

INDUSTRIAL TALK 1

SECP1513



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

INTRODUCTION

ON 24TH OF DECEMBER 2020, THE INDUSTRIAL TALK OF REVOLUTION 4.0 (PAST, PRESENT AND FUTURE) WAS HELD BY MR. REDZUAN SHAH YUSSOFF THE DIRECTOR OF SOUTHERN STRATEGIC ECONOMIC REGION, TELEKOM MALAYSIA. MENTIONING THAT 4IR HAS BEEN INITIALED IN BRITAIN, IT'S A MAIN FOCUS NOW FOR EVERY OTHER COUNTRY IN THE WORLD SINCE THAT INDUSTRIAL REVOLUTION 4.0 HAD A BIG CONTRIBUTION TO THE CHANGE IN THE 18TH CENTURY.

EXECUTIVE SUMMARY

- IR=INDUSTRIAL REVOLUTION
- THE HISTORY OF INDUSTRIAL REVOLUTION STARTING FROM IR1.0....IR4.0 PRESENT NOW
- IR1.0-STATES HOW MECHANICAL MACHINERY WAS EVOLVED
- IR2.0-STATES HOW ELECTRICITY WAS EVOLVED AND HOW IT IMPACTED THE WORLD BY DISCOVERING A NEW SOURCE OF ENERGY
- IR3.0-STATES HOW COMPUTING POWER WAS DEVELOPED
- IR4.0-IT'S THE PRESENT NOW AND IT INCLUDES THE REVOLUTION OF AI (ARTIFICIAL INTELLIGENCE)
- COMPONENTS INCLUDED IN IR4.0:
 1. AUTONOMOUS ROBOTS
 2. SIMULATION
 3. SYSTEM INTEGRATION
 4. INDUSTRIAL INTERNET OF THINGS
 5. CYBERSECURITY
 6. CLOUD STORAGE & COMPUTING

- 7. ADDITIVE MANUFACTURING
- 8. AUGMENTED REALITY
- 9. BIG DATA AND ANALYTICS
- EXAMPLES OF IR4.0:
 1. SMARTHOMES
 2. TESLA AUTONOMOUS DRIVING WHICH RELIES ON AI CONCEPTS
 3. 3D PRINTING HUMAN ORGANS ETC.
- WHERE ARE WE NOW
- EDUCATION 4.0 USING VR AND AUGMENTED REALITY
- COMMERCE 4.0
- JOB FUTURE WITH RELATION TO IR4.0
- HOW 5G TECHNOLOGY CAN AFFECT IR4.0

Content based on the situation discussed in the topic

AUTONOMOUS ROBOTS: INTELLIGENT MACHINES CAPABLE OF PERFORMING TASKS ALONE WITH NO EXPLICIT HUMAN CONTROL
EXAMPLES OF COMPANIES WHO USE AUTONOMOUS ROBOTS: BMW, TOYOTA
INTERNET OF THINGS (IOT): CONSISTS OF THREE LAYERS, APPLICATION LAYER, NETWORK LAYER, PERCEPTION LAYER.
AUGMENTED REALITY: CAN HELP WITH TOURISM AND EDUCATION
BIG DATA -> ANALYTICS -> DECISIONS
1R: MECHANICAL PRODUCTION
2R: MASS PRODUCTION
3R: DIGITAL
4R: CYBER PHYSICAL SYSTEMS

COMMERCE 4.0: BEING ABLE TO SHOP THROUGH VR SHOPS
CLOUD 4.0: CONNECTING VEHICLES ON THE ROAD, ALLOWING THEM TO DRIVE ON ITS OWN
EXAMPLE: TESLA 3
SMARTPHONE APPLICATIONS HAS TRANSFORMED THE E-COMMERCE INDUSTRY
EXAMPLE OF APPLICATIONS: UBER, GRAB, FOODPANDA, SHOPEE
OVER THE YEARS, A LOT OF TECHNOLOGY COMPANIES STARTED FOCUSING AND DEVELOPING IR 4.0 TECHNOLOGY IN MALAYSIA

