

The Way Forward

Have you understood the application and adoption?

Introduction

Since the beginning of the internet, the internet has had a growth of about a thousand per cent. In the last 20 years, we have seen unprecedented change in the number of people that use the internet and use it for business, for personal life, and so on. For the fourth industrial revolution, it has started and kicked off right now and because of technology, specifically internet-related technology is going to propel us much further than we could over what we would anticipate. The fourth industrial revolution is the central key part about the time when men and machines come together. It is a time when artificial intelligence will work to create different outcomes as we have never seen before and the industrial revolution. Regardless of what we are going to do, technology would be a massive part of our lives. So, it is time for us to start adapting ourselves more to technology and start adopting how it can help us, how we can use it to create change to the world. So. It is important for us to understand and leverage industry 4.0 to boost the organisation productivity. As such, we need to be ready for the change. It is very important NOT to use the old paradigm of the business model for the new era of the business environment. Or another way to describe it as, “Don’t sell a refrigerator to an Eskimo!”

Program Objectives

After completing this program, the participants should be able to

- Understand the concept
- Integrate in developing a competitive business advantage in business

Learning Outcomes

After completing this program, participants should be able to

- Communicate effectively with different stakeholders when dealing

Who should attend?

CEO, business owners, senior management, senior executives who would like to integrate into their business strategies to create competitive advantage

Methodology

Interactive lecture, videos, presentation, discussion, case study, case simulation, Socratic questioning, flipped classroom, brain-storming, worksheet, problem solving, inductive method, team exercise, peer to peer, action learning, coaching and mentoring

Program Outline

| Time | Day One |
|------------------------|---|
| 9.00am– 10.30am | <p>The Evolution of Industrial Revolution and the Framework</p> <p>The Industrial Revolution emerged from many improvements in manufacturing and service systems. Because remarkable and rapid changes appeared in manufacturing and information technology, synergy aroused from the integration of the advancements in information technology, services and manufacturing were realised. These advancements resulted in the increasing productivity of both in-service systems and the manufacturing environment. In recent years, manufacturing companies and service systems have faced substantial challenges due to the necessity in the coordination and connection of disruptive concepts such as communication and networking (Industrial Internet), embedded systems (Cyber-Physical Systems), adaptive robotics, cybersecurity, data analytics and artificial intelligence, and additive manufacturing.</p> |
| 10.30am-11.00am | Break and Networking |
| 11.00am-1.00pm | <p>Internet of Things (IoT)</p> <p>In the application of IoT, it is made up of omnipresent networks, connected computers, ubiquitous sensors on everything, intelligence on the periphery of the network. Application of IoT enables the manufacturing, transport system, defence system, agriculture, infrastructure, retails and businesses, logistics & utilities, banks and insurances, gas, oil and mining, food services, hospitality, healthcare, home and residence to be connected. In addition, it helps in tracking behaviour for real-time marketing, enhanced situational awareness. In this module, the participants would learn the fundamental of sensor-driven decision analytics, process optimisations, the instantaneous response in complex autonomous systems and optimised resource consumption</p> |
| 1.00pm-2.00pm | Lunch Break and Networking |
| 2.00pm-3.30pm | <p>Additive Manufacturing</p> <p>For thousands of years, manufacturing is about removing excess materials until we get to the final shape. In this module, the participants</p> |

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| | would learn the fundamentals of 3D printing that transforms manufacturing. With additive manufacturing, it goes beyond traditional practices. Traditionally we join pieces together to form complex structures, 3D printing provides maximum design efficiency, fewer joints, reduces weak points with unlimited design flexibility. With additive manufacturing, if you could dream it, then, you could print it. |
| 3.30pm-4.00pm | Break and Networking |
| 4.00pm-5.00pm | <p>Cloud Computing and Cyber Security</p> <p>In this module, the participants would learn building intelligence using analytics, automating marketing, customer service, support & order status. In this module, participants would start to learn the implementation of vendor managed inventory (VMI) to give real-time order status and the application of cloud-based resource management to manage manufacturing globally. For cybersecurity, the participants would appreciate that Industry 4.0 is not possible without connections which are secure, vigilant and resilient</p> |

| Time | Day Two |
|------------------------|---|
| 9.00am– 10.30am | <p>Big Data and Analytics</p> <p>In this module, the participants would learn the fundamentals of data management - the repeatable processes to build standards for data quality. In addition, the participants would learn how the process of data mining includes the process of discovering patterns, filter noises and identify useful info. In this module, the participants would learn the application of predictive analytics by applying statistical algorithms and machine learning to identify future outcomes. In addition, the participants will learn the application of in-memory Analytics that analyse data from the system to gain immediate insights.</p> |
| 10.30am-11.00am | Break and Networking |
| 11.00am-1.00pm | <p>Augmented Reality</p> <p>Augmented reality focuses on the computer-generated and complex digital environment. Currently, the digital world collides with our physical world. Now, we can travel anywhere in a heartbeat, design, visualise, showcase, demonstrate, customise your products without a physical prototype, explore the unknown like never before, unimaginable could come true. The technology has finally caught up with imagination</p> |
| 1.00pm-2.00pm | Lunch Break and Networking |

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| <p>2.00pm-3.30pm</p> | <p>Advanced Simulation, Horizontal and Vertical Systems Integration and Autonomous Robots</p> <p>In this module, participants would be exposed to the concept of visualisation and forecasting as the key to cost control, drives Innovation, and to make the best decisions. For the integrated system, the participants would learn how technology allows communications between different systems. In this module, participants would be exposed to the application of autonomous robots that can think, act and react.</p> |
| <p>3.30pm-4.00pm</p> | <p>Break and Networking</p> |
| <p>4.00pm-5.00pm</p> | <p>Simulation for Better</p> <p>In this module, participants would need to present their planning of adoption and application of their respective organisation</p> <p>.</p> |