

COLLABORATIVE DISCUSSION 1: THE FOURTH INDUSTRIAL REVOLUTION

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Unit 1
Machine Learning
University of Essex Online
29 October 2024

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The Fourth Industrial Revolution, Industry 4.0, includes artificial intelligence (AI) and AI-driven automation (Schwab, 2016). By contrast, the Fifth Industrial Revolution, IR 5.0, is about augmentation, or collaboration with machines (Ziatdinov et al., 2024). Schwab (2016) cites a range of potential issues with Industry 4.0 including job inequality, income stagnation, regulation, security including cyberwarfare, and data privacy. While Ziatdinov et al. (2024) concur, they list 37 negatives associated with Industry 4.0. The one most apt for this assignment is 'unintended consequences and negative impacts from AI and automation'.

On 25 September 2021, the failure of a Red Bee Media-operated broadcast centre in the United Kingdom (UK) resulted in a service outage lasting through 19 November 2021 (BBC News, 2021; Ofcom, 2022a, 2022b). The outage took Channel 4, Channel 5 and S4C off air completely and affected the BBC. Ofcom, the broadcasting regulator, registered over 500 complaints. Ofcom's investigation found that Freesat customers were unable to access subtitles for nearly two months, which breached Channel 4 Corporation's broadcast licence.

The root cause of the outage was determined to be a fire alarm which released fire-suppressant gas, followed by the removal of oxygen, resulting in a 'sonic wave' that destroyed the hard disks in the server room (BBC News, 2021; Clover, 2021; Ofcom, 2022a). The disaster recovery back-up subtitling system also failed and constructing a new one from scratch took almost two months. Firefighters found no fire.

Furthermore, Channel 4 failed to accurately communicate status and steps to rectify the outage in a timely or appropriate manner (Ofcom, 2022a). As a result, Ofcom

recommended two core actions for all broadcasters: improved disaster recovery and effective communication in the event of interruptions to service.

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