UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SECP1513 – SECTION 04

ASSIGNMENT: POSTER IR4.0

LECTURER: Hairudin Bin Abdul Majid

DUE DATE: 13/11/2021

GROUP'S LEADER CONTACT NUMBER:
0 16-310 0296

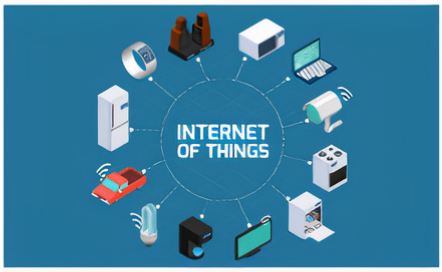
GROUP MEMBERS	 MUHAMMAD DINNIEY SAUFEE BIN RAZALI (LEADER)	 MUHAMMAD KHAIRIL AMAR BIN MOHD NAZRI	 MUHAMMAD RIYAAZ BIN KAMAL	 FIRHAD HAZIMI BIN JAMALUDIN	 ABDULRAHMAN OSAMA GALAL ALI	 ZIHAN IZHAR BIN AZAHIR
MATRIC NUMBER	A21EC0204	A21EC0085	A21EC0092	A21EC0175	A21EC0244	A21EC0241

Internet of Things (IoT) : Changing the way things work

INDUSTRIAL 4.0

INTRODUCTION

- Internet of Things (IoT) is a network of physical objects or people called "things" that are embedded with software, electronics, network, and sensors that allows these objects to collect and exchange data
- Allows objects to be controlled remotely across existing network infrastructure
- Is a very good and intelligent technique which reduces human effort as well as easy access to physical devices



DESCRIPTION OF IOT

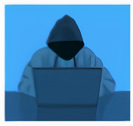
Importance

- Allows businesses to automate operations and save money on manpower
- Eases daily life and increases efficiency

Advantages

- Ability to access information from anywhere at any time on any device
- Improved communication between connected electronic devices

Disadvantages

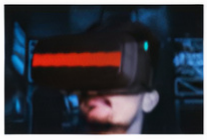


- As the number of linked devices grows and more information is shared between them, the risk of a hacker stealing personal data grows
- If the system has a flaw, every linked device will most likely get corrupted

EXAMPLE

Home Security systems that protects home from intruders such as SimpliSafe and ADT

Activity trackers designed to monitor and transmit key health indicators in real time such as Apple Watch and Xiaomi Mi Band



Augmented Reality Glasses allows information to be presented within the lenses of the glasses such as Google Glass

REFLECTION

IoT as a whole is about reinventing the way your entire business functions and grows, not just investing in new technology and tools to boost industrial efficiency

I believe that IoT is one of the most important technologies of everyday life as it helps people live and work smarter, not harder. It also allows us to gain control of our own lives

Learning about IoT motivates me to study harder in the course I am pursuing so that in the future, I am able to come up with new ideas on how to do things more efficiently using technology

Technology & Information System (SECP1513)

Firhad Hazimi Bin Jamaludin A21EC0175
Zihan Izhar bin Azahir A21EC0241

Technology Information System & 4.0th Industrial Revolution

Introduction

In 1st November 2021,all Technology and Information System (TIS)'s student from UTM have joined an industry talk from Telekom Malaysia (TM).This talk given by Mr. Nazri Edham which is head of Product Design TM. The mainly purpose of this talk is about 4th Industrial Revolution the revolution of technology to enable manufacturing environment.

Executive Summary

The talk given by Mr. Nazri Edham was regarding of 4th Industrial Revolution(4IR),adoption areas within 4IR,digitalization of services & outcome of the transformation, increasing execution performance with mobile & connected workforce and 4IR Digital Solution-Managing Logistic Performance With Smart Fleet . Question section also open for all of students.

4th Industrial Revolution

4IR is the ongoing automation of manufacturing and industrial practices using smart technology

*First(1784)-Mechanization, water power, steam power

*Second(1870)-Mass production, assembly line, electricity

*Third(1969)-Computer, electronic and production or automation

*Fourth(Today)-Cyber physical systems

-IR4.0 2011(Manufacturing)

-4IR 2015(All aspect of Human Life

Industry 4.0

Data capture & analytics, Saas, Platforms, Artificial Intelligence, Advanced robotics, Sophisticated sensors, Smartphones, Cloud computing, Augmented reality, The Internet of Things

Content

Adoption within 4IR

*Cloud/Digital

*Smart Cities

*5G

Digitalization of services

*Payment services digitally-eg.=PayPal

*Taxi services digitally-eg.=Uber

*Music digitally-eg.=Spotify

Increasing execution performance with mobile & connected workforce

*Assignment-showing list of assignments

*Note-Add notes after perform activity task

*Tickets-Showing details of created ticket information

Outcome of the transformation

*Operationally efficient

*Innovative business model

*Enhance customer experience

4IR Digital Solutions-Managing Logistic Performance With Smart Fleet

*Tracking

-Realtime tracking

-Location status by vehicle

*Trip replay

*Vehicle info

Reflection

From the talk given by Mr. Nazri Edham, we become more interested with the 4th Industrial Revolution. We have gained many interesting information and it is understandable. Especially, about the digitalization of services which is make people's nowadays much easier. We also interested with his explanation about Telekom Malaysia Berhad (TM) that make us interest with TM and we hope that we can experience work at there too.

***MUHAMMAD KHAIRIL AMAR BIN MOHD NAZRI**
A21EC0085

***ABDULRAHMAN OSAMA GALAL ALI TURKY**
A21EC0244

CYBERSECURITY INDUSTRIAL TALK IR 4.0

MUHAMMAD DINNIEY SAUFEE BIN RAZALI A21EC0204
MUHAMMAD RIYAAZ BIN KAMAL A21EC0092

INTRODUCTION

ON 2nd November 2021,all Technology and Information System students from UTM attended sn industry tslk from CyberSecurity Malaysia.The talk were given by Puan Sarah Khadijah.The talk mainly about IR 4.0 which is the ongoing automation of manufacturing and industrial practices using all the pillars mainly artificial intelligence.It is an era which all 3 foundation(1,2,3)Industrial revolution combined. As a result of cyber threats,new cybersecurity risk emerge especially in business

EXECUTIVE SUMMARY

Puan Sarah Khadijah was our speaker from Digital Forensics Department Cybersecurity Malaysia.She gave talk regarding IR 4.0,The Need to Embrace,IR 4.0 Transformation Drivers,Malaysia Moving Forward and Addressing the issue and challenges.Additionally topic about country's policy on Ir 4.0 which aim to transform manufacturing and related services.Many technologies are shared like Artificial Intelligence,Big data,Internet of Thing and many more.Q&A session were held

CYBERSECURITY MALAYSIA

agency under Ministry of Communicatiom formed to protect country's cyberspace and has many department

CYBERCSI-investigation and prosecution

Cybersafe-provide awareness

Cyberguru-offer training certificate

myCert-emergency response team

Cybersecurity role in IR 4.0

PEOPLE-to create expertise by offering certificate and job attachment program,upskilling and provide more awareness for worker in the industry.

PROCESS-to advance process that is acknowledged by international principles by developing method,SOP and guidelines.This enable us to be recognised as one of leading countries in IR 4.0

TECHNOLOGY-product development and testing
-setting up labs to generate and test product
-pilot project

CONTENT

THE NEED TO EMBRACE

-Malaysia need to transform faster than other ASEAN countries to open up new chances in our country.High skill employees productivity are yet to move forward in order to compete with other.Malaysian companies need to innovate in new technology especially in manufacturing firm

ADDRESSING THE ISSUES AND CHALLENGES

-Malaysia has developed strategy to adress this knowns as ACT(attract,create,transform) under MITI to attract stakeholder as potential manufacturing location,create suitable ecosystem for future development in the industry and transform it in
complete manner

MALAYSIA READINESS IN IR 4.0

-Malaysia has been recognised in leading category for IR 4.0 among top countries like UK,Singapore and Germany

MALAYSIA MOVING FORWARD

*upskilling and reskilling
*inclusive involvement of SME
*focused funding support
*good digital infrastructures

REFLECTION

This industry talk has given much exposure to student on IR 4.0 especially in Cybersecurity field.We are able to acknowledge the importance of cybersecurity and its role as a pillar in IR 4.0.We also gained insight of the goverment role in helping implementing stronger cybersecurity measure to ensure we are not left fallen behind by other countries.We also seen that IR 4.0 help to create job opportunity for people in technology sector especially for example in cloud computing,cybersecurity,network and many more