



Master Thesis

“A Systematic Literature Review on Organizational Transformations with Artificial Intelligence”

Background

Digitization is not only a buzzword for managers, but a crucial attempt to systematically transform a company and its business model into a digital entity. Moreover, it affects each and every industry worldwide. Hence, for staying competitive, companies have to continuously progress this transformation. A next step in this process will be the implementation of Artificial Intelligence (AI). The technology has the power to change market competition completely and is already mature enough to be applied in various business contexts. This offers plenty of space for gaining competitive advantage and *ceteris paribus* higher profits. As many companies are still digital beginners, it is still unclear how opportunities or challenges with respect to transitions look like. Therefore, it will be very interesting to analyze recent academic literature on AI transformation in order to identify important insights and process characteristics for organizations.

Introductory Readings

- Holmström, J. (2022). From AI to digital transformation: The AI readiness framework. *Business Horizons*, 65(3), 329-339. DOI: 10.1016/j.bushor.2021.03.006
- Brock, J. & von Wangenheim, F. (2019). Demystifying AI: What digital transformation leaders can teach you about realistic artificial intelligence. *California Management Review*, 61(4), 110-134. DOI: 10.1177/1536504219865226
- Magistretti, S.; Dell’Era, C. & Messeni Petruzelli, A. (2019). How intelligent is Watson? Enabling digital transformation through artificial intelligence. *Business Horizons*, 62(6), 819-829. DOI: 10.1016/j.bushor.2019.08.004

Tasks and Goals

This master thesis is closely related to the current research of the chair, and you will conduct your analyses in close collaboration with our doctoral students. The thesis will be based on qualitative methodology to examine important factors of an AI transformation process. You will especially analyze relevant scientific literature on AI regarding transformation phases, AI strategy, and organizational development. Based on the papers that you collect, you will create a systematic literature review in which you elaborate characteristics, prerequisites, and challenges of an AI-based transformation process.

Requirements

- Good English skills as well as previous experience with strategic topics and/or AI
- Independent, reliable, and diligent working style with an eye for detail and high motivation
- Successful participation (min. grade of 2.0) in the lecture *Strategies in Multinational Enterprises (SMNE)* or one of our advanced seminars

Details

- Supervisors Prof. Dr. Thomas Hutzschenreuter and Tim Lämmermann
- Timing Flexible / As of now for a duration of 6 months after the research exposé is accepted

Contact

If you are interested in writing your thesis at our chair or have questions to this topic, please contact Tim Lämmermann (tim.laemmermann@tum.de). Please send an email, including a tabular CV and current transcript of records (as one PDF file), to apply for a master thesis. We are looking forward to working together with you!