AUGMENTED REALITY

Augmented reality (AR) is one of the biggest technology trends right now and it will continuously getting bigger in the future as technology is advancing. AR let us see real life environment right in front of us. For example, you see a T-Rex running in the street through an AR device.

WHAT IS AUGMENTED REALITY (AR) ?

Augmented reality (AR) refers to the technology that allows the virtual world on the screen to be combined and interacted with the real world scene through the actuarial calculation of the position and angle of the camera image and the addition of image analysis technology. People are able to achieve a real physical world through the use of digital visual elements, sound and others that are delivered by using some technologies such as mobile device and glasses that have the ability to do the computing.

EXAMPLES OF AUGMENTED REALITY

Nintendo's Pokémon Go App

Disney Colouring Book App

IKEA Mobile App

REFLECTION

During this pandemic, AR is a good method that can be used for teaching. Instead of just reading books or listening to online lectures, students can actually start to learn by using AR devices and this increases engagement and improves the learning experience.

Besides that, manufacturer of certain product can try to develop an AR application that showcase their product such as IKEA Mobile App. This application enables the customer to shop online and lower the risk to virus infection since it is not necessary to go the physical store.
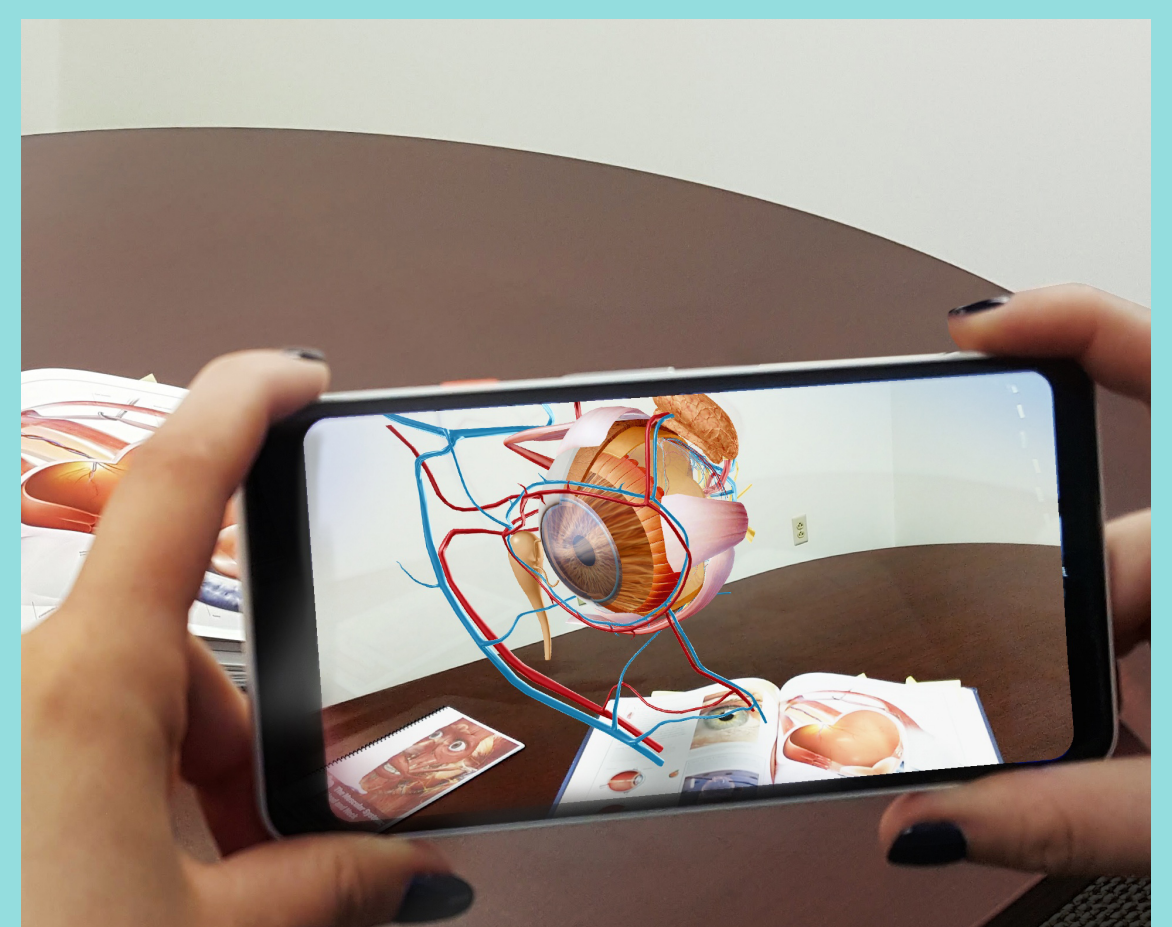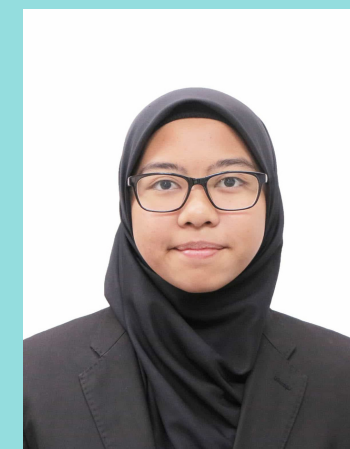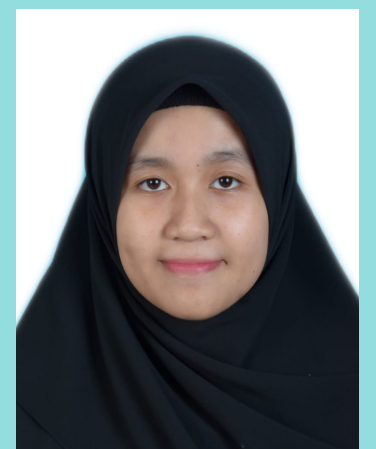
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INDUSTRIAL TALK 1

TECHNOLOGY INFORMATION SYSTEM & FOURTH INDUSTRIAL REVOLUTION

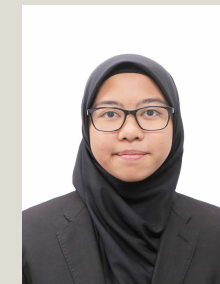*By : Mr Nazri Edham, Head of Product Design, TM Commercial*
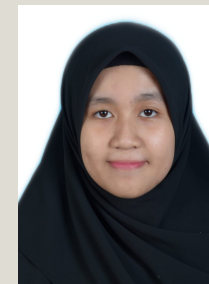
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INTRODUCTION

Industrial Revolution is divided into 4 phases; 1.0 IR (1784, 2.0 IR (1870), 3.0 IR (1969) & 4.0 IR (Today). Kicking off the first ever phase of IR, 1.0 IR was focusing on people gaining energy sources from mechanization, water power, steam power and combustion. Then, 2.0 IR changes the practices into mass production and assembly line, which was the era when electricity came into the picture. 3.0 IR initiated technologies like computer, electronic, production and automation like television.

IR4.0 VS 4.0IR

Both are focusing on cyber physical systems. While IR4.0 (2011) was striving for manufacturing, 4.0IR (2015) changed the game into development of technologies for all aspects of human life

EXECUTIVE SUMMARY

There are three Adoption areas within 4IR. First, cloud/digital technology. Due to this technology, many services have been digitized, such as telco services and payment services. These changes not only give new business models but also improve user experience. Next, smart city is a technology that responds to the needs of the citizens. For example, tracking technology which widely used on real-time package tracking and maps. Lastly, 5G technology. Compared to 4G, 5G has a faster connection speed. This allows us to do more things, such as unmanned/autonomous driving, Virtual Reality and smart manufacturing.

WAY FORWARD

With the development of these technologies, they will certainly face many challenges, including security issues that many people are concerned about. With the increase of data, it is bound to bring many security risks, such as the leakage of personal information. In order to build a safer environment, relevant talents are essential, but this will increase the demand for human resources, and this is also one of the challenges that must be faced.

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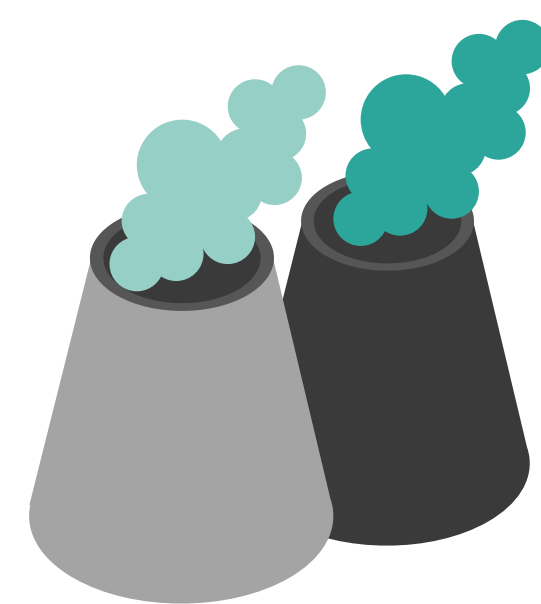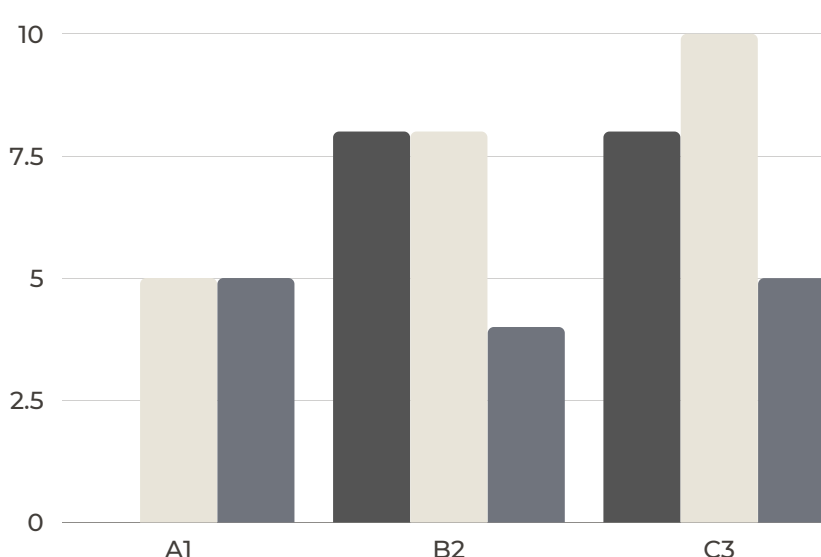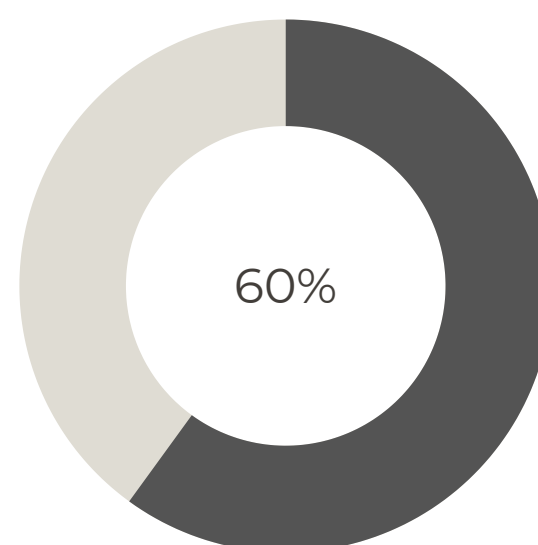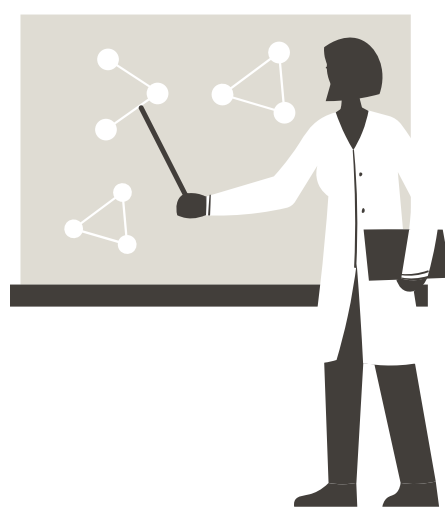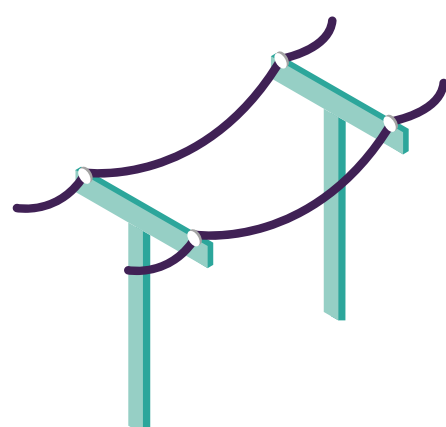
REFLECTION

In my opinion, although these technologies still face many challenges, I believe that with the efforts of relevant personnel, these difficulties will be solved. As a member of Generation Z, after completing my studies, I will join related industries and be fully prepared for the advent of new technologies.

INDUSTRY TALK 2
IR 4.0 :
A MALAYSIA PERSPECTIVE

4.0

INDUSTRIAL REVOLUTION

In this talk, a brief introduction about CyberSecurity Malaysia, Industrial revolution of 4.0 (IR 4.0), and Digital Forensic was given. The factors that drive Malaysia to the transformation of IR 4.0, the development of technologies, ways to help Malaysia to be prepared for IR 4.0, obstacles, and strategies to overcome the obstacles to achieve IR 4.0 was also discussed in this talk.

INTRODUCTION

In this era, where the world is full of technologies, executing IR 4.0 is a need because only with IR 4.0, Malaysia, would be able to compete with other countries. This is because other than digitalizing the manufacturing sectors, IR 4.0 would also help to increase the efficiency and the value of Malaysia's manufacturing sectors.

FACTORS OF THE TRANSFORMATION

- Changes in the global economic system
- The speed with which technology advances and converges
- Future-oriented knowledge and abilities
- Dynamics of the global supply chain

MALAYSIA READINESS

Compared to other countries, Malaysia is one of the top countries that is prepared to transform to IR 4.0. However, to completely change to IR 4.0, Malaysia must transform quickly to outperform other countries, improve labour quality and productivity, and start manufacturing enterprises to explore and invest in new technologies to compete effectively.

SOLUTION

- Improve labour skill
- Encourage the involvement of SME
- Capable to collaborate
- Provide support
- Produce useful and reliable infrastructure

OBSTACLES

- Demand
- Supply

POLICY

- Attract
- Create
- Transport

REFLECTION

From this talk, I realised that Industrial Revolution 4.0 has brought variety of changes in many aspects of human life. Advanced materials and additive manufacturing have increased the quality of our local products. 3D printing is one of the products produces by this technology that generate functional 3D objects. It can support the next generation of objects in industries including automotive, manufacturing, healthcare and consumer good. These technologies have helped our country to innovate and invest in new technologies to remain competitive.
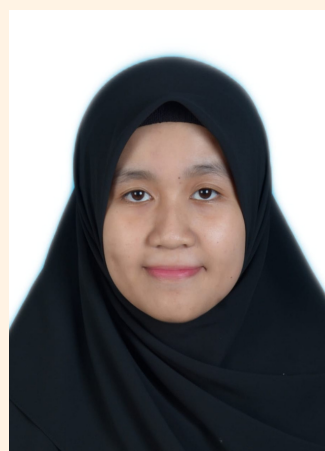
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