**Initial Post**

**Introduction**

The case study by Kovaitė and Stankevičienė (2019) covers the risks encountered through the digital transformation process driven by Industry 4.0 and the areas of the business model that are most affected. This initial post will cover what the authors mean by ‘Industry 4.0’ and provide real-world examples that fit into the risk categories offered.

**Industry 4.0**

Kovaitė and Stankevičienė (2019) describe Industry 4.0 as a ‘Fourth Industrial Revolution’, encompassing areas such as IoT (Internet of Things), cloud computing, and AI (artificial intelligence). The article argues this pushes the “decentralisation of communication between people and machines”. This definition corresponds to that proposed by McKinsey & Company (2022), who describe Industry 4.0 as a top strategic priority for a business involving connectivity, analytics and intelligence, human-machine interaction, and advanced engineering.

**Real-world examples of highlighted risks**

The study has produced a matrix of six risks involved with Industry 4.0, which the authors call a ‘RADi’ (Risk Assessment for Digitalisation). One risk proposed by the article is that of data security. The banking sector is one area of industry which is hugely affected by the risk, with the IMF estimating a $20 billion loss worldwide due to cyberattacks (Wang, 2024).

Two more critical risks highlighted by the case study include “acceptance by clients” and “acceptance by staff”. Generali CEE Holdings encountered these risks in 2010 when they had to embrace digital transformation to remain competitive in the insurance sector. Staff and customers were initially reluctant to accept the change to an automated process instead of their original, cumbersome, paper-based processes (vom Brocke, 2021). These risks were eventually mitigated when users and staff understood the process would simplify their work and improve efficiency.

**Issues with the case study**

The study admits there is a gap in research on business risks associated with Industry 4.0 and that further research should cover ‘macro-level risks’. Furthermore, the COVID-19 pandemic and subsequent lockdowns drove fast digitalisation for many enterprises (Contreras, N.D.; Mittal, 2024), and as such, risks such as ‘acceptance by clients’ and ‘acceptance by staff’ may be negligible. Newer research focuses more on technological implementation or legislation violations (Dokuchaev, 2020), which are arguably significant enough risks to be separated from the six risks offered in the RADi.

**Conclusion**

The article briefly describes six main risks of digitisation driven by Industry 4.0, the Industrial Revolution that capitalises on new technologies such as cloud computing and artificial intelligence. Evidence of these risks can be seen in the banking sector and other companies attempting to embrace digital transformation. The risks described may differ depending on the stage of business model innovation; however, the RADi can be used as a handrail while planning a digitisation process.

**References**

* vom Brocke, J., Mendling, J. & Rosemann, M. (2021) *Business Process Management Cases: Vol. 2 - Digital Transformation: Strategy, Processes and Execution*. Berlin: Springer. DOI: <https://doi.org/10.1007/978-3-662-63047-1>
* Wang, S. et al. (2024) Data privacy and cybersecurity challenges in the digital transformation of the banking sector. *Computers & security*. DOI: https://doi.org/10.1016/j.cose.2024.104051
* Kovaitė, K. & Stankevičienė, J. (2019) ‘Risks of digitalisation of business models’, *International Scientific Conference on Contemporary Issues in Business, Management and Economics Engineering*, Vilnius, Lithuania, 9–10 May. DOI: <https://doi.org/10.3846/cibmee.2019.039>
* McKinsey & Company. (2022) What are Industry 4.0, the Fourth Industrial Revolution, and 4IR? Available from: <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-are-industry-4-0-the-fourth-industrial-revolution-and-4ir> [Accessed 28 October 2024].
* Dokuchaev, V.A. (2020) *Digital Transformation: New Drivers and New Risks*. Moscow: Moscow Technical University of Communications and Informatics. DOI: https://doi.org/10.1109/IEEECONF48371.2020.9078547
* Contreras, R. (N.D.) COVID 19 and digitalisation. Available from: <https://www.eurofound.europa.eu/en/covid-19-and-digitalisation#:~:text=According%20to%20the%20Organisation%20for,models%2C%20the%20promotion%20of%20online> [Accessed 28 October 2024].
* Mittal, S. (2024) Embracing Industry 4.0: Navigating business transformation trends in the digital age. Available from: <https://economictimes.indiatimes.com/news/company/corporate-trends/embracing-industry-4-0-navigating-business-transformation-trends-in-the-digital-age/articleshow/110172703.cms?from=mdr> [Accessed 28 October 2024].