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# Multichannel Retailing: A Review and Research Agenda

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**Huan Liu**

Ph.D. Candidate, University of Groningen,  
Faculty of Economics and Business,  
Department of Marketing, Nettelbosje 2, 9747 AE Groningen,  
The Netherlands, [huan.liu@rug.nl](mailto:huan.liu@rug.nl) &  
University of Chinese Academy of Sciences, China

**Lara Lobschat**

Assistant Professor of Marketing, University of Groningen,  
Faculty of Economics and Business, Department of Marketing,  
Nettelbosje 2, 9747 AE Groningen, The Netherlands,  
[l.lobschat@rug.nl](mailto:l.lobschat@rug.nl)

**Peter C. Verhoef**

Professor of Marketing, University of Groningen,  
Faculty of Economics and Business, Department of Marketing,  
Nettelbosje 2, 9747 AE Groningen, The Netherlands,  
[p.c.verhoef@rug.nl](mailto:p.c.verhoef@rug.nl)

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# Multichannel Retailing: A Review and Research Agenda

Huan Liu<sup>1</sup>, Lara Lobschat<sup>2</sup> and Peter C. Verhoef<sup>3</sup>

<sup>1</sup>*University of Groningen, The Netherlands & University of Chinese Academy of Sciences, China; [huan.liu@rug.nl](mailto:huan.liu@rug.nl)*

<sup>2</sup>*University of Groningen, The Netherlands; [l.lobschat@rug.nl](mailto:l.lobschat@rug.nl)*

<sup>3</sup>*University of Groningen, The Netherlands; [p.c.verhoef@rug.nl](mailto:p.c.verhoef@rug.nl)*

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## ABSTRACT

The emergence of multiple channels is reshaping consumers' purchase behavior and retailers' marketing styles. We synthesize existing research on multichannel retailing based on more than 150 articles published in peer-reviewed marketing journals, most after 2006. From this synthesis, we reveal conditions under which both consumers and retailers can benefit from a multichannel context. More specifically, we identify multichannel retailing as a win-win game contingent on market environments, retailer characteristics, channel attributes, product categories, social and situational factors, and customer heterogeneity. Last, we highlight multiple directions for future research.

**Keywords:** multichannel retailing; multichannel shopping; multichannel marketing.

# 1

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## Introduction

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The plethora of new channels has changed the infrastructure of today's retailing environment (Neslin *et al.*, 2006). Especially Internet-based channels (i.e., online and mobile channels) and advanced technologies have created new and innovative opportunities for retailers' marketing activities and improved the flexibility of their marketing decisions (Verhoef *et al.*, 2015). For example, channels such as e-mail, websites, mobile devices, and social media allow retailers to reach consumers through various formats without the limitations of time and location. Technologies such as location-based services installed in mobile phones allow retailers to use the exact locations where target consumers are to transmit coupons and advertisements to them in real time (Andrews *et al.*, 2016; Verhoef *et al.*, 2017). Retailers no longer rely solely on traditional channels (e.g., physical stores, catalogs) given the omnipresence of advanced channels. A report by Episerver (2015) indicates that nearly 95% of retailers realize the importance of a multichannel strategy to target consumers. Another study by Pew Research Center shows that approximately 86% of apparel retailers have already adopted up to four social media channels to communicate with consumers (Morrison, 2015).

A wealth of related research has emerged since the appearance of Internet-based channels. A majority of early studies focused on the intention of consumers to purchase from a retailer's new channels. Later studies have discussed how new channels and the mix of traditional and new channels influence customer loyalty and retailer performance. Some of these studies show that adding a new channel has a positive effect on customer loyalty and firm value by increasing customer revenue, decreasing search cost, and providing better service outcomes to consumers (e.g., Homburg *et al.*, 2014; Wallace *et al.*, 2004). Other studies argue that cannibalization effects exist across channels (e.g., Falk *et al.*, 2007). For example, Ofek *et al.* (2011) show that the addition of a website decreases a retailer's overall profit when competition is intense, because the retailer needs to invest more in customer assistance provided in stores (e.g., greater shelf display, more qualified sales staff, floor samples) to improve differentiation from rivals that do not provide similar store assistance. However, not all customers benefit from the focal retailer's improved store assistance. Huang *et al.* (2016) find that a small percentage of website purchases shifted to a newly added mobile app because of its greater convenience. Other research further indicates that synergy and cannibalization effects co-exist and are contingent on retailer characteristics (e.g., the presence of stores) (Wang and Goldfarb, 2017). In essence, different findings appear in articles on multichannel retailing with different contexts, though little is known about what drives these divergent findings.

Thus, the aim of this article is to present an overview of and draw conclusions from extant studies related to multichannel retailing. Neslin *et al.* (2006) provide an influential review on multichannel retailing that includes both traditional and online channels. Thereafter, academic interest increased dramatically, with a large number of new articles being published on this topic (see Figure 1.1). For example, retailers have adopted additional new channels and new channel technologies with unique characteristics, which has further increased the complexity of multichannel retailing. These new channels generate different effects on retailer performance from the effects of offline and online channels (Fong *et al.*, 2015). Thus, an updated understanding of how retailers and consumers influence and interact with each other in multichannel



**Figure 1.1:** The number of published articles on multichannel retailing from 2006.

*Notes:* We used 14 keywords to search 649 articles from Web of Science, limited to 26 journals of business, economic, management, and psychology, such as *Marketing Science* and *Journal of Retailing*. Reading the abstract of all articles, we deleted those that had low relativity with multichannel retailing. The final number of articles counted in the figure is 345, including one article published in 2017. The 14 keywords are “multichannel retailing,” “online offline,” “multichannel marketing,” “cross-channel,” “multichannel marketing,” “channel elimination,” “channel migration,” “channel integration,” “multichannel shoppers,” “multichannel customers,” “multichannel customer management,” “mobile marketing,” “mobile app,” and “purchase journey.”

retail contexts is required. More specifically, we focus on the following questions: (1) What factors influence channel choices of retailers and customers? (2) How do retailers employ multichannel marketing strategies, and how do customers use different channels to search and purchase during their purchase journey? and (3) How do multichannel strategies and channel selection behavior affect customer outcomes (e.g., satisfaction, loyalty) and retailer performance (e.g., purchase frequencies, sales, profit)?

After presenting the definitions of key terms used in multichannel retailing, we introduce our framework. Next, we synthesize existing research and specify the three research questions with six subtopics by considering the perspectives of both customers and retailers. At the end of each subtopic, we discuss future research directions derived from research gaps, unresolved issues in practice, and environment changes. We conclude with thoughts about future retailing.

## References

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- Andrews, M., J. Goehring, S. Hui, J. Pancras, and L. Thornswood (2016). “Mobile promotions: A framework and research priorities”. *Journal of Interactive Marketing*. 34: 15–24.
- Andrews, M., X. Luo, Z. Fang, and A. Ghose (2015). “Mobile ad effectiveness: Hyper-contextual targeting with crowdedness”. *Marketing Science*. 35(2): 218–233.
- Ansari, A., C. F. Mela, and S. A. Neslin (2008). “Customer channel migration”. *Journal of Marketing Research*. 45(1): 60–76.
- Avery, J., T. J. Steenburgh, J. Deighton, and M. Caravella (2012). “Adding bricks to clicks: Predicting the patterns of cross-channel elasticities over time”. *Journal of Marketing*. 76(3): 96–111.
- Baker Retailing Center (2012). *Understanding the multi-channel shopper*. Retrieved October 13, 2017 from <http://www.verdegroupp.com/wp-content/uploads/2012/10/The-Multi-Channel-Shopper-Market-Study.pdf>.
- Baker, J. (1986). “The role of the environment in marketing services: The consumer perspective. The Services Challenge: Integrating for Competitive”. *Advantage*. 1(1): 79–84.
- Baxendale, S., E. K. Macdonald, and H. N. Wilson (2015). “The impact of different touchpoints on brand consideration”. *Journal of Retailing*. 91(2): 235–253.

- Beke, F. T., F. Eggers, and P. C. Verhoef (2018). *Consumer informational privacy: Current knowledge and research directions*. forthcoming.
- Bellman, S., R. F. Potter, S. Treleaven-Hassard, J. A. Robinson, and D. Varan (2011). "The effectiveness of branded mobile phone apps". *Journal of Interactive Marketing*. 25(4): 191–200.
- Bendoly, E., J. D. Blocher, K. M. Bretthauer, S. Krishnan, and M. A. Venkataramanan (2005). "Online/in-store integration and customer retention". *Journal of Service Research*. 7(4): 313–327.
- Berry, L. L., R. N. Bolton, C. H. Bridges, J. Meyer, A. Parasuraman, and K. Seiders (2010). "Opportunities for innovation in the delivery of interactive retail services". *Journal of Interactive Marketing*. 24(2): 155–167.
- Bhargave, R., A. Mantonakis, and K. White (2016). "The cue-of-the-cloud effect: When reminders of online information availability increase purchase intentions and choice". *Journal of Marketing Research*. 53(5): 699–711.
- Bilgicer, T., K. Jedidi, D. R. Lehmann, and S. A. Neslin (2015). "Social contagion and customer adoption of new sales channels". *Journal of Retailing*. 91(2): 254–271.
- Bouncepad (2017). *Consumers want more tech in-store*. Retrieved June 10, 2017 from <https://www.retailcustomerexperience.com/whitepapers/consumers-want-more-tech-in-store-infographic/>.
- Brasel, S. A. and J. Gips (2014). "Tablets, touchscreens, and touchpads: How varying touch interfaces trigger psychological ownership and endowment". *Journal of Consumer Psychology*. 24(2): 226–233.
- Brasel, S. A. and J. Gips (2015). "Interface psychology: Touchscreens change attribute importance, decision criteria, and behavior in online choice". *Cyberpsychology, Behavior, and Social Networking*. 18(9): 534–538.
- Breugelmans, E. and K. Campo (2016). "Cross-channel effects of price promotions: An empirical analysis of the multi-channel grocery retail sector". *Journal of Retailing*. 92(3): 333–351.
- Bruner, G. C. and A. Kumar (2005). "Explaining consumer acceptance of handheld Internet devices". *Journal of Business Research*. 58(5): 553–558.

- Butler, M. (2013). “Showrooming: Are retailers ready to embrace it”. *The Guardian*.
- Cambra, J., W. A. Kamakura, I. Melero, and F. J. Sese (2016). “Are multichannel customers really more valuable? An analysis of banking services”. *International Journal of Research in Marketing*. 33(1): 208–212.
- Cao, L. and L. Li (2015). “The impact of cross-channel integration on retailers’ sales growth”. *Journal of Retailing*. 91(2): 198–216.
- Carney, D. (2017). *Shoppers moving to mobile: Where retailers fall short with m-commerce experiences*. Retrived July 24, 2017 from [https://www.retailcustomerexperience.com/blogs/shoppers-moving-to-mobile-where-retailers-fall-short-with-m-commerce-experiences/?utm\\_source=Email\\_marketing&utm\\_campaign=emnaRCE07212017&cmp=1&utm\\_medium=html\\_email](https://www.retailcustomerexperience.com/blogs/shoppers-moving-to-mobile-where-retailers-fall-short-with-m-commerce-experiences/?utm_source=Email_marketing&utm_campaign=emnaRCE07212017&cmp=1&utm_medium=html_email).
- Chahal, M. (2016). *Social commerce: How willing are consumers to buy through social media?* Retrieved January 3, 2017 from <https://www.marketingweek.com/2016/03/23/social-commerce-how-willing-are-consumers-to-buy-through-social-media/>.
- Chang, C., J. Z. Zhang, and S. Neslin (2016). *The dynamic impact of buying ‘fit products’ on customer learning and profitability in multichannel settings*. Retrieved from SSRN 2759679.
- Chen, L. and J. Tan (2004). “Technology adaptation in E-commerce: Key determinants of virtual stores acceptance”. *European Management Journal*. 22(1): 74–86.
- Cheng, J. M., S. Tsao, W. Tsai, and H. H. Tu (2007). “Will eChannel additions increase the financial performance of the firm?—The evidence from Taiwan”. *Industrial Marketing Management*. 36(1): 50–57.
- Chiu, H., Y. Hsieh, J. Roan, K. Tseng, and J. Hsieh (2011). “The challenge for multichannel services: Cross-channel free-riding behavior”. *Electronic Commerce Research and Applications*. 10(2): 268–277.
- Choi, J., S. K. Hui, and D. R. Bell (2010). “Spatiotemporal analysis of imitation behavior across new buyers at an online grocery retailer”. *Journal of Marketing Research*. 47(1): 75–89.

- Columbus, L. (2017). *Internet of things will revolutionize retail*. Retrieved October 6, 2017 from <https://www.forbes.com/sites/louis-columbus/2017/03/19/internet-of-things-will-revolutionize-retail/#2c93f5965e58>.
- Danaher, P. J., M. S. Smith, K. Ranasinghe, and T. S. Danaher (2015). "Where, when, and how long: Factors that influence the redemption of mobile phone coupons". *Journal of Marketing Research*. 52(5): 710–725.
- Daunt, K. L. and L. C. Harris (2017). "Consumer showrooming: Value co-destruction". *Journal of Retailing and Consumer Services*. 38: 166–176.
- De Haan, E., P. K. Kannan, P. C. Verhoef, and T. Wiesel (2015). *The Role of mobile devices in the online customer journey*. Working paper, Marketing Science Institute.
- De Keyser, A., J. Schepers, and U. Konuş (2015). "Multichannel customer segmentation: Does the after-sales channel matter? A replication and extension". *International Journal of Research in Marketing*. 32(4): 453–456.
- Degeratu, A. M., A. Rangaswamy, and J. Wu (2000). "Consumer choice behavior in online and traditional supermarkets: The effects of brand name, price, and other search attributes". *International Journal of Research in Marketing*. 17(1): 55–78.
- Deleersnyder, B., I. Geyskens, K. Gielens, and M. G. Dekimpe (2002). "How cannibalistic is the internet channel? A study of the newspaper industry in the United Kingdom and the Netherlands". *International Journal of Research in Marketing*. 19(4): 337–348.
- Dholakia, R. R., M. Zhao, and N. Dholakia (2005). "Multichannel retailing: A case study of early experiences". *Journal of Interactive Marketing*. 19(2): 63–74.
- Dostis, M. (2016). *Victoria's secret will end catalogs, saving nearly \$150M-Will no longer sell swimwear, apparel and accessories*. Retrieved June 20, 2017 from <http://www.nydailynews.com/news/national/victoria-secret-catalogues-saving-150-million-article-1.2648817>.



- Dumrongsiri, A., M. Fan, A. Jain, and K. Moinszadeh (2008). "A supply chain model with direct and retail channels". *European Journal of Operational Research*. 187(3): 691–718.
- Earley, A. (2017). *7 tips to combat the Amazon effect. Hint: It's the hair of the dog that bit you*. Retrieved June 17, 2017 from <https://www.retailcustomerexperience.com/blogs/7-tips-to-combat-the-amazon-effect-hint-its-the-hair-of-the-dog-that-bit-you/>.
- Emrich, O., M. Paul, and T. Rudolph (2015). "Shopping benefits of multichannel assortment integration and the moderating role of retailer type". *Journal of Retailing*. 91(2): 326–342.
- Emrich, O. and P. C. Verhoef (2015). "The impact of a homogenous versus a prototypical web design on online retail patronage for multichannel providers". *International Journal of Research in Marketing*. 32(4): 363–374.
- Episerver (2015). *Multichannel digital marketing report 2015*. Retrieved October 13, 2017 from <http://www.episerver.com/learn/resources/research-reports/multichannel-digital-marketing-report-2015/>.
- Falk, T., J. Schepers, M. Hammerschmidt, and H. H. Bauer (2007). "Identifying cross-channel dissynergies for multichannel service providers". *Journal of Service Research*. 10(2): 143–160.
- Fong, N. M., Z. Fang, and X. Luo (2015). "Geo-conquesting: Competitive locational targeting of mobile promotions". *Journal of Marketing Research*. 52(5): 726–735.
- Frambach, R. T., H. C. Roest, and T. V. Krishnan (2007). "The impact of consumer internet experience on channel preference and usage intentions across the different stages of the buying process". *Journal of Interactive Marketing*. 21(2): 26–41.
- Friedman, L. G. and T. R. Furey (2003). *The channel advantage*. Burlington, MA: Butterworth-Heinemann.
- Fritz, W., S. Sohn, and B. Seegebarth (2017). "Broadening the perspective on mobile marketing: An introduction". *Psychology & Marketing*. 34(2): 113–118.

- Gallino, S., A. Moreno, and I. Stamatopoulos (2016). *Channel integration, sales dispersion, and inventory management*. *Management Science*. Retrieved October 13, 2017 from <http://doi.org/10.1287/mnsc.2016.2479>.
- Gao, F. and X. Su (2017). “Omnichannel retail operations with buy-online-and-pick-up-in-store”. *Management Science*. 63(8): 2478–2492.
- Gensler, S., P. S. Leeflang, and B. Skiera (2012a). “Impact of online channel use on customer revenues and costs to serve: Considering product portfolios and self-selection”. *International Journal of Research in Marketing*. 29(2): 192–201.
- Gensler, S., S. A. Neslin, and P. C. Verhoef (2017). “The showrooming phenomenon: It’s more than just about price”. *Journal of Interactive Marketing*. 38: 29–43.
- Gensler, S., P. C. Verhoef, and M. Böhm (2012b). “Understanding consumers’ multichannel choices across the different stages of the buying process”. *Marketing Letters*. 23(4): 987–1003.
- Geyskens, I., K. Gielens, and M. G. Dekimpe (2002). “The market valuation of internet channel additions”. *Journal of Marketing*. 66(2): 102–119.
- Ghaleno, M. R., M. R. Zavareh, and E. Bahrami (2016). “Effect of mobile marketing on customer-oriented brand equity in insurance industry”. *International Journal of Management, Accounting and Economics*. 3(3): 185–201.
- Ghose, A. and S. H. Park (2013). *The negative impact of mobile devices on niche product consumption*. in paper read at Thirty Fourth Internet Different Conference on Information Systems.
- Grewal, D., K. L. Ailawadi, D. Gauri, K. Hall, P. Kopalle, and J. R. Robertson (2011). “Innovations in retail pricing and promotions”. *Journal of Retailing*. 87: S43–S52.
- Grewal, D. and M. Levy (2007). “Retailing research: Past, present, and future”. *Journal of Retailing*. 83(4): 447–464.
- Gu, R., L. Oh, and K. Wang (2013). “Differential impact of web and mobile interactivity on e-retailers’ performance”. *Journal of Organizational Computing and Electronic Commerce*. 23(4): 325–349.

- Ha, S. and L. Stoel (2009). “Consumer e-shopping acceptance: Antecedents in a technology acceptance model”. *Journal of Business Research*. 62(5): 565–571.
- Hanssens, D. M. and K. H. Pauwels (2016). “Demonstrating the value of marketing”. *Journal of Marketing*. 80(6): 173–190.
- Hartmans, A. (2017). *Technical issues are forcing Amazon to delay the public launch of its cashier-less grocery store*. Retrieved June 2, 2017 from <http://www.businessinsider.com/amazon-go-grocery-store-opening-delayed-due-to-technical-issues-2017-3?international=true&r=US&IR=T>.
- Herhausen, D., J. Binder, M. Schoegel, and A. Herrmann (2015). “Integrating bricks with clicks: Retailer-level and channel-level outcomes of online–offline channel integration”. *Journal of Retailing*. 91(2): 309–325.
- Hitt, L. M. and F. X. Frei (2002). “Do better customers utilize electronic distribution channels? The case of PC banking”. *Management Science*. 48(6): 732–748.
- Hoch, D. (2014). *App retention improves-apps used only once declines to 20%*. Retrieved January 28, 2017 from <http://info.localytics.com/blog/app-retention-improves>.
- Homburg, C., J. Vollmayr, and A. Hahn (2014). “Firm value creation through major channel expansions: Evidence from an event study in the United States, Germany, and China”. *Journal of Marketing*. 78(3): 38–61.
- Howland, D. (2017). *Study: Amazon dominated online, but physical stores still retain the advantage*. Retrieved June 25, 2017 from <http://www.retaildive.com/news/study-amazon-dominates-online-but-physical-stores-retain-the-advantage/445507/>.
- Huang, L., X. Lu, and S. Ba (2016). “An empirical study of the cross-channel effects between web and mobile shopping channels”. *Information & Management*. 53(2): 265–278.
- Hubert, M., M. Blut, C. Brock, C. Backhaus, and T. Eberhardt (2017). “Acceptance of Smartphone – based mobile shopping: Mobile benefits, customer characteristics, perceived risks, and the impact of application context”. *Psychology & Marketing*. 34(2): 175–194.

- Ifhar, I. (2017). *The demise of brick-and-mortar retail has been greatly exaggerated*. Retrieved July 15, 2017 from [https://www.retailcustomerexperience.com/blogs/the-demise-of-bricks-and-mortar-retail-has-been-greatly-exaggerated-2/?utm\\_source=Email\\_marketing&utm\\_campaign=emnaRCE07122017121505&cmp=1&utm\\_medium=HTML>Email](https://www.retailcustomerexperience.com/blogs/the-demise-of-bricks-and-mortar-retail-has-been-greatly-exaggerated-2/?utm_source=Email_marketing&utm_campaign=emnaRCE07122017121505&cmp=1&utm_medium=HTML>Email).
- Inman, J. J., V. Shankar, and R. Ferraro (2004). "The roles of channel-category associations and geodemographics in channel patronage". *Journal of Marketing*. 68(2): 51–71.
- Janakiraman, R., J. H. Lim, and R. Rishika (2018). "The effect of a data breach announcement on customer behavior: Evidence from a multichannel retailer". *Journal of Marketing*. 82(2): 85–105.
- Jindal, R. P., W. J. Reinartz, M. Krafft, and W. D. Hoyer (2007). "Determinants of the variety of routes to market". *International Journal of Research in Marketing*. 24(1): 17–29.
- Joo, M., K. C. Wilbur, B. Cowgill, and Y. Zhu (2014). "Television advertising and online search". *Management Science*. 60(1): 56–73.
- Kim, E., J. S. Lin, and Y. Sung (2013). "To app or not to app: Engaging consumers via braned mobile apps". *Journal of Interactive Advertising*. 13(1): 53–65.
- Kim, S. J., R. J. Wang, and E. C. Malthouse (2015). "The effects of adopting and using a brand's mobile application on customers' subsequent purchase behavior". *Journal of Interactive Marketing*. 31: 28–41.
- Ko, E., E. Y. Kim, and E. K. Lee (2009). "Modeling consumer adoption of mobile shopping for fashion products in Korea". *Psychology & Marketing*. 26(7): 669–687.
- Kollmann, T., A. Kuckertz, and I. Kayser (2012). "Cannibalization or synergy? Consumers' channel selection in online–offline multichannel systems". *Journal of Retailing and Consumer Services*. 19(2): 186–194.
- Konuş, U., S. A. Neslin, and P. C. Verhoef (2014). "The effect of search channel elimination on purchase incidence, order size and channel choice". *International Journal of Research in Marketing*. 31(1): 49–64.

- Konuş, U., P. C. Verhoef, and S. A. Neslin (2008). "Multichannel shopper segments and their covariates". *Journal of Retailing*. 84(4): 398–413.
- Kumar, V. (2010). "A customer lifetime value-based approach to marketing in the multichannel, multimedia retailing environment". *Journal of Interactive Marketing*. 24(20): 71–85.
- Kumar, V. and W. J. Reinartz (2016). "Creating enduring customer value". *Journal of Marketing*. 80(6): 36–68.
- Kumar, V. and R. Venkatesan (2005). "Who are the multichannel shoppers and how do they perform?: Correlates of multichannel shopping behavior". *Journal of Interactive Marketing*. 19(2): 44–62.
- Kushwaha, T. L. (2007). "Essays on Multichannel Marketing. Doctoral dissertation, Texas A&M University".
- Kushwaha, T. L. and V. Shankar (2013). "Are multichannel customers really more valuable? The moderating role of product category characteristics". *Journal of Marketing*. 77(4): 67–85.
- Lemon, K. N. and P. C. Verhoef (2016). "Understanding customer experience throughout the customer journey". *Journal of Marketing*. 80(6): 69–96.
- Levy, M. and B. A. Weitz (2009). *Retailing management*. New York: The McGraw-Hills/Irwin companies.
- Lewis, J., P. Whysall, and C. Foster (2014). "Drivers and technology-related obstacles in moving to multichannel retailing". *International Journal of Electronic Commerce*. 18(4): 43–68.
- Li, B. and F. Tang (2011). "Online pricing dynamics in internet retailing: The case of the DVD market". *Electronic Commerce Research and Applications*. 10(2): 227–236.
- Li, C., X. Luo, C. Zhang, and X. Wang (2017). "Sunny, rainy, and cloudy with a chance of mobile promotion effectiveness". *Marketing Science*. 36(5): 762–779.
- Li, J., U. Konuş, K. Pauwels, and F. Langerak (2015). "The hare and the tortoise: Do earlier adopters of online channels purchase more?" *Journal of Retailing*. 91(2): 289–308.
- Liangyu (2017). *China focus: Alibaba's self-service TaoCafe takes e-shopping offline*. Retrieved July 16, 2017 from [http://news.xinhuanet.com/english/2017-07/11/c\\_136434967.htm](http://news.xinhuanet.com/english/2017-07/11/c_136434967.htm).

- Lin, H. (2012). "The effect of multi-channel service quality on mobile customer loyalty in an online-and-mobile retail context". *The Service Industries Journal*. 32(11): 1865–1882.
- Lin, J. C. and H. Lu (2000). "Towards an understanding of the behavioural intention to use a web site". *International Journal of Information Management*. 20(3): 197–208.
- Lobschat, L., E. C. Osinga, and W. J. Reinartz (2017). "What happens online stays offline? Segment-specific online and offline effects of banner advertisements". *Journal of Marketing Research*. 54(6): 901–913.
- Lund, D. J. and D. Marinova (2014). "Managing revenue across retail channels: The interplay of service performance and direct marketing". *Journal of Marketing*. 78(5): 99–118.
- Lusch, R. F. and S. L. Vargo (2011). "Service-dominant logic: A necessary step". *European Journal of Marketing*. 45(7/8): 1289–1309.
- Lynch Jr, J. G. and D. Ariely (2000). "Wine online: Search costs affect competition on price, quality, and distribution". *Marketing Science*. 19(1): 83–103.
- Ma, J. (2016). "Does greater online assortment pay? An empirical study using matched online and catalog shoppers". *Journal of Retailing*. 92(3): 373–382.
- McGoldrick, P. J. and N. Collins (2007). "Multichannel retailing: Profiling the multichannel shopper". *International Review of Retail, Distribution and Consumer Research*. 17(2): 139–158.
- Melero, I., F. J. Sese, and P. C. Verhoef (2016). "Recasting the customer experience in today's omni-channel environment 1/Redefiniendo la experiencia del cliente en el entorno omnicanal". *Universia Business Review*. 50: 18.
- Melis, K., K. Campo, E. Breugelmans, and L. Lamey (2015). "The impact of the multi-channel retail mix on online store choice: Does online experience matter?" *Journal of Retailing*. 91(2): 272–288.
- Melis, K., K. Campo, L. Lamey, and E. Breugelmans (2016). "A bigger slice of the multichannel grocery pie: When does consumers' online channel use expand retailers' share of wallet?" *Journal of Retailing*. 92(3): 268–286.

- Mindtree (2015). *Winning today's global phy-gital shoppers*. Retrieved October 13, 2017 from <https://www.mindtree.com/phygitalshopper/global/pdf/mindtree-global-detailed-report.pdf>.
- Montaguti, E., S. A. Neslin, and S. Valentini (2015). "Can marketing campaigns induce multichannel buying and more profitable customers? A field experiment". *Marketing Science*. 35(2): 201–217.
- Montoya-Weiss, M. M., G. B. Voss, and D. Grewal (2003). "Determinants of online channel use and overall satisfaction with a relational, multichannel service provider". *Journal of the Academy of Marketing Science*. 31(4): 448–458.
- Morrison, K. (2015). *91% of retail brands use two or more social media channels*. Retrieved December 20, 2016 from <http://www.adweek.com/digital/yesmail-retail-brands-social-media-channels/>.
- Naik, P. A. and K. Peters (2009). "A hierarchical marketing communications model of online and offline media synergies". *Journal of Interactive Marketing*. 23(4): 288–299.
- Narang, U. and V. Shankar (2016). *The effects of mobile apps on shopper purchases and product returns*. Retrieved from SSRN: <https://ssrn.com/abstract=2878903> or <http://dx.doi.org/10.2139/ssrn.2878903>.
- Narayanan, S. and P. Manchanda (2009). "Heterogeneous learning and the targeting of marketing communication for new products". *Marketing Science*. 28(3): 424–441.
- Neslin, S. A., D. Grewal, R. Leghorn, V. Shankar, M. L. Teerling, J. S. Thomas, and P. C. Verhoef (2006). "Challenges and opportunities in multichannel customer management". *Journal of Service Research*. 9(2): 95–112.
- Neslin, S. A. and V. Shankar (2009). "Key issues in multichannel customer management: Current knowledge and future directions". *Journal of Interactive Marketing*. 23(1): 70–81.
- Nicholson, M., I. Clarke, and M. Blakemore (2002). "'One brand, three ways to shop': Situational variables and multichannel consumer behaviour". *The International Review of Retail, Distribution and Consumer Research*. 12(2): 131–148.

- Noble, S. M., D. A. Griffith, and M. G. Weinberger (2005). "Consumer derived utilitarian value and channel utilization in a multi-channel retail context". *Journal of Business Research*. 58(12): 1643–1651.
- O’Cass, A. and T. Fenech (2003). "Web retailing adoption: Exploring the nature of internet users web retailing behaviour". *Journal of Retailing and Consumer Services*. 10(2): 81–94.
- Ofek, E., Z. Katona, and M. Sarvary (2011). "‘Bricks and clicks’: The impact of product returns on the strategies of multichannel retailers". *Marketing Science*. 30(1): 42–60.
- Olbrich, R. and C. D. Schultz (2014). "Multichannel advertising: Does print advertising affect search engine advertising?" *European Journal of Marketing*. 48(9/10): 1731–1756.
- Pauwels, K., P. S. Leeflang, M. L. Teerling, and K. E. Huizingh (2011). "Does online information drive offline revenues?: Only for specific products and consumer segments!" *Journal of Retailing*. 87(1): 1–17.
- Pauwels, K. and S. A. Neslin (2015). "Building with bricks and mortar: The revenue impact of opening physical stores in a multichannel environment". *Journal of Retailing*. 91(2): 182–197.
- Phillips, C. (2013). 'Webrooming' – new trend holds promise for in-store sales. Retrieved February 27, 2017 from <http://www.powerretail.com.au/multichannel/accenture-seamless-retail-study/>.
- Polo, Y. and F. J. Sese (2016). "Does the nature of the interaction matter? Understanding customer channel choice for purchases and communications". *Journal of Service Research*. 19(2): 276–290.
- Prins, R., P. C. Verhoef, and P. H. Franses (2009). "The impact of adoption timing on new service usage and early disadoption". *International Journal of Research in Marketing*. 26(4): 304–313.
- Puccinelli, N. M., R. C. Goodstein, D. Grewal, and R. Price (2009). "Customer experience management in retailing: Understanding the buying process". *Journal of Retailing*. 85(1): 15–30.
- Rangaswamy, A. and G. H. Van Bruggen (2005). "Opportunities and challenges in multichannel marketing: An introduction to the special issue". *Journal of Interactive Marketing*. 19(2): 5–11.
- Ratchford, B. T. (2009). "Online pricing: Review and directions for research". *Journal of Interactive Marketing*. 23(1): 82–90.



- Retail Customer Experience (2016). *Amazon Go promises no check-out, no Lines, no waiting*. Retrieved March 5, 2017 from <https://www.retailcustomerexperience.com/news/amazon-go-promises-no-checkout-no-lines-no-waiting/>.
- Retail Customer Experience (2017). *Walmart rolls out pickup kiosks in Arizona, Oklahoma, Alabama, Georgia and Virginia*. Retrieved July 10, 2017 from <https://www.retailcustomerexperience.com/news/walmart-rolls-out-pickup-kiosks-in-arizona-oklahoma-alabama-georgia-and-virginia/>.
- Rust, R. T. and M. Huang (2012). "Optimizing service productivity". *Journal of Marketing*. 76(2): 47–66.
- Saboo, A. R., V. Kumar, and I. Park (2016). "Using big data to model time-varying effects for marketing resource (re) allocation". *MIS Quarterly*. 40(4): 911–939.
- Schiff, J. L. (2015). *8 ways to create a successful multichannel customer experience*. Retrieved November 28, 2016 from <http://www.cio.com/article/2887285/e-commerce/8-ways-to-create-a-successful-multichannel-customer-experience.html>.
- Schoenbachler, D. D. and G. L. Gordon (2002). "Multi-channel shopping: Understanding what drives channel choice". *Journal of Consumer Marketing*. 19(1): 42–53.
- Schröder, H. and S. Zaharia (2008). "Linking multi-channel customer behavior with shopping motives: An empirical investigation of a German retailer". *Journal of Retailing and Consumer Services*. 15(6): 452–468.
- Shankar, V. and S. Balasubramanian (2009). "Mobile marketing: A synthesis and prognosis". *Journal of Interactive Marketing*. 23(2): 118–129.
- Shankar, V., A. K. Smith, and A. Rangaswamy (2003). "Customer satisfaction and loyalty in online and offline environments". *International Journal of Research in Marketing*. 20(2): 153–175.
- Shen, G. C., J. Chiou, C. Hsiao, C. Wang, and H. Li (2016). "Effective marketing communication via social networking site: The moderating role of the social tie". *Journal of Business Research*. 69(6): 2265–2270.

- Shim, S., M. A. Eastlick, S. L. Lotz, and P. Warrington (2001). "An online prepurchase intentions model: The role of intention to search". *Journal of Retailing*. 77(3): 397–416.
- SmartBear (2014). *2014 state of mobile*. Retrieved December 22, 2016 from <https://smartbear.com/news/news-releases/the-state-of-mobile-testing-2014/>.
- Sopadjeva, E., U. M. Dholakia, and B. Benjamin (2017). *A study of 46,000 shoppers shows that omnichannel retailing works*. Retrieved January 20, 2017 from <https://hbr.org/2017/01/a-study-of-46000-shoppers-shows-that-omnichannel-retailing-works>.
- Sousa, R. and C. A. Voss (2006). "Service quality in multichannel services employing virtual channels". *Journal of Service Research*. 8(4): 356–371.
- Sultan, F., A. J. Rohm, and T. T. Gao (2009). "Factors influencing consumer acceptance of mobile marketing: A two-country study of youth markets". *Journal of Interactive Marketing*. 23(4): 308–320.
- Teerling, M. L. and E. K. Huizingh (2005). *The complementarity between online and offline consumer attitudes and behavior*. Working paper: University of Groningen, the Netherlands.
- Thomas, J. S. and U. Y. Sullivan (2005). "Managing marketing communications with multichannel customers". *Journal of Marketing*. 69(4): 239–251.
- Valentini, S., E. Montaguti, and S. A. Neslin (2011). "Decision process evolution in customer channel choice". *Journal of Marketing*. 75(6): 72–86.
- Van Baal, S. and C. Dach (2005). "Free riding and customer retention across retailers' channels". *Journal of Interactive Marketing*. 19(2): 75–85.
- Van Birgelen, M., A. De Jong, and K. De Ruyter (2006). "Multi-channel service retailing: The effects of channel performance satisfaction on behavioral intentions". *Journal of Retailing*. 82(4): 367–377.
- Van Doorn, J. and J. C. Hoekstra (2013). "Customization of online advertising: The role of intrusiveness". *Marketing Letters*. 24(4): 339–351.

- Van Nierop, J. E. M., P. S. Leeflang, M. L. Teerling, and K. E. Huizingh (2011). "The impact of the introduction and use of an informational website on offline customer buying behavior". *International Journal of Research in Marketing*. 28(2): 155–165.
- Venkatesan, R., V. Kumar, and N. Ravishanker (2007). "Multichannel shopping: Causes and consequences". *Journal of Marketing*. 71(2): 114–132.
- Verhoef, P. C. (2012). "Multichannel customer management strategy". In: *Handbook of marketing strategy*. Ed. by V. Shankar and G. Garpenster. Cheltenham: Edward Elgar Publishing Limited. 135–150.
- Verhoef, P. C. and B. Donkers (2005). "The effect of acquisition channels on customer loyalty and cross-Buying". *Journal of Interactive Marketing*. 19(2): 31–43.
- Verhoef, P. C., P. K. Kannan, and J. J. Inman (2015). "From multi-channel retailing to omni-channel retailing: Introduction to the special issue on multi-channel retailing". *Journal of Retailing*. 91(2): 174–181.
- Verhoef, P. C. and F. Langerak (2001). "Possible determinants of consumers' adoption of electronic grocery shopping in the Netherlands". *Journal of Retailing and Consumer Services*. 8(5): 275–285.
- Verhoef, P. C., K. N. Lemon, A. Parasuraman, A. Roggeveen, M. Tsiros, and L. A. Schlesinger (2009). "Customer experience creation: Determinants, dynamics and management strategies". *Journal of Retailing*. 85(1): 31–41.
- Verhoef, P. C., S. A. Neslin, and B. Vroomen (2007). "Multichannel customer management: Understanding the research-shopper phenomenon". *International Journal of Research in Marketing*. 24(2): 129–148.
- Verhoef, P. C., A. T. Stephen, P. K. Kannan, X. Luo, V. Abhishek, and M. Andrews (2017). "Consumer connectivity in a complex, technology-enabled, and mobile-oriented world with smart products". *Journal of Interactive Marketing*. 40: 1–8.

- Vijayasathy, L. R. (2004). "Predicting consumer intentions to use on-line shopping: The case for an augmented technology acceptance model". *Information & Management*. 41(6): 747–762.
- Voorveld, H. A., E. G. Smit, P. C. Neijens, and A. F. Bronner (2016). "Consumers' cross-channel use in online and offline purchases". *Journal of Advertising Research*. 56(4): 385–400.
- Wallace, D. W., J. L. Giese, and J. L. Johnson (2004). "Customer retailer loyalty in the context of multiple channel strategies". *Journal of Retailing*. 80(4): 249–263.
- Wang, K. and A. Goldfarb (2017). "Can offline stores drive online sales?" *Journal of Marketing Research*. 54(5): 706–719.
- Wang, R. J., E. C. Malthouse, and L. Krishnamurthi (2015). "On the go: How mobile shopping affects customer purchase behavior". *Journal of Retailing*. 91(2): 217–234.
- Wang, X., C. Yu, and Y. Wei (2012). "Social media peer communication and impacts on purchase intentions: A consumer socialization framework". *Journal of Interactive Marketing*. 26(4): 198–208.
- Wilson, H., R. Street, and L. Bruce (2008). *The Multichannel Challenge*. Routledge.
- Wolk, A. and C. Ebling (2010). "Multi-channel price differentiation: An empirical investigation of existence and causes". *International Journal of Research in Marketing*. 27(2): 142–150.
- Wolny, J. and N. Charoensuksai (2016). "Multichannel customer journeys: Mapping the effects of zmot, showrooming and webrooming". In: *Marketing Challenges in a Turbulent Business Environment*. Ed. by M. Groza and C. Ragland. 205–206.
- Xu, J., C. Forman, J. B. Kim, and K. Van Ittersum (2014). "News media channels: Complements or substitutes? Evidence from mobile phone usage". *Journal of Marketing*. 78(4): 97–112.
- Xue, M., L. M. Hitt, and P. Chen (2011). "Determinants and outcomes of internet banking adoption". *Management Science*. 57(2): 291–307.
- Zhang, J., P. W. Farris, J. W. Irvin, T. Kushwaha, T. J. Steenburgh, and B. A. Weitz (2010). "Crafting integrated multichannel retailing strategies". *Journal of Interactive Marketing*. 24(2): 168–180.

- Zhang, J. and M. Wedel (2009). “The effectiveness of customized promotions in online and offline stores”. *Journal of Marketing Research*. 46(2): 190–206.
- Zhang, X. (2009). “Retailers’ multichannel and price advertising strategies”. *Marketing Science*. 28(6): 1080–1094.