to disrupt from the inside: how would a new competitor

design your business? How would a disruptor innovate products and services, decouple resources from profit, build brand loyalty and create resilient, adaptive organisations?

- 3.3. Certain factors about Circular Economy reveals that, instead of leaking value by discarding products and materials after use, the circular economy redesigns products, processes, supply chains and business models to **yield more value**. Creating durable products, and recovering products and materials **at** end of use, enables **4R** concept i.e. Reuse, Repair, Remanufacture and Recycling.



- Making orange juice: the ‘waste’ becomes by-products, with pectin, pulp and zest for food manufacture and essential oils for pharmaceuticals and cosmetics.
- Commercial photocopiers aren’t sold now; photocopying is a service with efficient repair networks plus refurbishment and remanufacture to enable second and third lives for each machine.

- 3.4. Approaches of Circular Economy helps, to regenerate ecosystems to better support human health and well-being. By converting the take-make-waste approach into value loops, creating more from less, the circular economy approaches decouple resource use from value creation.

Therefore, the circular economy is gaining momentum as a critical tool for future-fit businesses. Global businesses and new start-ups alike are developing circular products and services, helping their businesses become future-fit.

- 3.5. Considering all above when supply chains become multi-dimensional, they implement new flows and formats, service networks, more touch points, recovery loops for products and materials and therefore they are ‘loopy’ instead of leaky.

- 3.6. The diagram below shows some of the potential flows. Cycling materials and protecting their value (ready for resale, repair, remanufacturing or recycling) means re-thinking reverse supply chains and packaging design – not just Reverse Logistics (**Reverse logistics** is for all operations related to the reuse of products and materials. It is the process of moving goods from their typical final destination for the purpose of capturing value, or proper disposal).

- **The ‘loopy’ supply chain**

4. **TO CONCLUDE**, rather it is better to say as “BEGINNING”/ for achieving a circular model, it is pertinent to look to investigation of few quick wins, with little disruption and risk, by following the steps mentioned here under.

- 4.1. Prioritise: are there some high-risk products or materials you buy, with volatile prices, toxic or scarce materials that –

- Could replace with something safe and secure?
- Could recover own resources, or create value from a new by-product?
- Could design something to be more easily disassembled for repair or recycling?
- Could swap from buying a product to contracting for service or performance, such as tyres by the mile?

- 4.2. Work with suppliers, to share company’s vision, scan for ideas and specify the goal. Guide suppliers to innovate for a win-win outcome.

- 4.3. Use learnings from those quick wins, to build experience and gain buy-in from other stakeholders.

- 4.4. Invest the learnings and benefits in the next projects – perhaps bigger scale or requiring more disruption to existing processes.

- 4.5. Tell the story to suppliers and consumers – engage a wider group of stakeholders to create momentum.

Considering all the above/ nevertheless creating circular operations to participate in this new economy, may be a daunting prospect, still, steps can be taken to transform linear supply chains into digital supply networks that facilitate circularity to boost competitiveness and to improve business outcomes.

5. **FINALLY THE RESULT:** New revenue streams, and more intelligent, efficient and sustainable industries that will fuel circular economies through Supply Chains.

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WTO UPDATE : AZEVEDO: E-COMMERCE MUST BE A FORCE FOR INCLUSION



Speaking at a meeting of the OECD Ministerial Council in Paris on 23 May, Director-General Roberto Azevêdo highlighted that advances in technology are changing the way we trade and do business today, facilitating trade in digital products and services. Noting the rapid growth in e-commerce and its potential, he also underlined challenges, such as the need to address the digital divide. He said that the WTO has witnessed growing interest in discussing e-commerce issues and concluded: "Ultimately, the test of our success in responding to this revolution will be the extent to which we use it as a force for greater inclusion." This is what he said:

Minister Carr,

Excellencies,

Ladies and gentlemen,

Good afternoon and thank you for the kind invitation.

When we talk about trade in the digital era, I think we must first acknowledge that we are in the midst of a revolution. We are all working to better understand what this means for our economies – and for our shared rules, practices and institutions.

This starts, of course, with informed discussions like this. Advances in technology are changing the way we trade and do business today. They have further facilitated trade in digital products and some types of services. The latest data is for 2017. It shows annual growth in global e-commerce sales of 13%, reaching around 29 trillion dollars. The number of online shoppers has registered a similar increase. One quarter of the world's population purchased goods and services online in 2017. And importantly, the share of those buying from abroad rose from 15% in 2015 to 21% in 2017.

These statistics do not separate out goods or services purchased online. Nonetheless the upward trend is clear. This presents countless opportunities to reach a broader network of buyers, access the most competitive suppliers, tap into global markets and participate in global value chains. A recent WTO study found that by lowering costs and increasing productivity, digital technologies could provide an additional boost to trade by up to 34% by 2030. But while it is clear that e-commerce can unleash great potential, we also need to be aware of the challenges involved. The digital divide still poses a big barrier. According to the ITU, the proportion of households with Internet access at home in developed countries is twice as high as in developing countries.

Digital gaps are also manifested within countries. Men, urban residents and young people are more likely to be online than women, rural dwellers and older people. For example, there are an estimated 250 million fewer women online globally than men. We have to address these gaps. But being connected is not enough. Even

when you are connected, other obstacles such as inadequate regulatory frameworks or lack of appropriate skills can still pose big barriers. Without the right framework in place, there is a clear risk that big players will increasingly dominate, leaving smaller businesses behind. To ensure that this revolution is inclusive, a lot of work needs to happen domestically – which is something that you will discuss today.

Of course, cooperation at the international level through organizations like the WTO can be important as well. Over the past few years, at the WTO, we have witnessed growing interest in discussing e-commerce issues in more detail. At the multilateral level, members are continuing the exploratory work under the existing Work Programme on Electronic Commerce. Here an important focus is assessing the impact and scope of the moratorium on customs duties on electronic transmissions. At the same time, we have had important progress on other fronts.

At our Ministerial Conference in Buenos Aires in 2017, a group of WTO members signed a Joint Statement to explore further work on e-commerce. This includes developed, developing and least-developed members.

While not all members participate in these conversations, the proponents are clear that the debate is open to any member that wants to join. This is a very positive sign about what is possible within the WTO. Members are prepared to be flexible and innovative to make progress. Engagement has been excellent so far. Private sector interest is higher than ever. And the work has started to bear fruit.

As of this month, 77 WTO members accounting for 90% of global trade have commenced negotiations on trade-related aspects of e-commerce. A first substantive round of meetings was held last week. I understand that delegations discussed proposals on a wide range of issues, such as: facilitating electronic transactions, consumer protection, transparency, and non-discrimination and liability. Further discussions will be held next month.

E-commerce issues range widely in their level of complexity and ambition. Time will tell what members can achieve. Ensuring that these discussions remain open to all members is important – but proponents should also be seeking to ensure that poorer countries that want to participate are helped to do so.

Ultimately, the test of our success in responding to this revolution will be the extent to which we use it as a force for greater inclusion. I hope this discussion will shed further light on how we can seize that opportunity.

Thank you.

Source : WTO Website



BRANCH NEWS

- | | | |
|---------------------|------------------------|-----------------------------|
| ■ AHMEDABAD BRANCH | ■ CEHNNAI BRANCH | ■ RANCHI BRANCH |
| ■ ALWAR BRANCH | ■ GREATER NOIDA BRANCH | ■ VAPI BRANCH |
| ■ AURANGABAD BRANCH | ■ LUCKNOW BRANCH | ■ VADODARA BRANCH |
| ■ BANGALORE BRANCH | ■ PUNE BRANCH | ■ THIRUVANANTHAPURAM BRANCH |

AHMEDABAD BRANCH

Report on April & May MM Day celebration series of program 2019 : Ahmedabad Branch organized a series of programs throughout the month as a part of celebration of MM day. After successful first ever paid program on “Life Transformation” By Mr. LOMESH DAVE on 7th April.



On 14th April, We had started integrated materials management training session 2 after successful completion of 1st batch to enhance the basic and working knowledge in the field of Supply Chain Management/ Materials Management, by **Mr. Jayanta Chakraborty** – eminent expert in the field of SCM/MM.

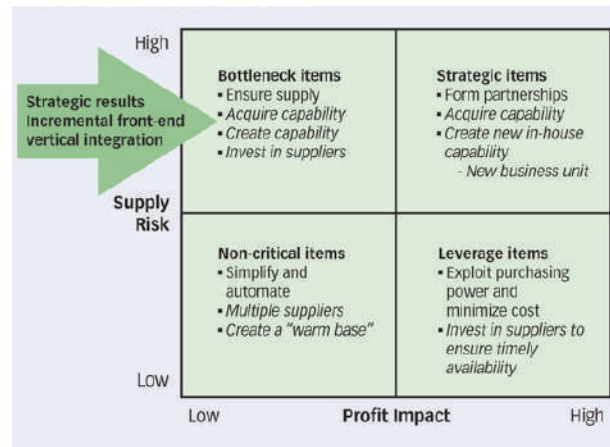
Mr. Jayanta Chakraborty is a **Mechanical Engineer** with **Graduate Diploma in Materials Management** from **IIMM**. He handles material Management’s core functions at different levels during his three decades of professional work experience with various corporate such as **HAL, NTPC, GKW, Inox India & Century Laminating Company**. He served as Sr. GM – SCM with M/s. **Phoenix Construction Technologies (M&B group)**.

Teaching is his passion and he has been associated with taking classes for IIMM courses at Varodara branch for various materials management subjects. He has received several accolades and awards for excellent services during his professional work career. He has extensively traveled around globe. He has covered following points during various sessions.

- OVER VIEW OF MATERIALS MANAGEMENT
- PURCHASE MANAGEMENT
- STORES MANAGEMENT
- MAERIALS PLANNING AND INVENTORY CONTROL
- SUPPLY CHAIN MANAGEMENT
- SOME BASIC MANAGEMENT THEORY AND FIELD APPLICATION
- ENVIRONMENT AND SAFETY
- PERFORMANCE MEASUREMENT

It was as good as classroom Panel discussion by Senior General Manager from Pharmaceutical, Hospital and Manufacturing Industries.

Mr. MANOJ PANDEY General Manager - Materials **Apollo Hospitals – Ahmedabad**, Explained on the topic “Purchase- A Profit Centre” During his talk he has covered various points like **How do we set our Purchasing Right? , Purchase Strategy: Peter Krajlik-Matrix , Reverse Auctions , International Commercial (INCO) terms .**



Later on **Mr. Naresh Gajjar Sr. GM Purchase Cadila Pharmaceutical Ltd** talked on “Packaging” He has covered various aspects like

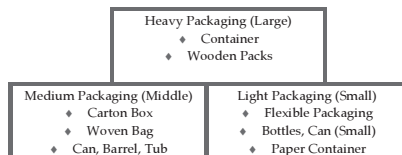
- 1) What is Packaging ?
How would you define it?
- 2) Brief information about packaging
 - Packaging Principles:
 - Packaging is an art of presenting and science of protecting
 - Attraction of consumer
 - Consumer friendly till the product is consumed/ discarded
 - Environment friendly throughout life Cycle
 - Selection of packaging: Acceptable to all concern i.e. production, Quality assurance, storage, distribution, merchandising, consumer and finally for disposing
- 3) Importance of Packaging
- 4) Packaging development, team
- 5) Basic Material for Packaging

. Functions of Packages:

Protective Function <ul style="list-style-type: none"> ♦ Shock, Drop, ♦ Pressure, Vibration ♦ Heat, ♦ Water or Moisture 	Convenient Function <ul style="list-style-type: none"> ♦ Transportation, ♦ Stocking (User, Ware House), Image, Design, Size Protection, ♦ After Re-Use Productivity
Graphic Design <ul style="list-style-type: none"> ♦ Design ♦ Colour ♦ Size 	Psychological Function <ul style="list-style-type: none"> ♦ Attraction

b. Classification of Packaging:

1. By Shape (Form or Size)



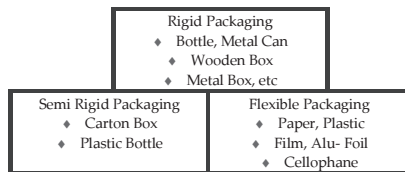
. By Methods (Way of Packing)

<ul style="list-style-type: none"> ▪ Vacuum Packaging ▪ Aseptic Packaging ▪ Retortable Packaging ▪ Shrink Packaging ▪ Strip Packaging 	<ul style="list-style-type: none"> ▪ Gas Flush Packaging ▪ Moisture – Proof Packaging ▪ Blister Packaging ▪ Skin Packaging ▪ Tamper – Evidence Packaging ▪ Others
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3. By Contents

<ul style="list-style-type: none"> ▪ Food Packaging ▪ Cosmetics Packaging ▪ Powder Packaging ▪ Toiletry Packaging 	<ul style="list-style-type: none"> ▪ Drug Packaging ▪ Liquid Packaging ▪ Clothing Packaging ▪ Dangerous Packaging ▪ Others
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4. By Materials



- 7) How Package is prepared
- 8) Cost of poor packaging – Internal Failure
- 9) Packaging in India 10) Recycling Symbol, example of plastic

Ahmedabad Branch also organized a student meet on 21st April where alumni shared their experiences.



As a part of celebration of the “Materials Management Day”, this was the fifth event, celebrated by IIMM

AHMEDABAD Branch on 4th May, 2019. It was indeed historical fun filled evening for all IIMM members with their families. Around 250 members with their families actively participated in the event, which was record-breaking number in the history of IIMM Ahmedabad. The chairman of the branch Mr.Pankaj Panchbhai & his team welcomed all the members with open arms. Musical chair, Housie, Word search games for children etc made the crowd crazy. The venue was filled with lots of joy & happiness. Soft lighting, melodious music, pleasant & soothing ambience, delicious food was like icing on the cake. Exciting prizes were distributed to all winners.







People were delighted to relish mix & Make multigrain healthy, yummy cup-cakes, sponsored by **Mrs. Jalpa Jinesh Mehta**. Mouth- watering desert - Pabrai's Fresh & 100% Natural ice-cream was sponsored by **Ms. Purvi Kotak**. Gift vouchers of Rs. 5000/- in form of 5 free health check-up cards were sponsored by "Healthism". "**Radhe Tapes**" had also given their contribution as a sponsor. There was a special launching of IIMM Ahmedabad Newsletter of year 2018-19 by all committee members. The event was ended up with the world famous "Gujarati Garba".

Member Volunteers These are the real heroes behind this historical fun filled mega successful historical evening. **Registration and food coupon distribution** Mr. Dilip Choudhary, Mr. Gaurang Goswami, Ms. Janki Jodhani,

Musical chair and music Ms. Purvi Kotak, Ms. Henal Shah, Ms. Janki Jodhani, Mr. Akhilesh Shah, Mr. Payank Patel, Mr. Vivek Ganatra, Mr. Hitendra Goswami

Winners were

Ms. Rashi Panchbhai, Master Vihaan Wattamwar
Mr. Krish Rai, Ms. Anshika Garg
Mr. Talpesh Patel, Mr. Deepak Mohkar
Ms. Uma Garg and Ms. Nidhi Garg

To House Game Conduct Mrs. Hiral Panchbhai, Ms. Sakshi Panchbhai, Ms. Janki Jodhani

Winners were :**Mrs. Pooja Kedia, Mrs. Usha Gupta, Mrs. Pinki Patel, Mrs. Dishti, Mrs. Smita Wattamwar , Mr. Shaswat Jain, Mr. Manan Kadia, Mrs. Pinal Ganatra, Mrs. Vanita Patel, Mr. Het, Mrs. Sheetal Shah**

For children games Mrs. Pinal Ganatra : Gift vouchers of Rs. 5000/- in form of 5 free health check-up cards were sponsored by "Healthism lucky winner were

Mr. Dinesh Kajale, Mr. Rajiv Agarwal, Mr. Shushant Gupta, Mr. and Mrs. Venkateswarlus, Mr. Nikesh Bhardwaj.

Gujarati Garba Winners :

Ms. Henal Shah, Mrs. Avnika Kadia, Ms. Tvesha Kadia
Mr. Rahul & Mrs. Heena Thakkar

Dinner arrangements : Mr. Sudhir Shah, MR. Nikesh Kumar and Mr. Mukesh Chouhan, Mr. Jayesh Patel

Special Thanks to Mrs. Dipal Chiragkumar Patel and Mr. Suresh Kamdar

Overall programmer sequence and arrangements was done by one and only very senior our beloved Distinguish member Shri D. K. Goswamy

On this historical evening, We had launched a special issue of newsletter containing activities of last several months and new members' photographs of the branch

Mr. Pankaj Panchbhai thanked all committee members, Volunteers, who had given wonderful support & cooperation, without whom it would not have been The Great Show.

ALWAR BRANCH

Indian Institute of Materials Management Alwar Branch. Organized one day National Seminar on Opportunities and Challenges for Supply Chain Management Vision. 2022 on 27/4/2019 at. Hotel lemon tree Shanti Kunj Alwar. The seminar was Inaugrated by Mr. G K Singh National President. Mr. Lalit Raj Meena National Secretary and Treasurer of IIMM, Mr. Avdhesh k M Mishra plant Head ROCA. Parryware Alwar Plant, Mr. Rakesh Rastogy NC Mysore, Mr. Mahendra Kumar V P South, Mr. Suresh Kumar Former National President, Mr. Jitesh Gupta. VP. West Along with other members Mr. Khandelwal from Jaipur, Mr. Ajit Singh from Noida branch.



About 70 delegates attended the program from various Industries and government institutions. Participants were from Jaipur, Alwar, Jalore, Indore, Mysore, Hyderabad, New Delhi, Ghaziabad, Lucknow, Chandigarh, Agra, Bhartpur, Neemrana and Bhiwadi Industries and institutions.

Mr. Pulkit Khandelwal delivered the talk on Implications of GST on supply chain, Mr. Suresh Kumar on Digital

Technologies, Prof. Saroj koul on Block chain technology. Dr. Vijay Kumar Meena made his presentation on 3D printing technology for industrial and Human application. Dr. Vijay Meena shared his success stories about human In plants and complicated surgery done by them. He also presented how the 3D printing technology is helpful for Manufacturing of critical parts with 100 percent accuracy. The Technology can also help in weight reduction of equipment for better efficiency.

मार्केट की सप्लाई चैन पर जीएसटी व चुनौती को लेकर हुई चर्चा



अलवर। भारतीय सामग्री प्रबंधन संस्थान की ओर से सप्लाई चैन मैनेजमेंट में अवसर चुनौतियों विजन 2022 विषय पर राष्ट्रीय संगोष्ठी का आयोजन किया गया इस दौरान जीएसटी का सप्लाई चैन पर प्रभाव 3D प्रिंटिंग टेक्नोलॉजी ब्लॉकचेन टेक्नोलॉजी डिजिटल टेक्नोलॉजी का उपयोग व प्रभाव लॉजिस्टिक्स में भावी पद्धति या सप्लाई चैन में जोखिम मिटिगेशन सहित खाद प्रौद्योगिक में विकसित की गई तकनीकी जानकारी प्रदान की गई संगोष्ठी में देश उत्कृष्ट संस्थानों के लगभग 70 प्रतिभागियों ने भाग लिया संगोष्ठी का उद्घाटन संस्थान के राष्ट्रीय अध्यक्ष जी के सिंह सचिव ललित राज मीणा अलवर शाखा प्रमुख बीडी गुप्ता ने किया कार्यक्रम के मुख्य अतिथि अवधेश मिश्रा भी मौजूद थे।

Mr. R K Rastogy spoke on various New Technologies and it's benefits for the Industries. Mr. Sourabh Khandelwal and his team delivered the talk on reduction in logistics cost.

Mr. V D Gupta Chairman of the branch welcomed all the members present. Mr. Lalit Raj Meena National Secretary and Treasurer presented about History of the IIMM, the activities of IIMM, course offered, training and consultancy by IIMM and about the services and capabilities of the IIMM for the benefit of the Industries of the region.

Dr. S Roy Choudury was the master of ceremony and he also presented the vote of thanks. In the opening Mr. G K Singh National President appreciated that the Alwar Branch is the most vibrant branch of the region . Mr. S K also honored Mr. Lalit Raj Meena, Mr. V D Gupta and Dr. S Roy Choudhary with President appreciation Medal for the service rendered by them for IIMM.

AURANGABAD BRANCH

IIMM Aurangabad has conducted A Case Study Competition during Materials Management Week 2019 on 20th April 2019 at Hotel Ajanta Ambassador, Aurangabad for the first time. The theme for MM Week was the subject given to the participants.



Group Photo of Participants and EC members



Judges Working on the Scores



Mr Phani Kumar Anchoring the session



Runners Receiving Memento from Mr K Srihari



Varroc Team Presenting their Case



Invocation by Mr. Prathik Hegde



Winners Receiving Memento from Mr Rajesh Sanghvi

Two teams from Endurance Technologies Ltd, one team from Varroc Polymers and one team from Dhananjay group have participated and presented their case studies. Each team consisted of two members and case studies were presented related to process improvements, there by reducing rejection and improving efficiency.

Mr Rajesh Sanghvi, Managing Director Sanghvi Group of Industries and Mr Sanjay Sanghai NC Member has judged the team for the presented case studies. Prizes were distributed to the winner and runner teams.

Proceeding for this program was done by Executive Committee member Mr. M. Phani Kumar. Branch Chairman Mr. K. Srihari briefed about IIMM and appealed delegates to avail IIMM life membership.

Alongwith with them, Vice President West Mr. Jitesh Gupta, NC Members, Mr. S.J. Sanghai, Dr. Narendra Joshi, Treasurer Mr. Lalit Lohade, Course Coordinator Mr. R.D. Jaulkar and Executive Committee Members, Mr. Shrikant Muley, Mr. Sudhir Patil, Mr. Santosh Pande, Mr. Sunil Ved, Mr. Yogesh Koshe, Mr. Sushil Pande, Mr. Ravi Kathavi, Mr. Ameya Kolte, distinguished Member Mr. N.B. Warade and others took efforts to make this program successful.

BANGALORE BRANCH

Bangalore Branch of IIMM planned for a fortnight program to celebrate MM Day on 23rd April 2019. The programs include Quiz competition, Debate, Essay Competition, Evening Lecture, EDP, etc., The program was kick started on 14th April in the Branch.



Mr. A.V. Sham Sundar, Honorary Treasurer, proposing Vote of Thanks on the occasion of MM Day celebration on 23.04.2019



Mr. Arjun, receiving participation Certificate of ESSAY competition by Mr. M.R. Achyuth Rao, Course Co-ordinator and EC Member



Mr. B. Jayaraman, Sr. Member receiving memento for completing 25 years of IIMM Membership by Mr. P.Viswanathan, EC and Faculty of IIMM



Mr. B.N. Suresh, receiving BEML Trophy winning team of BMM Competition 1st Prize Winner



Mr. P.K. Gopalakrishna, Sr. Member receiving memento for completing 25 year of Membership of IIMM by Mr. C.L. Kapoor



Mr. C. Subbakrish, Past National President briefing about MM Day and Quiz on the occasion of MM Day Quiz competition held on 14.04.2019



Mrs. Ranu Rajani Sr. Member awarding BEML trophy to BMM Competition 1st Prize Winner Team-Mr. Srishail Kittur receiving Trophy



Mr. K.V. Sudheendra, Vice Chairman, briefing about MM Day on 23.04.2019



Mrs. Uma Maheshwari, receiving GDMM Convocation Certificate by Mr. M.S. Shankar Narayanan, N.C. Member and Past Chairman



Mr. N.S. Balaji Prasad, Sr. Member receiving memento for completing 25 year of Membership of IIMM by Mr. C.L. Kapoor, Past National President



Oath Taking Ceremony conducting by Mr. P. Sengttaian, Honorary Secretary on MM Day Celebration on 23.04.2019

Dr. C. Subbakraishna, Former National President of IIMM inaugurated the program. The photos are taken during the program. During his talk, Dr. C. Subbakraishna, brought out the significance of April 23rd and said that IIMM is celebrating the birthday of IIMM. He said that Bangalore Branch has rich culture of celebrating various programs as a professional festival which will be highly beneficial to the members. The programs will enhance the professional knowledge for the members. Many senior officials of the Industry are also invited to share their practical and current knowledge.

The quiz was conducted very professionally and was anchored by the Chairman of Bangalore Branch Mr. Srinivas V Rao and was presented Mr. Akash Gupta, the Executive Committee Member of the Branch. The quiz questions were of high standard and the response was also good. The entire program was ably supported by Mr. Nandeesh, Mr. Vishwanathan, Achutharao, Executive Committee members and Mr. S.M. Nagaraj, Manager of the Branch. This is a report only the inauguration of the fortnight program for MM Day. Held on 14th April 2019. During the inauguration, A Certificate was also presented to Dr. C. Subbakraishna, to Mr. Arun Kumar, who has successfully completed PGDMM, with high marks.

The response from the industries was very good. There was participation of 14 teams from companies including Siemens Gamesa, Vestas, Wheels India, FLYJAC, Mahle Anand filters, Trichy Ordinance Factory, Madras Engineering and IIMM DSCM students.



Registration



Welcoming Guest Speaker Mr. K Sivakumar by Mr. J Ravishankar, Vice Chairman, IIMM Chennai



Welcome Address by Mr. J Ravishankar, Vice Chairman, IIMM Chennai



2019 SCM Quiz Participants



SCM Quiz winner and runners



Senior Members



Sectary, Mr. B Ramesh addressing

There were three rounds each in two Preliminary rounds and the final and all teams participated with zeal. The Quiz winners' team were from Siemens Gamesa represented by Mr. Balakrishnan & Mr. Dinesh

and our DSCM Students Mr. Vijay and Mr. Sivakumar stood as Runners.



Guest Speaker Mr. K Sivakumar, GM - Materials, TAFE Madurai



SCM Award Presentation



SCM Award Presentation



Young SCM Award Presentation



SCM Award Presentation



SCM Award Presentation



Mr. TAB Barathi, Education Director, IIMM Chennai Addressing



Mr. M. Sundaram, Distinguish Member of IIMM Chennai

Mr. Karthik Dore, EC member was present on the occasion to cheer the participants. Mr. J Ravishankar, Vice Chairman distributed the gifts to audience and concluding remarks and vote of thanks was given by and Mr. B Ramesh, Hony. Secretary.



IIMM Chennai Team

Indian Institute of Materials Management – Chennai Branch, Materials Management Day Celebrations

The 36th Materials Management Day was celebrated by Chennai Branch on 27th April 2019 at Hotel Regenta Central Deccan. Guest Speaker was **Mr. K Sivakumar**, General Manager, TAFE Ltd, Madurai.

Indian Institute of Materials Management, Chennai branch, organizes Material Management Day, as usual in a big way every year in the month of April. IIMM Members and SCM professionals from various industries sectors will attend the event to mark this day of IIMM's birth. Competitions, Quiz will be conducted to focus on the importance of Supply Chain Management as a profession.

IIMM Chennai has instituted **IIMM “Best Young SCM Manager Award”** to acknowledge Individuals' contribution in the field of SCM. After perusing the nominations received from various Supply Chain Managers, **Mr. Balakrishnan Ramasamy**, Industrial Operations, Siemens Gamesa Renewable Power Private Limited was selected by award committee and awarded “IIMM Chennai Best Young Supply Chain Manager - 2019” award.

Mr. J Ravishankar, Chennai Branch Vice Chairman welcomed the gathering and outlined the details about IIMM yearly award(s) and read the citation. The award containing a citation and memento were awarded to **Mr. Balakrishnan Ramasamy**, Siemens Gamesa Renewable Power Private Limited by Mr. M. Sundaram, Distinguish Member of IIMM Chennai.

Mr. B Ramesh, Hony Secretary thanked the companies and professionals / members supported / participated in Quiz program and IIMM –Young SCM Manager award. Mr. T N Srinivasan, National council member, and past Chairman given trophies to Quiz winners Mr. Balakarishnan and Mr. Dinesh of Siemens Gamesa and Mr. TAB Barathi, Director Education, IIMM Chennai given runners trophy to Mr. Vijay of Air Liquide and Mr. Sivakumar of Brakes India (current students of IIMM). SCM professionals from various industry

verticals including past Chairmen, distinguished members and EC members attended the Materials Management Day celebrations.

Mr. TAB Barathi, National council member and Director-Education, highlighted on IIMM Chennai branch educational activities and importance of IIMM.

LUCKNOW BRANCH

21.4.19 CEO MEET : Mr. Rajeev Kumar CEO, Hindustan Aeronautics limited accessories complex, Lucknow inaugurated the programme with lighting of the lamp & Saraswati Vandana, after that he shared his views and ideas on behalf of Hindustan Aeronautics Limited and also HAL's future plans.



Lighting of the Lamp by Mr. Rajeev Sahu, Addl. GM, CEO Office HAL, Lucknow



Memento given by Mr. C K Vishwakarma to Dr. C.M. Mishra



Memento given by Chairman IIMM Lucknow Branch to CA Pawan Tiwari



Power Point Presentation by CA Pawan Tiwari

23.4.19 : Mr.C.M.Mishra, our life member and senior research associate of Indian Institute of Management, Lucknow gave his power point presentation on the topic what is the difference between supply chain management and value chain management. Mr.Mishra explained various things on the above subject like as GTZ theory, Mesoplayers, Lab to Land and Land to Industry linkage with supply and value chain management . He also gave the examples in monopolistic competition and monopsony competition and gave example where government is the producer as well as purchaser the like H.A.L and others. Minimise of damages, gaps improvement and realignment. BCG Matrix & Porter, 5 points formula & dependency in crucial factor of supply chain management.

25.4.19 : Mr.Pawan Kumar Tiwary — M.COM, MBA, DFM, ACMA, FCA gave a power point presentation on topic- KEY CHANGES IN INCOME TAX RETURN FOR INDIVIDUAL ASSESSEE FINANCIAL YEAR 2018-19 Online filing of ITR Mandatory — ITR — Ifor financial year 2018-19 cannot be filed in paper format by tax payers having income below Rs. 5 Lakh with no refund. Only super senior citizens (age 80 or above) can now file ITR-1. or ITR-4 in paper form while others will have to file their ITR electronically.

ITR 1- for individuals being a resident having total income upto Rs. 50 Lakh from salaries, one house property, other sources (interest etc.) and agricultural income upto Rs. 5 thousand.

ITR 2 - for individuals and HUF's not having income from profits and gains of business or profession.

ITR 3 — for individuals and HUF's having income from profits and gains of business or profession

ITR 4—for individuals, HUF's and firms (other than LLP) being a resident having total income upto Rs.50 Lakh and having income from business and profession which is computed under section 44AD, 44ADA or 44AE.

If you have sold a property in financial year 2018-19, then while filing ITR 2 you have to provide complete details of the buyer. It is mandatory to deduct TDS if sale value exceeds Rs.50 Lakh. Rent arrears received have to be reported property wise. Individuals who have one house which is let out then rent received has to be reported in ITR - 1. Individuals with more than one house will file ITR — 2.

Specify house property while providing details in ITR - Whether house is self-occupied, let out or deemed let out. Holding shares in an unlisted company then disclose the details of your holdings in ITR - 2. Reporting of salary details in ITR — are in sync with the information available in form -16. Director of a company is required to specify DIN (Director Identification Number) in ITR - 2 or 3 whichever is applicable and also provide information which is name of company, PAN. whether share are listed or unlisted.

After power point presentation vote of thanks given by Mr.Saurabh Garb, Additional General Manager, Tata Motors Limited, Lucknow.

GREATER NOIDA BRANCH

National Seminar “ Modern Supply chain management contracts & Technologies” IIMM Greater Noida & SBS, Sharda University, 25th April, 2019

Chief Guest of the Seminar: Mr. H.K. Sharma, Addl. Director General, Ministry of Commerce, Govt. of India, New Delhi : The important role of Contracts in the Modern Day Supply Chain management issues in Organizations. The challenges which they come across during the course of Implementation of various clauses as per the Contract. The changes are phenomenal in the days to come in the area of Supply Chain procurement and role of Information Technology in facilitating the modern Supply Chain contracts. The influence of various Cross functional drivers in the Supply Chain and the role of Internet of Things and Business Analytics across the Value chain in various sectors.





Guest of Honour: Mr. V.K. Jain, Former Director , AIR INDIA : Emphasized the changing role of Supplier in the modern day Supply Chain Management. The significance of today's Supply chain role in changing Business environment. Critical analysis of Supply Chain issues in the Air line Sector and the procurement mechanism which play a important role in increasing the market share and Sustainability.

Technical Session-I. Guest Speaker: Mr. Sanjeev Bhatia, Chief General Manager, Corporate Strategy, INDRAPRASTHA GAS Ltd. (IGL) : Case presentation of IGL: Supply Chain issues in CNG, and the challenges in Pipe line management and maintenance of equipments. Recent trends of Pre-paid meters installation in various Residential welfare associations (RWA's) in Delhi NCR Region.

Technical session – II, Guest Speaker: Mr . Narendra Kumar, Chartered Accountant : Pre GST and Post GST in terms of Purchasing and Supply Chain issues for various products procurement, State GST, Central GST, IGST and its influence on final price of the products and billings aspects with reference to purchase and consumption of materials. A mix and composite GST implementation issues on various items bundled as a single package for purchase and consumption and the significance of Contracts and maintenance issues in GST Implementation.

Technical Session-III, Guest Speaker, Mr. S.RaviChandran, Sr. Manager, Purchase, DAURALA SUGAR WORKS,

The role of various aspects of Supply Chain management and the importance of Infrastructure development to facilitate Logistics management in various regions. The transformation from Logistics to

Supply Chain and the significance of Cross Docking and Bull whip effect in various Supply Chain issues.

Prof. Dr. MukeshChaturvedi, Dean SBS, Sharda University. The challenging role of supply Chain in the modern day technological environment. The significance of Contracts and its influence on Business environment. Supply Chain integration and its role in facilitating various cycles in the Supply Chain operations, from procurement to end consumer.

Dr. M K Bhardwaj, Chairman Board of Studies, Indian Institute of Materials Management talk to PGDMM & PGDSCM&L AICTE approved courses & other educational courses run by IIMM.

Prof. OmvirChowdhary, Associate Dean, Sharda University. Critical evaluation of the role of Supply Chain in various sectors and the significance Business Analytics in Supply Chain implementation.

Prof. Dr. A.VNageswara Rao, HoD, Supply Chain Mgmt,SBS, Sharda University. The role of Information technology and emerging trends in Supply Chain mgmt, The role of outsourcing and its influence on Product pricing and competitiveness. The emerging trends in the area of Supply Chain mgmt.

Mr. Suresh Kumar Sharma, IIMM, Greater Noida. Emphasized the role of Supply Chain and the evolution from Logistics to Supply Chain management. Instrumental in the conduct and success of the Seminar on Supply Chain management technologies.

IIMM, New Delhi, G. Ajay Kumar
IIMM, Greater Noida, Ajit Kumar

Around 50 Delegates participated representing various Industries /aspects of Modern day Supply Chain management trends. Co-ordinators: Ms. Richa Pandey, Ms. PiyaliHaldrcO-ordinated the National seminar on Supply Chain management ast SBS, Sharda University, Auditorium 201.

PUNE BRANCH

Evening Program : The Materials Management week celebration was concluded on the evening of 27th April 2019, by having an evening programme at Hotel Panchratna, Pune. The chief guest of this programme was Mr. Milind Deouskar, Divisional Railway Manager, Pune Division (Central Railways).

Hon. Treasurer Mr. Shashikant Kulkarni welcomed the Chief Guest, Branch Chairman & all the present members. Branch Chairman Mr. Amit Borkar briefed all the present members about the activities conducted by IIMM. Pune branch in recent times & its future plans.

Mr. Mohan Nair (National Councillor, IIMM) also spoke about how IIMM, Pune should reach out to new emerging industrial & well as service sectors. He appealed to all the members for their continuous support & active participation in all this program. This was the first time wherein an eminent person from the railway sector has graced the occasion. Mr. Milind

Deouskar, Divisional Railway Manager, Pune Division (Central Railways). Major talk was on the role of supply chain management in the railways.

He also emphasized the difficulty level faced by them on daily basis and how the railways manage to overcome these difficulties and strive their level best to give their services to the public day in and day out.

There was also a Q & A session held.

Mr. K R Nair(National Councillor, IIMM) concluded the program by a vote of thanks to the Chief Guest & all the participant of the Evening Program. More than 100members of IIMM participated in this concluding session which was followed by dinner.



INAUGURAL LECTURE : The Materials Management Week celebration was started by IIMM, Pune on the eve of 23rd April,2019 with an inaugural lecture by Mr.

Satish Kalokhe - President (QCFI), the topic being Success Story of QCFI.

Branch Chairman Mr. Amit Borkar welcomed the Guest Speaker & all the members for this lecture & also briefed all the members about MM Week. Mr. Mohan Nair, National Councillor, IIMM introduced the Guest Speaker Mr. Satish Kalokhe to all the members. The main focus of this lecture was on how QCFI could manage to evolve much stronger because of the involvement of its committee members.

QCFI being a nonprofit organization, how it managed to create revenues after losing support of some major industrialists. Instead they started designing and creating their own training programmes due to which they emerged stronger and all credits to the commitment and involvement of their core committee members.

Mr. K R Nair National Councillor IIMM, concluded the evening program by a vote of thanks to all the attendees of this event. This lecture was attended by around 40 -45 members of IIMM, Pune branch.



Industrial Visit : As part of Materials Management week IIMM, Pune branch organized an industrial visit on 24th April,2019 to KHS Logistics Pvt. Ltd, Chakan which in itself is a class apart warehouse having world class facilities for warehousing which caters to the various industrial warehousing requirements.

IIMM, Pune also carried out a visit to MBM Automation and Robotics Pvt. Ltd, Bhosari owned by Mr. Kadam, who started with a humble beginning working in various small-scale industries and with his sheer determination and hard work scaled to greater heights. Today his company is the 2nd company in the world having a patent of coating technology developed to prevent gases and petroleum equipment's in case of fire.



All in all, it was a learning and knowledge sharing experience for all 10 to 15 members who joined us for this visit.



PRESS MEET : IIMM, Pune organized a Press Meet with its media partner Hindustan Times on 27th April, 2019. Mr. Abhay Vaidya (Resident Editor) & Ms. Anjali Shetty (Asst. Editor) attended this press meet. Branch Chairman Mr. Amit Borkar welcomed the guest & briefed them about MM week & the activities conducted by IIMM, Pune.

He also emphasized on how IIMM, Pune & Hindustan Times can come together & work for the spreading the reach of IIMM in various industrial sectors.

It was quite an interactive session & Hindustan Times in turn have agreed to collaborate with IIMM, Pune branch for creating awareness about the activities conducted by IIMM, Pune among various emerging industrial sectors by jointly conducting some round table meetings with them.

IIMM, Pune is quite sure that this collaboration will yield some fruitful results soon.



RANCHI BRANCH

Ranchi Branch celebrated IIMM Day on 23.05.2019 at Hotel Lelac, Sarovar Portico Ranchi. Seventy to Seventy-five participants consisting of members and their family beneficated from lecture by Sri Manoj Tiwari [CEO] Samadhan.



Branch Chairman Shri A.K.Thakur



National President Sri G.K. Singh



Guest Speaker Shri Manoj Tiwari



Sri A K Thakur Chairman Ranchi Branch given his welcome address. Sri G K Singh [National President IIMM] deliver a lecture on importance of IIMM day and entire activities of IIMM within India and abroad. Sri Singh has explained how professionals working in the field of purchase, stores and logistic can be benefited by different course conducted by IIMM.

The talk i.e. "Family Value and Ethics" delivered by eminent speaker Sri Manoj Tiwari was very informative. All members really enlightened with such a vast knowledge in this topic. The end of program was conducted through a Quiz i.e. Question and Answer interactive mode for members and their family by Ajay Deep Wadhwa [Life Member]. Sri R N Singh, former Chairman proposed vote of thanks. IIMM day was concluded by family dinner.

THIRUVANANTHAPURAM BRANCH

IIMM Thiruvananthapuram Branch celebrated Materials Management Day and Family get together on Saturday 27th April 2019. The programme was held at Hotel Horizon, Thiruvananthapuram.

Dr. M. Baba, Former Director of the Centre for Earth Science Studies(CESS), Thiruvananthapuram was the Chief Guest for the function. Dr. Baba was Director of CESS for a record 12years. Afterwards he established a Centre for Advanced Training in Earth System Sciences and Climate in IITM, Pune under the Ministry of Earth Sciences, Govt. of India. He was Chairman and expert member of several national and international committees. Dr. Baba is lately associated with the Asian Development Bank's (ADB) technical programs. He is at present the Deputy Team Leader of GEF/ADB "Climate Resilient Coastal Protection and Management Project in India".

The programme started with a silent prayer. The meeting paid homage to the innocent victims of Sri

Lankan tragedy occurred on Easter Day. Branch Chairman, Dr. Koshy M George welcomed the Chief Guest, members, their families and invited guests.

In his presidential address, Dr. Koshy M George, Chairman of the Branch highlighted the major activities of the branch with special emphasis to Materials Management Day which is being celebrated on 23rd April every year by Indian Institute of Materials Management all over the country. This year 23rd April being the Parliament Election day in Kerala, postponed the celebration to 27th April.

Sri KG Nair, Former Chairman, introduced the Chief Guest to the gathering. Thereafter Dr. M. Baba made an excellent presentation on the topic: "Climate Change". He explained that climate change is a long-term shift in the climate of a specific location, region or planet. The shift is measured by changes in features associated with average weather such as temperature, wind patterns and precipitation. Natural causes of Climate Change are Variations in the Earth's orbital characteristics, Volcanic eruptions, Variation in solar output, Change in composition of atmosphere, etc. Anthropogenic causes of Climate Change are Green house gas emission (Carbon dioxide, Methane, Hydrofluorocarbons, Nitrous oxide, water vapour, etc.), Industrialisation and Deforestation. He also highlighted the impacts of Climate Change in India and cautioned that the Country should seriously think of immediate remedial steps to minimize the impacts, otherwise the future generation is going to suffer a lot.

The talk was followed by a violin concert by Ms Swetha Anandasivan, daughter of S. Anandasivan, Treasurer, IIMM, Thiruvananthapuram Branch. She played some of the hit Tamil and Hindi film songs on violin which was well appreciated by the gathering. Sri M.G. Narayanan Nair, Secretary proposed vote of thanks. The meeting ended with dinner. It was a memorable evening for the participants.



Starting of the Meet with silent prayer



Dr Koshy M George, Branch Chairman welcoming the Guests and Members



Dr. K G Nair, NC Member introducing the Chief Guest



Dr M Baba, Former Director, CESS making presentation on "Climate Change"



Branch Chairman presenting memento to the Chief Guest



Violin Concert by Ms Swetha Anandasivan

THE NEC AND NC MEETINGS WERE SUCCESSFULLY HELD AT TRIVANDRUM ON 10TH AND 11TH MAY 2019 :



Sri. G.K. Singh chairing the NEC Meeting at Hotel Residency Towers, Trivandrum on 11th May 2019.



Dr. Koshy M. George, Chairman, Trivandrum Branch presenting a memento to Dr. M.K. Bhardwaj, Chairman, BOS in the NEC Meet.



Trivandrum Branch Chairman welcoming the participants of NC Meet held at Trivandrum on 11th May 2019.



Presidential Address by Sri. G.K. Singh, National President in the NC Meet.



Participants of NC Meet at Trivandrum.

VAPI BRANCH

MM Day Celebration – 23rd April 2019 : IIMM Vapi celebrated “ Materials Management day” on 23rd April 2019 at Vapi Branch. The theme of the MM day , as selected by the NHQ, was “ Circular Economy : Role of Supply chain Management “.

Mr. Parthiv Mehta, Branch Chairman welcomes the members & delivered his inaugural address and highlighted the importance of the Materials Management day .



Hon. Secretary Mr. Rakesh Nandre welcomes the key note speaker Mr. Akshay Champaneria – Sr. Director Plant and Engg., Allweiler India Private Limited (Formerly Tushaco Pumps Pvt Ltd)Industrial Pumps – CIRCOR. Key note speaker Mr. Askshay Champaneria spoke on Circular economy and role of supply chain management. The program was very well attended with more than 40 delegates from the various

industries as well as IIMM students. Mr Anant Kapadia -Vice chairman gave away vote of thanks.

PLANT VISIT : As Part of Materials Management month celebration, IIMM- Vapi Branch organised a plant visit to BLUE STAR LIMITED, Dadra Unit. About 20 members and students participated in the visit. Participants felt that this visit has provided practical knowledge on the various aspect related to good operation practises and end-to-end supply chain management flow.



A view participants & EC members – Plant visit on 13.04.2019 at Blue Star , Dadra



IIMM VAPI Branch Chairman – Mr. Parthiv Mehta & Executive committee members handing over Memento to Mr.Sunil Bhosale - Manager Manufacturing, Blue Start Ltd.

VADODARA BRANCH

Seminar on ‘Logistics & Supply Chain’ topic at EDII, Ahd : This Year again we received Invitation from Ms.Ankita Jain, Senior Research/Academic Associate-PG Prog. of **Entrepreneurship Development Institute of India**, Ahmedabad to take sessions on ‘Mtrls. & Mfg.’ and ‘Logistics & Supply Chain’ topics for their Trisem-II Students of PGDM-BE course in 2018-20 batch, who had selected above topics in their course. We requested them for mail to discuss in our EC Meeting wherein it was decided to comply as per last year. Thereafter, they intimated for taking sessions on ‘Logistics & Supply Chain’ topic by Mr.L.L.Notani as they had made local arrangements for sessions on ‘Mtrls. & Mfg.’ topic. Later, the schedule for sessions was discussed with faculty to complete lectures in Week-3 of MAR’19 & Week-1 of APR’19 as students would have exams in second half of APR’19 and so it was decided for **L&SC** sessions on 18/3/19 & 3/4/19 which was agreed by EDII authorities.

On the first day, Ms. Ankita Jain shared faculty profile in her introductory talk & then IIMM Corporate presentation was shared with students (about 10 Nos.). During Lunch Break, upon taking students' feedback, they appreciated the session & were satisfied with presentation. They thanked for Ref. Mtrl. booklet given to them. Thus, the programme was successful as seen in the photos given below –



Events organised for MM Day Prog. in MM Week 2019 Celebration by IIMM Vadodara Branch : Various MM Day Programmes are organized during the week of our Foundation Day i.e. **23rd April** wherein we planned following Events during MM Week in April 2019 –

- **MM Day Prog.** with 'Future of Business : Circular Economy : Role of Supply Chain' theme organized on **21st APR'19** from 7 PM onwards wherein **Chief Guest, Mr. Mukesh Kumar Tiwari – Chief General Manager, GAIL (India) Ltd.-Vadodara** delivered Talk on Theme followed by Dinner & then **Musical Programme** conducted by **Mr. Priyansh Shah & Group** at C.C.Mehta Auditorium, M.S.University, Vadodara which was attended by about **350 Members, Guests & Invitees**.
- An Evening Talk on 'Industry 4.0 & Its Impact on Supply Chain Management' topic by **Dr. Bharti Trivedi** was organized on **23rd APR'19** from 6.30 PM onwards at our Conf. Hall which was attended by about **35 Members & Students**.
- The **Alumni Meet** of Passed out GDMM-Regular Students alongwith Board of Studies, Faculty & Executive Committee Members held on **28th APR'19** from 10 AM onwards at our Conf. Hall wherein **Chief Guest, Mr. Adesh Singhal – Deputy General Manager, GAIL (India) Ltd.-Vadodara** delivered Talk which was followed by Lunch and attended by about **50 Committee, Faculty Members & Students**.

- **MM & HR Conclave** for MM/SCM and HR Teams from PSUs, Corporates, Industries, etc. with '**Best SCM Practices**' theme for MM/SCM teams and '**Role of SCM Professionals in Profitability of Organisation**' theme for HR teams held on **28th APR'19** from 6 PM onwards at Hotel Grand Mercure Surya Palace wherein **Chief Guest, Mr. Neelamkumar Valecha – President (Reliance Ind. Ltd., Dahej)** delivered Talk on SCM Theme followed by Presentations of MM/SCM teams from **Five Organisations** and HR teams from **Three Organisations**. The Programme was attended by about **75 Persons** comprising of Members, Invitees and successfully completed with Dinner.

MM Day Programme organised on 21st APR'19 : The **MM Day Programme** with 'Future of Business : Circular Economy : Role of Supply Chain' theme was organised on **21st April'19** from 7 PM onwards at C.C.Mehta Auditorium, M.S.University, Vadodara wherein **Chief Guest, Mr. Mukesh Kumar Tiwari – Chief General Manager, GAIL (India) Ltd.-Vadodara** delivered Talk on Theme. Our Sr. Vice President, Mr. Malay Mazumdar shared details about various programmes planned for MM Day Celebration and Director-IFPSM, Mr. Lalbhai Patel gave inputs about International aspects of IIMM. Dr. Rashmi Dhumal very well anchored the programme which was attended by about **350 Members, Invited Guests, etc.** who appreciated the same. The programme was followed by Dinner and then Musical Programme was conducted by Mr. Priyansh Shah & Group wherein everyone liked the fusion of Old with New Songs which continued till late night.

The Event highlights are seen in photos given below –



Mr. Lalbhai Patel, Director IFPSM welcoming Chief Guest Mr. Mukesh Kumar Tiwari with Flower Bouquet



The Dignitaries lighting the Lamp at Inaugural Function



Mr. Mukesh Kumar Tiwari delivering MM Day Theme



The Auditorium was full with Talk on Audience enjoying the Event



Mr. Malay Mazumdar, Sr. Vice President felicitated Chief Guest with Memento



The Musical Group of Mr. Priyansh Shah & Team entertained with Fusion of Old & New Hindi Songs

Evening Talk held on 23rd APR'19 (MM Day) : An Evening Talk with 'Industry 4.0 & Its Impact on Supply Chain Management' topic by Dr. Bharti Trivedi was held on 23/4/19 (MM Day) from 6.30 PM onwards at our Conf. Hall which was attended by about **35 persons** comprising of members, students. Dr. Bharti Trivedi is Academician turned Entrepreneur and Co-Founder of Apex Technology, She is Doctorate in Management & I.T. with more than two decades of strategic as well as hands-on professional experience.

Being Adj. Professor at M.S. University of Baroda, she is Research Co-ordinator of CRIMM at IIMM, Vadodara. Her global presence includes latest visit to Tashkent-Uzbekistan in AUG'18 as member of high-level delegation by Minister of Industries & Commerce, Mr. Suresh Prabhu. In MAR'18, she was invited to attend the Global Education and Skills Forum, Atlantis Palm - Dubai. She visited Dhaka in JAN'18 as Delegation Member nominated by Ministry of Industries & Commerce for Multi Country Project and in SEP'16, she went to South Korea, Seoul as National Expert nominated by GOI for Research Project. Dr. Bharti has visited multiple countries like Switzerland, Thailand, France, Malaysia, Singapore etc. for various business trips. She is currently leading the team of technocrats who are working on the prospective collaboration with overseas/international organizations in Advance Research and Training of Industry and Academic experts by setting-up a state of Art Advance Research centre. Her goal is to bridge the gap between Academia and Industry. She is passionate about setting up Advance research centre and to train research scholars, senior executives and mentoring professionals.

The Fourth Industrial Revolution — Industry 4.0 — has begun. The emerging technologies and applications in automated data gathering using Internet of Things (IoT), Machine Learning and Artificial Intelligence, as well as Analytics and Cloud Computing Systems in play today are already changing the way we do business. The Supply Chain Industry is also undergoing a transformation, adopting digitization, automation and centralized business intelligence systems. The talk highlighted the need of development of supply chain visibility solutions for every level — Manufacturing, Procurement, Logistics, Warehousing and Fulfillment. The companies with Integrated Digital Supply Chain functions will become far more efficient than their predecessors. The impact of Industry 4.0 on digital supply chain isn't limited to better efficiency & productivity. Adopting supply chain digitization solutions will give us an edge over competitors, improve our ability to service customers & build better business collaborations and generate more avenues for revenue. The purpose of talk was to motivate companies to start early, take small steps & implement pilot projects to completely transform their digital supply network in due course of time. The Talk was very much appreciated by audience as they actively participated in the interesting findings.

Thus, MM Day was nicely celebrated with Event memories shared in photos given below –



Mr.Lalbhai Patel-Director, IFPSM felicitated Dr.Bharti Trivedi with Memento

ALUMNI Meet organised on 28th APR'19 : After a span of about 10 years, Alumni Meet was organized on **28th APR'19** from 10 AM onwards at our Conf. Hall wherein **Chief Guest, Mr.Adesh Singhal – Dy. General Manager, GAIL (India) Ltd.-Vadodara**

delivered Motivational Talk for Students apprising them about current market scenario & challenges ahead to be overcome for successful career development. The Dignitaries like Mr.Lalbhai Patel-Director, IFPSM, Mr.Malay Mazumdar-Sr.Vice President, Mr.Devanand Trivedi-Director (Western Region), Mr.Tushar Trivedi-Chairman, Mr.Sambhudevan Nair-Vice Chairman, Mr.H.M.Bhatt-BoS Member, Mr.K.B.Walvekar-Faculty Member shared their views about IIMM & Educational Activities. Also, the attending students informed about benefits gained by them after completing GDMM Course and shared their experience, feedback. Mr.Rajesh Vasayani-Course Co-ordinator anchored the meet. The Event was attended by about **50 Committee, Faculty Members & Students** & followed by Lunch which was appreciated by all & made memorable with following photos -



Mr.Adesh Singhal being welcomed with Flower Bouquet by Mr.M.Sambhudevan Nair



Mr.Adesh Singhal delivering the Talk



The student intimating about his experience during course tenure

MM & HR Conclave organised on 28th APR'19 : **MM & HR Conclave** for MM/SCM and HR Teams from PSUs, Corporates, Industries, etc. with '**Best SCM Practices**' theme for MM/SCM teams and '**Role of SCM Professionals in Profitability of Organisation**' theme for HR teams was held on **28th APR'19** from 6 PM onwards at **Hotel Grand Mercure Surya Palace** wherein **Chief Guest, Mr.Neelamkumar Valecha – President (Reliance Ind. Ltd., Dahej)** delivered Talk on SCM Theme. Then, Presentations of MM/SCM teams from **Six Organisations** namely SCHNEIDER ELECTRIC, OPaL, GAIL, GEA PROCESS ENGG., AARTI Industries, ADANI Ports & SEZ Ltd. and HR teams from **Three Organisations** i.e R R GLOBAL, DEEPAK Group, GSFC were sequentially done which were well appreciated by all. Also, Delegates from GETCO, IOCL, GACL, ONGC, Mahindra Gujarat Tractors Ltd., etc. attended the Meet. Dr.Bharti Trivedi anchored the Meet with concluding remarks shared by Mr.Ketan Patel. The Prog. was attended by about **75 Persons** comprising of Members, Invitees and successfully completed with Dinner depicting following photo glimpses –



Mr.Neelamkumar Valecha lighting the Lamp with other Dignitaries



Mr.Malay Mazumdar, Mr.Tushar Trivedi Mr.Neelamkumar Valecha, Mr.Lalbhai Patel & Mr.M.Sambhudevan Nair at Dais



Mr.Devanand Trivedi felicitated Mr.Neelamkumar Valecha with Memento



Mr.Sudhir Agrawal-Head,Tech.Comm. & Mr.Sanjay Gupta- VP,Tech.Comm. from Adani Ports & SEZ Ltd. attended alongwith Mr. Pankaj Panchbhai-Chairman, IIMM-AHD Branch



Mr.Rajeev Bhargava-HR Head from RR Global being felicitated with Memento by Mr.Lalbhai Patel



Mr.Adeshe Singhal-DGM(C&P) from GAIL, Vado. being felicitated with Memento by Mr.M.Sambhudevan Nair



Indian Institute of Materials Management

MISSION

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

OBJECTIVE

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

CODE OF ETHICS

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



भारतीय सामग्री प्रबंधन संस्थान Indian Institute of Materials Management

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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.

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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 _____

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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

THE CORRECT WAY TO GET YOUR DIABETES TEST DONE

Dr. Anurag Bansal, Technical Head N&E and Director - Lab Operations,
(Gurugram Reference Lab) SRL Diagnostics.

Getting blood tests at the lab can be stressful for many. Scheduling the test, fasting for hours, waiting in the line and then anxiously waiting for the results. Apart from all this hassle, you need to know there are some things that can jeopardise an accurate result, especially in case of a diabetes test. If you are a diabetic patient and often go to the lab for getting your blood sugar tested, here's a complete guide to prepare you for your test and make sure that you get the most accurate results.

Test for type 1, type 2 and prediabetics A1C test – Glycated haemoglobin

This blood test doesn't require you to fast and indicates your average blood sugar for the past three months. The test measures the percentage of the blood sugar attached to the haemoglobin, the oxygen-carrying protein to the red blood cell.

The higher your blood sugar, the more haemoglobin you will have with the sugar attached. On standard level, if your A1C level is 6.5 or higher in two consecutive tests, it means you have diabetes. If your A1C level is between 5.7 and 6.6, this indicates that you are a prediabetic. And below 5.7 is considered normal.

The conditions that can affect this test are if you are pregnant or have an uncommon form of haemoglobin called haemoglobin variant. In such cases, your doctor might ask you to get some other test done.

Random blood sugar : As the name suggests, a blood sample is taken at a random time, regardless of the fact what you ate or when you ate. The random blood sugar level of 200 mg/dL suggests higher diabetes level.

Fasting plasma glucose (FPG) test : A lot of people are confused about how to get their fasting blood sugar test done. One needs to fast overnight (at least 8 – 12 hours) to get their fasting blood sugar tested the next morning. While 100 mg/dL is normal, between 100 – 125 mg/dL is considered prediabetic and if it's higher than 126 mg/dL in two separate tests, you have diabetes.

Postprandial glucose : The sample for this test is taken two hours after breakfast. But because different people eat different breakfast and some even tweak their meal thinking that it might bring better results, breakfast is now replaced with 75 grams of glucose to maintain uniformity of glucose intake. The basic purpose of the test is to check how your body handles glucose, a value of more than 140 mg/dL is abnormal.

If you choose to eat breakfast, have what you eat on a regular basis and do not change your meal, recommend experts.

Oral glucose tolerance test : This test is done in two

parts. You have to fast overnight and then the fasting blood sugar is measured right in the morning. Then you are asked to have a sugary drink, following which your blood sugar levels are tested after two hours.

If type 1 diabetes is detected, then you might be asked to get a urine test done. This test looks for the presence of a by-product produced when muscle and fat tissue are used for energy because the body doesn't have enough insulin to use the available glucose.

Gestational diabetes : You are at a high risk of gestational diabetes if you were obese during the start of your pregnancy, you had gestational diabetes during your last pregnancy or your mother, father, siblings or child have diabetes. Your doctor will ask you to get tested for gestational diabetes during the first prenatal visit.

Tests for gestational diabetes : Initial glucose challenge test: You are made to drink a syrupy glucose solution. One hour later, your blood sugar is measured. If your blood sugar is higher than normal, follow up test is done to determine if you have gestational diabetes.

Follow up glucose tolerate testing : For the follow up gestational diabetes test, you will be asked to fast overnight and then get your blood sugar level measured. Then you are asked to have a sweet solution, which has a higher concentration of glucose, post which your blood sugar levels are checked every hour for a period of three hours.

If the readings for at least two hours are higher than the normal, you have gestational diabetes.

How to test your blood sugar at home

Testing blood sugar at home requires a small device called glucometer. Follow the below instructions to measure your blood glucose level accurately on a glucometer.

1. Wash your hands well and dry them
2. Insert the test strip into your meter
3. Prick the side of your fingertip with the help of needle provided with your test kit.
4. Now gently squeeze or massage your finger to drop the blood drop on the test strip.
5. Or you can touch and hold the edge of the test strip to the drop of blood.
6. The meter will display the blood glucose readings on the screen after a few seconds.

Source: timesofindia.indiatimes.com



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