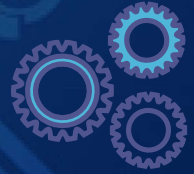




4th IR- INTERNET OF THINGS



INTRODUCTION

The changes of the world are very fast and now it come to 4IR. The Fourth Industrial Revolution is represents the movement towards smart industry and manufacturing goals. IR 4.0 also known as the 'digital revolution': combines technological and human capacities in an unprecedented way through self-learning algorithms, self-driving cars, human-machine interconnection and big-data analytics.

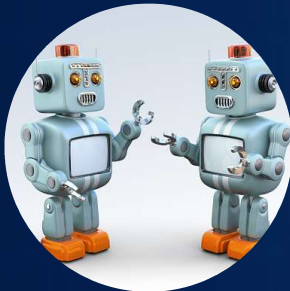
WHAT IS THE INTERNET OF THINGS?

The internet of things is a system make up of physical devices connected by the internet that can accumulate and share data across the network. While the platforms used to develop IOT devices may differ, but they have same core components.

The concept is to connect mobile phones, coffee makers, washing machines, Windows, headphones, lights and other devices to the Internet via switches. And it can also be a connection between things. In addition, the Internet of Things provides the ultimate connection between people, people and things, and things.



EXAMPLE OF INTERNET OF THINGS



- **Connected Cars**

The connected car is a vehicle that optimizes operation, maintenance and passenger comfort through on-board sensors and Internet connectivity.

- **Wearables**

These products in your daily lives like smartwatches can AI hearing aids, fitness trackers where you can monitor it.

- **Smart Home**

All electronics devices in home can be controlled by using smartphone through internet connection at everywhere. Smart homes are able to arrange, improve and monitor our daily lives.

- **Smart Cities**

Smart city is a high-tech urban area using electronic technologies. The IoT technology saves the significant problems faced by the people living in cities, such as shortage of energy supplies, traffic congestion, and pollution.

REFLECTION

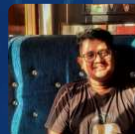
- From this Internet of things, I know that our technology is developing faster and faster. I learn more knowledge and some skills about internet of things. Besides, internet of things have increase the potential in many field. internet of things have make big change on our life and it can improve human life quality from many aspects such as smart technology can provide us convenient in work .
- From internet of things, I gain some information about smart technology and know that the internet of things is very importance for human that is because the smart devices such as smart phone can let us obtain all information in the world simply and it can make our work easy. Therefore, i think i'm very lucky to be born in this age of advanced technology.



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REFERENCE

<https://campusinternetofthings.weebly.com/description.html>, <https://mindmajix.com/iot-examples>, <https://www.youngupstarts.com/2021/10/05/internet-of-things-devices-best-examples-in-2021/>, <https://www.analyticssteps.com/blogs/top-internet-things-iiot-examples>, <https://www.ibm.com/blogs/internet-of-things/what-is-the-iiot/>, <https://www.ferrovial.com/en/innovation/technologies/internet-of-things/>, <https://www.twi-global.com/what-we-do/research-and-technology/technologies/industry-4-0>, industry 4.0 - Bing images, industry 4.0 - Bing images, 2 robots talking to each other - Bing images

INDUSTRY TALK BY



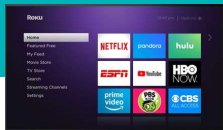
The talk discussed about Fourth Industrial Revolution (4IR) and its impact toward human community and technology usage. It also covered a topic on adoption areas within 4IR that being focused by TM industry that will contribute to society. These information are important for student that taking Computer Science related course.

INTRODUCTION

Telekom Malaysia Berhad (TM), is the national connectivity and digital infrastructure provider and Malaysia's leading integrated telco. TM play role on enabling global connection in Malaysian society and had been serving our country since 1946. As Fourth Industrial Revolution (4IR) take place globally, where most of aspect of human life are relying on technology, TM have started our journey to support the evolution of 4IR through government, economy and society. In order to change Malaysian into advance society, TM have been working on the adoption areas within 4IR which is cloud/digital, smart cities and 5G,

CLOUD/DIGITAL

- As market forces are driving Digital Transformation (DX) in businesses across all vertical, lot of service such as television services, payment services and education services had been digitalize in order to operate efficiently and boost customer experience.
- A strong digital infrastructure is needed for digital transformation to success, therefore execution performance with mobile had been increasing and workforce being connected.



SMART CITIES

- A place where the technology being intuitively adapt and respond to the need of the citizen.
- One of the feature is managing logistic performance and efficiency with smart fleet such as using tracking device to got a route that can optimize the time for the trip.
- There are multiple approach in adopting smart services for smart cities, including full commitment from local government and private enterprises.



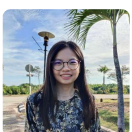
5G

- A new generation of mobile network evolution. its a unifying connectivity fabric for society and a wide mobile ecosystem to new industries.
- More superior technology than 4G, that have higher peak data rate and connection density.
- Opens up a wide range of use case such as enhanced mobile broadband, where its connected to more devices and faster connection speed. 5G use cases also contribute on job creation, talent development, and security.



ENABLING THE 4IR JOURNEY

TM are always ready to served their customer through 4IR journey. There lot improvement on the way TM interact with their customers such as multi channel that will help the customer with their problem. TM has built world class data centers to support the development within the region, for example, Iskandar Puteri Data Centre and Klang Valley Data Center. Data centers are the place that manage information that reside in Clouds. TM always protect and preserve the services in Malaysia by enabled an end-to-end service ecosystem.



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REFLECTION

- 4IR have improved the business process to become more efficient as it can be managed through digital service that are widely connected. Customer can always use a particular apps that will access to their desired services, such as online payment service.
- Strong and fast connections are needed to ensure that digital and online processes run smoothly. That is why enabling 5G in our country is crucial thing to do as 5G more advance and faster than 4G.



INDUSTRY TALK 2 BY CYBERSECURITY

CyberSecurity was covered in the fourth industrial revolution (4IR) talk. A ministry of communications and multimedia agency that serves the government, the public sector, and the private sector. They were formed with the goal of defending the nation's cyberspace.

Introduction

CyberSecurity Malaysia is devoted to have a wide range of cybersecurity development services, programs, and initiatives to reduce the vulnerability of digital systems also while improving Malaysia's cyber self-reliance. There are agency for CyberSecurity of Malaysia like Cyber CSI MyCERT, CyberSAFE, CyberGuru etc. Those agency provides service like Responsive Services, Proactive Services, Strategic Study and Engagement, Industry and Research Development, Threat monitoring by them etc.



Cybersecurity

Malaysia obtained high rankings in the cyber-power rankings by combining policy capacity with a wide network of international intelligence connections. Malaysia is able to punch above its weight in terms of cybersecurity due to alliances. The agencies are player a vital role in cybersecurity. Malaysia's cybersecurity agency has established an initiative and Outreach Department aimed with educating and raising public awareness about the technological and social concerns that internet users confront, notably the threats they encounter online.

Reflection

- To familiarize participants with the experience of dealing with cyber incidents.
- To spread awareness among all users of the national security implications of a significant cyberattack.
- Analyze, identify, prevent, and respond People are responding to cybersecurity risks through governance.

Source

- technology information system and four industrial revolution
- Official site of Cyber CSI , MyCERT, CyberSAFE, CyberGuru



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