

Disclosing Paths for Multi-channel Service Research: A Contemporaneous Phenomenon and Guidelines for Future Investigations

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Abstract. The present paper reports on the findings of a systematic literature review on multi-channel services. In doing so, it uses an affinity diagram to show the results of a content analysis regarding the issues addressed by the existing literature in the field. This enables to understand areas of interest in the contemporary subject of research, find gaps in the literature and, lastly, to uncover guidelines for future research. The results suggest that future investigations should focus on the integration of traditional and virtual services, on quality issues and customer behaviour towards the use of multi-channel services. Previous research also suggests that multi-channel services are largely unaddressed, regarding issues as back-office processes, within the scope of operations management. Subsequently, since multi-channel services are multidisciplinary in nature, these guidelines represent a fruitful opportunity for future research to involve other disciplines.

Keywords: Service integration · Multi-channel services · Systematic literature review

1 Introduction

Following the first decade of the 21st century, it has become obvious that multi-channel service delivery is changing. This change was first described by Froehle and Roth [1], arguing that customers used to interact directly with service employees (face-to-face), but, more recently, it is complemented with new technologies (face-to-screen). In face-to-screen settings, the role of technology can either be the mediation of contact with a service employee or performing automated service delivery without human intervention [2]. A second perspective, presented by Sousa and Voss [3], distinguishes virtual and physical channels of service delivery. A virtual channel consists of a means of communication using “advanced telecommunications, information, and multimedia technologies” and physical channels consist of means of communications with the customer employing a physical (brick-and-mortar) infrastructure [3, 4]. As Robert Yin [5]

mentioned before, a contemporaneous phenomenon, whose boundaries are unclear, makes it technically difficult to define. Concomitantly, the understanding of this phenomenon is largely connected on how the *multi-channel service* term is defined. While there is a definition that has gathered some scholar approval, i.e. service composed of components (physic and/or virtual), delivered through two or more channels [3], the field of multi-channel service still did not reach a consensus regarding the meaning of its core concept [6], as it can be seen from Table 1. The difficulty of defining the term “multi-channel service” led us to search the literature for a more comprehensive element, known as “multi-channel service system”, associated to distinct aspects of multi-channel system.

The term *multi-channel service system* was initially described as the “use of more than one channel to manage customer integration across all channels” [7]. From Table 1, it seems clear that different authors use different terms and several settings to refer to the same thing: the “multi-channel services” term. Based on the definitions, our intention is to define the minimal set of features associated with the term, as well as the set of elements of a multi-channel service system. In an attempt to understand the phenomenon we reduce the term to its essential elements derived from the multi-channel service definition. The challenge of defining the multi-channel service concept can be tackled after the definitions have been reduced to their basic elements. A multi-channel service i.e. “service, composed by its elementary components (physical and/or virtual), delivered consistently to customers through the interaction of two or more organizational channels”. In fact, physical distribution channels (such as a branch or retail outlet), telephone, automatic teller machines (ATMs), Internet, enable today service firms and their customers to interact with each other [1, 14]. In particular, the Internet is fast becoming a feasible alternative to the traditional face-to-face channel [1] as it is integrated into multi-channel servicing system [15, 16]. The opportunities offered by the Internet and the infatuation it aroused among customers led service firms to adopt a multi-channel distribution by combining both traditional physical channels and virtual channels such as the Internet and telephone [14]. A good example is the financial sector, which has a long history of developing new ways to interact with customers and has, therefore, been employing multi-channel strategies for a long time [17, 18].

In sum, the emergence of hybrid distribution systems such as multi-channel services rapidly changed the world and became a standard business model [19, 20]. The proliferation of multi-channel services has created a challenge for firms insofar as how to manage these new environments effectively and created opportunities for academics to produce insights that can help address this challenge [10].

Subsequently, to close this section, we present the research question, in order to understand the areas of interest in the contemporary subject of research, find gaps in the literature and to disclose guidelines for future research.

- RQ: What are the research domains associated to the multi-channel services?

This research question will allow achieving the main purpose of the investigation, and disseminate the leading contemporary domains that are associated to multi-channel services.

Table 1. Definition for multi-channel service system

Year	Author	Terms	Multichannel services system definition
2002	Stone <i>et al.</i> [7]	Multi-channel management	The use of more than one channel or medium to manage customers in a way that is consistent and coordinated across all the channels or media in use
2004	Payne and Flow [8]	Multichannel services	These main channel categories can be represented as a continuum of forms of customer contact ranging from the physical (such as a face to face encounter with a company sales representative) to the virtual (such as an e-commerce or G3 phone transaction)
2004	Wallace <i>et al.</i> [9]	Multiple channels	Offering multiple complementary channels provides a greater and deeper mix of customer service, thereby enhancing the seller's overall value proposition
2006	Neslin <i>et al.</i> [10]	Multi-channel management	The design, deployment, coordination and evaluation of channels through which firms and customers interact, with the goal of enhancing customer value through effective customer acquisition, retention, and development
2006	Sousa and Voss [3]	Multichannel services	Services composed of components (physic and/or virtual), delivered through two or more channels
2008	Agatz <i>et al.</i> [11]	Multi-channeling	Different channels differ in their abilities to perform various service outputs
2009	Cassab and MacLachlan [12]	Multi-channel service	Multi-channel services are the use of alternative modes of contact by customers to interact with and obtain service from an organization
2011	Chiu <i>et al.</i> [13]	Multichannel environment	Consumers can move easily among different channels. They engage in cross-channel free riding when they use one retailer's channel to obtain information or evaluate products and then switch to another retailer's channel to complete the purchase

2 Methodology

To conduct research about a given subject, it is crucial to find answers, contextualized in terms of a larger research problem. This necessarily involves reviewing the literature of that subject to indicate what has been researched in the area and to demonstrate a need for future research [21]. This study discusses the findings of a systematic literature review (SLR) on multi-channel services. In doing so, it uses an affinity diagram to

show the results of a content analysis regarding the issues addressed by the existing literature in the field. This strategy will permit to find guidelines for future research.

2.1 Systematic Literature Review

The adoption of the SLR method is due to the fact that multi-channel services is a relatively new area of study [22], but also because it is an explicit and reproducible method for identifying, evaluating and synthesizing the existent body of completed and recorded work produced by researchers [23].

However, this method is limited, in that it does not cover the whole body of knowledge related to a specific phenomenon, as it is restricted to a selected number of keywords [24]. Thus, it is acknowledged that some relevant articles could be missing; the results are based on the application of filters, which may exclude broad cited articles or, in the individual perception of readers, articles that should be interesting to integrate the study *per se*. Furthermore, to present a literature review of almost 120 articles, in such a few pages, it is a difficult task for any author, but is also motivating and requires a good capacity for synthesis. Despite these difficulties, a SLR allows for searching through a vast pool of research [24, 25] – in this case, a broad range of journals over a period of 25 years.

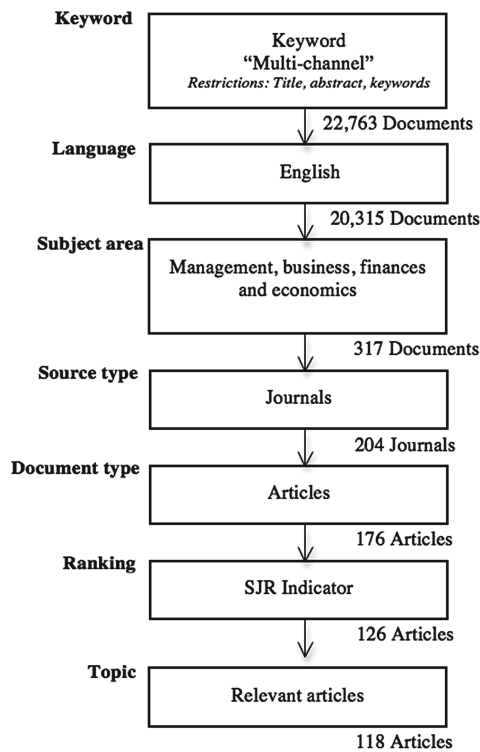


Fig. 1. Methodological approach [6]

This paper precedes the results of a conference proceeding [6] and a summary of the search process is presented below, shown in Fig. 1.

This paper is based on a search made in March 2014, using the Scopus database with the keyword “multi-channel” in the title, abstract and keywords, which found a total of 22,763 documents. The review process was based on the application of successive filters to exclude irrelevant papers and ensure viable results (Fig. 1). In this figure, readers can see that only articles written in English language were deemed relevant. To ensure the adequacy and quality of findings, the authors only considered articles in the management area within the quartiles Q1 and Q2 of the SCImago Journal & Country Rank (scimagojr.com).

In comparison with the previous one, the current paper presents new contributions, since it identifies dimensions and gaps in the literature of multi-channel services, and suggests guidelines for future research.

2.2 Affinity Diagram

The affinity diagram is a useful tool to structure a large amount of information. After reducing and filtering 22,763 documents to 118 articles it was necessary to understand their similarities. An affinity diagram was used to show the results of a content analysis [26] regarding the issues addressed by the existing literature in the field.

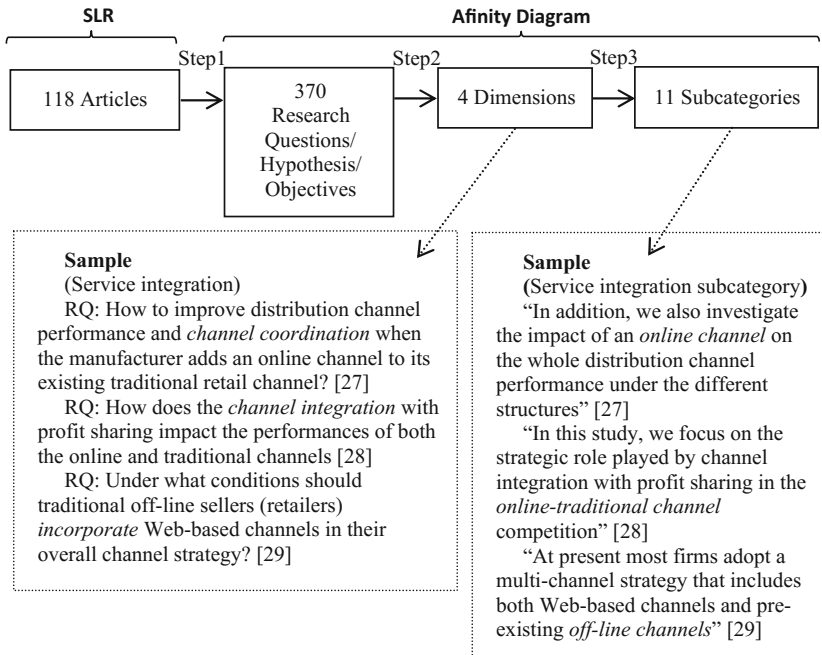


Fig. 2. Data analysis procedures

Figure 2 resumes the data analysis procedures. First, the research questions of all 118 articles were listed, including hypothesis and objectives; the result was a total of 370 questions, objectives or hypothesis to analyse. Second, to find the dimensions, those research questions were grouped by their similarities and affinities, as shown in the sample on Fig. 2. In this case, all research questions, concerning service integration, use words as “channel integration” or “channel coordination”. Third, a similar process was performed to retain and subcategorize the selected dimensions. In this case, we analysed the most mentioned words of each article that are interrelated with “service integration”, an example is “online channels” and “offline channels”. In sum, most of the articles are related to issues such as customer behaviour, service integration, quality issues and financial services (Fig. 3).

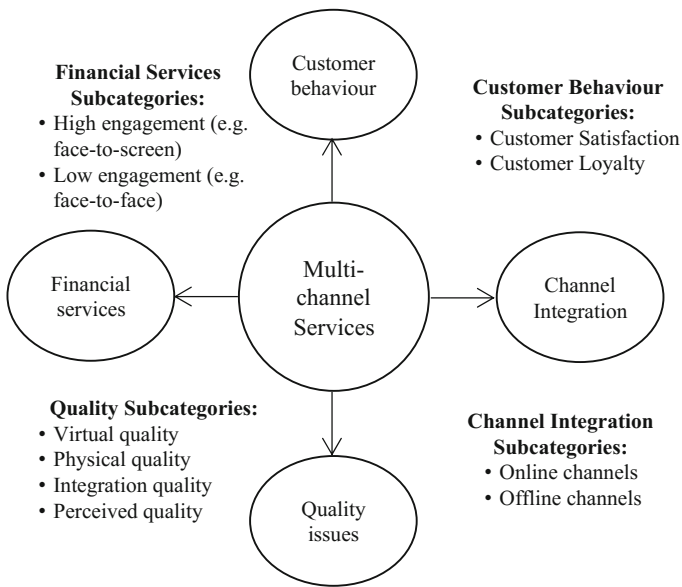


Fig. 3. Affinity diagram of multi-channel service theme

The next stage was to settle each of the topics and find the existing research gaps in each group in order to identify guidelines for future research to practitioners and academics. The affinity diagram approach may help discover hidden linkages between articles from a multidisciplinary range of documents.

3 Discussion

Several dimensions have emerged, the most cited concern customer behaviour, service integration, multi-channel quality and financial services. Each one poses different research opportunities. Due to space limitations, we only present brief discussion of the literature within each dimension.

3.1 Customer Behaviour

According to existent literature, consumer's perceived multi-channel service quality, channel-switching difficulties and satisfaction mediate the effect of channel characteristics on their behaviour intentions [12]. Therefore, multi-channel characteristics will influence multi-channel quality and channel switching difficulties. Although there is an abundance of literature about the determinants of customer loyalty in either the brick-and-mortar or online contexts, there is limited research in multiple channel contexts, especially in the service industry [30]. Furthermore, offline channel fulfilment appears to be at least as important as website performance in a front-office context [2] and [30]. Some authors have also suggested that further research could investigate the influence of quality of the multi-channel service interface, information consistency and the ability of consumers to use multiple modes of contact efficiently [12, 20]. Indeed, the absence of consistency in providing a service across multiple channels can frustrate consumers when they have pretentions to purchase a service or a product [30, 31]. Therefore, a question can be posed for future investigation: What are motivating customers to pursuit multi-channel services?

3.2 Service Integration

Despite the growth of multi-channel services, little empirical research has offered insights into cross-channel issues, such as understanding how consumer's integrate the service with experiences via physical store and offline marketing communications, with website characteristics [32]. Moreover, the synergy between online and offline operations generated through the integration of channels has been argued to enrich customers' experiences with a service and cultivate customer loyalty in both channels [32, 33]. To improve the level of channel integration and avoid channel overlap [15] managers should understand these particular aspects in order to avoid channel conflicts [34] or address a possible cannibalization of a channel towards another [35–37]. In integration strategies, the channels are seen as complementary components of a multi-channel system that aim to provide a high level of convenience to customers [38]. Therefore, a question can be posed for future investigation: How is the integration of traditional and virtual services accomplished?

3.3 Quality Issues

A preliminary insight of multi-channel services usually comes from the service marketing literature. Particularly, the concept of service quality has been extensively studied in the last two decades, since the publication of the seminal work of Grönroos [39] and the development of the SERVQUAL instrument [12, 40]. In a multi-channel setting, however, other investigators have studied the multi-channel service quality [3]. This study proposes that in a multichannel setting, multi-channel service quality comprises three components: virtual (e.g., Web site), physical (people-delivered, including logistics), and integration quality (seamless service experience across channels). But, a question remains: what is the perceived quality of a multi-channel

service? Grönroos [39] states that the perceived quality of a service stems from the direct relationship between the expectations those customers have regarding the quality of a service, and the experience they have with the organization when the service is provided. Parasuraman *et al.* [40] and Berry *et al.* [41] refers, as Grönroos [42], that perceived quality of a service is made by comparing customer expectations and the performance of an organization. Another definition is presented by Zeithaml [43], which states that perceived service quality is the consumer's judgment about a service's overall excellence or superiority, similar to those previously reported. In a multi-channel context, customers' perceived service quality of each channel depends not merely on the service that one channel provides, but also on the service other channels provide [35]. Multi-channel users perceive the quality of every channel and then integrate them into an overall perceived service quality [30]. It would be useful to investigate why the main part of the studies on quality have focused on marketing issues. As Zeithaml [43] points out the relationship between quality perceptions and customer attitude has long been a focus of marketing literature. Eventually, it will be interesting to drive quality studies to other areas of knowledge (e.g. operation management). Therefore, an interesting question can be also posed for future investigation: How is service quality applied to multi-channel services?

3.4 Financial Services

The first self-service technologies emerged in the financial sector in the 1970s [44], when banks installed the first automated teller machines (ATMs) [45], and continued changing during the past decade with the proliferation of mobile communications technologies [46]. Hence, the importance of these services for multi-channel context. In analysing the results of the SLR, we found that financial services is a category with wide variation in terms of product purchase and management, customer involvement levels and perceived risk, all of which may influence consumer choice and multi-channel behaviour [16]. Recent studies [16] mention that while there is little involvement in financial services (e.g. routine procedures) consumers usually use the face-to-screen service, however, for more complex services, where there is high engagement (e.g. loan requirement), consumers prefer face-to-face services. The presented information shows that financial services are a good example of the engagement in multi-channel services; this study area is fertile for fieldwork and several places can be used for that propose (e.g. banks, insurance companies). Therefore, some questions can be posed for future investigation: To what extent does the financial services have influenced the developments of multichannel services?

It should be interesting to pursue the questions listed in Table 2 with empirical work (e.g. case study research). If the questions are well adapted to the phenomenon it can lead to fruitful results and mitigate some difficulties already identified. A case study could be also a great tool to reveal some answers, as it can study the phenomenon in its natural setting and, additionally, can also lead itself to early exploratory investigations where the variables are still unknown and the phenomenon is not at all understood [47, 48].

A previous study [6] reports that these questions are dedicated to the analysis of consumer interactions with front-office services, thus, other disciplines, as operation

management, have a limited engagement with the literature. The listed questions, in Table 2, are not surprisingly as readers can find, however, the main suggestion goes towards moving the discussion of these issues to topics such as the back-office processes, an area still largely undressed in the literature.

Table 2. Questions and suggestions for multi-channel service

Multi-channel services topic	Questions	Suggestions
Customer behaviour	What are motivating customers to pursuit multi-channel services?	Extend these topics to a new comprehensive approach concerning the operation management area. Usually these topics are analysed from a marketing perspective
Service integration	How is the integration of traditional and virtual services accomplished?	
Quality issues	How is service quality applied to multi-channel services?	
Financial services	To what extent does the financial services have influenced the developments of multichannel services?	

4 Conclusions

The results of the analysis show that there are two main findings. First, there are four major areas related to the investigation of multi-channel services. Concerning the first area, customer behaviour, there is an abundance of literature about the determinants of customer loyalty, in either the brick-and-mortar or online contexts, but the multiple channel context and especially the offline processes remain unaddressed. On other hand, and despite the growth of multi-channel services, little empirical research has offered insights into cross-channel issues, such as the understanding on how consumer's integrate the service with experiences face-to-face and face-to-screen. A preliminary insight of multi-channel services usually comes from the service marketing literature. Particularly, the concept of service quality has been extensively studied in the last two decades. However, few studies have a multi-channel scope and there are other areas besides marketing that are being neglected (e.g. operations management). The lack of studies may jeopardize the quality of multi-channel services, particularly, with regard to the integration quality. Regarding these concerns, it is important to mention that there is scope for further research, especially in the area of financial services, more specifically, to perform fieldworks in banks or insurance companies. Second, this research also highlights the need for further research regarding the issues of back-office processes, which have been surprisingly overlooked by the academic community. Bridging these gaps may provide useful knowledge for practitioners and would deepen the academic understanding.

Several methodological limitations can be mentioned. Due to space limitations it is not possible to list all the 118 references. References can be provided on request, by

contacting the first author. The findings from this study have been limited due to the methodological constraints that resulted from the research design and the data-set [26]. The Scopus citation index is constantly being updated with new peer-reviewed international literature and our sample consists of journal articles, based on the assumption that these amount to the frontier of research [26], although, there may be other publications that are not included in this database and, thus, in this study [24]. Nevertheless, the review has undeniable value as it synthesizes scientific knowledge of the conceptualizations and outcomes of multi-channel services research [24]. This paper is also a part of a work in progress since a SLR is an overview of primary studies that contains an explicit statement of objectives, materials, and methods [49].

The results suggest that future investigations should focus on the integration of traditional and virtual services, on quality issues and customer behaviour towards the use of multi-channel services. Thus, the main guidelines for future investigations relate the need to approach certain issues in multi-channel services from an operations management perspective. Reis *et al.* [6] remark that it is imperative the need to direct studies into a prospective analysis of back-office processes, contrary to what has been done so far. This paper alerts scholars to the need to conduct new researches, suggesting direct attention to the issues presented in this paper, which are usually placed in the marketing area, but we believe that can also be applicable to the sphere of operations management. Since multi-channel services are multidisciplinary in nature, the benefits are clear; these guidelines represent a fertile opportunity for future research since it calls the engagement of other disciplines (e.g. operation management) besides marketing, which can lead to new contributions for management.

References

1. Froehle, C., Roth, A.: New measurement scales for evaluating perceptions of the technology-mediated customer service experience. *J. Oper. Manag.* **22**, 1–21 (2004)
2. Semeijn, J., Riel, A., Birgelen, M., Streukens, S.: E-services and offline fulfilment: how e-loyalty is created. *Manag. Serv. Qual.* **15**, 182–194 (2005)
3. Sousa, R., Voss, A.: Service quality in multichannel services employing virtual channels. *J. Serv. Res.* **8**, 356–371 (2006)
4. 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)
5. Yin, R.: Studying phenomenon and context across sites. *Am. Behav. Sci.* **26**, 84–100 (1982)
6. Reis, J., Amorim, M., Melão, N.: Research opportunities in multi-channel services: a systematic review. In: *Proceedings of the 21st EurOMA Conference, Palermo-Italy* (2014)
7. Stone, M., Hobbs, M., Khaleeli, M.: Multichannel customer management: the benefits and challenges. *J. Database Mark.* **10**, 39–52 (2002)
8. Payne, A., Frow, P.: The role of multichannel integration in customer relationship management. *Ind. Mark. Manag.* **33**, 527–538 (2004)
9. Wallace, D., Giese, J., Johnson, J.: Customer retailer loyalty in the context of multiple channel strategies. *J. Retail.* **80**, 249–263 (2004)
10. Neslin, S.A., Grewal, D., Shankar, V., Teerling, M.L., Thomas, J.S., Verhoef, P.D.: Challenges and opportunities in multichannel customer management. *J. Serv. Res.* **9**, 95–112 (2006)

11. Agatz, N., Fleischmann, M., Nuenen, J.: E-fulfillment and multi-channel distribution – a review. *Eur. J. Oper. Res.* **187**, 339–356 (2008)
12. Cassab, H., MacLachlan, D.: A consumer-based view of multi-channel service. *J. Serv. Manag.* **20**, 52–75 (2009)
13. Chiu, H., Hsieh, Y., Roan, J., Tseng, K., Hsieh, J.: The challenge for multichannel services: cross-channel free-riding behaviour. *Electron. Commer. Res. Appl.* **10**, 268–277 (2011)
14. Seck, A., Philippe, J.: Service encounter in multi-channel distribution context: virtual and face-to-face interactions and consumer satisfaction. *Serv. Ind. J.* **33**, 565–579 (2013)
15. Birgelen, M., Jong, A., Ruyter, K.: Multi-channel service retailing: The effects of channel performance satisfaction on behavioural intentions. *J. Retail.* **82**, 367–377 (2006)
16. Cortiñas, M., Chacarro, R., Villanueva, M.: Understanding multichannel banking customers. *J. Bus. Res.* **63**, 1215–1221 (2010)
17. Easingwood, C., Storey, C.: The value of multi-channel distribution systems in the financial services sector. *Serv. Ind. J.* **16**, 223–241 (1996)
18. Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., Pahnla, S.: Consumer acceptance of online banking: an extension of the technology acceptance model. *Internet Res. Electron. Netw. Appl. Policy* **14**, 224–235 (2004)
19. Moriarty, R., Moran, U.: Managing hybrid marketing systems. *Harvard Bus. Rev.* **68**, 146–155 (1990)
20. Webb, K., Hogan, J.: Hybrid channel conflict: causes and effects on channel performance. *J. Bus. Ind. Mark.* **17**, 338–356 (2002)
21. Given, L.: *The SAGE Encyclopaedia of Qualitative Research Methods*, vol. 1&2. Sage, Thousand Oaks (2008)
22. Thorpe, R., Holt, R.: *The Sage Dictionary of Qualitative Management Research*. Sage, London (2008)
23. Fink, A.: *Conducting Research Literature Reviews: From Paper to the Internet*, 2nd edn. Sage, Thousand Oaks (2005)
24. Mustak, M., Jaakkola, E., Halinen, A.: Customer participation and value creation: a systematic review and research implications. *Manag. Serv. Qual.* **23**, 341–359 (2013)
25. Wang, C., Chugh, H.: Entrepreneurial learning: past research and future challenges. *Int. J. Manag. Rev.* **16**, 24–61 (2014)
26. Coombes, P., Nicholson, J.: Business models and their relationship with marketing: a systematic literature review. *Ind. Mark. Manag.* **42**, 656–664 (2013)
27. Tang, F., Xing, X.: Will the growth of multi-channel retailing diminish the pricing efficiency of the web? *J. Retail.* **77**, 319–333 (2001)
28. Yan, R., Wang, J., Zhou, B.: Channel integration and profit sharing in the dynamics of multi-channel firms. *J. Retail. Consum. Serv.* **17**, 430–440 (2010)
29. King, R., Sen, R., Xia, M.: Impact of web-based e-Commerce on channel strategy in retailing. *Int. J. Electron. Commer.* **8**, 103–130 (2004)
30. Hsieh, I., Roan, J., Pant, A., Hsieh, J., Chen, W., Lee, M., Chiu, H.: All for one but does one strategy work for all? Building consumer loyalty in multi-channel distribution. *Manag. Serv. Qual.* **22**, 310–335 (2012)
31. Rangaswamy, A., Bruggen, G.: Opportunities and challenges in multichannel marketing. *J. Interact. Mark.* **19**, 5–12 (2005)
32. Carlson, J., Cass, A.: Managing web site performance taking account of the contingency role of branding in multi-channel retailing. *J. Consum. Mark.* **28**, 524–531 (2011)
33. Kwon, W., Lennon, S.: Reciprocal effects between multi-channel retailers' offline and online brand images. *J. Retail.* **85**, 376–390 (2009)
34. Sharma, A., Mehrotra, A.: Choosing an optimal channel mix in multichannel environments. *Ind. Mark. Manag.* **36**, 21–28 (2007)

35. Montoya-Weiss, M., Voss, G., Grewal, D.: Determinants of online channel use and overall satisfaction with a relational, multichannel service provider. *J. Acad. Mark. Sci.* **31**, 448–458 (2003)
36. Steinfield, C.: Does Online and Offline Channel Integration Work in Practice? Paper presented at the Workshop on E-Commerce Impacts Revisited, DIW, Berlin (2004)
37. Kollmann, T., Kuckertz, A., Kayser, I.: Cannibalization or synergy? Consumers' channel selection in online-offline channel systems. *J. Retail. Consum. Serv.* **19**, 186–194 (2012)
38. Muller-Lankenau, C., Wehmeyer, K., Klein, S.: Strategic channel alignment: an analysis of the configuration of physical and virtual marketing channels. Springer, New York (2006)
39. Grönroos, C.: A service quality model and its marketing implications. *Eur. J. Mark.* **18**, 36–44 (1984)
40. Parasuraman, A., Zeithaml, V., Berry, L.: SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *J. Retail.* **64**, 12–40 (1988)
41. Berry, L., Zeithaml, V., Parasuraman, A.: Five imperatives for improving service quality. *Sloan Manag. Rev.* **31**, 29–38 (1990)
42. Grönroos, C.: Service quality: The six criteria of good perceived service. *Rev. Bus.* **9**, 10–13 (1988)
43. Zeithaml, V.: Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *J. Mark.* **52**, 2–22 (1988)
44. Railton, J.: Automated teller machines. *Comput. Law Secur. Rev.* **1**, 1–12 (1985)
45. Dabholkar, P.: Consumer evaluations of new technology-based self-service options: an investigation of alternative models of service quality. *Int. J. Res. Mark.* **13**, 29–51 (1996)
46. Hoehle, H., Scornavacca, E., Huff, S.: Three decades of research on consumer adoption and utilization of electronic banking channels: a literature analysis. *Decis. Support Syst.* **54**, 122–132 (2012)
47. Benbasat, I., Goldstein, D., Mead, M.: The case research strategy in studies of information systems. *MIS Q.* **3**, 369–386 (1987)
48. Meredith, J.: Building operations management theory through case and field research. *J. Oper. Manag.* **15**, 441–454 (1998)
49. Greenhalgh, T.: How to read a paper: papers that summarize other papers (systematic reviews and meta-analyses). *Br. Med. J.* **315**, 672–675 (1997)