

Industry 4.0: Upgrading the Processes in Your Company

We are now in the midst of the global Industrial Revolution 4.0. Like it or not, it will affect your company eventually, especially if you are in manufacturing and manufacturing-related services. Industry 4.0 will transform how products are designed, fabricated, used and operated as well as how they are maintained and serviced.

It will also transform the operations, processes, supply chain management and energy footprint of factories. People might assume that the upgrading of technology is the main thrust of Industry 4.0, but that is not entirely true. The deciding factor is not technology alone. According to the readiness assessment (RA) criteria model, the core consists of three shift factors, which are technology (50%), Process (30%), and People (20%).

The focus on processes is on upgrading the management system used in running business operations, supply chain and product lifecycle. Improving manufacturing and business processes is important for Malaysia to move forward and the National Policy on Industry 4.0 (*Industry4WRD*) aims to create a favourable business environment and facilitate public-private partnerships. There is also a strong emphasis on security, sustainability and product co-creation.

According to automation expert Bill Lydon, Industry 4.0 should bring forth “considerably higher productivity, efficiency, and self-managing production processes where people, machines, equipment, logistics systems, and work-in-process components communicate and cooperate with each other directly”.

In the ideal Industry 4.0 enabled manufacturing facility, production and logistics processes are integrated intelligently, creating a more efficient and flexible real-time ecosystem.

This conducive environment will facilitate smart value-creation chains that include all of the life-cycle phases of the product, from the initial product idea, to development, production, use and maintenance to recycling. Every step and everything from product idea to recycling is designed to be responsive and improvements can be made continuously to optimise the ongoing processes.

The digitisation of industry and new developments are forecasted to foster new business models and lead to new opportunities, especially for the agile small and medium enterprises (SMEs). So, expect exciting times ahead.

The Ministry of International Trade and Industry (MITI) is driving the Industry4WRD initiative to transform the manufacturing industry in Malaysia towards Industry 4.0 adoption. To find out how you can be ready for industry 4.0, visit MITI's website at <https://www.miti.gov.my/index.php/pages/view/4832>.