

Discussion 1: Summary Post

The initial post defined the term Industry 4.0 according to the points described by Kovaitė and Stankevičienė, 2019. Kovaitė and Stankevičienė stated that Industry 4.0 describes an industry that is transformed by technological innovations, such as AI and IoT. Amrol Miah elaborated on this, describing how AI and IoT interact to reduce human workload (Nolle, 2023). Advantages of a lowered workload for the human worker can be beneficial to the business, as this means they can employ the worker to do other tasks which the machines cannot do.

Risks for SMEs that arise from this transformation are mainly since they often do not have the resources (financial and otherwise) to implement these new innovations. Implementing new technologies, however, also increases the risks from cyber attacks, as outlined by other posts in this forum, such as the initial post from Mohammed Younes. Amrol's research agrees that Stuxnet is a valid example of how a cyber attack can damage Industry 4.0 related systems. Amrol has further re-stated the six key areas identified by Kovaitė and Stankevičienė, 2019 which pose risks to companies during the transformation into Industry 4.0.

Unfortunately, especially SMEs face the problem that cyber attacks are often mistakenly identified as technical errors (HON, 2024). This increases the time hackers can use to compromise other systems before appropriate countermeasures can be taken.

Overall, this discussion has provided interesting insights into the risks associated with Industry 4.0, especially related to SMEs.

References

HON (2024) How Cyber Security and Industry 4.0 are connected. Available from: <https://hon.it/cyber-security-industry-4-0/> [Accessed 24 July 2024].

Kovaitė, K. and Stankevičienė, J. (2019) Risks of digitalisation of business models. Proceedings of 6th International Scientific Conference Contemporary Issues in Business, Management and Economics Engineering '2019.

Nolle, T. (2023) AI and IoT: How do the internet of things and AI work together?. Available at: <https://www.techtarget.com/iotagenda/tip/AI-and-IoT-How-do-the-internet-of-things-and-AI-work-together> [Accessed 02 August 2024].