

Abstract:

Given the foundational technological advances made in the field of artificial intelligence (AI) over the past few years, numerous businesses have begun to explore these technologies in the context of internal process optimization, automation and efficiency increase. Given their considerable potential to reach a critical size quickly, startups may truly benefit from such technologies with regards to aspects such as team expansion, streamlined accounting or market research, to name a few.

This thesis aims to explore the necessity and feasibility of AI technologies with regards to startup processes and operations. In order to understand these two aspects, the research revolved around the analysis of different critical success factors concerning the development, implementation and adoption of such AI technologies in this context. The findings are based on insights from a secondary data analysis in the form of a review of the existing literature as well as a primary data examination subject to semi-structured in-depth interviews.

The synthesis resulted in a ranged of different affirmative and contradictory insights with regards to the overall research topic. Large-scale internally-built AI infrastructures are arguably not economically viable nor of fulfilling purpose for startups. This is mainly due to resource limitations as well as uncertain economic periods. Nevertheless, such businesses offer very favorable traits and cultural facets in relation to a successful technological business transformation. Consequently, a viable option might be to test different third-party solutions in order to define different best practices and economic approaches. Once the two aspects of resource scarcity and economic uncertainty are not as prevalent anymore, such learnings could be used to impactfully turn towards more potent internal solutions and systems. Such could help to establish a considerable competitive advantage due to the vast number of use cases and possibilities these technologies offer.