New Ways to Deal with Omni-Channel Services: Opening the Door to Synergies, or Problems in the Horizon?

João Reis^{1(∞)}, Marlene Amorim², and Nuno Melão³

Department of Economics, Management and Industrial Engineering and Tourism,
Aveiro University, Aveiro, Portugal

reis.joao@ua.pt

Department of Economics, Management and Industrial Engineering and Tourism, and GOVCOPP, Aveiro University, Aveiro, Portugal mamorim@ua.pt

³ Department of Management and CI&DETS, School of Technology and Management of Viseu, Polytechnic Institute of Viseu, Viseu, Portugal nmelao@estqv.ipv.pt

Abstract. This article aims to investigate organizational synergies in the omnichannel service context. In doing so, it discloses new omni-channel trends and discusses its implications for managers and academics. It uses a qualitative multimethod approach, which includes more than one method of collecting data to generate comprehensiveness and rich knowledge, namely: a systematic literature review and a case study. The transition to an omni-channel service requires companies to overcome many organizational challenges and is compelling academics and practitioners to focus on its operations management. The results indicate that organizational synergies are changing the omni-channel landscape and may provide several opportunities for gaining competitive advantages by implementing new technologies (e.g. m-payments), and anticipating customer needs (e.g. multi-brand experience). It is possible that these organizational synergies are transcending the omni-channel concept, creating new trends, but to confirm this hypothesis further investigation is needed.

Keywords: Organizational synergies \cdot Omni-channel services \cdot Qualitative multi-method approach \cdot Systematic literature review \cdot Case study \cdot Competitive advantage \cdot Operations management

1 Introduction

Recent times have seen an increasing interest in omni-channel services. Whereas traditional retail players are ramping up their Internet presence, online-first retailers are complementing their service delivery systems by opening stores and showrooms [1]. Customers are becoming more self-assured in employing electronic devices (e.g. laptops, tablets, mobile phones...) both for product search and order placement [2]. Moreover, the service delivery arena is now evolving from the adoption of multi-channel approaches, where customers are offered alternative channels, towards the pursuit of omni-channel strategies that aim at leveraging on integration, and the potential synergies

© Springer International Publishing AG 2017 S. Za et al. (Eds.): IESS 2017, LNBIP 279, pp. 51–63, 2017.

DOI: 10.1007/978-3-319-56925-3_5

from combining various interfaces for customer interaction. Moving from multi– to omni-channel service systems is an important opportunity, but also a major challenge for companies [3]. It allows customers to undertake the buying process on their terms and convenience across all channels [4] and as a brand experience [5]. Key challenges are related to the management of service operations so as to allow a seamless integration of decentralized structures [6], as it happens when orders are placed online and have to be collected in store [7]. What underlies is that we have witnessed a continued evolution from single, to multi–, cross–, and recently to omni-channel services in a relatively short period of time. So far, we ask ourselves, what is the next step? Are we consolidating or opening the doors to new strategies? The next sections aim to provide some answers to these questions.

2 Literature Review

The first step is to delimit the omni-channel concept. The multi-, cross-, and omni-channel concepts are commonly used indistinctively in the academic literature. Rigby's [8] first mentioned the word, defining omni-channel retailing as an integrated sales experience that melds the advantages of physical stores with the information-rich experience of online shopping, but is difficult to find a consensual definition. Beck and Rygl [7, p. 175] defined omni-channel retailing as the "set of activities entailed in selling merchandise or services through all widespread channels, whereby the customer can trigger full channel interaction and/or the retailer controls full channel integration". Picot-Coupey et al. [5] performed a systematic literature review to describe omni-channel services as a seamless and integrated shopping experience across all channels that blurs the distinctions between physical and online stores, and culminates in an integrated brand experience. The emergence of Internet and new technologies have changed significantly the foundations of customercompany interactions; self-service technology is a classic example, where no interpersonal contact is required between buyer and seller [9]. The availability of these new channels has drastically changed the way companies interact with customers by introducing substantial degrees of freedom in the way customers can employ different channels for each service activity [10]. Moreover, it extends the possibilities for providers to facilitate customers' direct engagement with specialized intermediaries for specific service delivery activities (e.g. payment, logistics). Choi and Wu [11] predicted, to a certain extent, the emergence of new dynamics in service delivery involving triadic relationships, i.e. buyersupplier-supplier. More recently, Wynstra et al. [12] extended the supply networks relations to service management, while they suggested a service triad as a business model (buyer-supplier-customer). For instance, if a software company outsources its helpdesk services to a third-party call-center, the primary service interaction is between the customer and the call-center, not between the customer and the software company, even though the customer has a contractual relationship with the software company [12]. What is relevant here is the integration of more than one company to provide a service experience, and for that reason engaging in direct interactions with the final customer. Triadic relationships take place when a company contracts with a supplier to deliver services directly to its final customer. Adding a technological interaction layer to these triadic service delivery

approaches leads to the need to update the components involved in the operations of omnichannel services, i.e. evolving the service channel systems that support the traditional dyadic service exchanges between providers and customers towards a network of companies-channels-customers (Fig. 1). To adequately conceptualize these chances, we need to resort to three major interrelated and dynamic components of service delivery systems [13]: (1) Strategic service design choices (SSDC) (companies), (2) Service delivery systems execution (SDSE) (the channels), and (3) Customer-perceived value for the total service concept (CVTSC) (customers).

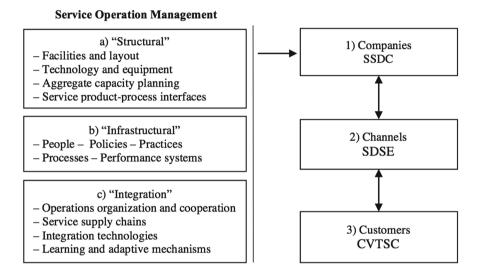


Fig. 1. Triad of service management in an omni-channel context (adapted from [2, 12, 13])

According to Roth and Menor [13] the setup of a service delivery system requires a set of company's decisions related to (a) Structural choices, concerning key decisions about physical elements of the delivery system, namely facilities, technology, equipment, and capacity; (b) Infrastructural choices, concerning programs, policies, and behavioural aspects that command service operations strategy; and (c) Integration choices, that refer to the issues of external integration, internal integration and adaptive mechanisms. The interface between customers and companies' service system is performed by means of service channels that result from the aforementioned decisions. The developments in information and communication technologies has increased the number of means by which customers are able to interact with service providers [14-16]. Sousa and Voss [17] distinguish among two types of channels: (a) Virtual channels, consisting of means of interaction using advanced telecommunications, information, and multimedia technologies (e.g. ATMs); and (b) Physical channels, consisting of a means of communication with the customer employing a physical (bricks-and-mortar) infrastructure (e.g. warehouses) and resorting to customer-employee personal interactions. Froehle and Roth [16] offered a classification for banking channels according to the type of customer interface: "face-to-face" or "face-to-screen". In financial services

companies, face-to-face contact, for example, occurs at the physical branches [15]. This taxonomy has led to a profusion of definitions for service delivery models; namely Sousa and Voss [17, p. 357] defined virtual service (face-to-screen) as "the pure information component of a customer's service experience provided in an automated fashion through a given virtual channel" and physical service (face-to-face) "as the portion of a customer's service experience provided in a non-automated fashion, requiring some degree of human intervention, either through a virtual or physical channel". Virtual services have grown in number and sophistication with the recent emergence of mobile payment technologies (m-payment). These are solutions that have been anticipated since the early 2000s, but it was only in recent years that their roll out has gathered strength, particularly in the USA, Europe and some parts of Asia [18]. As the availability and reliability of these systems increases, and customers get more acquainted and qualified, they increasingly employ electronic devices for diverse service operations, ranging from information search to order placement and payments. M-payment possibilities came into the retail sector and dramatically altered the process by which products pass from retailer to consumer, but it has received surprisingly little scholarly attention [19, 20]. After all, mobile payment will become an uncontested mode for paying for goods in the near future [21, p. 188]. Such technological innovations lay the ground for service systems where the co-creation of value will be become increasingly common [22]. In this sense, cocreation, is a new paradigm in the management literature that allows companies and customers to create value through interaction [23]. The growing technological developments give academics enough confidence to argue that omni-channel services will continue to evolve and at the same time will create new trends.

3 Methodology

This article follows a qualitative multi-method approach. Consistent with prior definitions, we define multi-method research as one that includes more than one method of collecting data and or more than one method of analyzing the data [24]. Such methods can be supported by qualitative techniques, quantitative techniques, or a mix of both, in what is called mixed-methods approach [24, 25]. Dividing this study into two independent articles could make the methodological approach more suitable to the reader, however, recent work advocates that combining two or more methods of collecting data generates comprehensiveness and rich knowledge [24], counterbalancing the weaknesses that are inherent to individual methods [26]. The first method consisted in conducting a systematic literature review, justified by the fact that omni-channel services are a relatively new area of study [27]. Its purpose was to identify recent trends in the utilization of channels for service delivery. Building on the literature review, a case study was then conducted to empirically validate the theoretical insights. The literature search was performed on Scopus.com, one of the largest abstract and citation peerreviewed literature databases, using the word omni-channels for article title, abstract and keywords, on December 14, 2016.

Scopus Search		
Criteria	Filters	Documents
Keyword	Omni-channels	67 documents
Restrictions		
Document type	Article, book chapter and conference paper	57 documents
Source type	Journals, books, conference proceedings	45 documents
Language	English	44 documents

Table 1. Systematic literature review.

The systematic literature review offers a qualitative overview on the trends of omnichannel services in the management literature. The results support the view that the literature is still incipient (see Table 1), with only 67 documents emerging on the Scopus database. The subsequent case study-based research aimed at further understanding and corroborating the findings from the literature review. It used multiple data collection methods, including 5 semi-structured interviews, direct observations and analysis of official documents from a large private retail bank. The number of participants selected for the interviews is justified by theoretical saturation. Saunders and Townsend [28] consider saturation as a plausible justification for the number of participants, and comment that saturation is being considered the gold standard by some [29]. Participants were chosen according to the employees' different functional areas and different levels of responsibility at a bank's physical branch. Employees tend to follow very similar rules and procedures across branches, for which the research team had reason to believe that data collection from one branch would probably not be substantially different on a different branch. Observation, as a data collection method, involves systematically seeing and listening [30] in order to enable learning and analytical interpretation [31]. During the direct observation field notes were taken. These field notes came from the analysis of the real life phenomenon, and from informal conversations with the interviewees. At the end, the data from direct observation was confronted with the interviews for triangulation purposes. The choice to carry out the case study in the context of banking was driven by the available academic and empirical evidence about the pioneering role that financial services have been taking in the adoption of new channels in service delivery [32], contributing to pave the way for new trends (e.g. multi-channel services).

4 Findings

This section provides a theoretical overview and its empirical validation derived from the case study. The focus of this study is on new trends in omni-channel services, notably its synergies and possible (dis)advantages. Data analysis and discussion integrates statements collected from employees, direct observations and documental analysis.

4.1 Moving from a Marketing to an Operations Management Perspective

During the latter part of the 20th century, the service sector grew significantly in virtually every developed country, leading service operations management to recall for a legitimate field of its own [33]. This rapid growth was determined by several factors, including the application of information technology/information systems (IT/IS), which have significantly altered the landscape of operations management [34]. The IT/IS enables the combination of competences, capabilities, and knowledge [35] that underpin value co-creation in collaborative relationships [36]. Cabiddu *et al.* [22] exemplifies with the airline sector, where information technology has influenced operations (e.g. from paper-based ticketing to e-ticket) as well as service delivery [37]. Contemporaneous evidence suggests that omnichannel services literature has contributed to reinforce earlier arguments. However, Reis et al. [38] noted that preliminary insights from the multi-channel services came from the marketing literature. They alerted scholars for the apparently need to carry out studies in the operations management sphere. De facto, the introduction of new technologies and the "shifting towards omni-channel strategies were so complex and engaging that it is impossible to evolve directly from a multi-channel, siloed strategy to an omni-channel strategy without any transition" [5, p. 347]. This transition has clearly compelled academics to increase their focus on operations management, as shown by the significant increase of academic articles published in scientific journals. If we analyze the systematic review, we verify that 47% of the current literature is based on operations management, being a higher percentage when compared with a similar study by Reis et al. [39] on multi-channel services (only 2.5%). The roots of this phenomenon are probably linked with the calls for organizational adaptation. Companies have found that they have advantages in serving their customers using an integrated network of channels, but these changes normally require process change. Hübner et al. [40] corroborates this, stating that the transition from multichannel to omni-channel requires the redesign of logistic structures and, concomitantly, the optimization of processes [13]. In this context customer participation has an important role. Process optimization needs to align the transition to omni-channel services with customer requirements, as the company and the customers' roles converge [41]. Customers generate value through interaction [42], as their participation is an important element in the value cocreation process [43]. When customer involvement into the company's operations takes place, joint value creation occurs, which means that the customer is engaged in, for example, the design or in front-office operations [44]. However, relatively little is known about how customers engage in the co-creation of value [36], especially in an omni-channel context. The future of omni-channel services and its implications to operations management are still uncertain, but will certainly be promising.

4.2 Synergies Between Companies: Systematic Literature Overview

The results of the systematic review showed a plethora of articles referring to companies' integration and adaptation to the omni-channel strategy [2, 40], but few referred to synergies. An exception is Picot-Coupey *et al.* [5] who investigated internal synergies between clicks and bricks, and how successful the transformative process to become omni-channel can be. Other authors pointed out the need to focus less in products or

services, and more in consumer-centric approaches [45]. Melero et al. [45] exemplified how Decathlon and Zara companies introduced new communication channels to interact with their customers: Decathlon with a mobile application (App) to facilitate contact between customers who practice the same sport and Zara achieved a leading position on social networks, where customers can interact with the company. Also in the omnichannel context, Notomi et al. [46, p. 38] stated that "retailers have found themselves forced to compete for customer attention like never before". The underlying question is: do organizations have to do this on their own? Maybe not. Notomi et al. [46, p. 38] remarked that "at the same time, online retailers are expanding their reach by partnering with companies that already have stores and service establishments", because today's consumers no longer go to stores merely to shop; they pursue the optimal purchasing experiences, e.g. best prices, best information. This seems a sensible thing to do because, theoretically, we already have companies that collaborate with each other to best serve their customers. In this regard, Verhoef et al. [3] gives the examples of Booking.com and Tripadvisor.com, which shook-out traditional travel intermediaries. These are just a few examples that emerged from the systematic literature review. Companies can also interact with each other to optimize their services. For example, Rumbo.com and Edreams.com have understood the advantages of adding several airline agents to their search engines so as to provide the cheapest available prices and the lowest waiting time to their customers. Indeed, working in partnership can open up new opportunities. Other companies are also adopting this strategy internally. Starbucks Canada is implementing mobile payments through an app [47], enabling customers to make virtual payments of their purchases in any store of its network. These synergies between companies, either within or between groups of companies, can provide a number of opportunities still to investigate. In this sense, it is necessary to address the possible interactions that may arise from the synergies between organizations not only to respond to customer's needs and expectations, but also to promote their retention. From the literature review, we conclude that there is a need to: (i) address operations management issues related with integrated service experience; and (ii) evolve from synergies between channels (bricks and clicks) to synergies between companies and thereby introducing new degrees of freedom in how customers can interact with different companies for each service activity.

4.3 Basic and Complex Synergies: Case Study Analysis

Data analysis from the case study highlighted, in the strategic plan (2016–2018), the importance of channel management, notably by referring to the implementation of more digital and technological tools for customers and workers (explicitly mentioned in the bank's official documents). Similarly, a contact sales employee emphasized that the bank was pursuing a transition from multiple channels to an omni-channel strategy, e.g. is investing and making available to its contact sales employees tablets to facilitate interactions with customers. The same contact sales employee reinforces that the required organizational effort is high, because the bank has to invest on: (1) technology and, concomitantly, on restructuring existing processes as new channels are introduced (i.e. revisiting its structural decisions); (2) training its employees (i.e. revisiting

infrastructural decisions) and; (3) disseminating the information regarding the availability of new channels to the customers (i.e. acting on the integration of the components of the service system). Cook et al. [4] discusses the nature of the omni-channel customer and the associated changes required from the physical retail spaces, referring to the case of Argos, a brick-and-click store that started to use iPad-based kiosks. These kiosks and the empowered staff were helping their customers in selecting the best suited products and purchasing. In the case study, the concept behind this approach is to simplify and speed up the sales process, removing the traditional queuing approach in service provision [4]. When companies do not have capacity to add new technology to their portfolio (structural limitation), or do not intend to invest in additional physical stores or web environment, a viable strategy is establishing partnerships. Examples of basic synergies can also be found in the literature. Ebay.com proposed pickup points at Argos stores in the United Kingdom [7], giving support to Notomi et al.'s [46] arguments mentioned before. Amazon, originally a pure online player, already opened brick-and-mortar bookstores and is planning to venture is retail operations to 100 pop-up stores in the United States. These examples show that an omni-channel strategy can be achieved in several ways. On this subject, the contact sales employees argued that the bank was already preparing complex channel synergies, building on the establishment of synergies with other companies from different specialties. Companies that complement each other create value networks [42] in which resources of the partners are orchestrated into a novel value proposition that, in turn, is offered to customers. This co-created value exists when several firms interact with one another, e.g. by means of technological innovation to create a value proposition that can generate greater value for customers compared to a value proposition offered by any single company [22]. For example, the bank already participated in the MB Way service, a functionality that allows customers to connect the bank to several retail companies. This solution allows customers to combine an act of physical purchase and virtual payment, by making a mobile payment for a service or product purchase in a retail store. This kind of synergy is complex because customers can use the payment function across a network of companies, and also combines several types of services (physical and virtual). In return, customers provide value to the network of companies in the form of profits [48], although they also may compete for the extraction of economic value [41]. The roles of producer and consumer are becoming indistinct, as joint interactions lead to the development of new business opportunities [23] and reciprocally co-creating value through the integration of resources (e.g., channels) and customer skills [42]. We believe that this typology of service delivery is beyond the omni-channel capabilities, but to determine the implications of these synergies and the co-creation of value further investigation is needed.

4.4 Opening the Door to Synergies or Problems in the Horizon?

Mobile devices have a number of characteristics, such as ultra-portability and location sensitivity, assisting consumers in a number of shopping activities: search, comparison, purchase and post-purchase [49, 50]. Interviews from the case study revealed that m-payment technology created new prospects in omni-channel services, notably by "increasing the possibility of choosing simultaneously other channels to perform a

purchase" (sales employee statement). This is consistent with the literature in that mpayments may facilitate the showrooming practice, which consists of "using mobile technology while in-store to compare products for potential purchase via any number of channels" [51, p. 360]. For instance, a customer can access information and opinions from a variety of sources, including friends, competitors, consumer-to-consumer reviews, and even other channels at the focal retailer (virtual channels and/or physical channels). Additionally, the interviews revealed that m-payments are actually opening the door to synergies, as these technologies are bringing together companies that are using or intending to use the same means of payment. A sales person added that in the case of partnerships, the free-riding phenomenon (when a consumer uses a retailer's channel to prepare a purchase and then switches to another retailer's channel to purchase [52]) may be mitigated, although this not yet been corroborated in the literature. Nevertheless, we know from the literature that consumers can visit a retail website via a mobile device, even in a competing retail store, and even purchase at a competitor's on-line shop without leaving the brick-and-mortar store [50]. Allegedly, when it comes to partnerships, the free-riding phenomenon is not applicable. Direct observation confirms that a customer may choose the Supermarket B that has a partnership with Bank A, which allows the customer to pay for a product with her mobile device. This process comprises simultaneously a physical purchase and virtual payment, involving two different companies. On the other hand, if the customer wishes to add another purchase to the shopping cart, but does not like the wine offers of the Supermarket B, she can alternatively buy that product online from Supermarket C, using her mobile device to pay the purchase (Fig. 2).

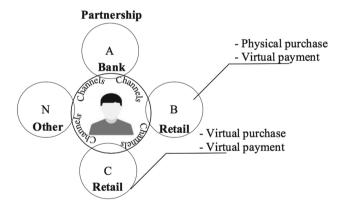


Fig. 2. Omni-channel service synergies

This process connects three different companies; it encompasses, simultaneously, a physical and a virtual purchase with a virtual payment (m-payment) to deliver a service to a customer. What is new here is that we believe this strategy goes beyond the omnichannel experience that originally reflects the articulation of different channels in the context of a single service provider. Picot-Coupey *et al.* [5, p. 339] refers to omnichannel as an integrated "brand experience", but the empirical insights reflect more a

multi-brand experience, since it entails several companies. There are, however, limitations. The network of channels of a partnership transcends the channels of a single organization. Thus, customers may have to choose over a portfolio of channels of different organizations, which will certainly bring new operations management challenges. But these challenges can also bring problems on the horizon, the transition from multi- to omni-channel services requires process change, but in this new development stage a paradigm shift is also needed - from a single company to a network of companies, and an overall portfolio of channels.

5 Conclusions

The omni-channel service transition typically requires reengineering of processes and, thus, has led academics to focus more in operations management issues. When companies do not have the capacity to add new technologies to their portfolio or, for some other reason, do not have such interest, they may seek synergies (partnerships). These synergies provide a number of opportunities to customers and organizations: e.g. a multibrand experience, and the end of the free-riding phenomenon. In the current service delivery contexts, where companies can rely on multiple channels to support different interactions with customers, these organizational synergies (i.e. different companies coordinating to provide distinct activities in service delivery) call for a conceptualization that is beyond the omni-channel concept, as they bring together a mix of channels and providers that need to be articulated in a seamless interaction with the customer. Since this is a recent layer in the service channels landscape, the full understanding of its implications requires further investigation. This article is important for practitioners because it attempts to identify new trends that may be relevant to organizations so as to gain competitive advantages - especially with regard to value co-creation, as synergies between firms lead to the emergence of value networks, making them more competitive. In return, customers collaborate in co-creating value but also compete for the extraction of economic value. Academically, this article shows that the omni-channel concept may need to be adapted to be in line with developments in real-world practice. This paper is not free of limitations. Some relevant articles may be missing since the search is restricted to a selected keyword. This work is also limited because of its exploratory nature, but we hope that it can encourage future investigations at the level of the omnichannel services. On the other hand, by integrating a conceptual and empirical study, the qualitative multi-method approach provided a balanced design, paying due attention to the dimensions of development, triangulation and complementarity, as well as contributing to an overall understanding of the subject under investigation. Due to confidentiality reasons we have not provided any information about key informants and the respective organization. According to Mills et al. [53] the removal of identifying information and suppression of confidential information can lead to the removal of the contextual information that is of greatest interest and value to the researcher. To maintain the scientific rigor, the list of all documents of the systematic literature review can be provided on request by the first author. In line with the main results, it may be interesting to conduct a mixed-method investigation in other geographical areas. It seems also

relevant to explore some issues (e.g. new trends and synergies) that still remain unclear and require further investigation. With this timely contribution we expect to instigate other investigators to contribute to the operations management discipline, and to advance knowledge in the omni-channel service arena.

References

- 1. Bell, D., Gallino, S., Moreno, A.: Showrooms and information provision in omni-channel retail. Prod. Oper. Manag. **24**(3), 360–362 (2015)
- Bernon, M., Cullen, J., Gorst, J.: Online retail returns management. Integration within an omni-channel distribution context. Int. J. Phys. Distrib. Logistics Manag. 46(6/7), 584–605 (2016)
- Verhoef, P., Kannan, P., Inman, J.: From multi-channel retailing to omni-channel retailing. Introduction to the special issue on multi-channel retailing. J. Retail. 91(2), 174–181 (2015)
- 4. Cook, G.: Customer experience in the omni-channel world and the challenges and opportunities this presents. J. Direct, Data Digital Mark. Pract. **15**(4), 262–266 (2014)
- 5. Picot-Coupey, K., Huré, E., Piveteau, L.: Channel design to enrich customers' shopping experiences. Synchronizing clicks with bricks in an omni-channel perspective the Direct Optic case. Int. J. Retail Distrib. Manag. **44**(3), 336–368 (2016)
- Zhang, J., Farris, P., Irvin, J., Kushwaha, T., Steenburgh, T., Weitz, B.: Crafting integrated multichannel retailing strategies. J. Interact. Mark. 24(2), 168–180 (2010)
- 7. Beck, N., Rygl, D.: Categorization of multiple channel retailing in multi-, cross-, and omnichannel retailing for retailers and retailing. J. Retail. Consum. Serv. 27, 170–178 (2015)
- 8. Rigby, D.: The future of shopping. Harvard Business Review (2011). https://hbr.org/2011/12/the-future-of-shopping
- 9. Meuter, M., Ostrom, A., Roundtree, R., Bitner, M.: Self-service technologies: understanding customer satisfaction with technology-based service encounters. J. Mark. 64(3), 50–64 (2000)
- Patrício, L., Fisk, R., Cunha, J.: Designing multi-interface service experiences. J. Serv. Res. 10(4), 318–334 (2008)
- 11. Choi, T., Wu, Z.: Triads in supply networks: theorizing buyer-supplier-supplier relationships. J. Supply Chain Manag. **45**(1), 8–25 (2009)
- 12. Wynstra, F., Spring, M., Schoenherr, T.: Service triads: a research agenda for byer- supplier-customer triads in business services. J. Oper. Manag. 35, 1–20 (2015)
- 13. Roth, A., Menor, L.: Insights into service operations management: a research agenda. Prod. Oper. Manag. **12**(2), 145–164 (2003)
- Cassab, H., MacLachlan, D.: A consumer-based view of multi-channel service. J. Serv. Manag. 20(1), 52–75 (2009)
- 15. Cortiñas, M., Chocarro, R., Villanueva, M.: Understanding multi-channel banking customers. J. Bus. Res. **63**(11), 1215–1221 (2010)
- Froehle, C., Roth, A.: New measurement scales for evaluating perceptions of the technologymediated customer service experience. J. Oper. Manag. 22(1), 1–21 (2004)
- 17. Sousa, R., Voss, C.: Service quality in multichannel services employing virtual channels. J. Serv. Res. **8**(4), 356–371 (2006)
- 18. Mallat, N., Tuunainen, V.: Exploring merchant adoption of mobile payment systems: an empirical study. E-Serv. J. 6(2), 24–57 (2008)
- 19. Groß, M.: Mobile shopping: a classification framework and literature review. Int. J. Retail Distrib. Manag. 43(3), 221–241 (2015)

- Taylor, E.: Mobile payment technologies in retail: a review of potential benefits and risks. Int. J. Retail Distrib. Manag. 44(2), 159–177 (2016)
- 21. Raina, V.: Overview of mobile payment: technologies and security. In: Banking, Finance, and Accounting: Concepts, Methodologies, Tools, and Applications, pp. 186–222 (2014)
- 22. Cabiddu, F., Lui, T.-W., Piccoli, G.: Managing value co-creation in the tourism industry. Ann. Tourism Res. **42**, 86–107 (2013)
- 23. Galvagno, M., Dalli, D.: Theory of value co-creation: a systematic literature review. Managing Serv. Qual. **24**(6), 643–683 (2014)
- Mills, A., Eurepos, G., Wiebe, E.: Encyclopedia of case study research. Sage Publications, California (2010)
- 25. Davis, D., Golicic, S., Boerstler, C.: Benefits and challenges of conducting multiple methods research in marketing. J. Acad. Mark. Sci. **39**(3), 467–479 (2011)
- 26. Wood, M., Daly, J., Miller, J., Roper, M.: Multi-method research: an empirical investigation of object-oriented technology. J. Syst. Softw. **48**(1), 13–26 (1999)
- 27. Thorpe, R., Holt, R.: The Sage dictionary qualitative management research. Sage, London (2008)
- 28. Saunders, M., Townsend, K.: Reporting and justifying the number interview participants in organizational and workplace research. J. Manage. **27**, 836–852 (2016)
- Guest, G., Bunce, A., Johnson, L.: How many interviews are enough? Field Methods 18, 59–82 (2006)
- 30. Taylor-Powell, E., Steele, S.: Collecting Evaluation Data: Direct Observation. University of Wisconsin, Madison (1996)
- Saunders, M., Lewis, P.: Research Methods for Business Students, 4th edn. Prentice Hall, London (2007)
- 32. Sousa, R., Amorim, M.: A framework for the design of multichannel services. Project for the Foundation for Science and Technology, under grant number PTDC/GES/68139/2006 (2009)
- 33. Heineke, J., Davis, M.: The emergence of service operations management as an academic discipline. J. Oper. Manag. 25(2), 364–374 (2007)
- 34. Gunasekaran, A., Ngai, E.: The future of operations management: an outlook and analysis. Int. J. Prod. Econ. **135**(2), 687–701 (2012)
- Srivastava, M., Gnyawali, D.: When do relational resources matter? Leveraging portfolio technological resources for breakthrough innovation. Acad. Manag. J. 54(4), 797–810 (2011)
- 36. Payne, A., Storbacka, K., Frow, F.: Managing the co-creation of value. J. Acad. Mark. Sci. **36**(1), 83–96 (2008)
- 37. Basole, R., Rouse, W.: Complexity of service value networks: conceptualization and empirical investigation. IBM Syst. J. 47(1), 53–70 (2008)
- Reis, J., Amorim, M., Melão, N.: Disclosing paths for multi-channel service research: a contemporaneous phenomenon and guidelines for future investigations. In: Nóvoa, H., Drăgoicea, M. (eds.) IESS 2015. LNBIP, vol. 201, pp. 289–300. Springer, Cham (2015). doi: 10.1007/978-3-319-14980-6_23
- 39. Reis, J., Amorim, M., Melão, N.: Research opportunities in multi-channel services: a systematic review. In: 21st EurOMA Conference on Operations Management in an Innovation Economy, Palermo, 20–25th of June (2014)
- 40. Hübner, A., Wollenburg, J., Holzapfel, A.: Retail logistics in the transition from multi-channel to omni-channel. Int. J. Phys. Distrib. Logistics Manag. **46**(06Jul), 562–583 (2016)
- Prahalad, C., Ramaswamy, V.: Co-creation experiences: the next practice in value creation.
 J. Interact. Mark. 18(3), 5–14 (2004)
- 42. Vargo, S., Lusch, R.: Service-dominant logic: continuing the evolution. J. Acad. Mark. Sci. **36**(1), 1–10 (2008)

- 43. Vega-Vazquez, M., Revilla-Camacho, M., Cossío-Silva, F.: The value co-creation process as a determinant of customer satisfaction. Manag. Decis. **51**(10), 1945–1953 (2013)
- 44. Grönroos, C.: Value co-creation in service logic: a critical analysis. Mark. Theory **11**(3), 279–301 (2011)
- 45. Melero, I., Javier Sese, F., Verhoef, P.: Recasting the customer experience in today's omnichannel environment [Redefiniendo la experiencia del cliente en el entorno omnicanal]. Universia Bus. Rev. **50**, 18–37 (2016)
- 46. Notomi, N., Tsukamoto, M., Kimura, M., Yamamoto, S.: ICT and the future of the retail industry Consumer-centric retailing. NEC Tech. J. **10**(1), 38–41 (2015)
- 47. Pastoll, C., Rochwerg, T., Vlaar, B., Compeau, D.: Starbucks canada: the mobile payments decision. In: 35th International Conference on Information Systems. Build a better world through information systems, ICIS, New Zealand (2014)
- 48. Gupta, C., Lehman, D.: Managing customers as investments: the strategic value of customers in the long run. Pearson Prentice Hall, Upper Saddle River (2005)
- Shankar, V., Balasubramanian, S.: Mobile marketing: a synthesis and prognosis. J. Interact. Mark. 23(2), 118–129 (2009)
- 50. Voropanova, E.: Conceptualizing smart shopping with a smartphone, implications of the use of mobile devices for shopping productivity and value. Int. Rev. Retail Distrib. Consum. Res. **25**(5), 529–550 (2015)
- Rapp, A., Baker, T., Bachrach, D., Ogilvie, J., Beitelspacher, L.: Perceived customer showrooming behavior and the effect on retail salesperson self-efficacy and performance. J. Retail. 91(2), 358–369 (2015)
- 52. Heitz-Spahn, S.: Cross-channel free-riding consumer behaviour in a multichannel environment: an investigation of shopping motives, sociodemographics and product categories. J. Retail. Consum. Serv. **20**(6), 570–578 (2013)
- 53. Mills, A., Durepos, G., Wiebe, E.: Encyclopedia of case study research. Sage Publications, California (2010)