



# UTM

UNIVERSITI TEKNOLOGI MALAYSIA

SECP1513 - 04

**Subject : Technology and Information System**






**ASSIGNMENT: POSTER on**

- a. 4th IR
- b. Industrial Talk 1 by TM (Mon 1st Nov 2021)
- c. Industrial Talk 2 by CyberSecurity Malaysia (Tues 2nd Nov 2021)

**LECTURER:** Hairudin Bin Abdul Majid

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**Group leader's contact number:** :012-704 1955

<b>GROUP MEMBERS</b>	 PRAVIN SIVANATHAN **(Group Leader)	 AFIF BIN GENARI @AZHARI	 MUHAMAD FAIZ BIN ABDUL MUTALIB	 RASIDIN BIN HATTA	 MUHAMMAD QAYYIM BIN KHAMARUDIN
<b>MATRIC NUMBER</b>	A21EC0123	A21EC0003	A21EC0059	A21EC0126	A21EC0090

# 4TH INDUSTRIAL REVOLUTIONARY *CYBERSECURITY*

## Digital Transformation



## Data Protection



## CYBERSECURITY

- **DEF:**
- Practice of securing data on a server from cyberthreats
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## TYPES OF CYBERSECURITY

## CYBERTHREATS

### MALWARE

- VIRUS
- TROJENS

### PHISHING

-Attackers use legitimate profile to send emails/links

### DDOs attack

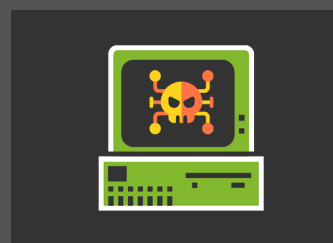
-Target servers to disrupt traffic flow, preventing users from accessing these resources.

### MAN-IN-MIDDLE

hacker or compromised system sits in between two uncompromised people

### Born of cyberscurity

Bob Thomas created a computer program called Creeper



Ray Tomlinson - the inventor of email - wrote the program Reaper, which chased and deleted Creeper.

KATIE CHAD-24NOV2020

### Real-Life Examples:

- Receiving suspicious mail from unknown user saying the receiver won a lottery and request for his personal / banking details

#### CyberSecurity ACT:

Not giving our details/click on any link attached along the email

- Password attacks are often carryout by hackers

#### CyberSecurity ACT:

Set a strong password for our accounts such as string that containing alphabets, numbers and symbols

**Information security** – protecting physical and digital data from unauthorized access both on-site and through remote systems

**Network security** – securing internal computer networks against unauthorized access

**User education** – teaching employees and customers best practices for recognizing and avoiding cyberthreats

**Infrastructure security** – ensuring that the structures and facilities you rely on are access-controlled and guarded against disruption

### REFLECTION

Cybersecurity helps human to secure their data which are highly valuable in the digital world, **CONFIDENTIALITY. INTEGRITY. AVAILABILITY.** These are the main core underpinning of cybersecurity. Every individual should take accountable for their personal information out there on servers/internets



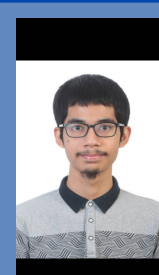
RASIDIN BIN HATTA  
(A21EC0126)



PRAVIN SIVANATHAN  
(A21EC0123)



AFIF BIN JENARI@AZHARI  
(A21EC0003)



MUHAMMAD QAYYIM  
BIN KHAMARUDIN  
(A21EC0090)



MUHAMAD FAIZ  
BIN ABDUL MUTALIB  
(A21EC0059)



## REFLECTION



# INDUSTRY TALK 2 BY CYBERSECURITY

## Executive Summary

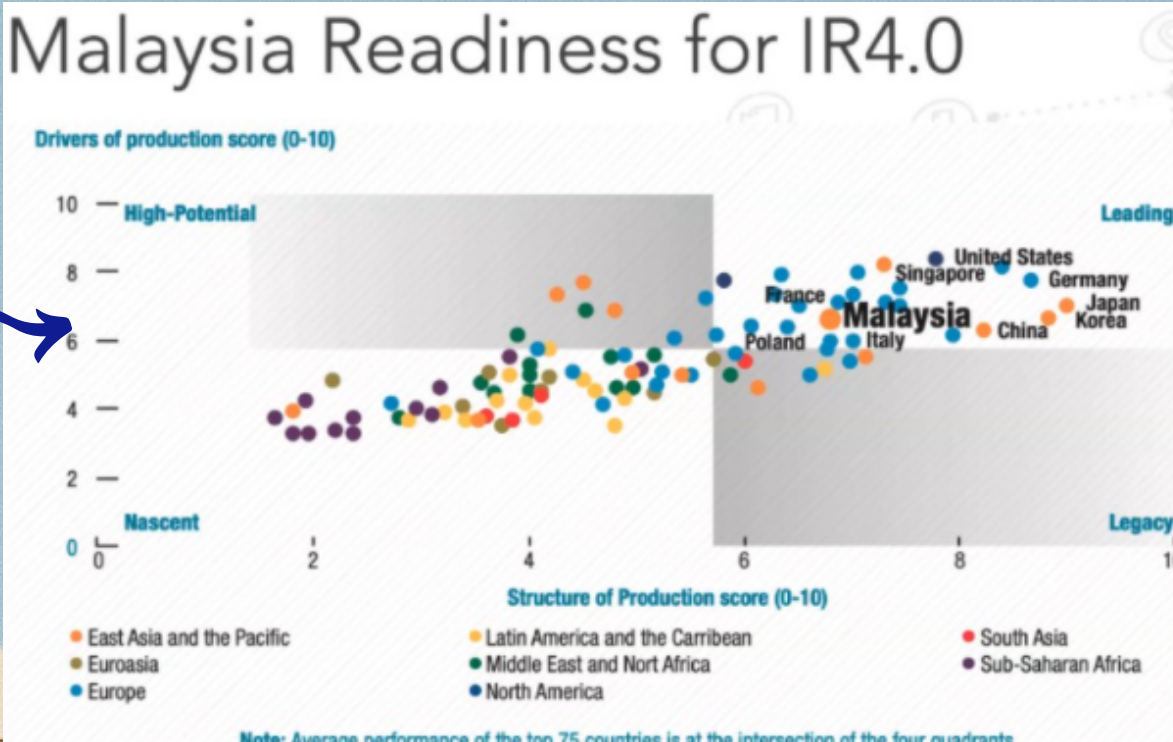
This industry talk was given to give students an overview of 4IR as well as a brief overview of Malaysia's CyberSecurity Organization. This is due to the fact that many students are still clueless about technological developments happening around them. So far, the talk has covered the true meaning of 4IR, factors influencing Malaysia's manufacturing future, and Malaysia's CyberSecurity specialist agency. As students, we must be concerned about this so that Malaysia can become a developed country able to compete with other nations in the future.

### INTRODUCTION

4IR has made headway into the Malaysian market, bringing the country on the fast track to becoming a digital powerhouse. Consequently, we shall go deeper into the industrial discussion's primary focus: 4IR in Malaysia.

### CONTENT

Based on the graph by the world economic forum, Malaysia is in the leading quadrant for the readiness of 4 IR, which means that we are positioned well for the future of 4IR The only gap that we have is the gap with global leaders like the US and Japan. But also there are many developing countries that are moving rapidly in adopting 4lr which means that Malaysia needs to do something to keep moving forward in this matter.



SOURCE: Readiness for the Future of Production Report, World Economic Forum,2018

### THE NEEDS TO EMBRACE 4IR

#### Malaysia's manufacturing future is affected by

Inequality in the world's value chains and production	Higher labour productivity and quality, but not at a reduced labour cost	New technologies are disrupting and fostering a manufacturing model centred on technology.
<ul style="list-style-type: none"> <li>Especially when production relocated to Asia mainly from China and other countries</li> </ul>	<ul style="list-style-type: none"> <li>While our labour productivity has risen by 3-4% in recent years, high-skilled workers have not.</li> </ul>	<ul style="list-style-type: none"> <li>Therefore it must be our norm to innovate and invest in new technologies to remain competitive</li> </ul>

### MALAYSIA TACKLING THE ISSUES AND CHALLENGE IN 4IR

Malaysia under MITI has developed a policy to address the issues and challenges. The policy's main principle is based on A-C-T which is Attract, Create and Transform. For the word "A", it is meant to attract skate holders to industry 4.0 technologies and manufacturing and further increase Malaysia's attractiveness as a preferred manufacturing location, "C" is for creating the appropriate ecosystem for industry 4.0 to be adopted and align existing and future development initiatives and "T" is for transforming Malaysia's industry capabilities in both a holistic and accelerated manner

### REFLECTION

Based on our opinion on this industry discussion, we have a very clear exposure connected to 4IR and CyberSecurity in Malaysia. With the establishment of 4IR, it will be possible to improve the community's quality of life by exploiting existing technological advances such as internet of things technology, which is smart home security systems, which will ensure that the home is always safe from intruders. Cybersecurity, on the other hand, guards against irresponsible parties hacking or invading cyber security. Finally, the presence of 4IR and Cybersecurity in Malaysia has the potential to make Malaysia a credible country that is highly valued by other nations.

### MALAYSIA ISSUES AND CHALLENGE IN ADOPTING 4 IR

#### CENTERED INTO 2 BIG FACTOR

#### DEMAND

For demand, there are various challenges include awareness, innovation, high cost of investment, talent training, and digital readiness and connectivity. Malaysia is still in the period of awareness we keep raise awareness on the impact, the need of the 4lr in our ecosystem both in terms of potential and business model.

#### SUPPLY

For supply, the challenges are from the governance itself, funding and incentive, ecosystem support, training providers, and infrastructure. For governance issue, each ministry has its own agenda or program, therefore in order to empower 4 IR, the governance need to establish one center for the 4IR platform so that all 4IR development can be synchronized.



AFIF BIN GENARI@AZHARI  
(A21EC0003)



PRAVIN SIVANATHAN  
(A21EC0123)



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(A21EC0090)



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(A21EC0126)



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(A21EC0059)