



# **Online Workshop on Industry 4.0**

**Smart Manufacturing-**



"Digital is the main reason over half of fortune 500 companies have disappeared"

- Driving Digital Path to Profits
- Convert Disruption to Opportunity
- Create a Digital Twin for Cutting Edge Performance

#### **Theme**

The entire world, as we are all aware, is gripped by the Covid-19 pandemic, affecting every manufacturer in some way or other. The global supply chain is still experiencing high levels of disruption and many manufacturing companies have halted their production completely, while some have seen greatly reduced demand.

Around the world, the coronavirus (Covid-19) outbreak has exposed the limited resilience of many manufacturers – in particular, their fragile supply chains, overdependence on human assets, and often insufficient agility. Indeed, with a global recession looming, further volatility expected, and investors growing more cautious, the need for manufacturing industries to step up performance – for them and for society – has never been greater.

The pandemic is triggering Industry 4.0, as companies are implementing Industry 4.0 technologies to mitigate the various challenges as risk management becomes the most critical part of the supply chain manager's job. This is a great opportunity for digital leaders to discover and implement innovative digital strategies to drive digital transformation across the organizational level, giving the chance to factories to continue production, without spreading the virus and associated risks. Further, the adaptability to analyze and adjust inventory requirements, optimize their supply chains, and advance the OEE is now more of the essence

CII Naoroji Godrej Centre of Manufacturing Excellence (CII CME) is organising an Online Workshop dedicated to support companies to prepare and define their future capabilities for what is next and beyond. This Workshop, scheduled from 17 – 28 August 2020, will focus on the key technology enablers of Industry 4.0 and focus on the following deliverables:



Develop a coherent roadmap for controlled, predictable and monitored manufacturing

Comprehend how 14.0 can be implemented concurrently with lean Manufacturing/TQM/TPM etc

Step by step Methodology to implement a complex initiative, 14.0

Identify skill gaps in the company and adopt ways to upgrade them Grasp full understanding of new domains that need to be developed within the company

Evolve a Technology Vision and long-term CapEx Strategy

## **Objective of the Workshop**

In order to support member companies in the implementation and application of the Industry 4.0 levers and value drivers, CII Naoroji Godrej Centre of Manufacturing Excellence is offering a special on line programme spread over ten working days -- one module per day.

The workshop will address these critical issues and attempt to draw up a new narrative for Indian Industry 4.0

The Workshop is not an Awareness Programme, but will help participants to draw a roadmap for implementation.



## The Programme will involve

**Module:** Smart Manufacturing - Ways to Implement

[17- 28 August 2020, Mumbai]

**Objective:** To address critical issues and attempt to draw

up a new narrative of Indian Industry 4.0 by:



Learning about implementation of latest advancements that include smart manufacturing, robotics, artificial intelligence and the Internet of Things (IoT), additive manufacturing, automation and robotics and more.



Learning about how I4.0 is revolutionizing manufacturing globally by way off:

- Adopting a 360 degree approach virtual reality and augmented reality
- Viewing the Fourth Wave in 3D
- Robots on the rise controlled by humans
- Building Intelligent Factories In the Cloud
- · Disruption in Manufacturing

## Module: Industry 4.0 Smart Manufacturing - Ways to Implement

#### **Core Areas of Concern for India**

- Industry 4.0 is a capital intensive approach, at least, in the initial phases. Substantial CapEx may be involved in Smart Machines, Automation, Data Management and I.T networks. In India, capital is more expensive. This will be a key challenge.
- India's manufacturing sector currently deploys physical assets belonging to multiple technology generations. Purely mechanical assets, some with 1st generation electronic controls right upto NextGen Smart Machines, at least four different levels of technology stratum exist. To harmonise all of them into a single connectivity language will be another challenge.
- When all countries implement industry 4.0 and India does the same, where will India's national competitive advantage come from?

#### Why Industry 4.0?

- As 2022 (the dawn of New India) inches closer, manufacturing companies need access to knowledge, training and state-of-the-art information and communication updates so that they are ready for Industry 4.0.
- Companies need to find innovations to make their operations smarter, cleaner and more productive.
- To understand what the Factory of the Future should look like, in the next decade, when faced with competition from next generation communication systems and concepts.

#### **Sessions on**



Factory of the Future+ Pathway to Paperless Factory



Sensors, RFID, Analytics and Big Data



Connected Enterprise : M2M Connectivity, IoT and Cloud



Future of Work



**Automation and Collaborative Robotics** 



Artificial Intelligence, Augmented Reality & Smart Machines



Disruptive Technologies - Additive Manufacturing



IoT based Predictive Maintenance



Cyber Security

#### **Who Should Attend?**



## **Leading Domain Experts will conduct Sessions**

This Workshop is intended to help senior leaders in manufacturing [both large and medium scale] who are deploying Industrial Internet of Things technologies to obtain greater value from their businesses by diagnosing the state of their systems, measuring activities appropriately, and overcoming cultural obstacles to deployment of productive technologies.

It will also guide senior executives from small scale manufacturing companies understand the various stages of the Industry 4.0 technological process and consider the various implementation stages to be adopted to secure value and create competitive advantage in today's environment.

- Ideally, a cross functional team of 2 3 representatives from same organization, tasked to start I4.0 and Advanced Manufacturing Journey should attend together
- Faculties/ Industry Professionals/ Leading Domain Experts to conduct the various Modules

### **Target Sectors**

Marine, Aerospace, Automotive,
Biotechnology, Chemical, Construction,
Defence, Energy, FMCG, Textiles,
Metal Components, Mobile Technology,
Parts Manufacturing, Food & beverage,
Research & Development, Medical &
Pharma, Electrical & Electronics, Capital
Goods, Logistics Service Providers,
Manufacturing Verticals of IT Companies.



The significance of manufacturing for the Indian economy has been long recognised. While the Government has initiated several mission mode programmes to encourage manufacturing in India, Industry has been making concerted efforts to enhance its competitiveness. A highly competitive environment promotes the well-being of enterprises and stakeholders involved, both directly and indirectly, by boosting productivity across levels. A competitive ecosystem also has the potential to create a large number of jobs in the manufacturing sector. The CII Naoroji Godrej Centre of Manufacturing Excellence (CII CME) promotes and fosters pre-eminence and competitiveness to create a global manufacturing hub in India.



Confederation of Indian Industry 125 Years: 1895-2020

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering industry, Government, and civil society, through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, playing a proactive role in India's development process. Founded in 1895, India's premier business association has more than 9100 members, from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 300,000 enterprises from 291 national and regional sectoral industry bodies.

CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes. Partnerships with civil society organizations carry forward corporate initiatives for integrated and inclusive development across diverse domains including affirmative action, healthcare, education, livelihood, diversity management, skill development, empowerment of women, and water, to name a few.

India is now set to become a US\$ 5 trillion economy in the next five years and Indian industry will remain the principal growth engine for achieving this target. With the theme for 2019-20 as 'Competitiveness of India Inc - India@75: Forging Ahead', CII will focus on five priority areas which would enable the country to stay on a solid growth track. These are - employment generation, rural-urban connect, energy security, environmental sustainability and governance.

With 68 offices, including 9 Centres of Excellence, in India, and 11 overseas offices in Australia, China, Egypt, France, Germany, Indonesia, Singapore, South Africa, UAE, UK, and USA, as well as institutional partnerships with 394 counterpart organizations in 133 countries, CII serves as a reference point for Indian industry and the international business community.

#### For participation, please contact

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