

Focusing the customer through smart services: a literature review

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Received: 30 March 2017 / Accepted: 3 January 2019 / Published online: 9 February 2019

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Abstract

Smart services serve customers and their individual, continuously changing needs; information and communications technology enables such services. The interactions between customers and service providers form the basis for co-created value. A growing interest in smart services has been reported in the literature in recent years. However, a categorization of the literature and relevant research fields is still missing. This article presents a structured literature search in which 109 relevant publications were identified. The publications are clustered in 13 topics and across five phases of the lifecycle of a smart service. The status quo is analyzed, and a heat map is created that graphically shows the research intensity in various dimensions. The results show that there is diverse knowledge related to the various topics associated with smart services. One finding suggests that economic aspects such as new business models or pricing strategies are rarely considered in the literature. Additionally, the customer plays a minor role in IS publications. Machine learning and knowledge management are identified as promising fields that should be the focus of further research and practical applications. Concrete ideas for future research are presented and discussed and will contribute to academic knowledge. Addressing the identified research gaps can help practitioners successfully provide smart services.

Keywords Smart services · Value co-creation · Literature review · Status quo analysis · Future research agenda

JEL classification L80 · L86

Introduction

Increasing digitalization and the emergence of the Internet of Things have fostered growing interest in smart services in

This article is part of the Topical Collection on *Smart Services: The move to customer-orientation*

Responsible Editor: Rainer Alt

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recent years (Georgakopoulos and Jayaraman 2016). Smart services are characterized by the fact that the service provider and the customer interact to create value. This process is called value co-creation (Gavrilova and Kokoulina 2015) and enables service providers to continuously adjust to a customer's individual and constantly changing needs (Massink et al. 2010). Customers are supported, and new business models are realized via smart services.

The number of publications that have focused on smart services has greatly increased in recent years. Although these publications have answered many relevant research questions, none have yet articulated a systematic and comprehensive research agenda for smart services. Systematic insights in different topics help to provide a broader view on the subject (Kamp et al. 2016). Therefore, the objective of the article is to present a holistic overview of past research and opportunities for further research in the field of smart services.

The presented literature review clusters existing publications related to smart services based on topics and lifecycle phases. Both in theory and practice, the lifecycle concept is adopted to describe a product or service from the design to the continual improvement (e.g., Fischbach et al. 2013; Wiesner et al. 2015). It helps to organize the complex structure of a

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