

## **Tying Industry 4.0 to existing research - What the past reveals on successfully adopting industry 4.0?**

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The term industry 4.0 comprises a wide array of technological solutions from fields such as communication technologies, robotics, virtualization and data analysis. Although the use of automation and information technology in manufacturing is not a new phenomenon and has been propagated since the 1970ies, recent studies emphasize that companies do not know how to approach this new wave of digitization. A wide range of consulting whitepapers has emerged proposing to give guidance.

Against this background we synthesize both academic and applied literature to build a framework on research streams connected to industry 4.0. By focusing on advanced manufacturing technology literature (AMT) in particular, we give a structured overview on technological and organizational capabilities past research showed to enable successful AMT implementation and which are equally important addressing today's technological changes. Further, we highlight questions arising from industry 4.0 the past research in AMT missed to address.

We aim to contribute to the emerging topic of industry 4.0 in three ways: Firstly, consolidating the breadth of definitions and situating industry 4.0 within academic literature. Secondly, closing the gap between practitioner's advice and academically sound research and lastly, highlighting research gaps and drawing connections to other literature streams beyond operations management.

**Keywords:** Industry 4.0, Technology Adoption, Literature Review

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