



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)

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DUE DATE: 13/11/2021

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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

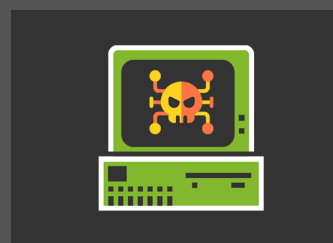
-Target servers to disrupt traffic flow, preventing users from accessing these resources.

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

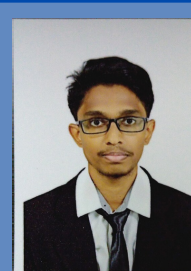
Infrastructure security – ensuring that the structures and facilities you rely on are access-controlled and guarded against disruption

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



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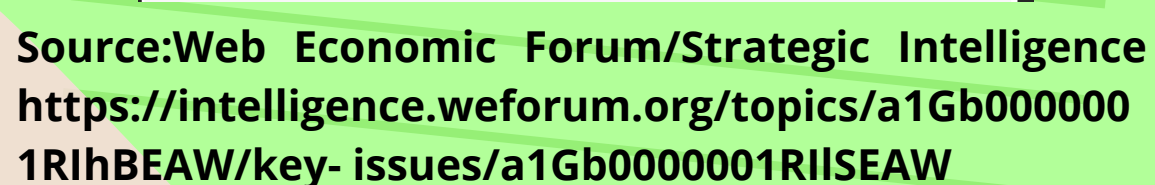
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The industry talk by Malaysian telecommunications company, TM Commercial has given a lot of opportunity to many student to understand more about 4IR (Fourth Industrial Revolution). This industry talk also give a brief information about technological developments and modern technology such as 5G technology and cloud computing. Apart from that, this talk give a better perspective about 4IR technology and what possible action we can do during this modern era. In addition, this talk explain how people can be benefited from 4IR Digital Technology. Because of that people especially student must open their eyes and mind about technology developments to react faster about technology and make Malaysia one of the top country in term of technology in the nearest future.

4IR influence people to boost up manifactury environment by using the lastest version of technology,its incourage Malaysia to compete with other developing countries.But in 2015,4IR cover all aspect of human life such as Internet Of Thing(IOT),Cloud Computing,Data Analytics and Artificial Intelligence.We must support the evolution of 4IR to make a better envoirement for society.

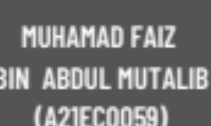
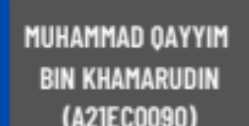
Malaysia one of the developing country this day when Malaysia introduced 4IR to the society in 2016. The 4IR allow Malaysia to create a lot of new type of job that can solve unemployment problem in this country. In term of information technology and Communication, our country start to apply 5G to society in order to compete with other developed country like United State and Japan. 4IR increasing the execution performance with mobile and connected workforce. According to the chart, 4IR come with a lot of benefit when society start to adapt with the 4IR technology or latest technology. For example, 4IR can reduce the Inequalities (SDG10), poverty, zero hunger and so on.



Malaysia has a problem in the shortage of skilled workers about industry 4.0 because most industries in the country still use to work manually while still relying on outside expertise and this will cause higher spending to obtain services from abroad.

The Malaysian government should increase skills training on dealing with industry 4.0 to local graduates before they enter the world of work. This allows prospective employees to be equipped with relevant knowledge such as IoT, smart city, cloud computing, artificial intelligence, sophisticated sensors and so on.

Based on our insights into industry talk by TM, we agree that TM is one of the backbones in achieving industry 4.0. TM is a major part to enabling global connection into and from Malaysia and also responsible protecting nation's sovereignty and critical infrastructure from intrusion and disaster. Thus with this facilities, it will help human life such as in business, it becomes easier for employees working from home or from remote locations to communicate effectively and feel safe. They can use telecommunication devices to receive and send messages, access data, participate in conferences and work on documents.



4.0 INDUSTRIAL REVOLUTION

INDUSTRY TALK 2 BY CYBERSECURITY

Executive Summary

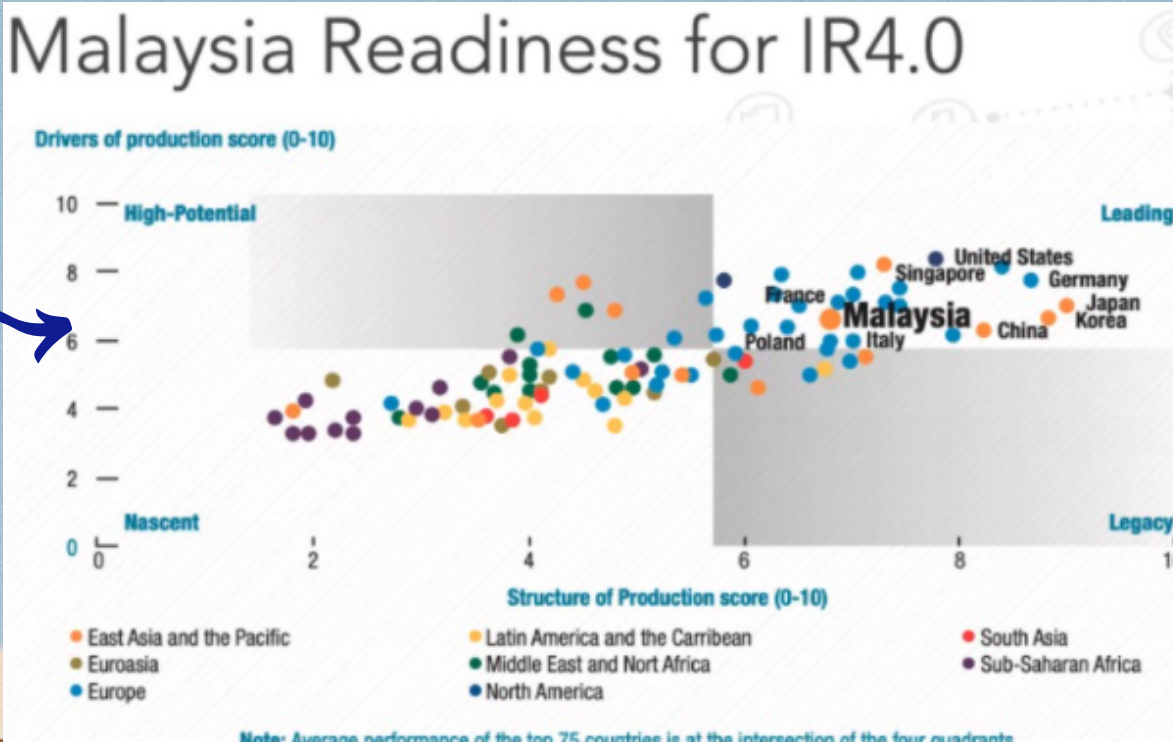
This industry talk was given to give students an overview of 4IR as well as a brief overview of Malaysia's CyberSecurity Organization. This is due to the fact that many students are still clueless about technological developments happening around them. So far, the talk has covered the true meaning of 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.
Especially when production relocated to Asia mainly from China and other countries	While our labour productivity has risen by 3-4% in recent years, high-skilled workers have not.	Therefore it must be our norm to innovate and invest in new technologies to remain competitive

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.



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