

INDUSTRY 4.0: ARE WE READY?

While the majority in Pakistan is dispensing sermons about the country missing out on the knowledge economy, there is another boat that is leaving the shore.

That boat is smart manufacturing. Given that the country's exports comprise mainly of manufactured goods particularly focused on textile exports, it would make sense to start the discussion on smart manufacturing.

At the heart of smart manufacturing lies a smart factory which is equipped with a fully connected fluid system that can use artificial intelligence and data from connected operations and production systems to learn and adapt to new information.

What that results in is faster manufacturing operations with less human intervention and more precision. Even though simple automation has been around for some time and is also present in many factories in Pakistan, what is required for the future is a smarter way of production in an increasingly cutthroat global market.

The 4th Industrial Revolution also known as Industry 4.0 is upon us. Pakistan's competitors Bangladesh and Vietnam have already made it a part of their long term industrial policies and companies are investing heavily for strategic benefits. According to the PwC Industry 4.0 Vietnam Survey 2018, 67 percent of the respondents foresaw significant impact of the smart manufacturing revolution on their organisation's operations within the next three years.

Vietnamese corporations estimate spending heavily on digitisation and automation with the next five years and these potential investments may be significantly larger than global estimates. The expected benefits of investing in Industry 4.0 by Vietnam's workforce include improvement in operational efficiency and improved access to customers through integration and digitisation of value chains. The interesting point to underscore here is that these transformations have already started taking place.

So how does it all work? According to an article by Deloitte Insights automated workflows, synchronization of assets and optimised energy consumption in the smart factory can increase yield, uptime and quality while reducing costs and waste.

These smart factories will utilise multiple digital and physical technologies including digital twin, digital design, additive manufacturing machines and autonomous robots.

While this might sound advanced and futuristic, the fact of the matter is that this kind of technology is precisely what will drive the production processes of in the not so distant future. In

fact, companies in wide-ranging industries from apparel to automotive manufacturing are already building smart factories. Bangladesh is also utilising Industry 4.0 for its garment and apparel manufacturing but more on this in the coming days.

Given that a lot of bigger players in the textile sector are undergoing or plan to undertake expansions, it is important for them to realise the kind of competition and innovation that they are up against. In order to become a leading player in manufacturing, Pakistani businesses will have to at least stay on the curve if not ahead of it.