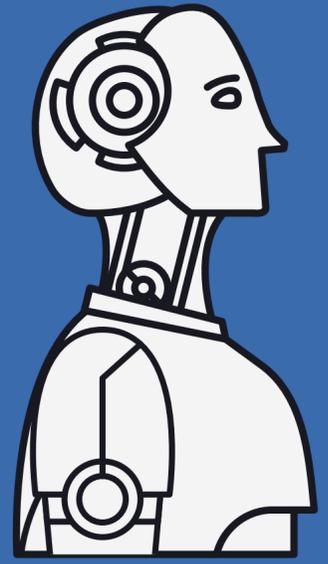What is the significance of cybersecurity? As we already know, we are currently living in the IR 4.0 era, which is described by wide use of networks and the internet. The internet is used by every company on earth for selling, advertising, and shopping. But what happens if data about consumers' identities, such as their credit cards or bank accounts, is leaked? It will be quite problematic. Later in the session, we'll talk about IR4.0 and how it relates to the importance of cybersecurity.

CYBERSECURITY

TALK CONTENT

IR4.0 features more infusion of automation. Its application will enhance efficiency and ultimately friving competitiveness to bring market value for what we already have thus causing economic progress and growth.

Malaysia should upgrade their forensic science department by applying AI technology to reduce human error and increase accuracy of judgement. Applications of AI technology include crime scene reconstruction, data acquisition and recovery, cyber forensics, data analysis, etc. Big data applications are crucial for predicting trends and market demands. We're also able to make new materials through 3D printing like organic tissue.

Factors impacting manufacturing future of Malaysia
a. Shifting in global value chains and production geography. China's production relocation to ASEAN countries. Hence, internet adoption is key. Faster internet access should be applied such as 5G.

b. Quality of labour and higher productivity but not low labour cost. More training and upskilling is needed for high-skilled workers.

c. Technology-based model production. Malaysian manufacturing firms need to innovate and invest in new technology to remain competitive.

Addressing issues and challenges
1. MITI made a policy to overcome the issue ; A-C-T. A is to attract stakeholders to IR4.0 technology. C for creating the right ecosystem for IR4.0. T for transforming Malaysia's industry capabilities.

What to do moving forward :
1. Create more knowledgeable workers by upskilling and reskilling the labour force.
2. Be inclusive of SMEs
3. Evolve in innovation by developing programmes and offering pilot projects to SMEs to share the tech.
4. Focused funding support
5. Good digital infrastructure.

IR4.0 was implemented in China due to a shift in global economic order caused by the changes in the world, for instance the COVID-19 pandemic. Industry revolution 4.0 convergences include changes in manufacturing to improve efficiency. In the domestic market, demands will increase if the quality of goods are assured and services are inspected and monitored beforehand. Some factories already use food quality technology such as sensors and robotics.
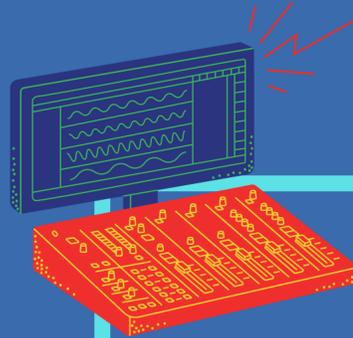
Malaysia is one the leading countries for IR 4.0 as Malaysia has a strong current and base. However, we still have to close the gap with Japan and Germany so Malaysia should come up with new policies and implement better cybersecurity.

Issues and Challenges in Malaysia
1. When customer demand increases, high expectation of product quality will become an issue
2. Legality of NFTs ; non-fungible token. Local artists can trade their services profitably. They can create art which gets put in blockchain (market product). However, we must think about IP issues like copyright and trademark infringement.
3. Small medium enterprises may get limited use of automation so we must create more awareness to enable more tool uses.
4. Exposure to cyber traps. Application of IT but without the security aspect.

Framework
1. Smart manufacturing to be the primary destination for high-tech industry.
2. To increase labour productivity growth, economic manufacturing contribution, innovation capacity and high skilled jobs.
3. Optimisation of people, process and technology.
4. Enabling funding, infrastructure, regulations, skills and talents and technology.

SUMMARY

Because the internet is so convenient, we will be more productive in our work because there is so much information on the web. Not only that, but the force of technology has made us one of the IR 4.0 countries, allowing us to improve our product quality in industries such as manufacturing. Despite this, our security system must be kept up to date or else all of our benefits will be rendered ineffective because our data will be leaked. To compete globally, developed countries must be balanced in all aspects, whether manufacturing or technology.

REFLECTION

Living in an IR4.0 Malaysia means overcoming the issues and challenges of technology adoption in our industries to ensure our manufacturing future. Stronger, more secure cybersecurity should be implemented. Moving forward, Malaysia should adhere to the goals set and surely, given our strong current and base in IR 4.0 implementation we can catch up to Japan and Germany in no time.

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