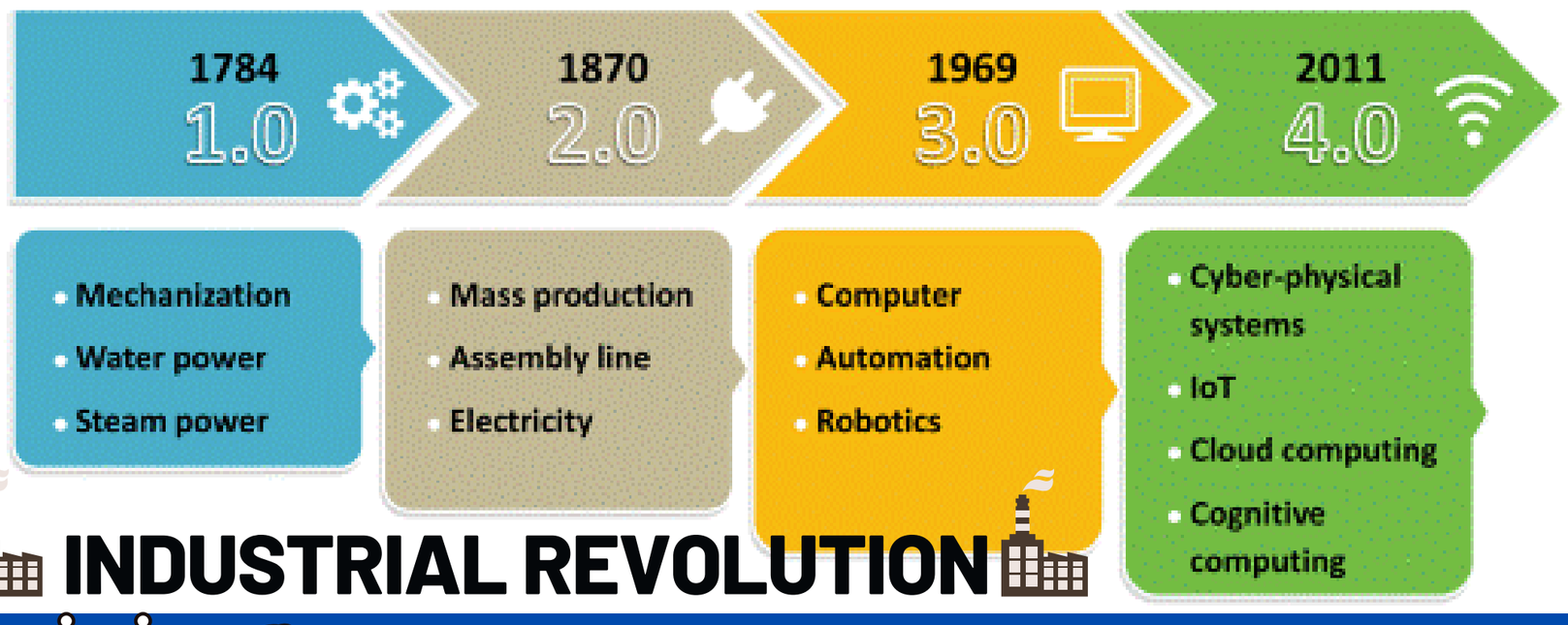
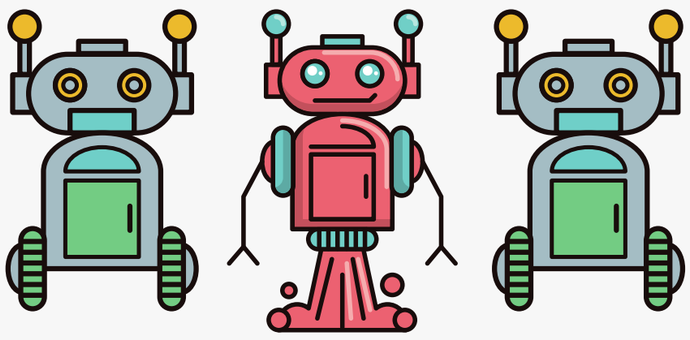


Joseph F. Engelberger is known as 'The Father of Robotics' who created the world's first industrial robot

Autonomous robots

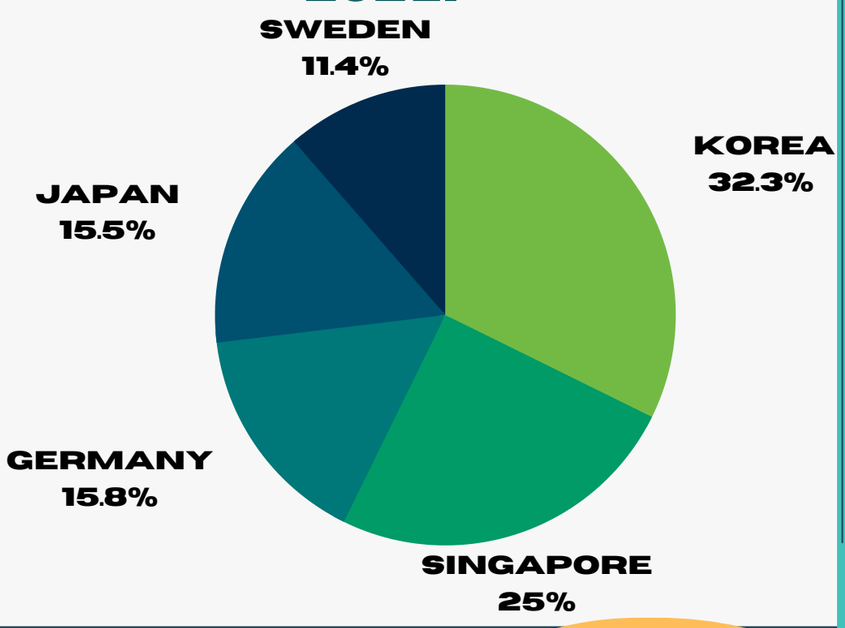
INTRODUCTION

- Autonomous robots are intelligent devices which is capable of doing many activities without the participation of a human.
- Can perceive and learn from their environment or surroundings, as well as they can make decisions on their own.



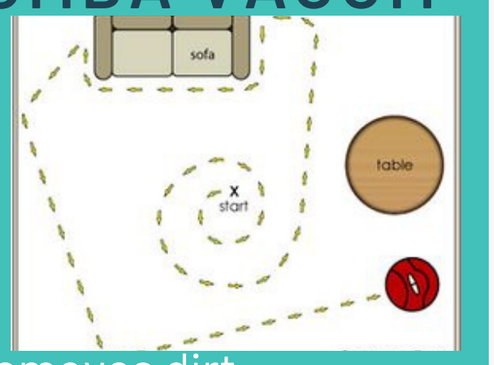
- Able to operate without human involvement over a long length of time.
- Over the next five years, a strong growth is predicted due to its implementation of high technologies

Top countries with leading robotics implementation in 2021.



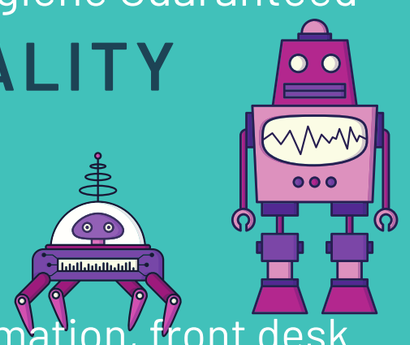
ADAPTATION / EXAMPLES

01 THE ROOMBA VACUM CLEANER

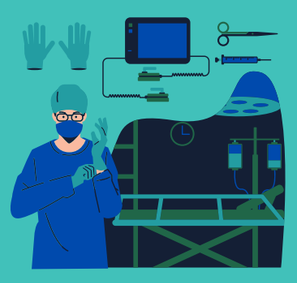


- Detects and removes dirt.
- Dirt Detect Sensors warn about dirtier areas of the house and it cleans them more effectively as a reaction such as high-traffic areas
- Safety and Hygiene Guaranteed

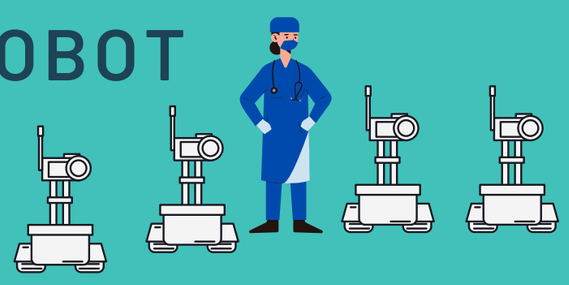
02HOSPITALITY ROBOTS



- Providing information, front desk services, storage services, and check in and check out services are handled
- Use audio and facial recognition technologies.
- it saves time



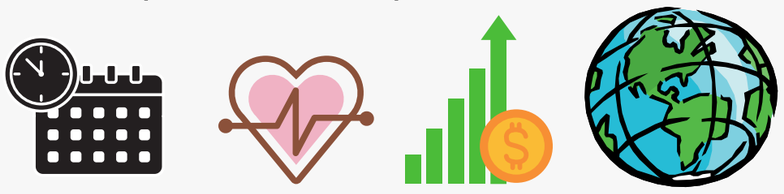
03 MEDICAL ASSISTANT ROBOT



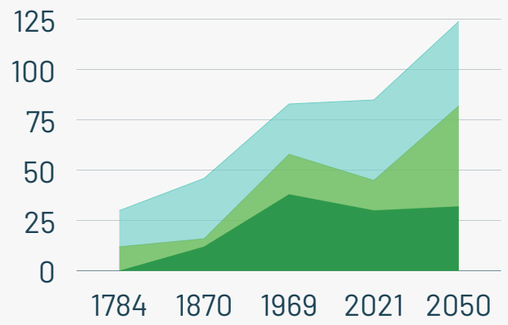
- Implemented to position a computerised microscope
- Surgeons able to gain a better sight of the procedure and boost their performance.

REFLECTIONS

- This industrial talk has changed our thinking perspective on the evolution of the technology across the time. Its provide a great exposure to new technologies on human development especially for the students
- We learnt that Autonomous robots are aiding to identify the distribution network of the future by reducing long-term expenses, supplying workers and utilisation stability, raising worker productivity, limiting error rates, reducing inventory check frequency, maximising picking, sorting, and storing times, and providing access to dangerous and difficult locations that helps human life in these particular aspects.



- In conclusion, we cherish all technology convenience as well as admire the people who have invented these technologies for a better living. Lastly, as students, we think that developing new skills in technologies and autonomous robots contributes to the digital development of IR 4.0 in Malaysia for a better future.



Rising trend of autonomous robots

GROUP 6

1.HARCHANA A/P ARULAPPAN (A21EC0028)
2.MALLEYLENE PENEH(A21EC0052)
3.NASRUL AMIN AB HADI(A21EC0099)
4.PUTERI ELEEYA SYAFIKA BT MOHD ZABDI(A21EC124)

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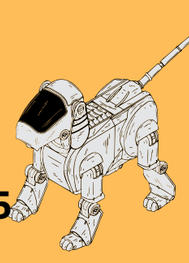
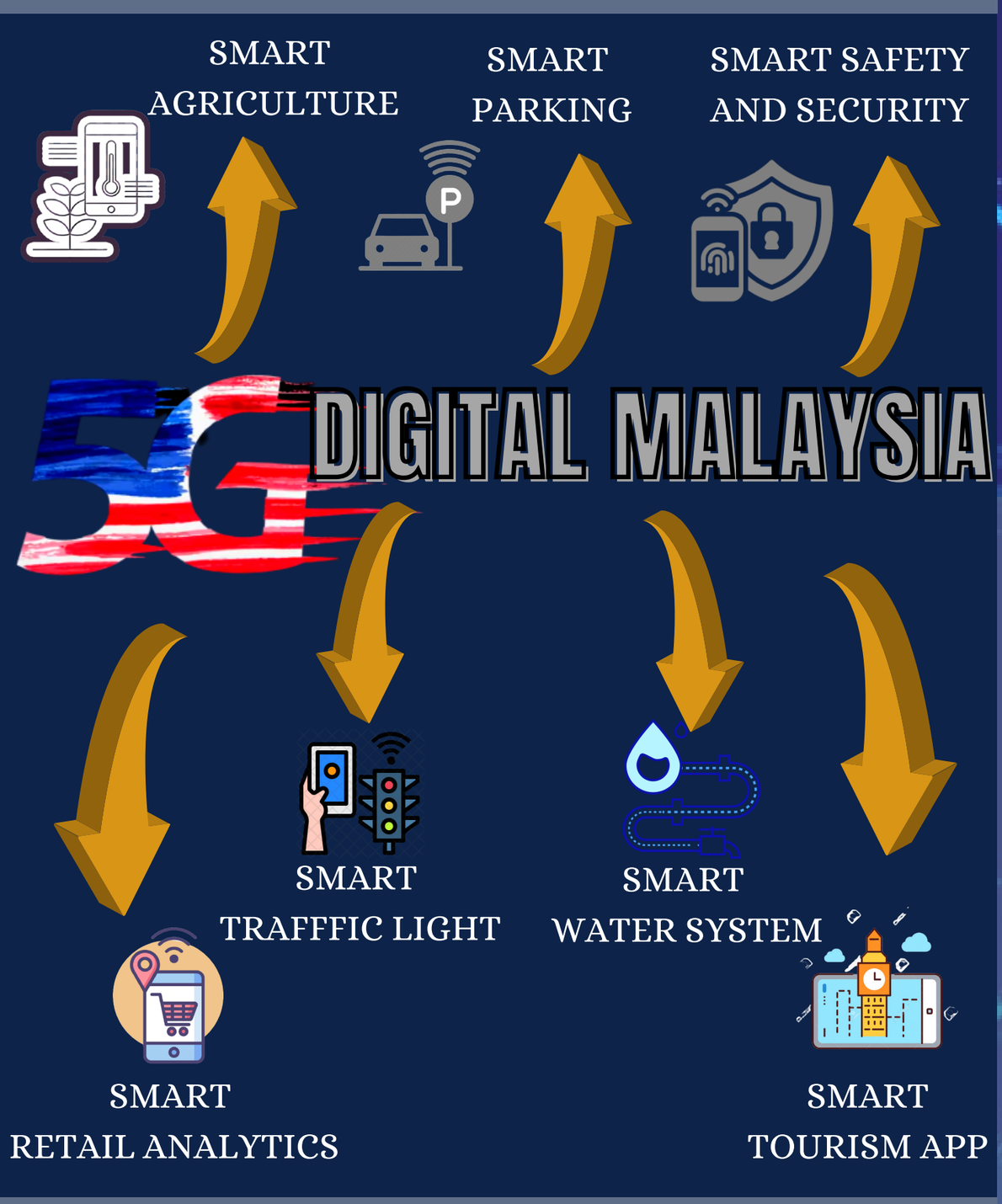


INDUSTRIAL TALK 1 : INDUSTRIAL REVOLUTION 4.0

TM HUMANIZING TECHNOLOGY

EXECUTIVE SUMMARY

People all across the world are becoming increasingly aware of the Fourth Industrial Revolution (IR 4.0). IR 4.0 is the further automation of old manufacturing and industrial processes utilizing contemporary smart technologies. The rise of IR 4.0 has resulted in increased production and improved resource management. Increased flexibility to produce large manufacturing and more efficient decision-making based on actual data. By adopting Digital Malaysia, Mr. Nazri Edham, the head of product design Telekom Malaysia (TM) commercial, gives talks about how TM plays a vital role in achieving IR 4.0 in Malaysia.



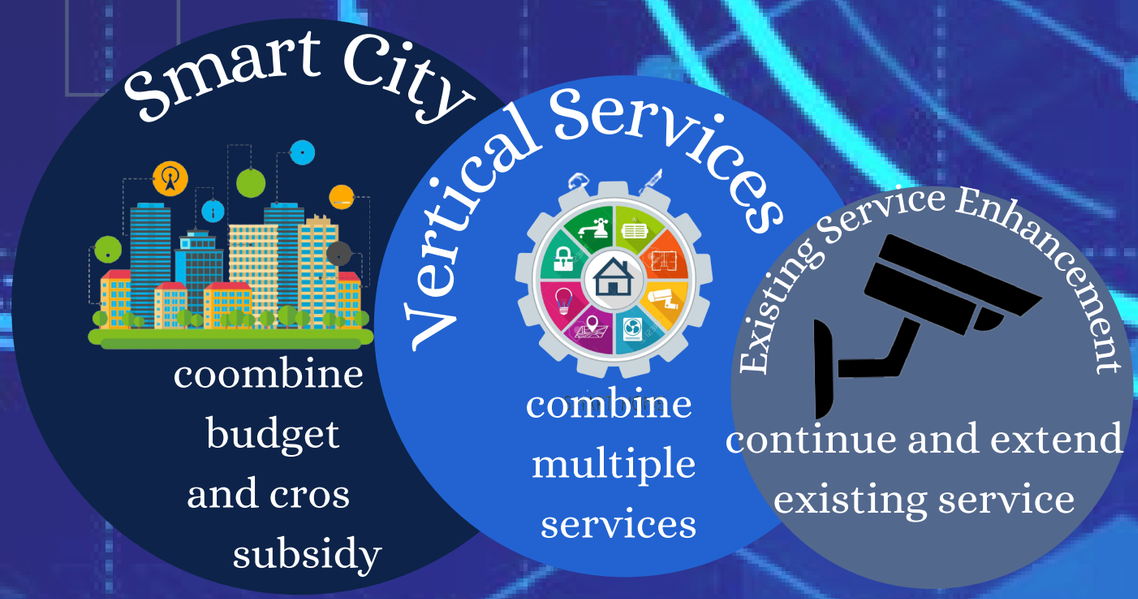
REFLECTION

Through the industrial discourse, we learned about past, present, and future technology, as well as the four Industrial Revolutions. In general, industrial revolutions have helped the world by bringing about new discoveries and technical improvements. This Industrial talk has broadened our understanding of the progression of technology across time. Aside from that, we must cherish all modern conveniences and congratulate those who have built these technologies to improve our lives. Finally, as students, we realized that mastering new technologies and artificial intelligence (Al) abilities adds to Malaysia's digital progress of Industrial Revolutions 4.0 for a brighter future.

INTRODUCTION

In our gift time, wherein is the commercial revolution from being simply an enterprise that every person may be expert on through simplest practicing and schooling withinside the conventional and non-conventional methods to a sophisticated enterprise with a technological and technical focus, wherein anyone wishes technical know-how. In Malaysia, Telekom Malaysia Berhad or also known as TM is a telecommunications company that have three main business clusters which are UNIFI for consumer and SMEs, TM WHOLESALE for global and wholesale, and the last one TM ONE for enterprise and public sector. The 4th Industrial Revolution actively took its place globally and TM also contribute to helping Malaysia achieve IR4.0.

ADOPTING SMART SERVICES FOR SMART CITIES



THE ADVANTAGES OF ADOPTING IR 4.0 IN MALAYSIA THAT IS FACILITATED BY TM

Smart manufacturing solutions will increase production rate, speed up sales transactions, and improve overall manufacturing performance.

Smart fleet management improves logistical performance and efficiency.

Increasing operation efficiency with a mobile and connected workforce.

Smart Water Integrated Management System (SWIMS) was established.

GROUP 6

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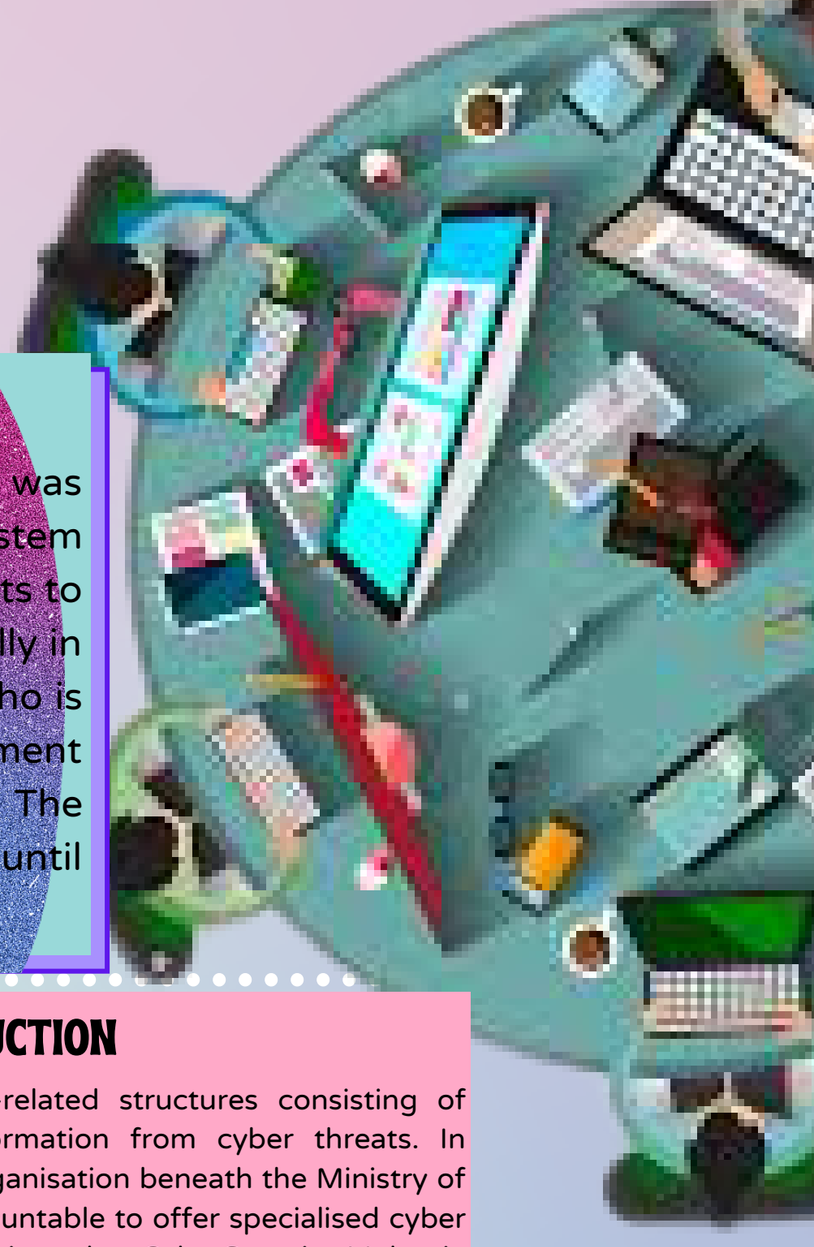
INDUSTRIAL TALK 2 : FOURTH INDUSTRIAL REVOLUTION



EXECUTIVE SUMMARY

On 2 November of 2021, Fourth Industrial Revolution Talk was organised by the lecturers of Technology and Information System (TIS) course of Universiti Teknologi Malaysia (UTM) for TIS students to have deep learning about the fourth industrial revolution, especially in cybersecurity. This talk was given by Ms. Sarah Khadijah Taylor who is a Strategic & Project Manager from Digital Forensic Department representing her company which is Cybersecurity Malaysia. The duration of this talk is one hour and a half starting from 3.00 p.m. until 4.30 p.m. and was held online using Webex.

INTRODUCTION

Cybersecurity is the safety of internet-related structures consisting of hardware, software programs, and information from cyber threats. In Malaysia, CyberSecurity Malaysia is an organisation beneath the Ministry of Communication and Multimedia that accountable to offer specialised cyber protection offerings. There are many offerings that CyberSecurity Malaysia furnished consisting of CyberCSI, CyberSafe, MyCERT, and CyberGuru.

CONTENT

1. Transformation drives such as global economy order, technologies advancement, knowledge & skills, global supply chain, competitiveness, regulations, and customer behavior.

2. 3 factors of manufacturing future in Malaysia :
   # Global value chains & geographies of production are continuing to shift.
   # Quality of labour & higher productivity, but not low labour cost.
   # New technologies are disrupting and fostering technologies.
   -Malaysia manufacturing firms need to innovate and invest in new technologist to remain competitive

3. Policy A-C-T was implemented to address the issues & challenges
   o Attract (A)
   § To attract stakeholders

   o Create (C)
   § Create the right ecosystem for IR4.0

   o Transform (T)
   § To transform Malaysia's industry capability
   -Framework

4. Interest of cybersecurity in Malaysia

5. Digital Forensics
   - A service to collect data, extract data, analyze the data, record a report and present it.

REFLECTION

In this talk, I know on how Malaysia goverment emphasizes the importance of IR 4.0 and take steps to ensure the country's aspirations are realized. I also learned about the roles and state of cybersecurity in Malaysia

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