INDUSTRIAL REVOLUTION 4.0

EXECUTIVE SUMMARY

This poster is about the Industrial Talk of Technology Information System & Industrial Revolution 4.0 that has been delivered by Strategic & Project Manager Digital Forensics Department of Cybersecurity Malasyia, Ms. Sarah Khadijah Taylor on 2nd November of 2021. During the talk, Ms. Sarah emphasized about the 4th IR, the drives to 4th IR, the future manufacturing in Malaysia, technologies advancement of 4th IR and what Cybersecurity provide in order to achieve 4th IR.

INTRODUCTION

Since technology has grown exponentially since the early decades, it is a must for each country to have their own technology breakthrough. By doing so we can use the technology to create knowledgeable workers and develop process that is welcomed by international standards and also construct labs to create and test product. With that, It grows productivity, consumption, promotes flexibility in innovation and helps lessen the waste.

INTRODUCTION

IR 4.0 is an ongoing revolution whereby infusion of automation covers both traditional industrial and advanced technology in manufacturing. It is crucial considering that it helps boost efficiency and add value in marketing.

How are we agoing toward IR 4.0?

- Advancement of digitalization
- Advancement of technologies
- Efficient resource utilization

THE DRIVES TO IR 4.0 TRANSFORMATION

- Global Economic Order
- Technology advancement
- Future production of knowledge and skills
- Global supply chain
- Demand

THE FUTURE OF MANUFACTURING IN MALAYSIA

To become a strategic partner for smart manufacturing, solution provider, measure to the progress of transformation, optimizable
shift factors and enable determination of strategies, policies and action plans.

FACTORS

- Global production constantly grows
- Higher quality of labour and productivity

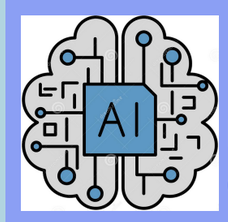
CHALLENGES

- Less public awareness
- High cost of invesment
- Limited skills
- Lack of supply : funding, infrastructure, governance and ecosystem support.

TO OVERCOME

Upskilling, inclusive involvement and funding support

TECHNOLOGY ADVANCEMENT

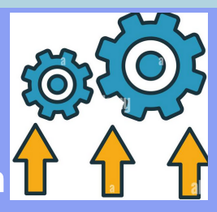


- ARTIFICIAL INTELLIGENCE

Programs developed by machine learning

- BIG DATA ANALYTICS

Used to predict trends in market



- SYSTEM INTEGRATION

Connection of different sub-systems into one system process

- ADDITIVE MANUFACTURING

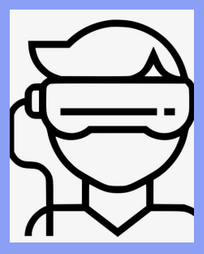
A name of an industrial production for 3D printing

- CYBERSECURITY

Programs developed by machine learning

- CLOUD COMPUTING

Commonly used for data backups, file storage & software development

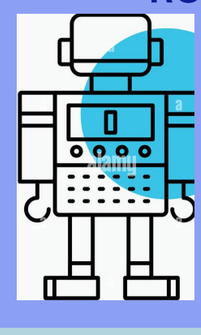


- AUGMENTED REALITY

Provide real-life training

- SIMULATION

Create virtual representations of a process on a computer for manufacturers



- AUTONOMOUS ROBOTS

Perform advanced tasks

- INTERNET OF THINGS (IOT)

Embedded with physical objects: sensors, processing ability, software, and other technologies

CYBERSECURITY MALAYSIA PROVISION

- Create knowledgeable workers
- Develop process that is accepted by international standards
- Setup labs to create and test product

REFLECTION

Through this industry talk, we know that industrial revolution 4.0 is very important for us. Industrial revolution 4.0 helps us to enhance efficiency which it improves our quality of life. There are some advanced technologies that can help human to fulfill their tasks that is difficult to done. For example, simulations, autonomous robot and cloud computing. Those are the technologies that can make human's tasks easier to be done. However, there are still lots of issues and challenges that we need to overcome to make sure Malaysia are always moving forward. Thus, we must put our effort in to make sure we are going towards IR 4.0.

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