

SETTING INDUSTRY 4.0 IN MOTION: EMBARKING ON A VISION FOR THE FUTURE

S.T. Rubaneswaran, CEO of Knowledgecom shares about the advent of Industry 4.0 and the need for skilled workers to meet the demands of this new era in industry.

Over the last few decades or rather centuries, industry has evolved – first came steam, then came electricity which saw the birth of the assembly line and mass production. The third era of industry, or in contemporary jargon ‘Industry 3.0’, entered the picture with the advent of computers and automation. Today, the world is setting its sights on the fourth era or what is now known as ‘Industry 4.0’.

WHAT IS ‘INDUSTRY 4.0’?

‘Industry 4.0’ is the integration of computers and automation in an entirely new way, alongside robotics and with very little input from human operators. Dubbed the ‘smart factory’, ‘Industry 4.0’ is where the physical systems become Internet of Things, communicating and cooperating with each other as well as with humans in real time via the wireless web. ‘Industry 4.0’ entails interoperability, information transparency, in-depth technical knowledge and synergy.

It has been stated that five related technologies – the mobile internet, Big Data, the Internet of Things, the

automation of work and cloud technology will modernise sectors across Malaysia and drive major productivity improvement. These technologies will produce billions in revenue for Malaysia annually and from that will make it able to achieve a technologically industrious nation, Industry 4.0.

KNOWLEDGE.COM MAKES IN-ROADS FOR INDUSTRY 4.0

Knowledgecom, a home-grown Malaysian company is at the fore-front of driving the entry of ‘Industry 4.0’ into Malaysian industries, as a provider of training programmes to prepare industries for 4.0. Talking about 4.0, S.T. Rubaneswaran, Chief Executive Officer of Knowledgecom puts it simply, “Industry 4.0 is where we use technology to automate processes. At the moment, industry 2.0 is labour intensive. This is where the manufacturing industries require large numbers of foreign labour.”

“4.0 is where we look at the whole supply line and where everything is integrated creating seamless interaction – the perfect synergy to drive productive and modern industries,” he adds.

Currently, no industry has achieved

4.0 yet, however there are companies working towards it.

On the question of whether employees will be out of jobs with the advent of 4.0, Rubaneswaran is quick to dispel such fears with a quick-witted response, “Yes and no. In the Malaysian context, every year the need for foreign workers increases, while there are Malaysians who are jobless. This indicates a clear mismatch of skilled and unskilled labour. When 4.0 comes into the picture, there will be lots of jobs for Malaysians, because the dependency on foreign workers will be reduced.”

He adds, “For example, the manufacture of a smart phone under 2.0 might cost RM1,000 due to labour, supply and materials, but if I were to use 4.0 to produce the same smart phone, it might only cost me RM500. I am able to reduce the cost of manufacturing the product, which means I am able to sell it to the market for a cheaper price. This also makes me more competitive on an international front.”

By applying 4.0 in industry, better products can be produced while aligning with customers’ requirements as well as keeping prices low compared to other

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countries that still depend on a labour workforce. Currently, most Malaysian industries are still on 2.0 while a handful have embarked on 3.0, with Japan making significant headway on achieving 4.0.

According to Rubaneswaran, Industry 4.0 will lead to countries being self-dependent on their locals. "Currently our dependency is on foreign workers because we have built such a structure. The only way to move out of this is through technology. Technology is an enabler which allows us to steer away from labour-intensive conditions," he stresses.

THE IMPACT OF 4.0 ON HUMAN RESOURCE SKILLS DEVELOPMENT

Through 4.0, new jobs will be created requiring different skills sets. Once dependencies on other areas are gone, new areas will open up, explains Rubaneswaran. The idea is for HR

professionals to look at more productive ways on how to skill their workforce to manage different areas. With the entry of 4.0, more people will need to be trained to get things done faster and better. Today, there is a demand for skilled workers in technology in the Malaysian environment, which calls for organisations to capitalize on this scenario and realign their human resources.

On 4.0's role in driving Malaysia to be a high income nation, Rubaneswaran says, "High-income nation fundamentally takes place when companies do well and are able to pay their staff well, as well as pay more taxes. Using technology as an enabler, companies are able to perform better, earn more revenue and enhance their competitive advantage both locally and internationally."

Today the Malaysian government is cognizant of the need to drive 4.0 and has introduced awareness programmes. However, the onus is on companies to

implement 4.0 and make it work. "In Germany, companies are beginning to embark on 4.0. For example, customers can actually choose the type of car they wish to have and it is manufactured according to their requirements," shares Rubaneswaran.

KNOWLEDGECOM DRIVES 4.0

Talking about the company's involvement in preparing the Malaysian industry for 4.0, Rubaneswaran explains, "We have opened up Centres of Excellence in Technology (CoETs) in 5 states namely, Johor, Perak, Penang, Sabah and Sarawak. The CoETs will work with the state government skills development centres to train workers in the Malaysian industry."

"We have designed courses for 4.0 comprising 12 tracks spanning Big Data and Cloud, among others. These modules were designed in collaboration with our partners from Germany and the USA. Companies in the states mentioned who wish to upskill their employees can enroll with the state skills development centres," he adds.

The courses include both online and classroom-based programmes. Launched in 2016, the classes began on the second week of March 2017. The target is to train 1,000 employees in 2017 in various industries such as manufacturing, production, automobile, technology and services, for both SMEs and SMIs.

"We are trying to roll these programmes out in other states as well as. Currently, we are getting students from universities and polytechnics to participate – especially those who are about to enter the workforce," says Rubaneswaran.

"We are now targeting 3 segments, namely the technical workforce, the professional workforce and the current workforce. In the next 5 years, we hope to produce 4.0-ready industries. Presently, we are the only provider driving 4.0 and to-date, we have 30 companies set to participate in this drive," he shares.

