European Journal of Operational Research 255 (2016) 620–630

Contents lists available at ScienceDirect

European Journal of Operational Research

journal homepage: www.elsevier.com/locate/ejor

Interfaces with Other Disciplines

Should companies jointly promote their complementary products when they compete in other product categories?

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ARTICLE INFO

Article history:
Received 22 February 2015
Accepted 26 May 2016
Available online 2 June 2016

Keywords:
Joint promotions
Game theory
Marketing-OR interface

ABSTRACT

Joint promotions, whereby companies pool marketing resources to promote their brands, are increasingly used to reduce marketing costs and develop common business opportunities, but formal knowledge about how they should be effectively implemented remains sparse. This paper investigates whether firms should jointly promote their complementary products when they also offer substitute products in another category. It also studies whether companies should partner with allies that can or cannot leverage on joint promotion to create spillover in their product portfolios. Our main findings are as follows. A company's decision to enter or not to enter into a joint promotion depends on the presence and nature (positive or negative) of promotion spillover in its own product portfolio and the effect of joint promotion on each complementary product demand. Particularly, in the absence of spillover effect, joint promotion may not be mutually beneficial if its direct effects on the two complementary products are asymmetric. On the other hand, depending on its direct effects on the complementary products, joint promotion could be a profit-enhancing activity for the two firms even when it negatively affects the demand of their substitute products by intensifying price competition. Finally, we discuss the implications of branding strategies on the effectiveness of joint promotion. The results in this paper are useful for firms offering products in different categories where joint promotional spillover can occur.

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1. Introduction

Since the recent economic downturn, there has been renewed interest by many companies in joint promotions or promotional alliances as a strategic marketing tool to improve the effectiveness and efficiency of their promotional activities (Augustine & Cooper, 2009; Helmig, Hubert, & Leeflang, 2008; Karray, 2011, 2015; Karray & Sigué, 2015). In a typical joint promotion arrangement, two companies pool resources and develop a promotional campaign that features two of their brands to make the most of a common business opportunity. There are several examples of such programs in diverse industries, including recent joint promotions by Google and American Express, PepsiCo and A-B InBev, and ConAgra Foods and Kraft.

Although joint promotions can benefit the products directly involved, companies do not always know the implications of these alliances for their multi-product portfolios. This is particularly important for diversified firms that offer many products in different product categories since promotions for a brand in one of its product lines could create spillover effects on its other brands in unrelated categories. A relevant example is the promotional collaboration between competing food firms Kraft and ConAgra Foods which partnered to promote their complementary products Velveeta processed cheese and Ro-Tel diced tomatoes (Advertising Age, 2011). ConAgra and Kraft offer a number of substitute products in addition to Velveeta and R-Tel such as ConAgra's Reddi Wip and Kraft's Miracle Whip in the whipped cream category. This phenomenon is well documented in one of the first studies published on promotional alliances by Varadarajan (1985) who surveyed executives of leading companies such as Campbell Soup, Coca-Cola, Kimberly-Clark, Lever Brothers, Pepsico, and Pillsbury to inquire about various managerial practices on the topic. Among others, Varadarajan reported the following enlightening finding:

"Brand managers usually are not permitted to enter into joint sales promotions with firms who are competitors in other product-market domains. For instance, although brand X instant coffee and brand Y coffee creamer, made by two different firms, may constitute an ideal tie-in, if these firms are formidable competitors in the pet food business, they may not enter into a joint promotion. However, some firms do not adhere to such restrictions. A leading brand of instant coffee and a leading brand of coffee creamer participated in a

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[1] Research funded by the National Sciences and Engineering Council of Canada (NSERC).

http://dx.doi.org/10.1016/j.ejor.2016.05.049
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tie-in promotion, although in the powdered drink mix business these firms are direct competitors." (Varadarajan, 1985, p. 48).

Surprisingly, three decades later, this finding has not generated further research to help us understand the rationale behind these practices, and this may give the impression that companies set their joint promotion policies arbitrarily rather than basing decisions on rigorous analyses. This possibility should be taken seriously, as poor joint promotion decisions could have important financial and marketing consequences for companies. The application of a restrictive policy that does not allow brand managers to enter into joint promotional programs for complementary products, if they also sell competitive products, may prevent firms from capitalizing on joint business opportunities that could increase both their sales and their profits. On the other hand, allowing brand managers to undertake joint promotional programs for complementary products with a company that also sells competitive products may not only have adverse effects on overall sales and profits—it can also hurt brand image, especially if a joint program contributes, directly or indirectly, to developing preferences for the partners' competitive products.

A joint promotion between two or more companies to sell products that complement each other is believed to improve the efficiency and effectiveness of partners' promotional activities (Karray & Sigué, 2015; Rao & Ruekert, 1994; Samu, Krishnan, & Smith, 1999; Son, Hahn, & Kang, 2006; Varadarajan, 1985; 1986). Products are complementary when consumers simultaneously use them to satisfy some specified needs as with the example of instant coffee and coffee creamer above. Marketing efforts that aim to expand market penetration or development for either product will also have a positive impact on the other. For instance, a price reduction or increased promotional activities for one of the complementary products positively impacts demand for the other. There is a risk of free riding between complementary products, depending on their level of complementarity, as neither one of the sellers of these products bears the full cost of pricing too high nor investing too little in marketing activities (Karray & Sigué, 2015). Pooling marketing resources together in a joint promotional program alleviates free riding. It is an efficiency-enhancing practice that stimulates additional promotional investments for the mutual benefit of all promotional partners.

However, the above theory cannot fully account for the use of joint promotion in a context where sellers jointly promote complementary products, but also sell competitive products. The challenge in such a context is that promotional activities can have spillover effects, which affect the partners' competitive products (Simonin & Ruth, 1998). For instance, positive spillover effects are purposely sought between a firm's own product categories when umbrella branding is adopted to help generate savings in marketing costs and enhance promotional productivity (Erdem & Sun, 2002; Lei, Dawar, & Lemmink, 2008). Although generally unplanned, negative spillover can also occur between a firm's own products and seriously harm the effectiveness of promotional activities (Lei et al., 2008). From a competitive perspective, positive (negative) spillover effects of a joint promotion on a firm's competitive product sales may translate into a loss (gain) of sales for other promotional partners (Roehm & Tybout, 2006). On the other hand, a firm that sells multiple products can eliminate advertising and promotion spillover by developing individual brands for each product category or by clearly differentiating them in the minds of customers (Lei et al., 2008). Again, even in such a context, a joint promotion between complementary products may still affect the sales of the partner's competitive product if joint promotion effects spill over to the partners' competitive products (Roehm & Tybout, 2006).

The objectives of this research were twofold. First, we investigated the conditions under which two firms can undertake a joint promotional program for their complementary products even if they compete in another (unrelated) product category. In particular, we focused on spillover effects of joint promotion between complementary products on the two partners' competitive products and analyze four scenarios. In the first scenario, joint promotion between complementary products does not spill over the two competitive products. The second and third scenarios assume one-side spillover effects. In these cases, the effects of joint promotion between complementary products extend to one partner's competitive product, but have no direct impact on the other partner's competitive product. The fourth scenario assumes a two-side spillover effect, where the joint promotion for complementary products directly impacts both partners' competitive products.

Second, we examined the strategic issues involved in selecting a promotional partner and designing joint promotional programs. Particularly, we considered a primary firm that aims at identifying a partner firm to help develop the most profitable joint promotional program possible. Because of current marketing strategies and programs (e.g., market segments, positioning, branding strategies), the primary firm knows up front that a joint promotion for its complementary product may or may not have any direct spillover effect on its other product. Uncertainty about the spillover effects of the potential joint promotional program rests mainly on the selection of the partner and the design of the program. The question then is: Should the primary firm choose a partner that has the potential to leverage on the joint promotion between their complementary products to generate spillover effects on its competitive product, or a partner that does not have such a potential?

We hope the findings of this research will provide scholars and managers with a better understanding of the effects of joint promotion arrangements between complementary products, especially when partners also compete in other product categories. The findings of this research should also offer managers a decision-making framework or a set of useful guidelines to help revise or develop comprehensive joint promotion policies that are consistent with their overall marketing strategies.

The rest of this paper is organized as follows. Section 2 presents two models. Section 3 derives their equilibria. Section 4 introduces four scenarios of spillover effects. Section 5 compares the findings of the four scenarios with the basic model. Section 6 examines the selection of a promotional partner and the design of the joint promotion. Section 7 concludes and discusses both the theoretical and managerial implications of the findings.

2. The models

Consider a duopoly market in which two firms sell two complementary products, c_i, and two competing or substitute products, s_i, $i \in \{1, 2\}$. In each firm's portfolio, the complementary product and the substitute product are independent. We develop two stylized models to account for various business situations. The first model or basic model (BM) helps assess the firms' profits when there is no joint promotion, while the second, the joint promotion model (JPM), is a broad model that applies to situations where the two firms undertake a joint promotional program to increase awareness of their products or stimulate their respective sales.

2.1. Basic model

The basic model (BM) represents the case where each firm sets the prices for its complementary product (p_{c_i}) and substitute product (p_{s_i}) and its individual promotional effort for the complementary product (u_i). Denote by q_{c_i} and q_{s_i}, $i \in \{1, 2\}$, Firm i's demands for the complementary and substitute products and assume the following linear functions:

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