

WEBINAR TITLE: COST REDUCTION THROUGH INDUSTRY 4.0 TECHNOLOGIES

Registration Fee (including GST):- Rs 499/- (Rupees Four Hundred Ninety Nine Only) per participant inclusive of GST

Expert Speaker (Name/ Designation) – Mr. Naresh Chawla, Business Excellence Coach and Six Sigma Master Black Belt

Webinar Date: 07.03.2021 Duration: 11.00 hours to 12.00 hours (one hour)

About Webinar (Brief One para):- Industry 4.0 technologies enable businesses to create smart factories that are more efficient, more productive, more flexible and more responsive to the customers. Industry 4.0 is the current trend of automation and data exchange in manufacturing technologies. It includes cyber-physical systems, the Internet of things and cloud computing. Industry 4.0 creates what has been called a “smart factory”.

Traditional factories lose a lot of money on returned substandard products. Using Industry 4.0 can reduce or eliminate those costs. Real-time monitoring and quality control allow data to be collected from every point of production. This helps determine and control the conditions that affect the quality of products while production is in process, for example, determining the optimum temperature and pressure levels ensures the best quality and helps eliminate waste. This can help reduce or eliminate defective or substandard products, which means fewer products are returned for failing to meet specifications.

One of the major components of Industry 4.0 are industrial robots. They can perform high-precision tasks without a glitch and also work 24/7 without a break, which is something that cannot be said about human workers. They also do not get hurt and do not take sick days. This means the factory will be operating nonstop throughout the year. The latest and most advanced robots can make job-specific decisions, which means less human intervention. Thus, using Industry 4.0 can greatly save costs.

As part of the Industry 4.0 implementation, it is known that technological tools allow optimization of day-to-day operations resulting in higher efficiency in manufacturing and management processes. While using new and powerful technological resources, Industry 4.0 will benefit companies with much advanced efficiency operations. In practical terms, companies have the opportunity to optimize resources for better results bringing competitive edge. Within this Industry 4.0 implementation, it is possible to save money by implementing an efficiently smart factory:

Some of the key benefits of Industry 4.0 technologies are :

- Cost reduction due to optimization of operations resulting in higher efficiency in manufacturing and management processes
- Less operating expenses due to efficient technologies
- Higher accuracy in results;
- Greater product safety and control;
- Reduction of failures;
- Reduction of time cycles and work in processes;
- Reduction of work injuries;
- Process regulation and control for better final product quality level;
- Higher equipment efficiency.
- Employees performing more value-added activities
- Improved working conditions

Thus Industry 4.0 technologies are enabling enterprise to improve their efficiencies, performance, innovation and business sales. Digitising their supply chains , manufacturers, could potentially limit up to 70% of manufacturing failures through predictive maintenance. Data-driven insights can potentially boost productivity by up to 30%. Reducing quality failures, minimizing/eliminating need of manual inspection, transferring the real time data in to manufacturing engineering system by combining IT with operational technologies are a few key areas of cost reduction in manufacturing. OEMs are also using 3 D printing technology for reducing cost of prototype development and smart manufacturing solutions to predict machine failures for reducing cost of spare parts as well as reducing unplanned breakdown time.

The webinar will focus on application of Industry 4.0 technologies in reducing cost and achieving operational excellence through creating a digital enterprise.

Webinar Coverage:-

- Introduction to Industry 4.0 and key Industry 4.0 technologies
- How to create a smart factory using Industry 4.0 technologies
- Industry 4.0 Outcomes
- Application of Industry 4.0 technologies in real-time monitoring and quality control for reducing wastages and failures.
- Automation through IIoTs
- Predictive Analytics
- Additive manufacturing
- Advanced Robotics
- Application of industry 4.0 technologies in SMEs
- How to create a digital enterprise?
- Case studies and examples of digital transformation and cost savings

Speaker Profile (Brief One Para & Photograph):- Mr. Naresh Chawla is a business excellence professional and a Lean Six Sigma coach with more than 28 years of experience driving innovation, continuous improvement and performance management in the business organizations. He is a Certified Six Sigma Master Black Belt and a Certified Productivity Practitioner from APO, Japan. He has served with National Productivity Council as Dy. Director, KDDL Ltd as Corporate Head Quality & Engineering, with PTU Nalanda School of TQM & Entrepreneurship as General Manager and with Punjab Engineering College (a deemed University) as Visiting Professor in the past. He has delivered sessions on Quality 4.0, Industry 4.0, Excellence through Manufacturing and Digital Transformations in the past.



Register to learn (Key Learning's' in bullet points):

- **Introduction to Industry 4.0 and key Industry 4.0 technologies**
- **How to create a smart factory using Industry 4.0 technologies**
- **Industry 4.0 Outcomes**
- **Application of Industry 4.0 technologies in saving cost and improving productivity**
- **How to create a digital enterprise?**

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Thanks and regards

S.P.Singh

Regional Director

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