

Greater KL's burgeoning robotics ecosystem gains traction

Bright future for robots in Malaysia's industrial and service sectors

Businesses around the world are increasingly turning to automation such as robotics to address rapidly changing working conditions brought about by the coronavirus pandemic. The International Federation of Robotics estimates that almost four million industrial robots will be working in factories around the world by 2022.

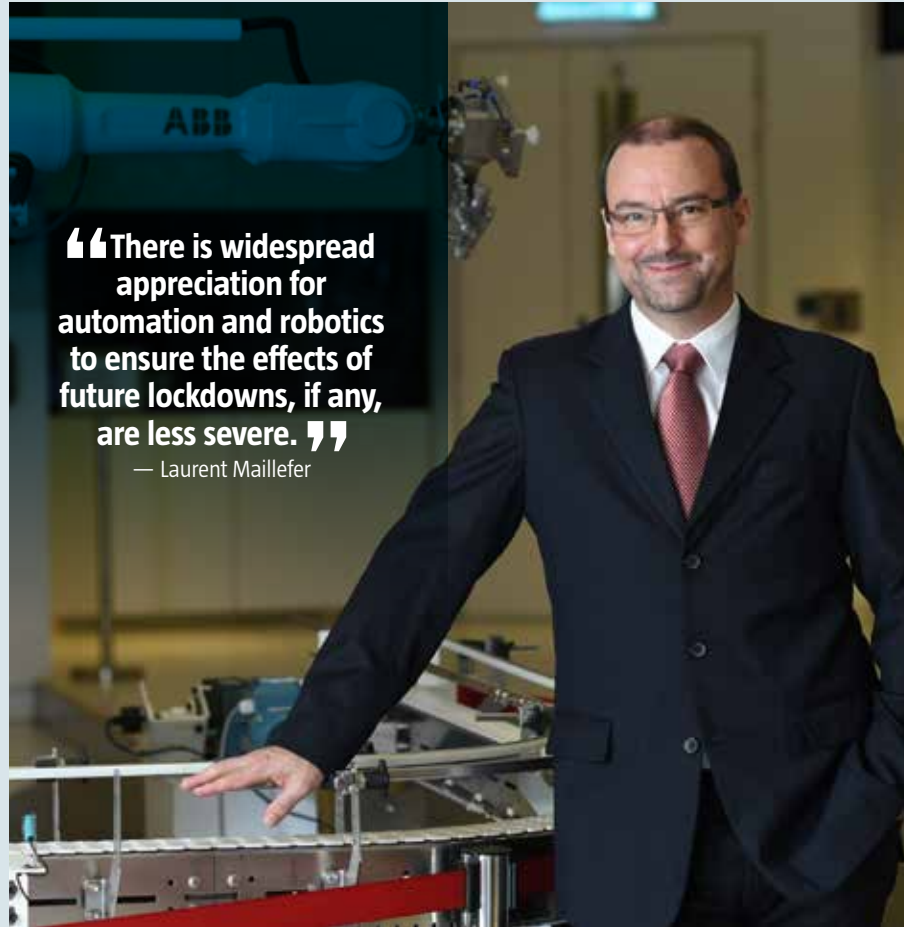
"For businesses, the pandemic has underscored the importance of automation for resilience. There is widespread appreciation for automation and robotics to ensure the effects of future lockdowns, if any, are less severe," says Laurent Maillefer, vice-president of robotics and discrete automation at ABB Malaysia Sdn Bhd.

"With social distancing guidelines in place, managers will need to account for a reduced workforce and ensure that people are at a safe distance from one another while at work. Robots can help in this aspect.

"But there are other competitive advantages that robotics offers in the new normal global business environment that is looking for adaptability, flexibility, customisation and smaller orders (batches). Robots can upgrade the traditional manufacturing process and meet these business needs. I am seeing an increasing number of industries from jewellery-making to food delivery looking at automating their business process for a post-pandemic world."

ABB, a Swedish-Swiss multinational company, is a pioneering global technology leader. The company has four customer-focused businesses divisions: Electrification, Process Automation, Motion and Robotics & Discrete Automation.

ABB, which has been in Malaysia since 1904, recently established a state-of-the-art Regional Robotics Digital Operations Centre in Greater KL. This centre leverages Industry 4.0 technologies such as cloud computing, big data analytics and end-to-end connectivity to provide real-time monitoring and technical support for ABB robots located at their clients'



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sites across Asean countries, Taiwan and India.

"ABB's decision to host our Regional Digital Operations Centre here reaffirms our commitment to supporting Malaysia's growing digital ecosystem. We have a long history here, so it was easy for us to further develop our local operations. Now, one of our main priorities is to develop local engineering capabilities that we need to drive ABB's leadership in digital technologies in the region," says Maillefer.

Nurturing 'robotics' skills in Malaysia

Robotics is an interdisciplinary field made up of multiple fields of study: computer science, mechanical and industrial engineering, and electrical and computer engineering. Advanced computer science such as machine learning programmes and complex artificial intelligence (AI) are usually part of a robot's control system.

Talent in the robotics field also requires skills such as creative thinking, programming and the ability to work in teams and solve complex problems.

"The field of robotics is always innovating. There is always something new to learn. It could be a new AI concept to test or new programming language to pick up," says Yong Chong Soon, CEO of UURobot Asia Sdn Bhd.

UURobot Asia, a joint venture between a local entity and Beijing Canbot Technology Co, Ltd/ShenZhen JustGood Technology Co, Ltd (CANBOT), is looking to establish an Asean regional hub for CANBOT service robots in Greater KL.

CANBOT is among the top robot service manufacturers in China. While the hardware is developed in China, UURobot develops the software that powers these robots for clients in the region.

"UURobot provides robotic solutions to local industries by enhancing the capacity of CANBOT's robot. This is done by building the software that tells the robot what to do. The result is a robot that can be used by companies regionally and a technologically advanced product that Malaysia can be proud of," says Yong.

He agrees that the future of robotics looks bright if the right steps are taken to continuously nurture and support the ecosystem as it matures into a thriving and vibrant community.

"The local robotics industry should be able to solve industry pain points and compete regionally as developers of technology. Talent is central to this ecosystem. They must be

inquisitive and eager to explore things that have never been done before. Development of local talent with the various tech and soft skills for this industry should be a top priority among all stakeholders in Malaysia's digital economy," he says.

UURobot Asia and ABB collaborate with local universities to secure talent pipeline for their companies.

On the job, they provide hands-on learning to their university interns, a necessity for young talent to gain a comprehensive understanding of real-world robotic skills. Interns also benefit from being a part of the innovation process and the development of new solutions.

Maillefer cites the success story of an intern at ABB who has gone on to establish a start-up specialising in the development of "eyes" for a robot. "This shows the boundless opportunities available to talent in this field. Someone with the technical skills and great interest can easily spot a gap in the robotics supply chain that needs to be filled," he says.

Innovation thrives on collaboration

Maillefer and Yong agree that collaboration is key to tech-driven innovation as companies, universities and government agencies look to respond to rapid demands and changes in the business world.

"There is a tendency for tech companies to work in silos, but companies such as start-ups, established corporations and government entities must work together to seize opportunities in a post-pandemic world," says Yong.

"There is no need to reinvent the wheel, especially when it comes to tech products and services, as things change so quickly. We should focus on working together to reimagine the norm and develop new solutions. Collaborative activity is the best way for all parties in this landscape."

Maillefer says: "ABB has always worked with local companies to provide solutions that meet our clients' needs. By working together, all of us can focus on what we do best. We are also working with local companies that are exporting their robotic solutions and expertise regionally."

Collaboration is also needed to explore the use of robotics in traditional industries such as healthcare and food and beverage (F&B). Robot providers such as UURobot have been encouraging companies to start automating by lowering the cost to entry.

"We see a lot of opportunities for robots in traditional industry. The healthcare industry, for example, will need to serve Malaysia's ageing population. Robots can help healthcare providers meet the growing need for care among the elderly," says Yong.

"There is a misconception that robots are very expensive. Technological developments and collaboration such as UURobot's joint venture with CANBOT has lowered the cost of using robots so technology can be accessible for everyone. For example, a delivery robot for the F&B industry costs about RM25,000. This robot operates 24/7. We are also coming up with a leasing model to make it even more affordable for restaurants to use robots.

"Now is the best time to explore the use of new technology to build a competitive advantage. We hope that companies will support the growth of the fledgling local robotic ecosystem and transform their business while the government supports proof-of-concept trials and other aspects that are needed by robotic companies in Malaysia to thrive regionally."



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