



## **Industry 4.0 Conference at PHD Chambers, New Delhi**

### **Event Report**

<b>Event Name:</b> Industry 4.0 Conference	<b>Event Date:</b> 16 <sup>th</sup> Sep 2022
<b>Faculty Coordinators:</b> Mr. Anshul Mathur	<b>Event Timings:</b> 10:00 AM – 4:00 PM
<b>Number of Participants:</b> 48	<b>Venue:</b> PHD Chamber of Commerce & Industry, New Delhi

### **Expected Outcome**

- Awareness about the evolution and progress of Industry 4.0.
- Critical thinking to imagine a better supply chain framework for next generation.

### **Purpose of the event:-**

- To broaden the knowledge about all the associated factors of Industry 4.0 in the competitive world.
- To get a deep understanding of evolution of Industry 4.0 and its enabling role in Make in India

## **Detailed Report:-**

### **Session 1: Inaugural session**

The Industry 4.0, conceptualizes rapid change to technology, industries, and societal patterns and processes in the 21st century due to increasing interconnectivity and smart automation. The term has been used widely in scientific literature, and in 2015 was popularized by Klaus Schwab, the World Economic Forum Founder and Executive chairman. Schwab asserts that the changes seen are more than just improvements to efficiency, but express a significant shift in industrial capitalism.

During this session, panelists emphasized on the basic concept of Industry 4.0, how it has evolved over the period of time and how it's going to give a new perspective to the business world in the future. Following points describe my observation-

Industry 1.0 was completely based on the concept of mass production and it was started at the end of 18th Century, after that we moved to the Industry 2.0 where industries started using Electricity in the manufacturing process, then we moved towards the Industry 3.0 where advanced machines fully loaded with Artificial intelligence, Machine learning, and IOT took place.

Now companies are moving towards industry 4.0 which is all about Connectivity and Automation. It makes use of advanced technologies such as Artificial Intelligence, Machine Learning, Additive Manufacturing, Smart manufacturing, IOT, Robotics, Big data, Cloud computing, Cyber security, Virtual reality, Augmented reality, and mixed reality.

There are two main purposes of Industry 4.0. To ensure the operational efficiency and safety in companies and to increase the contribution in total GDP of India from the manufacturing sector to 25% by 2025 from 16% currently, according to statistical data.

Industry 4.0 focuses on the 4C's of the business world. They are Connectivity, communication, Collaboration, and Computing.

The key characteristics of Industry 4.0 are Connectivity, Optimization, Transparency, being Proactive, and Agility.

Panelists in the inaugural session, also threw a light on the concept of Make in India and its purpose.

The main aim of the Make in India initiative is to introduce new processes, to introduce a new mind-set in the business world, to explore new sectors, and to build new infrastructures across various sectors.

There is a very good suggestion quoted by a panelist “Students and professionals need to focus on the skills which will be required 5-10 years down the line”.

Later on in the session, panelists also emphasised on the concept of Creation of Next gen. India.

As per my observation, there are two major questions every student and corporate should answer in order to build the next generation India.

What to do?

Create hyper specialized workers

How to do it?

Communities of Practice

Don't look for Jugaad

Do each work very well

Work for excellence

Answer, how am I going to change the Ecosystem? or What is the new role/job you're going to implement?

Principled enactment

Work for prosperity

Answer, how are you going to create value for your customers?

In the first session, panelists also discussed the concept of quality management and some of the well-known principles of quality management such as PDCA Cycle, SMARTER objectives, and 6M's applicable to processes.

### **Session 2: Smart manufacturing**

In this session the panelists mainly focus on future factories and factors of future in terms of manufacturing. It is impossible to imagine modern industry without the intelligent networking of production and value chains with information and communications technology. In a sector where efficiency is a top priority, digital processes are opening up new opportunities. Artificial intelligence (AI) and Big Data make it possible to automate production processes – all the way to the Smart Factory.

### **Session 3: Metaverse and Web3.0 technologies**

The industrial metaverse is no different: it's a digital representation of the real. Just an enormously different scale. Rather than just individual objects, the industrial metaverse is a complete digital universe to occupy, with digital representations of the real. A lot of conversation in business and leisure around the metaverse focuses on its entertainment and commerce possibilities. But that's the tip of the iceberg, when it comes to monetizing the metaverse.

Technical session-2 evolved around the topic Metaverse and Web 3.0. Some of my observations of the discussion has been described by the following pointers-

Metaverse is a virtual space and a network of 3D worlds which replicates the real world experience over the internet. It's persistent in nature and it has got no boundaries. Using Metaverse, one gets the same experience as he gets physically.

There was a very good example quoted by one of the panelists, "Brahma ji created the whole world, and we created another world called Metaverse".

There were also some discussions on the use cases of Metaverse and how businesses are getting benefited from this technology.

Later on, the concept of Web 3.0 was discussed and its evolution. Earlier we had Web 1.0 where we are allowed only to read what the editor or developer used to write, in the Web 2.0 users got access to read and write, and in the web 3.0, users are allowed to read, write, and add a new layer to the existing content. This ultimately gives a new kind of experience to the users.

#### **Session 4: Brainstorming session with sector Skill Councils for Skills Gap in industry 4.0**

There are many types of logistics and there are many definitions of logistics, ranging from the organization, planning and management of something complex, such as the logistics of setting up an event, to activities whereby many moving parts and processes are involved. It's in the latter sense of moving things (goods, assets, materials, data and more) around in a business, supply chain and Industry 4.0 context that we look at logistics here.

#### **Learning Outcomes:-**

- Understanding of Supply chain framework
- Knowledge of all the associated factors of Industry 4.0 in the competitive world.
- Understanding of role of Industry 4.0 in Make in India.

#### **Report Prepared by**

(Mr. Anshul Mathur)