FOURTH INDUSTRIAL REVOLUTION (IR4.0)

Internet of Things (IoT)

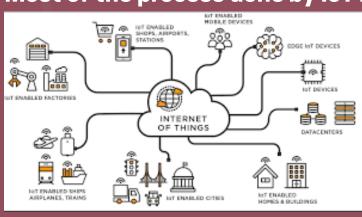


INTRODUCTION

-Refers to any physical items or devices that are inserted with sensors, software and other technologies.

-loT works by connecting one devices with other devices via the Internet so the detected data from the sensor can be shared among devices.

-Most of the process done by IoT is happening automatically.





Internet of Service (IoS)

-Based from 2 concepts, Web 2.0 and Service-Oriented architecture. -These concepts including interactivity, social

networks, tagging, web services and designing and constructing Information Technology applications. -Example:

1. UniFi, Celcom and Digi- telecommunication company to provide Internet connection such as broadband.

-Mainly to improve performance, preventive maintenance (PM) and productivity of manufacturing service.

-loMs exist to keep the industrial in manufacture developing and create competitive environment.

·Example:

Real-time asset monitoring- to control and manage the asset production and ensure the quantities and qualities produced. 2. Connected operational intelligence- connected with intelligent networks to identify problems and solve it faster and efficciently.

Internet of Manufacturing Service (IoMs)

Internet of People (IoP)

-Help society to connect directly with each other by Internet which allow people to see their similarities of interest based on their privacy limitations. -Hence, IoP protect user's personal information that was linked with multiple accounts of websites from being hacked or scraped by unknown party.

-Example : Social media FORMS OF IOT application such as Telegram, Whatsapp or Instagram is use widely by all people around the world to communicate and sharing interest together.



Daily affairs

-loT help to control machines or electronic devices at home and also can be used in security system.

Example: Smartphones with infrared blaster and built software that can control the television, air conditioner and network set top box (STB). The motion detected through closed-circuit television (CCTV) will alerted us through through the system's application.



Health

-loT devices can help society to track their daily activities, health information and control the quality of air in our house.

-Example : Smart watch : Help to track the user's heart rate and monitor their sleep quality.

Air purifier: Help to make sure the quality of air in our room is always in a healthy condition.





Manpower

-loT help some companies to reduce their own staff's manpower by changing a few task into automatically process to increase work productivity.

-Example : Several countries such as Japan and China have successfully applied the IoT by creating robots. that are used as servers in restaurants and cafes



REFLECTION BENEFITS)

Transportation

-loT makes the transportation system in the country more safer and orderly. Thus, the introduction of RFID technology to the public helps facilitate travel especially when on highways hat pass through tolls.

Example: Smart car such as Tesla have that autopilot function and equipped with numerous sensors to make user's travel safer. RFID tag and Smart tag that have radio wave which can detect and transfer the data faster to pay the tolls.



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