



Industrial 4.0 How will the future look like

Anas Ehab Nafei Mohamed, Rayhan Rafi Arviandy, Abdullah Mohammed Moqbel Qasem, and Muhammed Angwin Sayrestian
TIS-04 Group 5 UTM

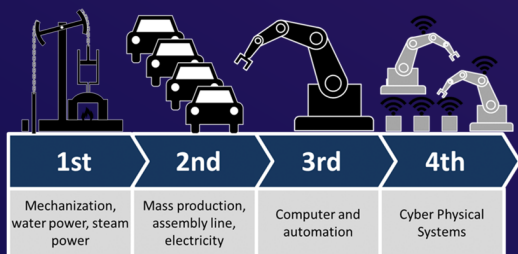


INTRODUCTION

In this 21st century era, we can't be separated from technology. All of aspect in our life are connected with technology, and a fascinating Industrial Talk program came to discuss it. Followed with the main theme which is Industrial Revaluation 4.0 (4IR) : Past, Present, Future. Conducted on 24 November, this program passed through Webex meeting and also recorded live on UTM Digital Facebook account. Mr. RADZUAN SHAH YUSOF as the main speaker who was the Director of Southern Strategic Economic Region Telecom Malaysia, and also the Head Director of Digital Architecture UTMDigital, Dr. NIC KAMAL IZUDDIN NIC IBRAHIM, as the moderator, explain many things about how this industrial era going to be. Start on 10 A.M. (MYT), this program went for about an hour and a half. At the end of the talk, every participant were able to give questions to the speaker related with this talk. Through this poster we will show several important things regarding this Industrial Talk

DETAILS OF JOURNEY

Mr. Radzuan started by showing us the difference between the different industrial versions starting by industrial 1.0 which started in 1784 by the first power loom, it was all about mechanical production and it was reliant on steam and water and it stayed until 1870 where the era of industrial 2.0 started in industrial 2.0 it was all about mass production and it was reliant on electricity and we had the first assembly line in this era. In 1969 we had our first programmable logic controller and that marked the beginning of the industrial 3.0 the digital era it was the era of IT and electronics. Finally we got to industrial 4.0 the era of robots and cyber physical systems, this is the current era where we have robots learning from humans and then helping them, smart homes, and cars with autopilot.



INDUSTRIAL 4.0

In industrial 4.0 there are 9 main components which are

- 1) Autonomous robots
which are robots that performs behaviors or tasks with a degree of autonomy. Some factory robots are autonomous robots.
- 2) Simulation
it is the simulating of a real life scenario and it's already used in many fields.
- 3) System Integration which is the integration between different software like what happens in ERP systems.
- 4) Industrial Internet of things
which is the connection of physical objects other than computers to the internet and allowing these objects to receive and send data an example of that would be smart homes where there are a lot of sensors that allow you to control your home from your phone just by connecting to the
- 5) Cyber Security
That's the act of protecting systems and networks from hackers and it's a really promising field.
- 6) Cloud
It's when the internet acts as cloud and allow the users to save data or process data online without the need of installing a special program and
- 7) Additive Manufacturing
this is just the industrial production name for 3d printing where instead of creating or molding material you can just 3d print it.
- 8) Augmented Reality (AR)
That's like simulation it's the experience of the real world environment where real world scenarios get created by a computer and a person can
- 9) Big data and analytics
that's the gathering of huge amount of data and analyzing this data to look for patterns to allow for enhancement to a specific system and that's

REFLECTIONS

ABDULLAH:

1. The industrial was very informative and the insight I got is how the technology has improved our daily life
2. Innovative makes our life so easy from making our life from manually work to technology work which save a lot of our time

RAYHAN:

1. The talk give us information about the industrial revolution, how it growth and what innovation were produced through the generation.
2. There will always any innovation in every generation, and those innovation surely help us in daily life, even

ANAS:

1. I gained a lot of new knowledge from this industrial talk I knew what changes to expect in the future from the industrial companies and how major changes happened from the past until now.
2. Innovation is a must in the current world since everything is changing so people need to come with new innovative ideas to match with the changes and make life easier.

ANGWIN:

1. I became more enthusiastic and confident to be able to continue my studies
2. We must help each other, because we are humans, who need each other, and no human is born perfectly

4
I
R



Past >>>> Present Future

AT
THE
OF
K
F
U
T
U
R
E
I
N
T
R
O
D
U
C
T
I
O
N

The world is currently shifting to industrial 4.0 and some huge companies even made the shift and is currently totally industrial 4.0 by understanding industrial 4.0 we can have a guess of what the world will look like in the near future, for example some jobs are going to be in need more than others, mostly IoT, cyber security, and simulation jobs will be in huge demand, we can also make an assumption on what kind of jobs are going to disappear in the near future which are all the jobs that can be done by robots, some of these jobs are typist, bus drivers, receptionist, phone operators, cashiers, and much more.

