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Bachelorarbeit / Masterarbeit
The Concept of Artificial Intelligence Platforms

The digitization of business and society leads to an emerging and rapidly growing portfolio of service offerings. Digital services and online platforms have become pervasive in our everyday lives in recent years, facilitating a wide range of economic and social activities. Accordingly, new business models such as ride- and accommodation sharing, which were inconceivable on a large scale even a few years ago, have now become ubiquitous. Simultaneously, with the maturation of machine learning, the availability of data, and adequate computing power, there is overwhelming evidence that Artificial Intelligence (AI) becomes central to running a digital platform. Further, as the application areas and their role in digital platforms have evolved, the role of AI has changed from being one of many minuscule building blocks in the technology of platform companies to an important layer in the stack and a platform by itself. Starting from automating specific tasks in internal business processes and offering capabilities to deliver new services that previously required human involvement, these technologies have enriched the repertoire of things that digital platforms can do to improve their business incrementally.

Despite this trend, it seems that research and practice have not yet comprehensively explored the concept of AI as a digital platform. As such, the literature lacks an overall conceptualization of AI platforms as well as specific aspects of AI platforms. To demonstrate the implications of AI technologies in the context of digital platforms in detail, a bachelor's/master's thesis could investigate the following research questions:

- **Conceptualization of AI platforms:** Who are the agents participating in an AI platform and its ecosystem? What constitutes the core and periphery of an AI platform? What is the overall AI platform architecture?
- **Value creation and capture in AI platforms:** How is value created and distributed within AI platforms? What are the AI platform externalities?
- **AI platform strategy, ownership, and control**: What are the building blocks of AI platform strategy? What are the governance models of AI platforms?

The thesis is supposed to be written in English language.

Empfohlene Einstiegsliteratur:

- Dann et al. (2021), Call for Papers, Issue 5/2022: Platform Economy: Beyond the Traveled Paths, Business & Information Systems Engineering
- Hofmann et al. (2021), Gateways to Artificial Intelligence: Developing a Taxonomy for AI Platforms, In Proceedings of the 29th European Conference on Information Systems (ECIS), Marrakech, Morocco
- Mucha and Seppälä (2020), Artificial Intelligence Platforms – A New Research Agenda for Digital Platform Economy, SSRN Electronic Journal

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