Introduction

Our society is currently being reshaped by fast advances in information & technologies. Industry 4.0 has been characterized as "a name for the latest thing of mechanization and information trade in assembling advancements, including digital actual frameworks, the Internet of things, cloud computing and cognitive computing and creating the smart factory". Malaysia looks towards Industry 4.0 to support productivity growth, with need at first given to the assembling area, future plans to extend it to different areas. And the conference about this topic which is IR 4.0 Past, present & Future has covered all of these context.

Industry Talk – Industrial 4.0: Past, Present & Future

1.4 Generation of Industrial Revolution
2. Autonomous Robots
3. Cloud Computing
4. Internet Of Things
5. Augmented Reality
6. Big Data Analytics
7. Education
8. Commerce 4.0
9. The Jobs Of Tomorrow
10. Progress of Tomorrow
11. Jobs of Different Times
12. Augmented Reality Applications
13. Developing IR in Johor
14. 5G Smart City Solution (eg. Langkawai)
15. Quarantine Centre with 5G Service
16. Works & Progress related to IR in Malaysia

Summary

At long last, let us consider large acknowledged feeling on the job and eventual fate of the Industry 4.0 idea. Specifically the Industry 4.0 is frequently considered as disruptive technology that will pave the way to a new generation of industrial manufacturing systems that will be totally unique in relation to the current ones. Further, the Industry 4.0 is commonly received as an idea of the fourth industrial revolution. This assessment does anyway require a more critical look since the fourth mechanical unrest is the primary modern transformation that was reported ahead of time and not when it was completely evolved.

1. 4 Generations of Industrial Revolution

Divided into 4, 1st is the proto industrialization period, 2nd new inventions, materials, and sources of energy through the helps of massive technological advancements, 3rd the rise of electronics, telecommunications, computers and nuclear energy. 4th is happening right now, for example the IoT that will bring lots of possible inventions and innovations that are yet to come.

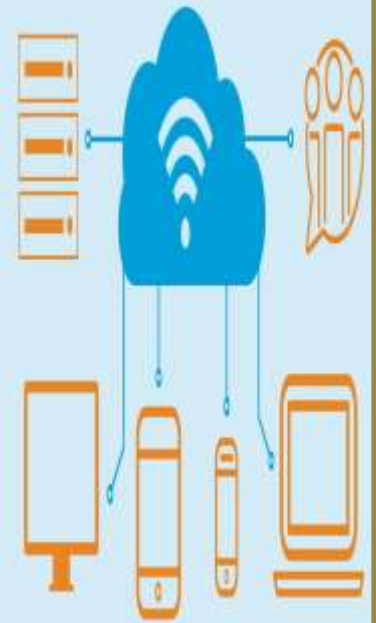### 2. Autonomous Robots

https://pakman.com

An autonomous robot, otherwise called basically an auto robot or auto boot, is a robot that performs behaviors or tasks with a serious level of independence. Autonomous robots sense their current circumstance through an assortment of advances including laser scanners, cameras, amplifiers, power force sensors and spectrometers.

3. Cloud computing

https://synergiseit.com.au/

Cloud computing is the on-demand accessibility of PC framework assets, particularly information stockpiling and processing power, without direct dynamic administration by the client. The term is commonly used to portray server farms accessible to numerous clients over the Internet. There are mainly three types of cloud computing – Infrastructure as a Service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS).

4. Internet of Things

The implementation of the Internet into everyday objects that would usually not require it through technological means. Basically making the environment around you smarter.

Smart Home

https://easternpeak.com

5. Augmented Reality

Augmented reality utilizes existing reality and actual items to trigger PC produced upgrades over the highest point of the real world, continuously. Basically, AR is an innovation that lays PC created pictures over a client's perspective on this present reality. These pictures ordinarily come to fruition as 3D models, recordings and data.
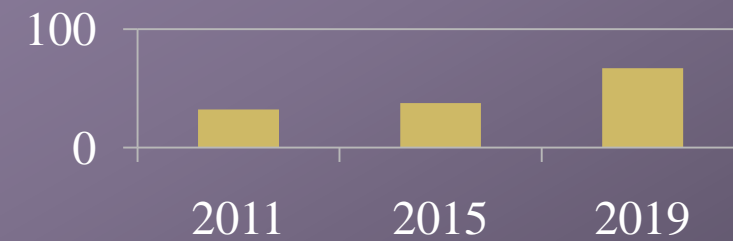
6. Big Data Analytics

Analysis of big data through the means of advanced analytic techniques. Researchers and business users are now able to make better and faster decisions using data that was not easy or possible to access before.

https://www.statista.com/

Big data and analytics software revenue worldwide in billion U.S. dollars*

■ Big data and analytics software revenue…

100

0

2011 2015 2019

7. Education

Industrialization 4.0 will require more critical thinkers, problem solvers, innovators, comm unicators to be able to adapt to the fast changes. Because of this schools need to have a new approach to education

https://www.netzwerk-ebd.de/

8. Commerce 4.0

With the rapid advancement of technology, consumers are going to demand things that will lessen their efforts to complete a task. By using data, companies are able to know what consumers prefer or want.

9. Jobs of Tomorrow

Technology will continue to evolve the role humans play in the workforce, Artificial intelligence, algorithms and intelligent machines will play a huge role. People are going to have to adapt and invest on acquiring new skills to survive jobs of tomorrow.

Past Jobs	Present Jobs	Future Jobs
Computer Operator	Biomass Plant Technician	3D Printing Technician
Film Projectionist	Blogger	Biomechanics Service Person
Lamplighter	Cloud Services Specialist	Computer Vision Engineer
Print Setter	Digital Marketing Specialist	De-extinction Zoologist

11. Jobs of Different Times

Jobs of tomorrow indicates jobs which are not available now, but will become so in the future. These are jobs that are to appear due to advancements in technology such as the IoT.

13. Developing IR in Johor

IR development has proven easier because of how close the JIIGW(Johor International Internet Gateway) is located(at Iskandar Puteri). This helps reduce latency and increase the productivity of internet speed.

10. Progress of Tomorrow

Progress of tomorrow is the progress in society and technology that will happen due to the advancements that the fourth industrial revolution will bring along in the near future.

12. Augmented Reality Applications

Augmented Reality refers to any type of technology that uses the environment and enhances and adds information to it, therefore making it an artificial environment. It has many applications including gaming tourism and education.

https://www.researchgate.net

14. 5G Smart City Solutions (Langkawi)

Langkawi is the 1st digital and smart tourism island in the world and it uses 5G.

Smart Retail Analytics | Smart Water System | Smart Vehicle System | Smart Helmet

Geolocation safety App | Smart Agriculture | Smart Safety and Security | Smart Traffic Light

Smart Parking | Smart Tourism App | UNESCO 8K Virtual Reality

15. Quarantine centre with 5G service

When people r in distress they need technology to relieve them. Internet is a utility and one of the psychological needs of people so Malaysian govt arranged 2 free quarantine 5G wifi centers . (MAEPS and ILKKM)

MAEPS		ILKKM	
Upload/GB	Download/GB	Upload/GB	Download/GB
922	8556	200	2643

16. Works and progress related to IR in Malaysia

i)We need to connect Malaysians everywhere inclusively with enriched digital lifestyle
.ii)Supporting government initiatives for country's betterment
iii)protecting nations sovereignty and critical infrastructure from intrusion and disaster
iv)Empowering and making values for businesses through borderless digital possibilities

Reflections

From the beginning, when human found out how to create a fire from then human are getting benefits and comforts from invention so am I. Actually it's a new topic for us, for this industrial talk I have learned all of it and got idea, also some guidelines. In reality if you want to reach your goal you need to be experienced. And this kinds of conference helps us to gain it. I've learned about IR 4.0, the purpose of it and how we are going to get benefits from it.