Call for Papers

Managing Smart Services and Smart Service Systems

Special Issue Journal of Service Management Research

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Smart services are becoming increasingly present in our daily lives: The number of digital voice assistants such as Amazon's Alexa or Apple's Siri used in devices worldwide is expected to rise from 4.2 billion in 2020 to 8.4 billion units in 2024 (Statista 2020a). Sales in the smart home market in Germany are likely to almost double from today's nearly 4.4 billion Euro to about 8.5 billion Euro in 2025 (Statista 2020b)—a trend that has been reinforced by the COVID-19 pandemic. Moreover, one third of the younger German Internet users use smart watches or fitness tracker (destatis 2020). This list of illustrative examples could go on and on, and the examples clearly indicate that smart services are finding their way into most industries and areas of life.

Smart services are services delivered to or through smart products (e.g., Allmendinger and Lombreglia 2005; Wünderlich et al. 2015); smart products consist of both tangible (i.e., hardware) and intangible (i.e., software) components (e.g., Porter and Heppelmann 2014; Raff et al. 2020); and a smart service system is a configuration of smart products and some service provider(s) that offer smart services (e.g., Beverungen et al. 2019; Henkens et al. 2020). The advent of smart services and smart service systems, respectively, can have severe managerial implications for core elements of a company's business model, that is, in particular, for the product/service offering, customers' perception and intentions, required company infrastructure, and financial aspects.

The *product* certainly is a main pillar in a business model. Managerial implications of smart service systems may relate to both its tangible and intangible components. Further research might be directed, for example, toward the design of the tangible components with respect to anthropomorphism (e.g., Jörling et al. 2020) or toward the intervention design (Schweitzer and van den Hende 2016). Intangible components being of particular relevance for the smart service system comprise awareness, connectivity, actuation, and dynamism (Henkens et al. 2020).

With respect to *customers*, prior research suggests barriers to smart service adoption such as perceived complexity or inertia (Mani and Chouk 2018); correspondingly, future research on drivers and barriers might examine smart service adoption within particular customer segments. Another direction for further research may relate to new customer relationships that emerge in the context of smart services since the constant data exchange turn the former customer touchpoints into customer touchlines (Decker and Stummer 2017). Psychological aspects come into play when customers feel as inferiors, superiors, or equals in their relationship with a smart service (Schweitzer et al. 2019)—a perception that comes along with various challenges for the management of smart services. In this regard, trust becomes pivotal for relationship building with smart services (Foehr and Germelmann 2020; Michler et al. 2020).

The required *infrastructure* is also coined by the advent of smart services. These days, many companies need to acquire especially information system (IS) competencies as a means for developing smart services. These companies may decide to cooperate with a startup, which indeed can help them mastering the challenges of the digital transformation but also bears the risk of unwanted effects on customer perception (Schleef et al. 2020). Another option for acquiring required skills and expertise lies in hiring new employees (Porter and Heppelmann 2015), which, however, can go along with the challenge to overcome internal mindset barriers (Töytäri et al. 2018).

Smart services can affect *financial issues* in a company's business model as they establish new revenue streams through offers such as product-as-a-service, pay-per-X, or in-product purchases (Decker and Stummer 2017, Lassnig et al. 2018). However, more research is needed about customer acceptance of these revenue models and it should be taken into account that such offers may have implications for a company's profit.

In summing up, several core components of a company' business model are potentially affected by the upcoming era of smart services. With this special issue, we seek to gain a better understanding of the particularities and challenges related to the management of smart services and smart service systems. Therefore, we call for research from multidisciplinary perspectives.

We welcome empirical and analytical papers using a variety of methods to addressing meaningful research questions in this context. We also invite conceptual papers offering a strong theoretical contribution to the management of smart services and smart service systems.

Topics of interest to the Special Issue might stem from various fields such as those exemplarily listed in the following:

- Service Management (e.g., developing smart transformative services, value co-creation within smart service systems, understanding value creation with smart services in various fields of application such as smart home, smart health, smart mobility)
- Strategic Management (e.g., new business model, importance of data, open or closed system)
- Marketing (e.g., designing proper offers of smart services and smart service systems, communicating them to customers, branding, distribution channels)
- Innovation and Technology Management (e.g., user innovation/co-creation in developing smart services, drivers and barriers to smart service adoption and diffusion)
- Entrepreneurship (e.g., creating sustainable business models for smart services, collaboration with startups in developing smart services)
- Business Information Systems Engineering (e.g., establishing smart service platforms)
- Human Resource Management (e.g., smart services in the working context, new skills required)
- Organization (e.g., usage of smart services on various organizational levels down to the team level)
- Logistics and Supply Chain Management (e.g., smart services for continuous tracking of products w.r.t. location, current condition, environment)
- Production (e.g., predictive analytics enabling service innovation in manufacturing, industry 4.0)
- Sustainability (e.g., smart services as a means to foster sustainability)

Submission

We seek high-quality submissions on such (or related) topics. In particular, we strongly encourage participants of the Second International Conference on Challenges in Managing Smart Products and Services (CHIMSPAS 2021) to submit full-length paper versions presenting their findings. However, the opportunity to submit a paper is not limited to

CHIMSPAS participants, we welcome contributions from other colleagues as well. All manuscripts will be subject to the standard review process of the Journal of Service Management Research (SMR).

Manuscripts submitted must not have been published, accepted for publication, or be currently under consideration elsewhere. Manuscripts should be submitted in accordance with the author guidelines available on the journal homepage https://rsw.beck.de/zeitschriften/smr/for-authors.

All submissions should be made via https://www.openconf.org/smr/.

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References

Allmendinger, G. & Lombreglia, R. (2005). Four strategies for the age of smart services. *Harvard Business Review*, 83(10), 131-145.

Beverungen, D., Müller, O., Matzner, M., Mendling, J., & vom Brocke, J. (2019). Conceptualizing smart service systems. *Electronic Markets*, 29(1), 7–18.

Decker, R. & Stummer, C. (2017). Marketing management for consumer products in the era of the internet of things. *Advances in Internet of Things*, 7(3), 47–70.

Destatis (2020). 23% der Internetnutzerinnen und -nutzer verwenden Smart Watches, Fitnessarmbänder und Co. Retrieved from https://www.destatis.de/DE/Presse/Pressemitteilungen/Zahl-der-Woche/2020/PD20_39_p002.html.

Foehr, J. & Germelmann, C. C. (2020). Alexa, can I trust you? Exploring consumer paths to trust in smart voice-interaction technologies. *Journal of the Association for Consumer Research*, 5(2), 181–205.

Henkens, B., Verleye, K., & Larivière, B. (2020). The smarter, the better?! Customer well-being, engagement, and perceptions in smart service systems. *International Journal of Research in Marketing.* Retrieved from https://doi.org/10.1016/j.ijresmar.2020.09.006.

Jörling, M., Böhm, R., & Paluch, S. (2020). Mechanisms and consequences of anthropomorphizing autonomous products: The role of schema congruity and prior experience. *Schmalenbach Business Review*, 72(4), 485–510.

Mani, Z. & Chouk, I. (2018). Consumer resistance to innovation in services: Challenges and barriers in the internet of things era. *Journal of Product Innovation Management*, 35(5), 780–807.

Michler, O., Decker, R., & Stummer, C. (2020). To trust or not to trust smart consumer products: A literature review of trust-building factors. *Management Review Quarterly*, 70(3), 391–420.

Lassnig, M., Stabauer, P., Breitfuß, G., & Mauthner, K. (2018). Geschäftsmodellinnovationen im Zeitalter von Digitalisierung und Industrie 4.0. *HMD Praxis der Wirtschaftsinformatik*, 55(2), 284–296.

Porter, M. W. & Heppelmann, J. E. (2014). How smart, connected products are transforming competition. *Harvard Business Review*, 92 (11), 64–88.

Porter, M. W. & Heppelmann, J. E. (2015). How smart, connected products are transforming companies. *Harvard Business Review*, 93(10), 97–114.

Raff, S., Wentzel, D., & Obwegeser, N. (2020). Smart products: Conceptual review, synthesis, and research directions. *Journal of Product Innovation Management*, 37(5), 379–404.

Schleef, M., Bilstein, N., & Stummer, C. (2020). "Shh! … I got help to become smart": Should incumbent firms disclose their cooperation with a startup? *Proceedings of the Forty-First International Conference on Information Systems (ICIS)*, AIS eLibrary. Retrieved from https://aisel.aisnet.org/icis2020/digital_innovation/digital_innovation/13.

Schweitzer, F. & van den Hende. E. A. (2016). To be or not to be in thrall to the march of smart products. *Psychology & Marketing*, 33(10), 830–842.

Schweitzer, F., Belk, R., Jordan, W., & Ortner, M. (2019). Servant, friend or master? The relationships users build with voice-controlled smart devices. *Journal of Marketing Management*, 35(7/8), 693–715.

Statista (2020a). Number of digital voice assistants in use worldwide 2019–2024. Retrieved from https://www.statista.com/statistics/973815/worldwide-digital-voice-assistant-in-use/.

Statista (2020b). Smart home. Retrieved from https://de.statista.com/outlook/279/137/smart-home/deutschland.

Töytäri, P., Turunen, T., Klein, M., Eloranta, V., Biehl, S., & Rajala, R. (2018). Aligning the mindset and capabilities within a business network for successful adoption of smart services. *Journal of Product Innovation Management*, 35(5), 763–779.

Wünderlich, N., V.; Kristina H.; Ostrom, A. L.; Patrizio, L.; Sousa, R.; Voss, C., & Lemmink, J. G. A. M. (2015). Futurizing" smart service: Implications for service researchers and managers. *Journal of Services Marketing*, 29(6/7) 442–447.