



## Master Thesis

### “A Case Study on Barriers and Enablers for the Adoption of AI-based technologies in companies”

#### 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. Nevertheless, many companies are still digital beginners facing a lot of challenges. Therefore, it will be very interesting to identify factors that enable a smooth adoption of AI-based technologies as well as those that provide barriers for this process. For this, both, internal as well as external company factors are of relevance.

#### Introductory Readings

- Kar, A. & Kushwaha, A. (2021). Facilitators and Barriers of Artificial Intelligence Adoption in Business – Insights from Opinions Using Big Data Analytics. *Information Systems Frontiers*. DOI: 10.1007/s10796-021-10219-4
- Hong, C.; Ling, L. & Yong, C. (2020). Explore success factors that impact artificial intelligence adoption on telecom industry in China. *Journal of Management Analytics*, 8(1), 36-68. DOI: 10.1080/23270012.2020.1852895
- Cubric, M. (2020). Drivers, barriers and social considerations for AI adoption in business and management: A tertiary study. *Technology in Society*, 62, Article 101257. DOI: 10.1016/j.techsoc.2020.101257

#### 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 barriers and enablers for companies during an AI implementation process. For this, you will review relevant scientific literature on AI adoption/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 barriers and enablers 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](mailto: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!