Peer Response 1: The Risks of Digitalisation

In reply to Elliot Bedworth

by Andrius Busilas - Wednesday, 26 June 2024, 1:18 PM

Peer response

Hi Elliot,

Your exploration of Industry 4.0 and its implications for industrial engineering is both insightful and reflective of your firsthand experience in the field. You adeptly describe Industry 4.0 as the fourth industrial revolution, characterized by the extensive generation and utilization of data alongside digital tools to transform industrial operations (Lasi et al., 2014).

Your mention of Kovaitė and Stankevičienė's (2019) identification of five risk categories in Industry 4.0 underscores the complexity and challenges faced by businesses in adopting these technologies. Competence risks, as you highlighted, remain significant and often underestimated. The need for collaboration among various departments—plant floor technicians, instrumentation engineers, and IT staff—is crucial for successful implementation. Your observation about the lack of alignment and communication leading to inefficiencies resonates deeply with the practical realities of integrating emerging technologies into existing industrial processes.

Moreover, your reference to Shinkevich et al. (2020) raises an important consideration regarding the efficient use of planetary resources amidst increasing digitalization. It prompts further reflection on how Industry 4.0 can drive improvements in sustainable practices and lean manufacturing, as discussed by Lai et al. (2019).

Overall, your article effectively navigates through the complexities of Industry 4.0, offering both critical insights and practical observations based on your professional experience. It would be interesting to see further discussions on specific strategies or case studies where businesses have successfully mitigated these risks and maximized the benefits of Industry 4.0 technologies.