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SMR Journal of Service Management Research

Call for Papers
Artificial Intelligence and Robots in Service Interaction

Special Issue Journal of Service Management Research

Guest Editors:
Stefanie Paluch, Ph.D., Professor of Services and Technology Marketing
at RWTH Aachen University
Jochen Wirtz, Ph.D., Professor of Marketing
at National University of Singapore

Deadline: June 1st, 2019

Proposed Special Issue Topic

Our economies are facing a turning point in its history similar to the industrial revolution in manufacturing that started in the 18th century. Rapidly improving technologies that become smarter, smaller, lighter and cheaper. These include sensors, cameras, speech recognition, biometrics, analytics, big data, mobile and cloud technologies, geo-tagging and more that are increasingly powered by artificial intelligence (AI), which together are about to transform virtually all service sectors. Especially, the advent of service robotics (virtual and physical service robots) in combination with these technologies will lead to rapid innovation that has the potential to dramatically improve the customer experience, service quality, and productivity all at the same time (Wirtz and Zeithaml 2018). Automization of service interactions enables individually tailored, more efficient as well as effective service and frees employees' time for more creative and/or complex service activities (Huang and Rust 2018).

Already today, service interactions are experiencing a paradigm change, as AI and service robots are increasingly adopted in customer-firm interactions (Teixeira et al. 2017; van Doorn et al. 2017). For example, many companies already use text and voice-based chatbots for customer service (Wünderlich and Paluch 2017), McDonald's uses automated kiosks, customers search for information and order through digital assistants such as Apple's Siri or Amazon's Alexa, and the Henn-na Hotel in Japan is mostly staffed with humanoid service robots. Huang and Rust (2018) point out that AI may soon be able to take over most tasks formerly carried out by human service employees and by 2020 a predicted 85 % of customer-firm-interactions will be conducted without human intervention (IBM 2017).

However, due to the services firms' increasing use of automated service interactions, customers loose the opportunity to obtain human service. Matzner et al. (2018) stress that organisations need to consider trade-off challenges when replacing humans with machines in service encounters. Human service has been related to positive customer outcomes such as customer delight (Collier et al. 2018) and is preferred over technology in some service settings (Rafaeli et al. 2017). Furthermore, employee behaviour characteristics, including attentiveness and courteous behaviour (Gremler and Gwinner 2008), effort (Collier et al. 2018), as well as competence, helpfulness, and sociability (Surprenant and Solomon 1987) are relevant to the customers' perception in a service encounter. Service firms loose the opportunity to influence customers through employee's tone of voice, courteousness or empathy which might diminish the richness of an interaction (Marinova et al. 2017). Even though, technology-enabled services such as the newly released google assistant mimic human voices and behaviour in a way that they can no longer be recognised as machines the uncanny valley concept (Mori, MacDorman and Kageki 2012) suggest that an artificial service agent that resembles a human too closely could be perceived as creepy and cold (van Doorn et al. 2017).

Moreover, the long term effects of automated customer-firm interaction on customer and employee outcomes remain unclear. Automated interactions are also more susceptible to being hacked, causing potential security or privacy issues (van Doorn et al. 2017), and raise ethical and societal questions (Wirtz et al. 2018). For example, the hard- and software of digital assistants such as Alexa are able to sense, process and record the world around them, store and process this data using opaque algorithms (Calo 2012). Sensitive data may be stored in foreign, unsecure clouds which are susceptible to being hacked. The replacement of service employees with robots might also foster dehumanization, social deprivation, and may advance employees' fear of being replaced by technology based service provision (Sparrow and Sparrow 2006; Wirtz et al. 2018).

Despite the trending implementation of technology-based service interaction, many of the questions related to the impact this trend will have on service interactions and the actors involved remain underexplored.

In response to this identified research gap, this Special Issue seeks to explore how AI and service robots shape the nature of service interactions. We invite submissions from different disciplines, e.g. service management, information systems or psychology that examine dynamics, driving factors, and challenges associated with AI and service robots in service interactions. We call for conceptual as well as empirical (both quantitative and qualitative) papers. We especially welcome interdisciplinary contributions and value method diversity. Following is a non-exhaustive and non-exclusive list of issues and questions that papers considered for the Special Issue might address. Other appropriately related topics are equally welcome:

- How can firms successfully automate specific parts of their service interactions to augment their employees' capabilities, and enhance overall service quality and productivity at the same time?
- Which are the key customer-based (e.g. personality, psychological needs, technology-anxiety, situational involvement), service-related (e.g. resource availability), context-related (e.g. health care), and distinct technology (e.g. service robot)-related factors that optimize customer/firm value ensuing from automated interactions?
- How will employees react to service robots in professional service encounters? How can firms design working environments for human-robot-teams to improve service interactions and ultimately increase service quality?
- How do consumers respond to technology-based service (AI-based or service robots) interactions with particular service firms and in particular contexts? What constructs moderate or mediate the effects of AI and service robots in service interactions on customer experience?
- How should AI-based service interactions be designed to drive e.g. customer satisfaction and loyalty throughout the customer journey?
- How can service firms obtain an optimal human-technology mix throughout the customer journey in particular service firms? In which particular service tasks/activities do automated service interactions create optimal value?
- Which types of service and customer segments value rapport with a service robot and what drives customer trust and rapport in service robots?
- How can various emerging technologies, including the Internet of Things, smart devices, or wearables, be integrated with automated service interactions to create optimal value?
- Which alternative theory(ies) best explain consumer acceptance, outcomes, satisfaction in automated service interactions?
- In how far will technology-based service encounters lead to dehumanization? Which influences will daily automated service interactions have on customers' psychological wellbeing or the society in general?
- Additional potential topics are listed in Wirtz et al's (2018) Table 3 that details a further research agenda for robotics in the service sector.

Submission

All 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/.

Submission Deadline: June 1st, 2019

Expected Publication: Issue 2–2020

Please direct any further inquiries to the editors, listed below.

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