

Mobilizing Information Resources

Purpose

In the age of digitalization, servitization is a major promising strategy for manufacturing firms. The motives and benefits include growth in revenue and profit, improving response to customer needs, improving product innovation, building new revenue streams, increasing customer loyalty and setting higher barriers to competition (Baines et al. 2017). Broadened views on service innovation (Lusch, Nambisan 2015) should provide theories, methods and tools to support these changes in business, although, the level of detail is often too general for practitioners. Firms that descend from a traditional product-centric business, like it applies for many industrial suppliers, struggle with the innovation of digital services on an operational level. Service systems engineering strives to enable firms innovate service systems influenced with traditional engineering approaches (Böhmman et al. 2014). In this research, we try to leverage service systems engineering by holistically regarding all required resources - physical, human and information - on an organizational and operational level that have to be mobilized to deploy complex digital service systems with the help of industrial platforms (Gawer and Cusumano 2014; Marston et al. 2011; Willcocks et al. 2013).

Methodology/Approach

The research design is based on action design research (Sein et al. 2011), since for IS researchers it is ideally suited for the study of new technologies in organizational contexts and it takes both aspects equally into account, social and technical, and the obtained knowledge is immediately applied (Baskerville, Wood-Harper 2016; van de Ven 2007). Within a manufacturing company, we try to innovated and deploy digital service business models with the help of industrial cloud platforms. Use cases are a maintenance process in the production environment and virtual reality for manufacturing planning. We manage and accompany the service system development, starting from the ideation phase until the deployment and roll-out phase. We try to achieve service systems engineering guidelines for IT managers

Findings

The findings reported in the contribution are part of a larger research project and represent yet the first qualitative step of the investigation. In a forming market, like the industrial platform market, service platform providers wake high expectations with their cloud offerings. However, from the view of the customer, much more effort is prerequisite to integrate a cloud based service system than only plug and play. The mobilization of resources starts with the alignment of the service innovation to the general strategy. The team faces issues with the IT strategy, IT security and IT management, as well as corporate technology and purchasing departments. Within the industrial context, cloud systems, especially external ones, are considered a major security vulnerability. Therefore, the IT governance view on information classification, rolls and rights, access and security control must be advanced. The General Data Protection Regulation (GDPR) enforces priorities on these concerns.

Originality/Value

Some firms have already reconsidered the role of platforms in a service ecosystem, started to provide industrial service platforms and try to become platform leaders. Much research has already been conducted until now with this focus (Gawer and Cusumano 2014). But breaking down to an operational IT management level, the question arises how service platform customers can utilize the value propositions of industrial service platform providers. In the end, IT managers have to load the burden of digital service innovation and practical scientific expertise is required to guide them.

References

- Baines, Tim; Ziaee Bigdeli, Ali; Bustinza, Oscar F.; Shi, Victor Guang; Baldwin, James; Ridgway, Keith (2017): Servitization. Revisiting the state-of-the-art and research priorities. In *Int Jnl of Op & Prod Mngemnt* 37 (2), pp. 256–278. DOI: 10.1108/IJOPM-06-2015-0312.
- Baskerville, Richard L.; Wood-Harper, A. Trevor (2016): A critical perspective on action research as a method for information systems research. In *Enacting Research Methods in Information Systems: Volume 2*, pp. 169–190.
- Böhmman, Tilo; Leimeister, Jan Marco; Möslin, Kathrin (2014): Service Systems Engineering. In *Bus Inf Syst Eng* 6 (2), pp. 73–79. DOI: 10.1007/s12599-014-0314-8.
- Gawer, A., and Cusumano, M. A. 2014. “Industry Platforms and Ecosystem Innovation,” *Journal of Product Innovation Management* (31:3), pp. 417–433.
- Lusch, R. F., and Nambisan, S. 2015. “Service innovation: A service-dominant logic perspective,” *MIS quarterly* (39:1), pp. 155–175.
- Marston, S., Li, Z., Bandyopadhyay, S., Zhang, J., and Ghalsasi, A. 2011. “Cloud computing – The business perspective,” *Decision Support Systems* (51:1), pp. 176–189.
- Sein, M. K., Henfridsson, O., Purao, S., Rossi, M., & Lindgren, R. (2011). Action design research. *MIS quarterly*, pp. 37-56.
- Willcocks, L. P., Venters, W., and Whitley, E. A. 2013. “Cloud sourcing and innovation: Slow train coming? A composite research study,” *Strategic Outsourcing: An International Journal* (6:2), pp. 184–202.
- van de Ven, Andrew H. (2007): *Engaged scholarship. A guide for organizational and social research*: Oxford University Press on Demand.