THE FOURTH INDUSTRIAL REVOLUTION (IR 4.0) AND THE IMPACT TO UNIKL BMI STUDENTS

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Introduction
Recently the terms IR4.0 becoming popular especially in mainstream media as well as in the universities. Lecturers have been mentioning about preparation towards IR4.0 and it seems that there is something big is going to happen that may change the current educations' landscape or some changes in the content and delivery mode. According to Aziz Hussin (2018), IR 4.0 is going to change the overall education curriculum in order to meet and prepared the graduates or the workforce towards the industry requirements. Universities roles becoming important in terms of providing the information and equipped their students with the latest information, exposure and experiences in order to meet the industry market demand for the workforce. At the same time (Culot et al., 2020) emphasis that students may need to follow the development of IR 4.0 and willing to explore new opportunities provided by the revolution. Szász et al., (2020) claimed that IR 4.0 is not only about the curriculum and about technology, but the effect is more related on how individual and companies or business organizations may sustain in the industry and enhance their competitiveness.

What is IR 4.0?
IR 4.0 is the short form for the fourth industrial revolution, which first mentioned during a world economic forum in 2015. It is the continuation of the revolution from 1.0 where industries transform from hand production methods to machines powered by steam or water. It was the time where industry start to think and find ways on how to increase productivity. Machine helps the industry to increase productivity despite being more economical and easier to manage. The following revolution is about the technology with the existing of electricity. Second revolution is also about the speed of ideas transfer. Used of machine during this era leaded to sudden huge unemployment. Third revolution known as digital revolution occurred in the late 20th century. Industrial started to digitalize not only their communications but also productions using computers. We are currently at the IR 4.0 where industrial more focused on machine-to-machine, real time data and interconnectivity. According to Bal and Erkan (2019), IR 4.0 offers industrial for better control beside improve the overall process and helps businesses to sustain in the market.

Impact to students
Many research and academics' scholars highlighted that the IR 4.0 will make a drastic change to the way people live especially to the current young generation. Focused made to the students in the universities or any other higher education institute in preparing them towards workforce by the time of graduation. Culot et al., (2020) insisted that IR 4.0 would change the way people behave, live, educate and work. Those changes derived from the technology that enable changes such as machine-to-machine, artificial intelligence and the most popular one is internet of things. Indirectly it will disrupt the overall routine, behavior and culture that have been practiced unless

people were thought to be parallel and develop together with the technology (Guzmán et al., 2020). As mentioned by Ellahi et al.,(2019), IR 4.0 focused on digital technology and potentially reshaping the way individuals works and behave especially related to production, servicing and management. It was also mentioned by Bal and Erkan (2019) that the digital structures will demonstrate to be revolutionary over a period. Based on that, students especially in Universiti Kuala Lumpur BMI may need to explore and accept the challenges in preparing themselves towards the new workforce requirements with a digital transformation.

Both students and educators in Universiti Kuala Lumpur BMI may focused on the following in order to ensure that graduates from the university can be marketable and suit the industry requirements, demand and standards.

Redefine the purpose of education

Students may need to evaluate the purpose of study that currently practiced. Most students focused in increasing the grade rather than developing challenging ideas and creativity to explore possibilities within the scope of subject. Students can no longer depends on the material given and textbook for the knowledge. It is about time that students voluntarily explore and push themselves out of the comfort zone for a real learning. Educators at the same time should also encourage students to be more creative and make used of the technology to support outside the box thinking. Students should not afraid to make mistake but rather to learn from the mistake.

Focused more on STEM (Science, technology, engineering and math)

It was suggested by Guzmán et al., (2020) that students to explore more on the STEM as it is part of the technology syllabus. Good knowledge in STEM may contribute to a strong exploration using the technology as the platform. Students may choose to be a creator or just sit back as user. Due to the high competition in the marketplace, students are encouraging to be more adventurous and accept the challenge to focused on something that is less popular but worthwhile for long-term benefits. STEM provides students with strong foundation that can easily associated with the technology such as machine-to-machine, IoT and automation.

Develop human potential

It was highlighted by many researchers (Aziz Hussin, 2018; Culot et al., 2020; Szász et al., 2020) that although IR4.0 involves heavily in machine and automation, but it cannot defeat the human potential. Students at the universities must explore opportunities to develop their creative thinking, imagination, social interactions as well as physical agility. Human potential combine with machine can be the best solutions for future industry approach (Bal & Erkan, 2019).

Lifelong learning

According to Ellahi et al., (2019) IR 4.0 requires people to continue with their studies and exploration from time to time. It may involve the learnt and unlearn situation where people need to continuously update themselves with the rapid developed technology. Those who failed to update themselves may left behind as the competition is not only between machine and automation but also against the people who compete to strive for the best in terms of career and personal development.

Change of learning concept

Ellahi et al.,(2019) recommended that both universities and students to be open minded in teaching and learning. Learning in the 21st century is no longer limited to in class activities or mini laboratory projects. As suggested by Ellahi et al., (2019), teaching and learning in 2020 may requires exploration and strong motivation in understanding principal and exploring the theoretical background. Students may no longer appropriate to memorize but rather to earn the knowledge thorough the experiments and findings based on practical works.

Conclusion

There is an indicator that soon or later machine and automation will take place to replace the human in many types of jobs. It has been warned by many scholars such as Teng et al., (2019) that business organizations would rather invest in machine rather than employ human in certain sectors especially related to production. Today, we can see that machine to machine works well in many organizations. Machine can transmit data to server without human intervention. Sensor were used largely to provide report and machine were currently used to replace people in servicing. Simple example such as the ATM machine that have been taken over thousands of job opportunity. Machine to machine successfully remove the involvement of people in data collection. Those are just a simple example based on surrounding experiences. Students especially in Universiti Kuala Lumpur BMI need to take the opportunity to blend themselves with the technology and developed together for a brighter future in the market.

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