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How does the added new online channel impact the supporting advertising expenditure?

Zhi Pei [a,*], Leslie Toombs [b,1], Ruiliang Yan [b,2]

[a] Department of Marketing and Logistics, College of Business, University of North Texas, Denton, TX 76203, United States
[b] Department of Marketing and Management, College of Business and Entrepreneurship, Texas A&M University, Commerce, TX 75428, United States

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ABSTRACT

This research addresses the strategic effect of a newly added online channel on a manufacturer's supportive advertising expenditure once a manufacturer opts to open an online channel to compete with its retailer. We first study the manufacturer–traditional retailer supply chain and consider three different scenarios: (1) product is less compatible with the online channel than with the traditional channel; (2) product is more compatible with the online channel than with the traditional channel; (3) product has the same compatibility with the online channel as with the traditional channel. Our results show that the added online channel significantly impacts the manufacturer's investment in supportive advertising. Depending on the different product categories, the impact of the newly added online channel on the supportive advertising expenditure also will be different. Furthermore, we extend our model to study the manufacturer–online retailer supply chain and investigate the effect of that added online channel on the manufacturer's supportive advertising to the online retailer. Based on our results, the manufacturer can utilize our findings to improve its decision-making when it plans to open an online channel to improve its product distribution.

1. Introduction

In the context of distribution channels, supportive advertising plays a significant role in marketing strategy. Many manufacturers are using this strategy to help coordinate channel distributions profitably. For example, in the business market, Apple, Dell, and HP are actively utilizing this strategy to provide supportive advertising to their retailers who carry their products to stimulate market sales (http://mediakit.tucson.com/tni%20co-op%20website/images/coopform.pdf). The overall increase in the significance of supportive advertising has motivated us to explore the role and use of this advertising in practice. Supportive advertising, in our paper, can be defined as a discretionary payment from manufacturer to retailer for demand stimulating advertising (i.e., the manufacturer makes a decision of how much should be provided to the retailer to engage in a local advertising campaign while the retailer pays a zero percentage of the supportive advertising cost). When the retailer uses the provided advertising expenditure to engage in an advertising campaign, the advertising campaign usually is intended to increase the retail sales. A supportive advertising expenditure helps retailers offer creative promotions that they normally wouldn't undertake without the manufacturer's support.

In today's business world, with the rapid development of technology, e-commerce is becoming more and more popular. According to Forrester Research in 2010, online retail sales in the U.S. will grow to $250 billion by 2014, up from $155 billion in 2009. This rise in online sales, coupled with the apparent ease of selling over the Internet and the opportunity to avoid middlemen, has provided a strong incentive for many manufacturers to sell directly to consumers. As a result, many manufacturers, which have traditionally sold through retailers, are increasingly opening additional channels for selling directly to the end users. In the business market, manufacturers such as Hewlett & Packard, Lenovo, Dell Computer, Compaq, Sony, Panasonic, Mattel, Pioneer Electronics, Cisco System, P&G, and Estee Lauder, in a variety of industries, have begun to use an online channel to sell their products directly to consumers (Tsay and Agrawal, 2004; Seifert et al., 2006; Chen et al., 2008; Amrouche and Yan, 2012).

In the event the manufacturer opens a new online channel to sell product directly to customers, an important question thus arises as to how the added online channel impacts the supportive advertising expenditure provided by the manufacturer. The result

* Corresponding author. Tel.: +1 940 565 3120; fax: +1 940 565 4234.
E-mail addresses: Zhi.Pei@unt.edu, peizhi1984@hotmail.com (Z. Pei), Leslie.Toombs@tamuc.edu (L. Toombs), Ruiliang.Yan@tamuc.edu (R. Yan).
[1] Tel.: +1 903 886 5903; fax: +1 903 886 5702.
[2] Tel.: +1 903 886 5710; fax: +1 903 886 5702.

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of such action is not obvious and the strategy needs careful study. For instance, the retailer could view the online channel as a threat, and fear that its profits will be hurt. Alternatively, when the manufacturer provides supportive advertising to expand the retailer's sales volume, the retailer is less adverse to the manufacture's newly added channel. Thus, channel competition is alleviated to some degree. Our model, however, indicates that this reasoning may not always hold. Our research focuses on an important issue, not currently addressed in the literature, and provides optimum marketing strategy for the manufacturer to employ as he opens an online channel to compete with its retailer. To our knowledge, this research is the first to study how the added online channel impacts advertising expenditure with the consideration of product web-fit (i.e., the product compatibility with online channel) in the manufacturer–retailer supply chain in the extant literature.

Specifically, we focus on how the manufacturer's investment in supportive advertising changes when a manufacturer decides to open an online channel, thereby starting competition with the retailer. When the manufacturer opens an online channel to sell its product directly to customers, the product web-fit plays a strategic importance for online sales (Kacen et al., 2002; Kwak et al., 2002; Korgaonkar et al., 2006; Kumar and Ruan, 2006). In order to address the strategic effect of the added online channel on the supportive advertising expenditure, we first study the manufacturer–traditional retailer supply chain and consider and analyze three scenarios, as follows.

Scenario 1. Product is less compatible with the online channel than with the traditional channel. In other words, customers prefer to buy this product from the traditional channel if the online price is the same as the traditional channel price.

Scenario 2. Product is more compatible with the online channel than with the traditional channel. In other words, customers prefer to buy this product from the online channel if the online price is the same as the traditional channel price.

Scenario 3. Product has the same compatibility with the online channel as with the traditional channel. In other words, customers show no preference in buying this product from either channel if the online price is the same as the traditional channel price.

These three scenarios encompass all of the product compatibility types with the online channel in the business market. In other words, we examine the effect of the added online channel on the manufacturer's supportive advertising by considering all types of product categories. Additionally, we extend our model to study the manufacturer–online retailer supply chain and investigate the effect of the added online channel in the manufacturer's supportive advertising to the online retailer. Based on our results, we derive optimal marketing strategy for the manufacturer to employ.

2. Literature review

2.1. The differences between prior research on cooperative advertising and our research

Dant and Berger (1996) studied cooperative advertising decisions in a franchise setup and showed that cooperative advertising can help the franchisor and its franchisee achieve a win–win result. Huang et al. (2002) studied cooperative advertising between the manufacturer and the retailer without considering price. Their results showed that cooperative advertising can help improve the performance of a manufacturer–retailer supply chain, particularly if the channel members behave in a partnership structure. Karry and Zaccour (2006) investigated the profitability of implementing a cooperative advertising program that allows the manufacturer to counter the harm of a private label's introduction. They show that the retailer will accept such a program only if the national brand competes strongly with the private label. Yan (2010) conducted a theoretical study for cooperative advertising in a manufacturer–e-retailer supply chain and showed that the manufacturer and the e-retailer can effectively improve channel coordination through cooperative advertising strategy and strategic alliance market structure. The aforementioned papers all focused on cooperative advertising, while our research focuses on supportive advertising. Although both cooperative advertising and supportive advertising focus on implementing a local advertising campaign to stimulate market sales, supportive advertising is different from cooperative advertising. For supportive advertising, the manufacturer decides how much advertising expenditure should be provided to the retailer to engage in a local advertising campaign while the retailer pays a zero percentage of the supportive advertising cost. However, for cooperative advertising, the retailer makes a decision regarding how much to spend on advertising to engage in a local advertising campaign while the manufacturer pays a percentage of the cooperative advertising cost. In addition, there are several differences between the aforementioned studies and ours. First, these papers focused solely on a manufacturer–single retailer channel and did not address the strategic role advertising plays in the dual-channel distribution, as our paper does. Second, the aforementioned papers focused solely on the advertising factor and little discussion was given to pricing strategy, even though pricing is a significant factor in the channel distribution of the manufacturer and retailer. Furthermore, the aforementioned papers did not address the strategic role the product web-fit plays in the manufacturer's supportive advertising expenditure. Unlike the aforementioned papers, our paper considers not only pricing and advertising factors but also product compatibility with online sales in the dual-channel distribution.

2.2. The differences between prior research on dual-channel coordination and our research

Various mechanisms for channel coordination in the dual-channel context have been proposed in recent decades. For example, Tsay and Agrawal (2004) examined the value of sales effort in a dual-channel distribution. They showed that sales effort can be utilized to alleviate channel conflict when the manufacturer provides the traditional retailer with the product to sell, while also selling directly to the same market, thereby competing with its own retailer. Mukhopadhyay et al. (2008) suggested a different strategy to combat channel conflict. They proposed that the manufacturer should allow the retailer to add value to the product so that the product is differentiated from the one sold in the direct channel. The retailer sets the retail price and can also be given, if appropriate, a side payment. The manufacturer designs a contract to coordinate the supply chain. Levary and Mathieu (2000) proclaimed as fact that the dual channel (hybrid of retail and e-tail channels) holds most promise for the future. Geyskens et al. (2002) showed that a powerful firm with a smaller number of direct paths to customers does better financially than a less powerful firm with a broader direct market offering. Cai (2010) utilized a game-theoretic model to show that it is mutually beneficial for the supplier and the retailer to use the revenue-sharing contract to improve channel performance when the supplier opens a direct online channel. Yan et al. (2011) studied product distribution and coordination strategies in the context of dual-channel distribution. They showed that product differentiation with profit synchronization can help improve the dual-channel coordination effectively.

Like the aforementioned papers, our paper focuses on channel coordination as well. However, there are several differences between the aforementioned studies and ours. First, the aforementioned papers