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Initial post

by Yousif Ali Karam Yousif Almaazmi - Friday, 8 August 2025, 6:10 PM

Metcalf (2024) emphasizes how Industry 4.0 and 5.0 mean moving beyond strictly technological automation and implementing human creativity, resilience, and long-term value into structures. Real-time payment systems, AI-based fraud detection, and hyper-personalised financial services are some of the innovations driven by these concepts in the banking sector. However, as the use of integrated information systems expands, it raises the cost of system breakdown, which can impact millions of customers and damage confidence in the efficiency and reliability-enhancing technologies themselves (Kang & Cheung, 2024).

An obvious set of occurrences is the 2023 TSB Bank IT migration failure in the UK. In the steps of a digital overhaul and according to Industry 4.0 guidelines, TSB moved the customer data into a new core banking system. The implementation is associated with severe bugs, which kept customers unable to log in to online and mobile banking functionality and, in some instances, vulnerable to unauthorized entry to other accounts (Habib et al., 2025). This brought havoc to key financial operations, such as access to salaries, bill payment, and urgent transactions. This event gained massive attention and led to bad publicity for the bank and the weakness of the ill-handled large-scale system upgrades (Kang & Cheung, 2023).

Industry 5.0 vision, such incidents remind us that human-focused design, system tests, and contingency planning should supplement technology. According to Metcalf (2024), Industry 5.0 is broader as it speaks of the design of sustainable and socially responsible systems. In the financial sector, this would involve a balance of innovation and customer safety, so that the technological shifts do not cause gaps in service delivery (Arshad et al., 2025). The example of the TSB case is a warning that the opportunities presented by Industry 4.0 and 5.0 are by no means threats, with the risk of failure exceeding the potential gains unless resilience and oversight measures are implemented correctly.

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Peer Response

by Ali Alhammadi - Sunday, 10 August 2025, 6:37 PM

The key points in your analysis relate to the premises of Industry 4.0. Moreover, 5.0 has risks that may play out when it involves hasty technology implementation or improper management. However, the TSB Bank IT migration failure is a very resounding example because it shows how sweeping digital transformations, even those based on modern industry guidelines, can result in reverse processes, should we ignore resilience planning, system testing, and human-centered safeguards. I recommend how you have pointed out the impact, not only in technical senses but also in its social and operational implications, access to salaries, bill payments, and critical transactions, to all its disruptions (Mehdiabadi et al., 2022).

The fact that Industry 5.0 emphasizes sustainability, human-centric design, and long-term value is specifically pertinent to you. The conflict between innovation and the protection of customers is an aspect most organizations fail to consider, even when they engage in aggressive digital deployment. You also raised that this scale of system failure erodes public confidence in technology itself, which is a significant and usually under-reported consequence (Nicoletti, 2021). As you demonstrate how these failures can potentially make innovation a reputational risk, the more you will make the arguments for a more tempered approach to the change.

To further deepen, you may examine how a series of rollouts, the incorporation of risk modelling, and user impact simulations could have solved the problems of TSB. To make your post more practical, you could have added more on cross-functional oversight, under which business, IT, and compliance teams cross-check the implementation plan. Also, another dimension that

oversight, under which business, IT, and compliance teams cross-check the implementation plan. Also, another dimension that may be useful to include is how proactive communication with the customer could have helped to alleviate anger during the crisis (Soomro et al., 2022). Overall, your post is extensive research, very well-argued, and displays a somewhat cautionary yet comprehensive approach to managing Industry 4.0 and 5.0 efforts.

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Peer Response

by Abdulla Husain Salem Hadna Almessabi - Monday, 11 August 2025, 10:07 AM

Dear Yousif Ali Karam Yousif Almaazmi

Your post highlights the failure of the IT migration to TSB Bank. This episode stresses the necessity to implement human oversight and a backup strategy into the technological processes. The TSB case illustrates the warning that although innovations and automation may spur our development, they have to guarantee stability and adequate testing of the systems (Sahadev, Sunil, et al.2024). This is in line with the essence of Industry 5.0, which pushes the view of the humane approach amidst the growing automation of the world.

The real-time systems and AI present more risks and complications (Grimwade, 2023). The method employed by Kang and Cheung (2024) in attesting to the limitations of technology risk assessment in the banking industry is critical in paying attention to the imperative of resilience in the systems linked with interdependent technologies. TSB failure showed the massive financial and reputational loss that can be incurred when a complex such as this fails to perform to these standards (Maixé-Altés, 2021).

Industry 5.0 is to concentrate on sustainable and overall responsible systems where the aspect of innovation cannot negatively affect customer safety and continuity of services. It is further supported by Metcalf (2024), who emphasises the need to have resilience and ethical cooperation between the providers of the technology and the operators. In a bid to achieve the benefits of Industry 5.0 to their full potential, it is important to have risk mitigation and human supervision to avert disastrous failures.

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Re: Initial post

by Gayathridevi Durairaj - Thursday, 14 August 2025, 3:28 PM

Hi Yousif,

Your assignment provides a clear, well-researched, and highly relevant discussion of technology used in Industry 4.0 and 5.0 in the banking sector (Mehdiabadi et al., 2022). One of its greatest strengths is the way you link theoretical concepts to a concrete, real-world case — the TSB IT migration. This example is timely, specific, and makes the risks of large-scale technological change both understandable and relatable. You also do an excellent job integrating multiple recent academic sources, which adds depth, credibility, and shows strong engagement with current research.

I particularly like how you balance the discussion between technological innovation and human impact (Rashidi, 2024). The detail about customers being unable to access salaries, pay bills, or make urgent transactions brings the theory to life and connects perfectly with the Industry 5.0 focus on people-centred, socially responsible systems (Directorate-General for Research and Innovation, 2021). The analysis also highlights the importance of resilience, oversight, and testing, making your argument both compelling and practical.

Your writing style is clear and flows well, making complex ideas easy to follow. The logical connection between the TSB example and the broader themes of Industry 4.0 and 5.0 is strong, and your conclusion reinforces the key message effectively. Overall, this is an insightful and engaging piece that communicates both the opportunities and challenges of technological change in banking.

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Re: Initial post

by Fatema Mohammed Ahmed Aal Malek Alshehhi - Thursday, 28 August 2025, 7:48 AM

Peer Response:

Hi Yousif,

I completely agree with your analysis of the TSB Bank IT migration failure and its connection to the implications of Industry 4.0 and 5.0. You've highlighted a crucial point about how the integration of advanced technologies, like AI and real-time payment systems, can bring immense benefits but also significant risks if not implemented with proper oversight and human-centric design.

The TSB incident serves as a strong reminder that while technological advancements can enhance operational efficiency, they should never come at the cost of customer safety and service continuity. As you mentioned, the lack of proper testing, contingency planning, and human-centered design led to severe issues, which impacted both the bank's reputation and its ability to serve its customers. The failure to ensure that the system would function properly under real-world conditions before the migration is a significant oversight.

I also appreciate your reference to Industry 5.0 and its focus on designing socially responsible systems. The TSB incident could have been avoided or mitigated if the migration was approached with a more resilient system that emphasized human oversight and customer-centric strategies. In fact, combining the technological advancements of Industry 4.0 with the human-focused principles of Industry 5.0 could have not only prevented this disruption but also created a system that could adapt to unforeseen challenges, ensuring smooth transitions.

To prevent such incidents in the future, banks and organizations adopting Industry 4.0 and 5.0 technologies should prioritize a balanced approach—one that involves extensive testing, redundancy systems, and the involvement of human expertise throughout the system development lifecycle. Ensuring that customer safety, service continuity, and user experience remain at the forefront of digital transformations will be key in building trust and reliability in these new systems.

Thanks for your insightful post!

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