IT TAKES TWO TO TANGO: INDUSTRY 4.0



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> INISTRY of International Trade and Industry (MITI) is highly focused on international

trade and industry, with the vision to make Malaysia the preferred investment destination and among the most globally competitive trading nations by 2020.

Currently, there are three major roles that the ministry is playing. Firstly, it is promotes Malaysian products and services overseas that require trade investment or export promotion. Secondly, the agency is make efforts to bring in Foreign Direct Investments (FDIs) into Malaysia. Thirdly, MITI is also involved in industrial development, under the guidance of the Third Industrial Masterplan. "This new masterplan fits perfectly into the direction that MITI is heading towards. The difference between this and the earlier masterplan is that ... new technological advancements will be integrated into the existing framework. We are also very fortunate to have three new technology agencies under MITI, namely SIRIM, Standards Malaysia and MIMOS. These agencies will support our industrial development framework to include technological aspects," said Datuk Isham Ishak, MITI's Secretary General.

To ensure that the industry can overcome the challenges posed by the Fourth Industrial Revolution, MITI has undertaken various initiatives to encourage the adoption of Industry 4.0 for the manufacturing sector, including developing the National Policy on Industry 4.0 that is set to be launched on Oct 31, 2018 by Malaysia's Prime Minister, YAB Tun Dr. Mahathir Mohamad.

REGIONAL IMPACT OF THE REVOLUTION

Collaboration is an important element in embracing the Fourth Industry Revolution as it extends beyond the borders, says Isham.

Malaysia envisions to be the strategic partner for smart manufacturing and related services in South East Asia, and the primary destination for a hi-tech industry. To achieve that, collaboration between countries is necessary in terms of technology sharing, capacity building, knowledge transfer and collaborative programmes.

"The economic impact might be felt only in the long run, but it can be long lasting. Countries such as Singapore, Vietnam and Thailand have announced their respective Industry 4.0 blueprints for their manufacturing sectors, and consequently have started having structured intervention to push forward the agenda within their respective economies.

⁴I view this positively. Economics is never about a zero sum game," said Datuk Isham.

The Readiness for the Future of Production Report 2018 by the World Economic Forum (WEF) and A.T. Kearney, positions Malaysia in the "Leader" quadrant, with a strong current production base and well-positioned for the future.

The introduction of the National Policy on Industry 4.0 will improve the competitiveness of the Malaysian industry in the long run. Isham believes that with the right implementation, Malaysia will become one of the leaders in Industry 4.0 in this region.

He said: "The potential is huge on many fronts. Firstly, we have one of the most sophisticated Electrical and Electronics (E&E) sectors in the region. As such, there is a natural progression for us to easily adopt manufacturing of products and parts related to Industry 4.0. But that is just a start, as our consulting houses including those related to the E&E and ICT sectors are very competent and most likely our export capabilities in this area will be the game changer in the long run."

ASEAN: GROWING TOGETHER

ASEAN member countries' gross

domestic products combined to US\$2.73 trillion in 2017, putting the group ahead of the UK that has reached US\$2.63 trillion and India, US\$2.61 trillion. In 2017, Focus Economics estimated that ASEAN's growth had reached a five-year high of 5.2%. More than half of ASEAN population is below 30 years old, giving advantage on the demographic.

The ASEAN member countries are aggressive in responding to the 4th Industrial Revolution. ASEAN countries' adoption of Industry 4.0 will attract more foreign investments, hence benefit the region economically.

There was a benchmarking study conducted regarding the readiness of ASEAN countries towards adopting Industry 4.0, and Malaysia was one of the countries interviewed. This study was conducted to help other ASEAN countries embrace and develop legislations or policies that will complement these technological advancements.

"As a production hub in ASEAN, a lot of our companies are in the supply chain and depend on each other, hence if there was an imbalance in technological advancements, some countries would not be able to cope. That is why it's important that once the results of this benchmarking study is announced, we will all know where we stand and what we need to do to improve and grow as one," Isham said.

KEY TECHNOLOGIES TO THE FORE

Malaysia itself is very receptive towards adopting several key technologies, namely robotics and the Internet of Things (IoT), Big Data Analytics amongst others. Though many of these technologies are still in development stages, Datuk Isham affirms that it is moving at a rapid pace.

"Currently, we are the seventh largest drone producer in the world, and this technology is very important to us as we use it in areas such as plantation, mapping, monitoring and so on. Robotics is another area we are keen on developing as the robotics we have on hand are standalone in its function. The goal is to integrate elements of new technologies to enable them to communicate with one another and be multi-dimensional.

"With the recent announcement regarding access to 5G in Malaysia, this really paves the way for adoption of IoT. There are a lot of new applications that need to be rejuvenated and renewed, and a lot of new infrastructure that will have to be accommodated to support this new 5G network."

Industry 4.0 also heralds a new age of connected, smart manufacturing and dynamic supply networks. This however brings about new cyber risks. Cybersecurity should become a fundamental part of the strategy, design, and operations. It should be considered from the beginning of any new connected, Industry 4.0-driven initiative.

"Our government, through CyberSecurity Malaysia, has instituted a broad range of innovation-led cyber security programmes and initiatives. Malaysia is currently ranked third globally among 193 International Telecom Union members, in terms of the level of national commitment to addressing cyber-security risks. Malaysia is also among the top scorers in the Technical Performance Index of the Global Cybersecurity Index 2017.

"This really shows an accurate picture to the world, that we really understand the challenges that come with the digital age, and are working with all stakeholders – both public and private – towards building a safe and secure digital nation. I truly believe that we now know the lay of the land, and are ready to harness the opportunities that the fourth industrial revolution brings," Isham concludes.

> Datuk Isham Ishak ... Secretary General of the Ministry of International Trade and Industry (MITI).

