

Characteristics of Business Models of Industrial-Internet-of-Things Platforms

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Abstract : The number of Internet-of-Things (IoT) platforms is steadily increasing across various industries, especially for smart factories, smart homes and smart mobility. Also in the manufacturing industry, the number of Industrial-IoT platforms is growing. Both IT players, start-ups and increasingly also established industry players and small-and-medium-enterprises introduce offerings for the connection of industrial equipment on platforms, enabled by advanced information and communication technology. Beside the offered functionalities, the established ecosystem of partners around a platform is one of the key differentiators to generate a competitive advantage. The key question is how platform operators design the business model around their platform to attract a high number of customers and partners to co-create value for the entire ecosystem. The present research tries to answer this question by determining the key characteristics of business models of successful platforms in the manufacturing industry. To achieve that, the authors selected an explorative qualitative research approach and created an inductive comparative case study. The authors generated valuable descriptive insights of the business model elements (e.g., value proposition, pricing model or partnering model) of various established platforms. Furthermore, patterns across the various cases were identified to derive propositions for the successful design of business models of platforms in the manufacturing industry.

Keywords : industrial-internet-of-things, business models, platforms, ecosystems, case study

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