Summary Post

by Kwok Wai Yau - Tuesday, 30 August 2022, 12:46 PM

Number of replies: 0

In my initial post, the topics and examples mentioned about industrial 4.0 innovation is about using robot to automate the delivery likes restaurant waiter and delivery robot. Thank you Sahib's comment and Doug's Response.

The innovative technologies often come with risks where involves data privacy concerns. Manufacturing companies and their supply networks may not be prepared for the risks due to the interconnected nature of industry 4.0-driven operations and the pace of digital transformation. Cyberattacks can have far more extensive effects than ever before (R.Waslo, T. Lewis, R. Hajj and R. Carton, 2017). It often becomes even more vital to take into account the security concerns the IoT devices offer to manufacturing, production, and corporate networks as production facilities. IoT device security consequences include production halts, damage to facilities or equipment that may result in catastrophic equipment failure, and, in the worst situations, human loss of life. In addition, potential financial losses may include fines, legal costs, and lost revenue from brand harm that may last for months or even years, far beyond the actual occurrence. These losses may also include production downtime and incident clean-up.

Industry 4.0 could refer to the automation of any process. These kinds of process automation is also affecting our life. The mechanism that drives the independence and motion of automated machines is known as an industrial control system. This technology makes it possible to automate industrial processes. A control system's control loop is its main component. Also, data communications are driving the Industry 4.0. The IoT is being used in smart factories to monitor everything from machine operations to inventory levels. In a factory, IoT devices interconnect machines and cyber-physical systems allowing for real-time data transfers, monitoring, and control (IEEE, 2019).

Reference:

R. Waslo, T. Lewis, R. Hajj and R. Carton. 2017. Managing risk in an age of connected production. Available at:

https://www2.deloitte.com/us/en/insights/focus/industry-4-0/cybersecurity-managing-risk-in-age-of-connected-production.html [Accessed on 30 Aug 2022]

IEEE. 2019. How Automation and the Fourth Industrial Revolution is Affecting Your Everyday Life. Available at: https://transmitter.ieee.org/how-automation-and-the-fourth-industrial-revolution-is-affecting-your-everyday-life/ [Accessed on 30 Aug 2022]