

Advancement in Manufacturing: Industrial Revolution 5.0

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Industrial revolution 5.0 is the buzzword nowadays. Although we haven't really got the optimum from the industrial revolution 4.0, yet the Industrial 5.0 is now gaining attention from manufacturers worldwide. The concept of was first presented by Japan as Society 5.0 as A human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space [1-3]. The focus of IR 5.0 shifts from shareholders to stakeholders and, additionally, it reinforces the contribution of industry to the society at large.

While the industrial revolution 4.0 was based on the implementation of cyber physical system with inclusion of Internet of Things (IoT) and automation and integration of multiple devices with each other to remain connected with each other [4, 5]. As the industry evolves, the concept of Industrial revolution 5.0 comes into picture as a developed version of IR 4.0.

It may however be noted that industrial revolution 5.0 is not a revolution, but it is a type of reinforcement for improvement in the IR 4.0. Where the IR 4.0 focused on connected machines, smart products and intelligent supply chain, IR 5.0 focuses on customer experience through hyper customization, interactive products and responsive supply chain.

In essence, the industrial revolution 5.0 is slated to be next level IR 5.0 or may be termed as IR 4.1 as it is established with a vision of providing customer satisfaction by way of customized products and an efficient supply chain delivery. It is more human centric and agile and planet conscious [6].

With the advent of IR 5.0 the human will be brought back into the system, which were seemingly left out in IR 4.0 due to heavy automation. In order to fulfill the need for customization and providing customer experience it is essential to bring the human and also saving the planet and make the system sustainable.

The benefits of IR 5.0 is improvement in process and cost optimization and green solutions by incorporating technologies which are sustainable. It also allows for a greater degree of flexibility in the product features as it offers hyper customization by leveraging latest technology. This requires trained people who can work on IR 5.0. COBOTS is the name given to robots in IR 5.0 for interacting with human and implementing any technology with attention to safety of human and the plant. IR 5.0 thus works towards supporting the already existing IR 4.0 and providing a fine balance between efficiency and productivity.

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