Summary Post

In industry 4.0 organizations, the use of threat modeling systems like STRIDE and OWASP helps identify security risks and plan responses to threats (Krebs, 2017). The OWASP-recommended actions for threat modeling, including the Cyber Kill chain, attack tree, and weakness library, are comprehensive and effective (Krebs, 2017). However, companies often fail to evaluate the changes in their business models when implementing new technologies, leading to potential financial losses (Iyad, personal communication, date). Another challenge in industry 4.0 technologies is the lack of updatable/patchable operating systems in IoT devices (Krebs, 2017).

To address these challenges, the article introduces a risk assessment matrix called RADi, which evaluates the relationship between two factors against an object, providing decision-making support (Krebs, 2017). The impact of industry 4.0 and digitalization on businesses and individuals is discussed, focusing on technological drivers such as the Internet of Things, big data, cloud computing, robotics, and artificial intelligence (Kovaitė & Stankevičienė, 2019). The lack of a systematic approach to assessing risks and testing changes in business models is highlighted (Kovaitė & Stankevičienė, 2019).

The risks associated with digitalization and industry 4.0 include data value, cybersecurity, function criticality, scalability of failure, misuse of ownership, and cost of mistakes (Kovaitė & Stankevičienė, 2019). A real-life example of the risk related to function criticality and scalability of failure is the Atlanta city government's ransomware attack in 2018, which resulted in disruptions to critical services and financial losses (Kelli, 2021).

The scientific focus on industry 4.0 has primarily been on individual pillars such as the Internet of Things, big data, and cloud computing, as well as different patterns of business models (Kovaitė & Stankevičienė, 2019). The article concludes by emphasizing the contributions it makes to the scientific literature, practical level, and national level, providing valuable insights for managing risks in industry 4.0 organizations (Krebs, 2017; Kovaitė & Stankevičienė, 2019).

References:

Krebs, B. (2017, September 14). Equifax Hackers Stole 200k Credit Card Accounts in One Fell swoop Equifax Hackers Stole 200k Credit Card Accounts in One Fell Swoop – Krebs on Security.

Kelli, Young. (2021, Sept 20). Cyber Case Study: City of Atlanta Ransomware Incident - CoverLink Insurance - Ohio Insurance Agency.

Kovaitė, M., & Stankevičienė, A. (2019). Exploring risks of digitalization in industry 4.0: Empirical evidence from scientific literature. Engineering Economics, 30(2), 192-203.

Kovaitė, M., & Stankevičienė, A. (2019). Exploring risks of digitalization in industry 4.0: Empirical evidence from scientific literature. Engineering Economics, 30(2), 192-203.