

Bachelor- / Masterarbeit

Technology Convergence in the Machine Economy

Technological advancements in different fields (e.g., blockchain, artificial intelligence, and the internet of things) led to the conceptualization of the so-called Machine Economy, which can be described as the: “[...] the complete integration and participation of economically autonomous acting machines based on innovative technologies and their convergence.” (Jöhnk et al. 2021, p.2). While the majority of researchers so far have focused on defining the research field, it is unclear to what extent knowledge of the technology convergence research field (Curran et al. 2010) can be applied to the case of the Machine Economy. Thus, this thesis focuses on structuring the field of technology convergence research and identifying possible implications for the Machine Economy and vice-versa.

The student should (i) analyze the available literature on technology convergence and the Machine Economy by conducting a structured literature review (Webster and Watson 2002), (ii) transfer the identified concepts to the case of the Machine Economy, and finally (iii) derive potential implications from this transfer for the (future) of the Machine Economy. Depending on the scope of the thesis, qualitative interviews with experts can be conducted as well. The focus of the work will be defined in an initial meeting with the supervisors. This topic can be chosen either as a Bachelor’s or Master’s thesis, as the scope varies depending on the type of thesis. The thesis can be written in English or German, although English is strongly recommended.

Empfohlene Einstiegsliteratur:

- Curran, C.-S., Bröring, S., & Leker, J. (2010). Anticipating converging industries using publicly available data. *Technological Forecasting and Social Change*, 77(3), 385-395.
<https://doi.org/10.1016/j.techfore.2009.10.002>
- Jöhnk, Jan, Albrecht, Tobias, Arnold, Laurin, Guggenberger, Tobias, Lämmermann, Luis, Schweizer, André & Urbach, Nils. (2021). The Rise of the Machines: Conceptualizing the Machine Economy. In: *Proceedings of the Twenty-fifth Pacific Asia Conference on Information Systems (PACIS)*
- Webster, Jane, & Richard T. Watson (2002). Analyzing the past to prepare for the future: Writing a literature review. In: *MIS Quarterly*: pp.: xiii-xxiii.

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