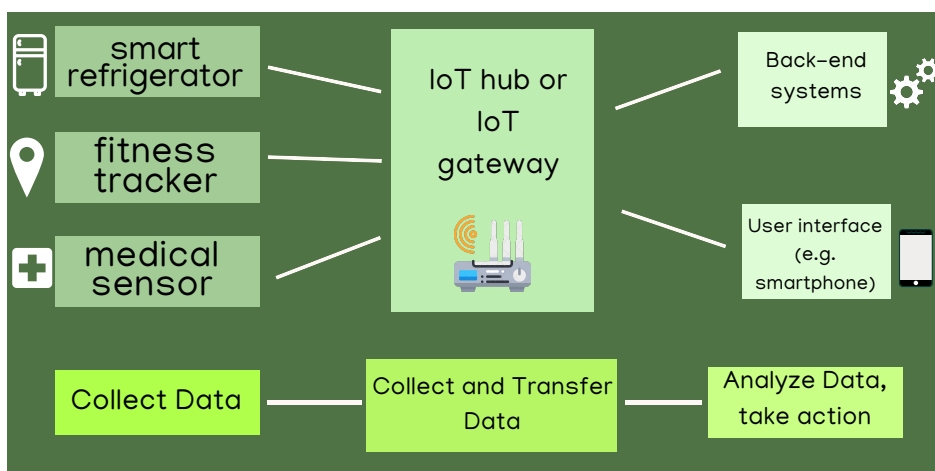


# INDUSTRIAL REVOLUTION

# INTERNET OF THINGS

Devices that have an embedded system and has a unique IP address that connected and exchange data with other devices over the Internet without requiring human-to-human or human-to-computer interaction



## IoT SYSTEM

- Smart home hubs (e.g. that control lighting, home heating and cooling)
- Smart assistant (Amazon Alexa and Apple's Siri)

## EXAMPLE



- ### HOUSEHOLD BENEFITS
- Managing and monitoring the state of the house
  - Minimize the use of electricity
  - Saving money
  - Optimising the home security
  - Reducing negative impact on the environment

IoT contributes positive impacts on our lives especially in the aspect of energy consumption. Household appliances with high energy usage will change depending on dynamic pricing signals. Moreover, IoT devices (e.g. smart lighting) manage specific settings to produce the best possible environment based on the home owner's daily routine. Owing to the prohibitively high cost of IoT products, IoT systems are not widely used in Malaysian society today. Without fear of contradiction, it can be said that the IoT system is one of the remarkable inventions for human beings. Thus, it is hoped that IoT systems could be implemented wider in our country one day later.

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## REFLECTION

## REFERENCE

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# TECHNOLOGY INFORMATION SYSTEM & FOURTH INDUSTRIAL REVOLUTION

Industrial Talk 2 by CyberSecurity Malaysia

## What Is CyberSecurity Malaysia?

An agency under the Ministry of Communications and Multimedia which established with the aim of securing the nation's cyber space.

### SERVICES

**CyberCSI**  
crime scene investigation

- assist law enforcement to seize evidence and collect data from crime scene
- gathered data is analyzed according to case objectives
- present the result

**MyCERT**  
Malaysia Computer Emergency Response Team

- provide awareness to students, SMEs (Small and medium Enterprise) and private sector

**CyberSAFE**  
Cyber Security Awareness For Everyone

- manage incoming malware cases, vulnerability
- detect and share information with other countries

**CyberGuru**  
CYBER SECURITY PROFESSIONAL DEVELOPMENT

- professional training service
- offer training certification to Malaysian

## MALAYSIA ISSUES & CHALLENGES

### DEMANDS

-  Awareness
-  Innovation
-  Digital Readiness & Connectivity
-  Skill Enhancement
-  High Cost of Investment
-  Best Practices

### SUPPLY

-  Governance
-  Funding & Incentive
-  Ecosystem support
-  Training Providers
-  Standard & Digital Integration
-  Infrastructure

## ADDRESSING THE ISSUES & CHALLENGES

- Attract Stakeholders
- Create the right ecosystems
- Transform Industry Capabilities

## REFLECTION

After attending the industrial talk, we have broadened our perception on cybersecurity which we realized that it is necessary to be existed in this modern world. Cybersecurity actually helped a lot in protecting the data and integrity of computing assets of the conventional. Malaysia, however, do facing a lot of issues and challenges in the prospects of manufacturing. Thus, ACT is meant to address the issues and challenges. As a future leader, we are supposed to contribute a lot more in every prospects of manufacturing to drive Malaysia to a better future and create miracles for our next generations.

## MALAYSIA MOVING FORWARD....

- Upskilling and Reskilling
- Inclusive involvement of SMEs
- Significant evolution in innovation
- Focused funding support
- Good digital infrastructure

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# TECHNOLOGY & INFORMATION SYSTEM

## INDUSTRIAL TALK 1 BY TM

TM is the company of national connectivity and digital infrastructure provider. They started their journey to support the evolution of 4IR where they build data centres, cloud services and Internet of Things. The 4IR has a lot of effect. Digital in Malaysia include digital government, digital economy and digital society.

## THE REVOLUTION OF INDUSTRY

### 1ST REVOLUTION OF INDUSTRY

- mechanization, waterpower, steam power

### 2ND REVOLUTION OF INDUSTRY

- mass production, assembly line, electricity

### 3RD REVOLUTION OF INDUSTRY

- computer, electronic and production

### 4TH REVOLUTION OF INDUSTRY

- production, management, and governance

## ADOPTION OF AREAS WITHIN 4IR

### SMART CITIES

What is Smart Cities?

-It uses technology to intuitively adapt and respond to the need of citizen

-What problems are they solving?

- Infrastructure
- Privacy concerns
- Educating community

### CLOUD DIGITAL

-This transformation has provided positive changes which are, the existence of an innovative business model, the customers experience get enhanced and the operations carried out become more efficient. There are many digitalization services that can be seen at the moment. Some of them are IT infrastructure, gaming, education, music and payment service. To make sure the digital transformation become successful, a strong digital infrastructure foundation are required

### 5G NETWORK

What is 5G?

-5G is the generation of the mobile network after 1G, 2G, 3G, and 4G networks where 5G includes people, things and city where it is proved to be 100 times faster than 4G

### SWIMS

What is SWIMS?

-Smart Water Integrated Management Systems (SWIMS) is a system that provides total visibility of water industry, reduces water wastage and increase water revenue. Innovation made including connectivity, smart meter, sensors, platform, mobility & apps

Approach in adopting Smart Services for Smart Cities

-Single

- continue and extend services
- upgrade service and refresh maintenance contract

-Cluster

- services implemented according to vertical
- collaboration of multiple party

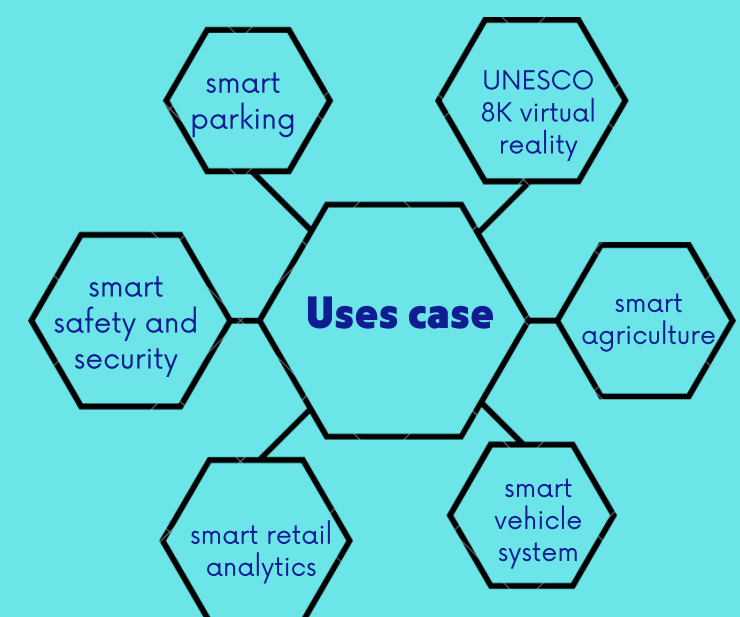
-City wide

- blueprint for smart city development
- combine budget

### REFLECTION

-Throughout this industrial talk that provides a lot of useful information, we know that we live in the 4th industrial revolution that will give impact on our daily lives. From the 1st industrial revolution to the latest which is the fourth one, we can see a lot of things change positively such as high productivity and improved quality of life. This transformation also makes us realize how important for us to have skills (critical thinking, effectively problem-solving and creativity) that will help us to survive and succeed in the 4IR. This means a lot of effort has been made to reach this point. We should be grateful for the transformation that has been made and works hard to live an even better life.

### 5G USES CASE



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