

# ***EMERGENCE OF DIGITAL AND X-AS-A-SERVICE (XAAS) PLATFORMS IN GERMAN ENERGY SECTORS***

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## **Abstarct**

The energy sector in Germany experiencing a profound transformation due to the evolution of digital technologies. Over the decade, various digital technologies have been penetrated and supporting this transformation. Nevertheless, there is always a gap between technological advancement and business value capture. This gap is often filled by innovative startups by offering innovative business models, products and services. In practice, such startups target the final consumer by disintegrating the conventional business to business (B2B) or business to consumer (B2C) business models. Thanks to state-of-the-art digital technologies that facilitate new ventures to collect and process huge amounts of consumer data. Such capabilities allowing companies to understand consumer trends and future value proposition opportunities.

In this work, we had analysed the business activities of 240 active German energy startups founded between 2014 to 2021 (April). The data is collected from different sources including web-scraping and professional data collection services. The underlying focus of this analysis is centered around the digital platform and X-as-a-Service (XaaS) business models. The finding reveals that most of the innovative energy startups are early adopters of digital technologies such as artificial intelligence, blockchain, digital-twin, etc. Along with, to respond to the scalability challenges a significant number of startups have adopted or in the transition to adopting a platform-driven business model. These startups are privileged by the increasing network externalities among the consumers, which improves the startup's value proposition and profitability by targeting a large number of consumers. The finding also covers the geographical distribution and principal business categories of startups implementing multi-sided platform business models in Germany.