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Bachelor- / Masterarbeit

Identifying Applications in the Machine Economy

Technological advancements in different fields (e.g., blockchain, artificial intelligence, and internet of things) led to the conceptualization of the so-called *Machine Economy*. While yet the majority of researchers focused on defining the research field and discussing the potential impact of different technology, structured knowledge on potential applications lacks. Thus, this thesis focuses on identifying potential applications in the Machine Economy. As the body of knowledge in academia is yet to be developed, the student should make use of the available literature in practice and research simultaneously, by conducting a multivocal literature review. The literature review should identify potential applications and structure them along possible archetypes or patterns. Depending on the scope of the thesis, qualitative interviews with experts can be conducted as well.

The focus of the work will be defined in an initial meeting with the supervisors. This topic can be chosen either as Bachelor's or Master's thesis, as the scope varies depending on the type of thesis. The thesis can either be written in English or German, although English is strongly recommended.

Empfohlene Einstiegsliteratur:

- Urbach, N., Albrecht, T., Guggenberger, T., Jöhnk, J., Arnold, L., Gebert, J., Jelito, D., Lämmermann, L., Schweizer, A. (2020) The Advance of the Machines Vision und Implikationen einer Machine Economy. Projektgruppe Wirtschaftsinformatik des Fraunhofer-Instituts für Angewandte Informationstechnik FIT, Bayreuth.
- Jöhnk, Jan & Albrecht, Tobias & Arnold, Laurin & Guggenberger, Tobias & Lämmermann, Luis & Schweizer, André & Urbach, Nils. (2021). The Rise of the Machines: Conceptualizing the Machine Economy. In: Proceedings of the Twenty-fifth Pacific Asia Conference on Information Systems (PACIS)
- Schweizer, André & Knoll, Patricia & Urbach, Nils & von der Gracht, Heiko & Hardjono, Thomas. (2020). To What Extent Will Blockchain Drive the Machine Economy? Perspectives From a Prospective Study. IEEE Transactions on Engineering Management. 1-15. 10.1109/TEM.2020.2979286.

<u>Betreuer:</u> Duda, Sebastian, M.Sc., University of Bayreuth and Stoetzer, Jens-Christian, M.Sc., University of Bayreuth

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