

Cyber Physical World

It's 2018 we live in. The world is totally a different place as we know it from the previous century or the ones before. This is the new age, this is the future. It's the age of Virtual reality that allows us to transport to new worlds, Artificial Intelligence & Robots working side by side with humans, Nano-technology that can cure many diseases and revolutionize the medical industry, 3D printers that can print a whole limb of a human body, and many more things that make you say, WOW!

It was obviously not like this from the start. As we know Industry revolution, there have been 4 phases to that. First phase was the time when we got to know how to use steam for the better quality of Mechanical Equipment in late 18th Century and so we developed trains. Then the second phase occurred, in late 1860's, when Alessandro Volta made an Electrical Battery for the first time and this along with the discovery of Electricity changed the way Industries used to be like. And it was late 70's when it changed to the third phase where everything got replaced by automated production and Electronics, small equipment that could really do the task easily. And this is the age of Industry 4.0, where virtual reality is changing everything around us.

Now the question arises what Industry 4.0 is really needed for? It's needed to make the manufacturing challenges really easy. It boosts the business forecasting and increases the efficiency. Even though its sometimes misunderstood with Industry 3.0 but the main difference between these both is that Industry 3.0 was even though mostly

automated but it's was still supervised by humans but Industry 4.0 is totally controlled by Artificial Intelligence. It leads to fasted and more productive manufacturing process.

Advanced digital tech has already been used in manufacturing, but using Industry 4.0, it has been improving the industrial production to new heights. It's changing the traditional production relationships among suppliers, producers, and customers—as well as between human and machine. There are some main building blocks of it which contain Simulation, Autonomous Robotics, Additive Manufacturing, Internet of Things, Cyber Security, the clouds etc.

This new age has been very comforting for us and is changing the ways of how we used to live our lives. However, we still don't know which turn it might take or which direction it might lead us to with time. As fascinating as this world is becoming, it's also frightening to not know the future it might hold which may turn the tables otherwise. All we can do is hope that it turns out in our favor.