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# A Systematic Literature Review of Profit Models for Online Marketing Channels

**Silvia Angeloni**

Associate Professor of Business Economics

University of Milano, Italy

silvia.angeloni@unimi.it

**Abstract.** During the last years, studies on analytical models in the field of online marketing channels have gained the attention of researchers along with the increase in the variety of alternatives that firms can access to market globally and improve their profits. A systematic review methodology was employed to screen the studies proposing profit models on online marketing channels and to identify research gaps in this area. The findings show that the comparative analysis of profitability of different online marketing channels was under-explored. Since most studies consider specific advertising forms in isolation, they offer little guidance for driving budget allocation decisions under budget constraints. Therefore, this study suggests the need of new analytical models to meet a gap in the literature and to adequately account for a variety of digital channels that firms usually rely upon to increase their profits.

**Keywords.** E-commerce, Online marketing channels, Profit models, Systematic review

## 1 Introduction

The pervasiveness of the internet and the proliferation of online users have created new challenges for the success of businesses. With people increasingly using the internet to access product information and make purchases, more and more firms employ online channels to reach new markets and new customers. Online marketing channels include “any e-marketing campaigns or programs, from search engine optimization (SEO), pay-per-click, and affiliate, and email, banner to latest web related channels for webinar, blog, micro-blogging, RSS, podcast, and Internet TV” (Malhotra, 2014, p. 2). Hence, companies have a wide array of options to pursue their promotional strategies in a digital context, even though their relative effectiveness remains uncertain.

In today’s economy, marketing is mostly carried out digitally by using websites, social media platforms, blogs, and other online channels, although synergies between traditional and online media should not be undervalued. Indeed, the variety of channel formats is highly suitable for attracting today’s customers, who seek information in traditional, online, and mobile channels simultaneously, although the risks of cannibalization should not be overlooked (Zhang *et al.*, 2021).

The design of profitable and effective campaigns is one of the key research issues in digital marketing. Interestingly, with the dramatic increase in internet users and web advertising options, the academia has shown a growing interest in analytical models able to better understand how certain variables can impact sellers' profits. A systematic review of studies on analytical models for online marketing channels has been carried out to understand their scope, challenges, and limitations. This analysis is relevant to understand to what extent studies on online marketing channels implemented models to support firms and marketers in their decision-making. Specifically, the objectives of this study are the following: first, to review and critically analyse the extant research on analytical model for comparing the profitability of competing online marketing channels; second, to identify possible research gaps that provide fruitful avenues for future research.

## 2 Methodology

A systematic review methodology was employed, because it is an appropriate method to identify, select, and critically analyse the extant literature in a rigorous, transparent, and replicable manner, leading to robust insights in the reviewed research area (Vrontis and Christofi, 2019).

The research question inspiring the systematic review was formulated after having confronted the first proposal and ideas with the academic and industry experts who attended several conferences and workshops on marketing issues. In the light of this process, the research question was formulated as follow: how, or in what way, has research on online marketing channels evolved as an area of study to improve the firm's profit? This research, based on the specific questions, defined the criteria for including and excluding studies in the review, and the search strategy for identifying relevant studies. Studies were included in the review if: 1) they focused on online marketing channels; 2) they accounted their effect on firm profit. Moreover, the analysis selected the studies which examined the problem from the sellers' perspective, excluding those which focused their attention exclusively on the performance optimisation for search engine providers or platform owners. Furthermore, the analysis considered only academic articles, while it excluded other publications such as book chapters and conference papers, as well as academic articles not published in English. Figure 1 illustrates the applied review process.

The systematic search was conducted using the databases of Business Source Complete, ScienceDirect, and Emerald because of their comprehensive journal coverage of the business field (Vrontis and Christofi, 2019). These databases were searched for articles containing variations of the following terms: "channel", "marketing", "online", "profit". More precisely, the search formula used was the following: marketing AND (online OR digital) AND (channel\* OR platform\* OR media OR medium OR marketplace\*) AND profit\*. The analysis did not limit the search by the publication date, instead leaving it open until December 2021.

The initial literature search returned a list of 2477 contributions with 1630 publications not eligible for the review, because not published in academic journals or

as duplicates of academic articles. Therefore, the first phase of the search process allowed to retrieve a sample of 847 articles that were further analysed on the basis of the boundaries of the review; the titles and abstracts were screened. This sample was further restricted to ensure a consistency with the review question. Accordingly, the analysis excluded the academic articles that did not develop an analytical model to measure the profit performance in the seller perspective. This phase has led to a set of 148 academic articles, which were reviewed by reading the full text. At this stage, the studies that implemented profit models for national or regional contexts as well as the studies not clearly related to the review topic were excluded. Following this process, 35 articles were selected. Additional studies (5) were sought through citation chasing, by obtaining a final set of 40 academic articles.

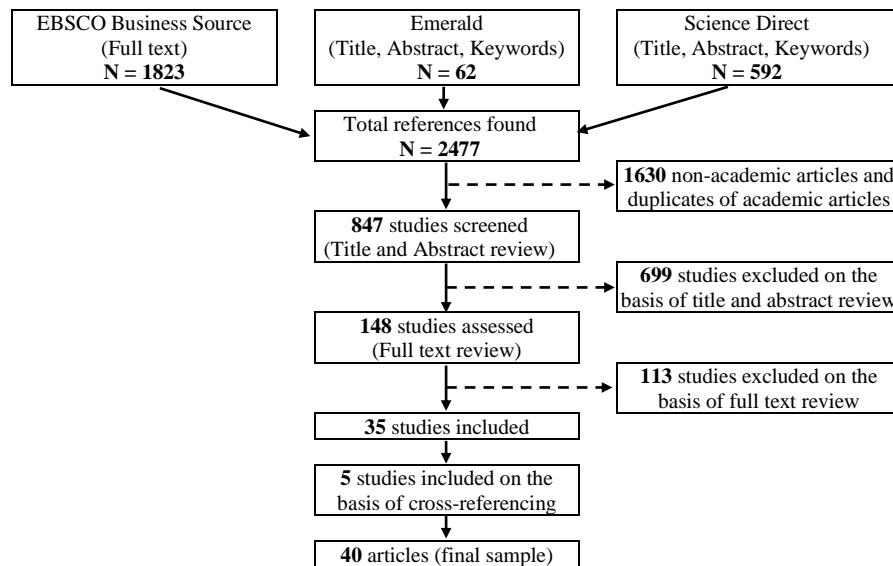


Fig. 1. Literature search strategy

### 3 Results

For each article included in the review analysis, Table 1 reports in chronological order the author(s), the key emerging themes, and the type of channels considered in the article: both online and offline channels, or only online channels. The results show that the academic interest in analytical models has increased exponentially over the past decade along with the proliferation of e-commerce and the internet shoppers. More interestingly, 60% of the studies are disseminated in publication outlets over the past 5 years (from 2016 to 2021), indicating the topi-

cality of reviewed research area and its promising development. Probably, the increasing complexity and variety of digital advertising explain the increased research interest in developing profit models for supporting managers in making decisions. Most journals publishing the reviewed articles are strictly related to the marketing discipline (55%), with *Marketing Science* and *Journal of Marketing Research* covering 35% of articles included in this review, as shown by Figure 2.

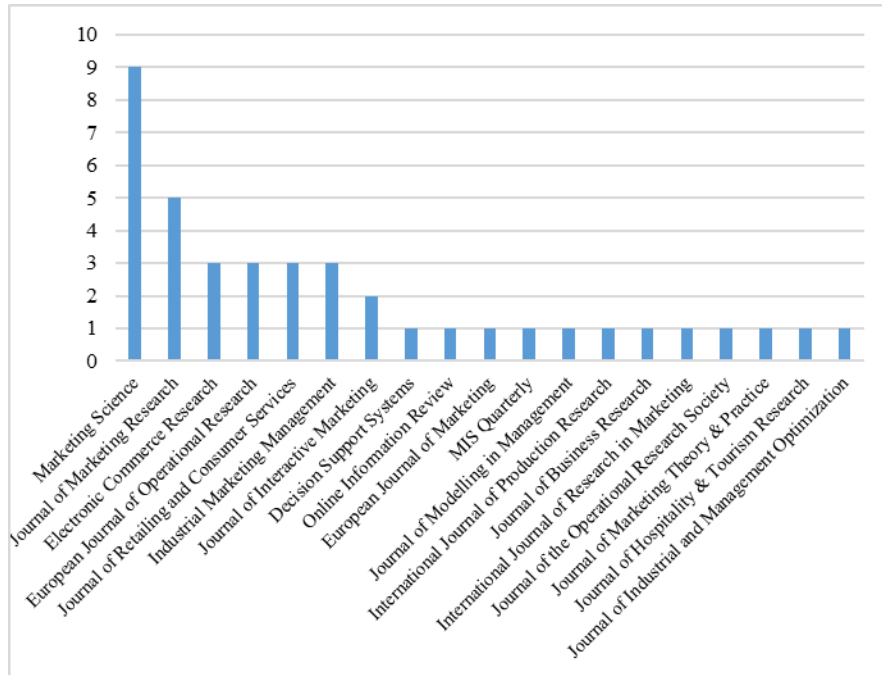


Fig. 2. Journals included in the sample

As regards the geographic analysis of authorship origin, the research results identified 98 authors, counting only once authors who wrote two contributions or more. Most authors are from the United States (44.9%) and from China (25.5%), followed by scholars from Germany (5.1%), the Netherlands (4.1%), Canada (3.1%), Korea (3.1%), Taiwan (3.1%), Australia (3.1%), Italy (2%), Iran (2%), Singapore (1%), Switzerland (1%), Turkey (1%), the United Kingdom (1%). Surprisingly, the percentage of European scholars involved is quite modest (13.3%). Most papers turn out to be published by an author team based in one country (57.5%) or in more countries (30%), while the percentage of papers published by a single author is low (12.5%). The systematic overview of extant studies on profit models allows to appreciate the remarkable progress in knowledge on what is important to manage in order to improve firm profits. More in detail, as regards the scope, the set of articles can be categorized into two groups, based on the level of analysis they focus on. The first category embraces the articles (65%) which studied profit impact

by considering both online and offline channels, while the second category concerns the articles (35%) which strictly focused on online channels.

Table 1. List of reviewed articles

Authors (year)	Key emerging themes	Channels
Gopal <i>et al.</i> (2006)	Price discrimination	online
Yan R. (2008)	Profit sharing	online and offline
Kim <i>et al.</i> (2009)	Pricing and market segmentation	online and offline
Neslin and Shankar (2009)	Multichannel customer segmentation scheme	online and offline
Zhang J. and Wedel (2009)	Customised promotions	online and offline
Hua <i>et al.</i> (2010)	Delivery lead time	online and offline
Yan R. (2010)	Brand differentiation	online and offline
Yan R. <i>et al.</i> (2010)	Profit sharing	online and offline
Agarwal <i>et al.</i> (2011)	Ad position, click-through rate and conversion rate	online
Chan <i>et al.</i> (2011)	Customer lifetime value	online and offline
Wiesel <i>et al.</i> (2011)	Marketing communication	online and offline
Yan R. (2011)	Differentiated branding and profit sharing	online and offline
Skiera and Abou Nabout (2013)	Determination of optimized bid	online
Yang <i>et al.</i> (2014)	Competition effect on paid-search advertising	online
Chan and Park (2015)	Impressions, clicks, and terminal clicks	online
Rao (2015)	Consumer preferences	online
Gu and Tayi (2017)	Pseudo-showrooming behaviours	online and offline
Wang and Zhou (2017)	Price protection	online
Zhang W.-G. <i>et al.</i> (2017)	Price discrimination	online and offline
Cao and Ke (2018)	Channel profit per click	online
Danaher and van Heerde (2018)	Advertising effectiveness	online and offline
Jiang Yuanchun <i>et al.</i> (2018)	Online promotion strategy	online and offline
Karray and Sigué (2018)	Pricing strategies and market conditions	online and offline
Kuksov and Liao (2018)	Showrooming behaviours	online and offline
Yan Y. <i>et al.</i> (2018)	Conditions for introducing a novel e-channel	online and offline
Zhang T. and Wang (2018)	Impact of fairness concern	online and offline
Banerjee and Bhardwaj (2019)	Incentive contracts	online and offline
Choi and Sayedi (2019)	Bidding strategies under incomplete information	online
Lawrence <i>et al.</i> (2019)	Online salesperson channel complementarity	online and offline
Mark <i>et al.</i> (2019)	Impact of catalogues on online and offline channels	online and offline
Zhang S. <i>et al.</i> (2019)	Impact of adding an online channel to offline platform	online and offline
Liu <i>et al.</i> (2020)	Showrooming behaviours	online and offline
Zhang L. and Chung (2020)	Price-setting process between merchants and platforms	online
Angeloni and Rossi (2021a)	Budget allocation between different online channels	online
Angeloni and Rossi (2021b)	Budget allocation between different online channels	online
Huang <i>et al.</i> (2021)	Optimal bundling and pricing strategy	online and offline
Jiang Yuqing <i>et al.</i> (2021)	Digital coupon promotion	online
Khorshidvand <i>et al.</i> (2021)	Pricing, greening, and advertising decisions	online and offline
Mu <i>et al.</i> (2021)	Commission-driven and marketing-based rebate modes	online
Tang (2021)	Daily deal campaigns	online and offline

Many studies belonging to the first group highlight that the rapid development of e-commerce has led to the adoption of dual channels, consisting of the traditional retail channel and a direct online channel. Multi-channel strategies are often suggested as the best answer to multi-channel customers. Most studies emphasize the need for allocating one's marketing communication budget across multiple media and, particularly, between both online and offline channels. These studies also remark the risks of conflict and competition between manufacturers and retailers when manufacturers, who initially provided traditional retailers with products to sell in the market, decide to sell directly and digitally to the same market. Hence, a common research question is how channel members can pursue optimal coordination and performances in the supply chain. Various mechanisms for coordinating supply chain channels have been proposed by these studies focused on both offline and online channels, by analysing profit sharing, pricing and market segmentation, customized promotions, delivery lead time, brand differentiation, customer lifetime value, marketing communication, consumer pseudo-showrooming and showrooming behaviours, price discrimination, advertising effectiveness, online promotion strategy, pricing strategies, conditions for introducing a novel e-channel, impact of fairness concern, incentive contracts, mechanisms for online salesperson channel complementarity, impact of physical catalogues, impact of adding an online channel to offline service platform, daily deal campaigns.

Instead, studies that focused only on online channels considered predominantly the model of search engine advertising, such as Google AdWords. These studies, belonging to the second group, developed their profit analysis by considering specific aspects, such as the price discrimination (Gopal *et al.*, 2006), the impact of ad placement on both click-through and conversion rates (Agarwal *et al.*, 2011), the best bidding strategies (Skiera and Abou Nabout, 2013; Choi and Sayedi, 2019), the effects of competition on click volume and on the cost per click of paid-search ads (Yang *et al.*, 2014), the value per terminal click (Chan and Park, 2015), the consumer preferences (Rao, 2015), the influence of price protection (Wang and Zhou, 2017), the manufacturer's and retailers' channel profit per click (Cao and Ke, 2018), the price-setting process between merchants and platforms (Zhang and Chung, 2020), the digital coupon promotion (Jiang Yuqing *et al.*, 2021), the commission-driven and marketing-based rebate modes (Mu *et al.*, 2021). Within the last group, there were only two studies which posited the question of selection of different online channels (Angeloni and Rossi, 2021a, 2021b), while all the remaining contributions (i.e., 12) tackled the issue of profit enhancement by considering only one type of online marketing channels, mostly the option of search engine marketing. Substantially, most studies on online market channels consider single facets in detail but neglect the big picture.

#### **4 Conclusions, limitations, and future research**

The systematic literature review allowed to highlight that there is scant literature addressing the issue of how firms can improve their profits by reallocating budgets

between two or more online channels. Conversely, most of the analysed studies focused on the profit impact of online and traditional channels, recommending multi-channel strategies. Engaging in multiple online channels is highly recommended but, under budget constraints, the best strategy could be the allocation of financial resources to investments with relatively higher profitability. Accordingly, this research highlights the paramount importance of conducting a comparative analysis between complementary or alternative online marketing channels by developing new analytical models. For instance, firms can choose between two kinds of online channels to increase their sales and profits: search engine advertising and e-commerce marketplace. Shoppers often use search engines or e-commerce platforms in a very similar way, but for the potential sellers each channel presents different costs and attributes. Therefore, future studies should better investigate whether, when and how some online marketing channels are more beneficial than others to increase business profit. Compared with larger companies, small and medium enterprises (SMEs) have, in general, a more limited budget and fewer resources to invest competitively in digital content and media in order to promote their offers. Faced with such financial constraints, advertising professionals and managers need guidance in order to make their investment choices. However, besides a few exceptions, there is still a huge gap in exploring how firms should allocate their budget to different and alternative online channels in marketing.

On the grounds of this literature gap, some of the key questions that should be explored in future studies are identified as follows. How can researchers develop an integrated model or theory that would adequately define an effective and efficient allocation of limited resources to digital channels in marketing? What are the differences and similarities between alternative online channels used in marketing? How do businesses choose which channel to adopt? What are the characteristics of firms and of industries that influence the adoption and the effectiveness of specific online channels? More specifically, could some variables (e.g., firm industry, size, marketing skills, budget amount) influence the adoption and the effectiveness of some online channels rather than others? Which variables should be accounted for to better allocate limited resources to complex digital campaigns? What influence do organizational capabilities have in deciding whether to implement search engine campaigns, affiliate programs, and social media campaigns in marketing practices?

Despite the valuable research findings, this study is not without limitations. First, the use of specific databases and keyword formula may have caused the loss of relevant studies. Second, the inclusion of only research articles published in the English language may have influenced the selection and size of the reviewed literature. Third, the research approach supposes a trade-off between different online channels, assuming that an advertiser does not or may not pursue a multi-channel strategy in the online ecosystem. However, such an assumption, without ignoring the positive effect of a variety of online marketing channels, may sound realistic if the company budget does not allow multiple online marketing channels, as it occurs with the majority of SMEs.

## References

- Agarwal, A., K. Hosanagar and M.D. Smith (2011). "Location, location, location: An analysis of profitability of position in online advertising markets." *Journal of Marketing Research*, Vol. 48 (6), 1057-1073.
- Angeloni, S. and C. Rossi (2021a). "An analytical model for comparing the profitability of competing online marketing channels: Search engine marketing versus e-commerce marketplace." *Journal of Marketing Theory and Practice*, Vol. 29 (4), 534-549.
- Angeloni, S. and C. Rossi (2021b). "Online search engines and online travel agencies: A comparative approach." *Journal of Hospitality & Tourism Research*, Vol. 45 (4), 720-749.
- Banerjee, S. and P. Bhardwaj (2019). "Aligning marketing and sales in multi-channel marketing: Compensation design for online lead generation and offline sales conversion." *Journal of Business Research*, Vol. 105, 293-305.
- Cao, X and T.T. Ke (2018). "Cooperative search advertising." *Marketing Science*, Vol. 38 (1), 44-67.
- Chan, T.Y. and Y.H. Park (2015). "Consumer search activities and the value of ad positions in sponsored search advertising." *Marketing Science*, Vol. 34 (4), 606-623.
- Chan, T.Y., C. Wu and Y. Xie (2011). "Measuring the lifetime value of customers acquired from Google search advertising." *Marketing Science*, Vol. 30 (5), 837-850.
- Choi, W.J. and A. Sayedi (2019). "Learning in online advertising." *Marketing Science*, Vol. 38 (4), 584-608.
- Danaher, P.J. and H.J. van Heerde (2018). "Delusion in attribution: Caveats in using attribution for multimedia budget allocation." *Journal of Marketing Research*, Vol. 55 (5), 667-685.
- Gopal, R.D., A.K. Tripathi and Z.D. Walter (2006). "Economics of first-contact email advertising." *Decision Support Systems*, Vol. 42 (3), 1366-1382.
- Gu, J.Z. and G.K. Tayi (2017). "Consumer pseudo-showrooming and omni-channel product placement strategies." *MIS Quarterly*, Vol. 41 (2), 583-606.
- Hua, G., S. Wang and T.E. Cheng (2010). "Price and lead time decisions in dual-channel supply chains." *European Journal of Operational Research*, Vol. 205 (1), 113-126.
- Huang, Y.S., C.C. Fang, P.C. Lin and Y.C. Liao (2021). "Bundling and pricing decisions for bricks-and-clicks firms with consideration of network externality." *Journal of Industrial & Management Optimization*, Vol. 17 (5), 2527-2555.
- Jiang, Yuanchun, Y. Liu, J. Shang, P. Yildirim and Q. Zhang (2018). "Optimizing online recurring promotions for dual-channel retailers: Segmented markets with multiple objectives." *European Journal of Operational Research*, Vol. 267 (2), 612-627.
- Jiang, Yuqing, F. Liu and A. Lim (2021). "Digital coupon promotion and platform selection in the presence of delivery effort." *Journal of Retailing and Consumer Services*, Vol. 62, 102612.
- Karray, S. and S.P. Sigué (2018). "Offline retailers expanding online to compete with manufacturers: Strategies and channel power." *Industrial Marketing Management*, Vol. 71, 203-214.
- Khorshidvand, B., H. Soleimani, S. Sibdari and M.M.S. Esfahani (2021). "Revenue management in a multi-level multi-channel supply chain considering pricing, greening, and advertising decisions." *Journal of Retailing and Consumer Services*, Vol. 59, 102425.
- Kim, E., B. Lee and J. Kim (2009). "Versioning information goods of multi-channel publishers in two-sided markets." *Online Information Review*, Vol. 33 (4), 785-804.
- Kuksov, D. and C. Liao (2018). "When showrooming increases retailer profit." *Journal of Marketing Research*, Vol. 55 (4), 459-473.
- Lawrence, J.M., A.T. Crecelius, L.K. Scheer and A. Patil (2019). "Multichannel strategies for managing the profitability of business-to-business customers." *Journal of Marketing Research*, Vol. 56 (3), 479-497.
- Liu, Z., L. Lu and X. Qi (2020). "The showrooming effect on integrated dual channels." *Journal of the Operational Research Society*, Vol. 71 (9), 1347-1356.

- Malhotra, S. (2014). "A study on marketing fast moving consumer goods (FMCG)." *International Journal of Innovative Research and Development*, Vol. 3 (1), 1-2.
- Mark, T., J. Bulla, R. Niraj, I. Bulla and W. Schwarzwaller (2019). "Catalogue as a tool for reinforcing habits: Empirical evidence from a multichannel retailer." *International Journal of Research in Marketing*, Vol. 36 (4), 528-541.
- Mu, L., X. Tang, V. Sugumaran, W. Xu and X. Sun (2021). "Optimal rebate strategy for an online retailer with a cashback platform: Commission-driven or marketing-based?" *Electronic Commerce Research*. <https://doi.org/10.1007/s10660-021-09485-w>
- Neslin, S.A. and V. Shankar (2009). "Key issues in multichannel customer management: Current knowledge and future directions." *Journal of Interactive Marketing*, Vol. 23 (1), 70-81.
- Rao, A. (2015). "Online content pricing: Purchase and rental markets." *Marketing Science*, Vol. 34 (3), 430-451.
- Skiera, B. and N. Abou Nabout (2013). "Practice Prize Paper—PROSAD: A bidding decision support system for profit optimizing search engine advertising." *Marketing Science*, Vol. 32 (2), 213-220.
- Tang, Y. (2021). "A product strategy for daily deal campaigns utilizing demand expansion and consumer leakage." *Electronic Commerce Research*. <https://doi.org/10.1007/s10660-021-09519-3>
- Vrontis, D. and M. Christofi (2019). "R&D internationalization and innovation: A systematic review, integrative framework and future research directions." *Journal of Business Research*, Vol. 128, 812-823.
- Wang, T. and C. Zhou (2017). "Price protection policies with demand uncertainty and strategic consumers." *Journal of Modelling in Management*, Vol. 12 (2), 190-203.
- Wiesel, T., K. Pauwels and J. Arts (2011). "Practice prize paper – Marketing’s profit impact: Quantifying online and off-line funnel progression". *Marketing Science*, Vol. 30 (4), 604-611.
- Yan, R. (2008). "Profit sharing and firm performance in the manufacturer-retailer dual-channel supply chain." *Electronic Commerce Research*, Vol. 8 (3), 155-172.
- Yan, R. (2010). "Product brand differentiation and dual-channel store performances of a multi-channel retailer." *European Journal of Marketing*, Vol. 44 (5), 672-692.
- Yan, R. (2011). "Managing channel coordination in a multi-channel manufacturer–retailer supply chain." *Industrial Marketing Management*, Vol. 40 (4), 636-642.
- Yan, R., J. Wang and B. Zhou (2010). "Channel integration and profit sharing in the dynamics of multi-channel firms." *Journal of Retailing and Consumer Services*, Vol. 17 (5), 430-440.
- Yan, Y., R. Zhao and Z. Li (2018). "Strategic introduction of the marketplace channel under spillovers from online to offline sales." *European Journal of Operational Research*, Vol. 267 (1), 65-77.
- Yang, S., S. Lu and X. Lu (2014). "Modeling competition and its impact on paid-search advertising." *Marketing Science*, Vol. 33 (1), 134-153.
- Zhang, J. and M. Wedel (2009). "The effectiveness of customized promotions in online and offline stores." *Journal of Marketing Research*, Vol. 46 (2), 190-206.
- Zhang, L. and D.J. Chung (2020). "Price bargaining and competition in online platforms: An empirical analysis of the daily deal market." *Marketing Science*, Vol. 39 (4), 687-706.
- Zhang, L., L. Wu, , L. Huang and Y. Zhang (2021). "Wield the power of omni-channel retailing strategy: a capability and supply chain resilience perspective." *Journal of Strategic Marketing*. <https://doi.org/10.1080/0965254X.2021.1972440>
- Zhang, S., K. Pauwels and C. Peng (2019). "The impact of adding online-to-offline service platform channels on firms’ offline and total sales and profits." *Journal of Interactive Marketing*, Vol. 47, 115-128.
- Zhang, T. and X. Wang (2018). "The impact of fairness concern on the three-party supply chain coordination." *Industrial Marketing Management*, Vol. 73, 99-115.
- Zhang, W.-G., Q. Zhang, K.J. Mizgier and Y. Zhang (2017). "Integrating the customers’ perceived risks and benefits into the triple-channel retailing." *International Journal of Production Research*, Vol. 55 (22), 6676-6690.