

Initial Post

By Njideka Ozoemena - Sunday, 20 August 2023, 1:50 AM

The case study-Risk of Digitalization of Business Models by Koviata, K. and Stankeviciene, J. 2019, explained the term Industry 4.0 as the 4th Industrial revolution due to advancement of digitalization that revolves around behavioural change in human, machine, and business models. The industry 4.0 technological drivers include Internet of things (IOT), Cloud computing, Robotics, Artificial Intelligence, and big data. The article further pointed out that 4th Industrial revolution explores decentralization of communication between people and machines.

From the articles, my understanding of meaning of few 4th Industrial revolution technology drivers such as Internet of Things refers to some of the advanced technological sensors deployed in network system, to collect and monitor data in real-time situation of a business operation. Example of IOT asset is a tracking device use in tracking location, condition, and status of an asset in a manufacturing operation process. The second example of the technology drivers is autonomous robots that are being programmed to perform tasks with minimal human intervention, ranging from inventory scanning drones to autonomous mobile robots that pick and place operations.

Two real-world examples of risks that fits into the risks in the articles are:

Data Security Risk: According to Cybalt White paper, the probability of smart factories been subject to vulnerability exploitation is very high. Typical examples of cyberattacks on an advanced technology companies are malware, denial of service (DoS), device hacking and so on.

Technical Risk: Outsourcing of cloud computing management service by most companies as result of advanced technology exposes huge volume of sensitive information to third party companies and slightest compromise of any stakeholder's password might lead to breach of personal data confidentiality and accessibility to the company's network system by unauthorized person (Sarangam, A. 2022).

Research-Technology Management article on "Evaluation of digital business model opportunity" by Linde, L. et al. (2021) also emphasized on assessment of business model of digital companies, opportunities, and the common digitalization traps to apprise before committing to implementation and commercialization of the model by decision makers. Examples of successful digitized high-tech companies such as Amazon, Apple, Netflix, Google, and Facebook were cited in the article.

A depth digital business model risk analysis is recommended for any company that is venturing into advance digitalization due to fourth industrial revolution concept. This is to minimize the associated digital business model risk.

Reference:

Cybert Whitepaper. Industry 4.0 Cyber Security Challenges – How real it is? Available from :https://www.cybert.com/docs/default-source/white_papers/cybert-white-paper---industry-4.0-cyber-security-challenges---how-real-it-is.pdf [Accessed 20 August 2023].

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