



**UTM**  
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**TOPIC:**

**INDUSTRIAL 4.0: PAST, PRESENT, FUTURE  
POSTER**

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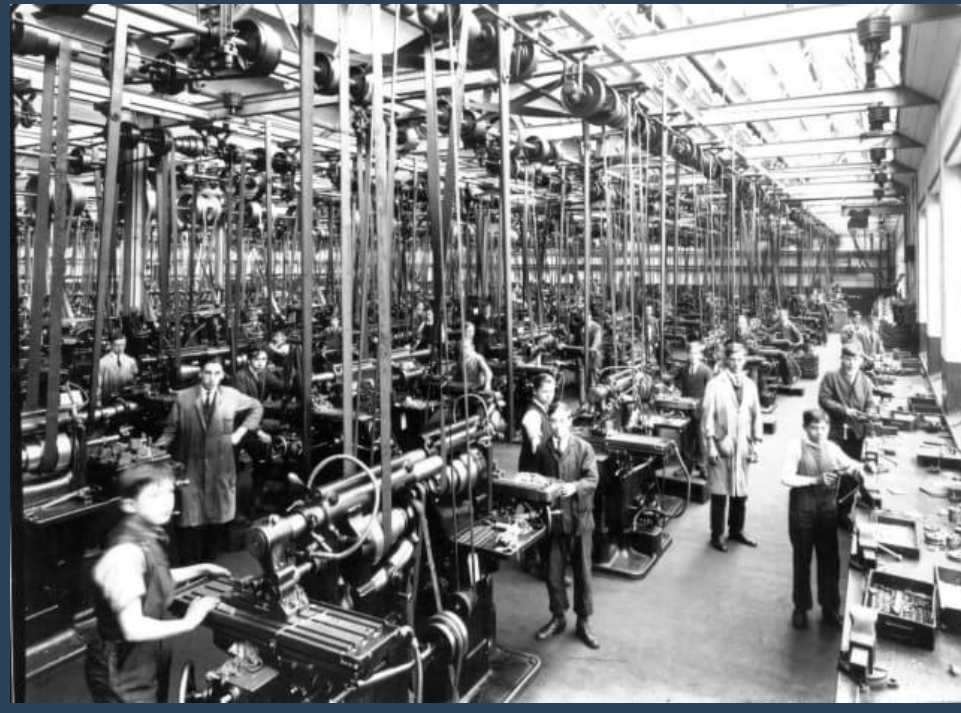


# INDUSTRIAL 4.0: PAST, PRESENT, FUTURE



## INDUSTRY 1.0

- Began in 18th century
- Pure manual of works
- Mechanical power derived from steam engine



## INDUSTRY 2.0

- Birth of electricity
- Mass production of goods
- Advancement of machine
- World first assembly lines



## INDUSTRY 3.0

- Era of computing
- Birth of first PLC
- Computer and IT is key of industry
- Also called digital revolution



## INDUSTRY 4.0

- Birth of Artificial Intelligence
- The era of combination of elements of Industry 1.0-3.0
- Production automation
- Networked machines



- Autonomous Robot
  - Perform task automatically without human control
  - Helps to reduce error
  - Works with combination of scanner, camera, microphone, sensors and etc.
- Cloud Computing
  - Including mobile, server, storage, application, database, private cloud, public cloud and hybrid cloud.
  - Provide a better stability, better flexibility and better computing power
  - Example: Huawei Cloud, Google Cloud, TM One Cloud, etc
- Internet of Things (IOT)
  - Network of physical objects that embedded with softwares, sensors and other technologies
  - Can connect and exchange datas between devices over the Internet.
  - Google Home : to control the connected devices
  - Smart helmet : can detect the real time location of workers
- Augmented Reality
  - An application can provide more information
  - Pokemon Go is a kind of AR
  - Benefit to tourism application and education
- Big data and Analytics
  - Gather large number of unstructured data
  - Smart traffic light:
    - Type of vehicle
    - Plate number
    - Number of vehicles passing through
    - Can trace vehicle that offended traffic light

- E Commerce 4.0
  - Adopting machine learning into their services
  - Learns the user shopping pattern
- Electric Cars
  - Connected to the cloud
  - Better battery allows for more mileage
  - Fully autonomous
- Smart Home
  - Controls your house remotely as long as you're connected to the internet
  - Improves security in case of a break in



### Past jobs

- Computer operator
- Ice cutter
- Print setter
- Typist
- Typesetter
- VCR repairer

### Present jobs

- Blogger
- Cloud services specialist
- Social media manager
- Mobile app designer

### Future jobs

- 3D printing technician
- Ethical hacker
- Infographic designer
- Urban agriculturist
- De-extinction zoologist

### Lee Jia Xian :

In this industrial talk, i found that the world is changing so fast. The world evolve from INDUSTRY 1.0 to INDUSTRY 4.0 in a short 200 years. This reminds me a word “singularity”. Singularity is a point in time which technological progress becomes uncontrollable and irreversible, leading to unforeseeable changes in human society. We can see that every stage of the industry evolution is a new singularity. Now the nearest and newest singularity is the birth of Artificial Intelligence (AI) which is in Industry 4.0. Once the AI technology is getting proficient and popularized to the whole world, the world will change in an unexpected way.

### Luqman Ariff Bin Noor Azhar:

From this industrial talk, I learned how left behind our country was compared to the other nations and for me personally, it was very concerning. We still have a long way to go to match all the other countries and to make it worse, the country is facing a terrible recession and the pandemic has opened our eyes on how crucial it was for the country to keep up in the Industrial Revolution 4.0. Perhaps that is where I come in, to steer the country back to the right path possibly in the near future

### Adam Wafii Bin Azuar:

My opinion on this industrial talk is that technology is changing how we live our life. Now we have all sort of technologies in our house and in fact we even love those things because we believe those things bring out the goodness in our life. The rapid growth in technology slowly became something that we should worry about. Because I believe technology is changing the way we live and it's not certainly a bad thing but it may cause something that we can't overcome in the future.

### Adrina Asyiqin Md Adha:

The industrial talk opened my eyes in many ways. It helps me see the world in a many different ways. Technology is in our life in every way we could think of, by taking advantages of these, we could create many different technologies in every sector of our lives. I believe that technologies in the future may create a way of life that is different from this era. I am actually very excited to see what else will be made and create for the future of the world.

### Kong Jia Rou:

After attending the industry talk, excluding the great thing about technology evolution, I learned that there is still many unpredictable and unknown facts about the evolution, like the time needed for our country to fully launch the latest technology, the security of user's privacy, the coverage of 5G, country readiness to accept ietc, leading people experience the lack of confidence toward the new era of technology. As far as what I can see, we are already on the road fitting in the new generation of industry revolution by taking the pandemic dilemma as an opportunity. More people are now familiar with the cyber-physical systems (CPS). For example, the use of QR codes or RFID tags. I believe everything will get better for the next two years.