

## Industry 4.0 – The Indian Perspective

Industry 4.0 – the latest term in the dictionary of industrialization, that promises a new industrial revolution. A revolution that marries advanced manufacturing techniques with the Internet of Things, to create manufacturing systems that are not only interconnected, but communicates, analyze, and uses information to drive further intelligent action back in the physical world.

At the IESS VIII, EEPC India with support from the Department of Heavy Industry held a session on Industry 4.0, aiming to create awareness and demystify the concept by developing networks and cooperation between industry and academia.

Shri Rakesh Shah, Chairman (PED), EEPC India welcomed the gathering and introduced the purpose and relevance of the topic.

With representations from the Government, large cooperates and MSME sectors, the session provided the manufacturing industries, particularly the MSMEs a feel of Industry 4.0, its relevance to their businesses and created awareness about the application and benefits of Industry 4.0. The session was a vital platform for sensitizing the DHI scheme of SAMARTH Udyog, initiated to facilitate and create ecosystems for the propagation of Industry 4.0 technologies in every type of Indian manufacturing by 2025.

Ms. Sukriti Likhi, Joint Secretary, Department of Heavy Industry, Government of India emphasized that Industry 4.0 is important to move towards a growing manufacturing industry and that it is not difficult to implement, provided it takes place in a systematic way.

*“Presently, the manufacturing sector in India contributes to 18% of the GDP. To increase that, we need this sector to grow and contribute further, which will, therefore, provide more employment opportunities and thus generate higher revenue. To achieve that, we need to be more competent, especially with a lot of manufacturing in the MSME sector that is not technologically advanced. We are actively creating awareness in the MSME sector to help them apply these technology advances while assuring them of its utility and affordability,” she added.*

Addressing the perceived notions of Industry 4.0, Shri P. J. Mohanram, Senior Advisor, Indian Machine Tool Manufacturers' Association (IMTMA) and Ms. Uma Balakrishnan, CEO, Axcend Automation & Software Solutions Pvt. Ltd resonated that Industry 4.0 is not a distant dream, but a reality. They simplified the practical truth of Industry 4.0 and urged the sector to integrate and implement, with the required local customization which can accelerate productivity to 30 percent.

Ms. Balakrishnan also suggested that once the industry stops seeing robotics as a threat to automation manufacturing, empowerment of women in the manufacturing sector can be made possible by technology.

## **'Unless we innovate, we cannot dominate'**

Technical Talks by Industry 4.0 Technology providers were focused on 'Internet of Things for Smart Manufacturing' by Dr. Nagahanumaiah, Director, CMTI Bangalore and 'Trends in Additive Manufacturing' by Mr. Adish Kunhiraman.

Dr. Nagahanumaiah presented an overview of how CMTI, a public funded R&D institute by the DHI views the next 4-5 years and listed initiatives and their establishment of Smart Manufacturing Demonstration Cell. The most important aspect of Industry 4.0 is the interface between the smart factory and other smart infrastructure such as smart mobility, smart logistics, smart grid, smart buildings, and homes. Also, social networking and business web play vital roles in Industry 4.0.

The session also has presentations of success stories from SIEMENS & MARii on their journey into Industry 4.0. Shri S. Divakar, General Manager Sales, Southern Region, Siemens Ltd shared specifics of their integration processes at Siemens he said is possible only with an open mind to take it forward and by setting comfort levels.

Dato' Madani Sahari, CEO of MARii, Malaysia Automotive Robotics & IOT Institute (MARii) shared his account of how they implemented industry 4.0 architecture at Malaysia. His presentation gave an account of the Malaysian market, which was challenging in the past, but now since its implementation, has become a success story, only with a high level of commitment.

With the key take away from the session being 'Communicate, Analyse And Act,' a panel discussion followed, with questions from the audience. There were questions on challenges and roadblocks to implementation, where companies requested support and partnerships from the Government as the application of change especially in the MSME sector looks challenging.

The panel recognized the need for a common platform, to address specific challenges with regard to manufacturing, technology and investment. Experts on the panel also recommended solutions for company-specific queries from the audience.

With a high capability of digitization in India, in short - Industry 4.0 is ushering in a digital reality that may alter the rules of production, operations, and workforce - even society.

'Technology Pavilion' was a major attraction at the show where latest innovation models were displayed, the participants were invited to visit the pavilion. The session was widely promoted on the online (Twitter, Facebook, etc) and offline media (Showdaily, Newsletters, etc).

Shri P R Venkatachalam, Working Committee Member, EEPC India concluded the session and thanked the panel for their willing participation and support.