



Master Thesis

“A Case Study on Strategic Decision Factors for the adoption of AI-based technologies in companies”

Background

Digitization is not only a buzzword for every manager, 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. Nevertheless, many companies are still digital beginners and face a lot of risks or challenges. Also, personal preferences might bias managers' decisions. Therefore, it will be very interesting to identify and evaluate key factors that drive strategists in favor or disregard of organizational AI adoptions.

Introductory Readings

- Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. *Futures*, 90, 46-60. DOI: 10.1016/j.futures.2017.03.006
- Cao, G.; Duan, Y.; Edwards, J. & Dwivedi, Y. (2021). Understanding managers' attitudes and behavioral intentions towards using artificial intelligence for organizational decision-making. *Technovation*, 106, Article 102312. DOI: 10.1016/j.technovation.2021.102312
- Mishra, S.; Ewing, M. & Cooper, H. (2022). Artificial intelligence focus and firm performance. *Journal of the Academy of Marketing Science*. DOI: 10.1007/s11747-022-00876-5

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 case study/qualitative methodology to examine important decision factors for strategists in order to evaluate a potential implementation of AI-based technologies. For this, you will review relevant scientific literature on AI adoption, AI strategy, and AI transformation as well as analyze company reports in order to find real-world evidence. Based on the data that you gather, you will create a case study in which you apply strategic decision factors from the academic literature on 2-3 selected companies.

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 2.3) in the lecture *Strategies in Multinational Enterprises (SMNE)*

Details

- Supervisors Prof. Dr. Thomas Hutzschenreuter and Tim Lämmerrmann
- Start Flexible / As of now
- Working time 6 months

Contact

If you are interested in writing your thesis at our chair or have questions to this topic, please contact Tim Lämmerrmann (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!