



## Master Thesis

### “Embracing Digital Transformation: Cases from the German Manufacturing Industry”

#### Background

International expansion has long been recognized as a crucial growth engine for multinational enterprises (MNEs), providing access to new markets, resources, and innovation opportunities. In our digital era, international business landscapes are transforming at an unprecedented pace. This phenomenon is vividly illustrated by the rapid advancements in the field of large-language models (LLMs): from GPT-1 in 2018 to the more sophisticated GPT-3, handling 175 billion parameters (ten times more than its predecessor!), in 2020 and GPT-4 already in 2023. Such advancements have set new benchmarks for how quickly companies must adapt to stay competitive. This thesis seeks to explore how publicly listed German MNEs in the manufacturing industry (or another industry) are navigating the challenges and opportunities presented by the digital era in their internationalization efforts. By comparing the internationalization patterns of several companies in one industry in depth, this research will provide insights into how different companies adapt to the digital revolution and leverage internationalization for sustained growth and competitiveness in a rapidly evolving global landscape.

#### Introductory Readings

- Luo, Y., & Zahra, S. A. (2023). Industry 4.0 in international business research. *Journal of International Business Studies*, 54(3), 403–417.
- Lanzolla, G., Lorenz, A., Miron-Spektor, E., Schilling, M., Solinas, G., & Tucci, C. (2020). Digital transformation: What is new if anything? Emerging patterns and management research. *Academy of Management Discoveries*.
- World Economic Forum (2023). A Global Rewiring: Redefining Global Value Chains for the Future. <https://www.weforum.org/publications/a-global-rewiring-redefining-global-value-chains-for-the-future/>
- Monaghan, S., Tippmann, E. & Coviello, N. (2020). Born digitals: Thoughts on their internationalization and a research agenda. *Journal of International Business Studies*, 51, 11–22.

#### 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 methodology and empirical analysis to examine the growth of German MNEs belonging to the HDAX. You will especially review relevant literature, analyze annual reports and track changes in MNEs over time. Based on the data that you gather, you will undertake empirical analyses to uncover the factors that correlate with variability in speed of growth.

#### Requirements

- Good English skills
- Good knowledge of Microsoft Excel
- Independent, reliable, and diligent working style with an eye for detail and high motivation
- Successful participation in one of our offered modules (see webpage)

#### Details

- Supervisors Prof. Dr. Thomas Hutzschenreuter and Lynn Waffenschmidt
- 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 Lynn Waffenschmidt ([lynn.waffenschmidt@tum.de](mailto:lynn.waffenschmidt@tum.de)). Please send an email, including a tabular CV and your current transcript of records (one PDF file), to apply for a master thesis. We are looking forward to hearing from you!