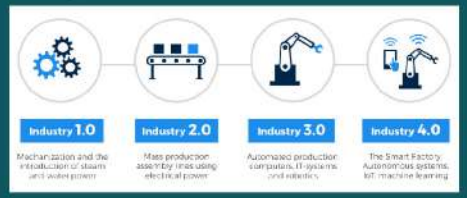
GROUP 1
1. ADAM HAQIEM BIN ABDRAHIM (A20EC0002)
2. DZAKIRIN ASYRAFF BIN ZAMSARI (A20EC0030)
3. EUNICE LIM XIAN NI (A20EC0034)
4. BRENDAN DYLAN GAMPA ANAK JOSEPH DUSIT (A20EC0021)

Industry Revolution 4.0



IR 1.0 (18th century)

- Transformation from muscle power to mechanical power.
- Emergence of steam engine
- This led to the increase of efficiency and productivity for industrial purposes

IR 2.0 (19th century)

- Invention of electricity
- Mass production through assembly line
- Remarkably faster at a lower cost in production of automobile using assembly line.

IR 3.0 (1970)

- Partial automation using computers and memory-programmable controls
- Beginning of the era of electronics and automation
- Now, an entire production process could be automated without human intervention

IR 4.0 (Present)

- Known as Industry 4.0
- Even more automation compared to the 3rd industrial revolution
- The linking of the physical and digital world through cyber-physical systems
- An adjustment from a central industrial control system to one where smart products define the production steps
- Personalization/customization of products, mainly through Big Data

E-commerce 4.0

- Nowadays, most marketing has implemented online platform to sell their products such as on Shopee and Lazada.
- Based on statistics from Forrester Research Inc., 30% of B2B spend more than B2C retailers by 2019.
- Merchants are mostly respond/order through AI.
- They already programmed with the products available in the store.
- The order processing are also being automated 24/7. The sellers don't have to take orders manually.
- For some manufacturers, they provide the customers with virtual reality view of their product. This allow to stay ahead of any sellers in e-marketing.

Industrial Talk by Telekom Malaysia Berhad (TM) - Industrial 4.0 : Past, Present, Future

Education 4.0

- Most classes (in school or university) requires heavy usage of Internet especially during pandemic.
- The students are given the opportunity to discover which learning processes that could help them understand them.
- Some of them might prefer visual learning through virtual reality and others would prefer audio teaching such as listening to podcast.
- Universities need to prepare the students on smart technology education since there will be more job offered related to AI in the future.
- A new norm of teaching has also been introduced such as through video conferencing or asynchronious learning.
- Project-based assignments have been implemented more to students in order for them to adapt the environment quickly.
- There will be less exam-oriented session but more towards enchaning industrial skills assessment.

FUTURE OF WORK

THE JOBS OF TOMORROW

- We'll never know what the job industry demands in the future but we can definitely predict it because of their trends.
- Nowadays, tech companies are more focused towards IR 4.0 technology, product and solution in Malaysia.
- Most of Malaysian technology companies involve themselves with one of the subset of IR 4.0 tech which is IoT(internet of things).
- Therefore, students need to at least have some basics in any of the subsets of IR 4.0 technology.

Past jobs	Present jobs	Future jobs
Lamplighter	Mobile app designer	Computer vision engineer
Switchboard operator	Biomass plant technician	3D printing technician
Typist	Cloud services specialist	Machine learning engineer

As we can see, the trend of jobs are getting more into the IR 4.0 tech as time goes by. We should expect more AI, IoT, augmented reality, etc, technolgy be part of our lives and our jobs.

- For example: The car company BMW has implemented augmented reality into their workplace. This would be beneficial to their worker as they can refer to a text or 3D model to make their work more efficient.

REFLECTION

What our group managed to gain from the talk is the awareness of advancing technology around us nowadays. However, we also realised that the higher lifestyles we obtained nowadys proves how competitive it is for everyone to survive and getting jobs especially in industrial fields. Despite that, young generation needs to be taught on modern technologies so that they can acheive the mission and vission of IR 4.0. Thus, we need to prepare ourselves holistically in order to adapt quickly with the new environment in the coming future.

REFERENCE

Desoutter Tools. (2020). Industrial Revolution - From Industry 1.0 to Industry 4.0. https://www.desouttertools.com/industry-4-0/news/503/industrial-revolution-from-industry-1-0-to-industry-4-0

Ham, A. (2018). E-commerce 4.0 is on the horizon. What does this mean for B2B? https://www.digitalcommerce360.com/2018/08/29/e-commerce-4-0-is-on-the-horizon-what-does-this-mean-for-b2b/

James, F. (2019). Everything You Need to Know About Education 4.0. https://www.qs.com/everything-you-need-to-know-education-40/