**06 | Sonu Prajapati**

* **Industry 1.0**

Dating back to around 1760, the First Industrial Revolution was the transition to new manufacturing processes using water and steam.  It was hugely beneficial in terms of manufacturing a larger number of various goods and creating a better standard of living for some. The textile industry, in particular, was transformed by industrialization, as was transportation.

Fuel sources like steam and coal made machine use more feasible, and the idea of manufacturing with machines quickly spread. Machines allowed faster and easier production, and they made all kinds of new innovations and technologies possible as well.

* **Industry 2.0**

The first Industrial Revolution represented the period between the 1760s and around 1840. This is where the second industrial revolution picked up. Historians sometimes refer to this as “The Technological Revolution” occurring mainly in Britain, Germany and America.

During this time, new technological systems were introduced, most notably superior electrical technology which allowed for even greater production and more sophisticated machines.

* **Industry 3.0**

It began with the first computer era. These early computers were often very simple, unwieldy and incredibly large relative to the computing power they were able to provide, but they laid the groundwork for a world today that one is hard-pressed to imagine without computer technology.

Around 1970 the Third Industrial Revolution involved the use of electronics and IT (Information Technology) to further automation in production. Manufacturing and automation advanced considerably thanks to Internet access, connectivity and renewable energy.

Industry 3.0 introduced more automated systems onto the assembly line to perform human tasks, i.e. using Programmable Logic Controllers (PLC). Although automated systems were in place, they still relied on human input and intervention.

* **Industry 4.0**

The Fourth industrial Revolution is the era of smart machines, storage systems and production facilities that can autonomously exchange information, trigger actions and control each other without human intervention.

This exchange of information is made possible with the Industrial Internet of things (IIoT) as we know it today. Key elements of Industry 4.0 include:

Cyber-physical system — a mechanical device that is run by computer-based algorithms.

The Internet of things (IoT) — interconnected networks of machine devices and vehicles embedded with computerized sensing, scanning and monitoring capabilities.

Cloud computing — offsite network hosting and data backup.

Cognitive computing — technological platforms that employ artificial intelligence.

**“**Industry 4.0 starts to move towards Industry 5.0 when you begin to allow customers to customize what they want

* **Industry 5.0**

Less than a decade has passed since talk of Industry 4.0 first surfaced in manufacturing circles, yet visionaries are already forecasting the next revolution — Industry 5.0. If the current revolution emphasizes the transformation of factories into IoT-enabled smart facilities that utilize cognitive computing and interconnect via cloud servers, Industry 5.0 is set to focus on the return of human hands and minds into the industrial framework.

Industry 5.0 is the revolution in which man and machine reconcile and find ways to work together to improve the means and efficiency of production. Funny enough, the fifth revolution could already be underway among the companies that are just now adopting the principles of Industry 4.0. Even when manufacturers start using advanced technologies, they are not instantly firing vast swaths of their workforce and becoming entirely computerized.

* **Green IT**

Green IT (green information technology) is **the practice of environmentally sustainable computing**. Green IT aims to minimize the negative impact of IT operations on the environment by designing, manufacturing, operating and disposing of computers and computer-related products in an environmentally-friendly manner.

**Pollution caused by Technology**

Manufacturing technology creates large amounts of waste, and used computers and electronics get thrown out when they break or become outdated. Called "technotrash," these electronics contain all sorts of hazardous materials that are very unsafe for the environment. They need to be disposed of using special methods.  
Clearing land where animals used to live to build factories and allowing pollution to contaminate the food chain can greatly affect the environment's natural cycles.

* **Largest  Social media websites that are generating the data**

1. Facebook – 2.23 billion MAUs. Facebook is the biggest social media site around, with more than two billion people using it every month. ...

YouTube – 1.9 billion MAUs. YouTube is a video-sharing platform where users watch a billion hour of videos every day. ...

WhatsApp – 1.5 billion MAUs. ...

Messenger – 1.3 billion MAUs.

* **Sigma Technologies**

Sigma Technology is **a leading software development consulting company** offering a wide range of IT services to ensure full-cycle project execution, from PoC to going to market and post-production support. ... To make deliveries resilient and reliable, we ensure that our services are ISO 9001, 27001, and 14001 compliant.

Sigma Technologies has established a long record of confidence and respect providing expert knowledge for our clients. With an approach that is both systematic and adaptable, Sigma delivers practical solutions to a broad array of network technology and infrastructure projects.

* **Data Science case Study - Problem Solving statement**

If you’ve learned data science by taking a course or certification program, you’re still not that close to finding a job easily. The most important point of your Data Science interview is to show how you can use your skills in real use cases. Below are 3 data science case studies that will help you understand how to analysis and solve a problem. All of the data science case studies mentioned below are solved and explained using Python.

**Case Study 1: Text Emotions Detection**

**Case Study 2: Hotel Recommendation System**

**Case Study 3: Customer Personality Analysis**