

The Effect of Inter-Business Relationships on Firms' Product Lines

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Abstract

Product line management is an important competitive tool in many industries. The breadth of a firm's product line in a given market confers both advantages and disadvantages. Though the theory of how product line breadth impacts performance is relatively well-understood, empirical examinations of the breadth-performance relationship have found conflicting results. In this paper, I examine a case in which product proliferation proved detrimental and detail the mechanisms at work. My results suggest that a firm with a competitive advantage in an established distribution channel may over-proliferate its product lines when it faces distribution channel shift.

Keywords: product line management; product proliferation; inter-business relationship, distribution channel

Research Question

Firms often increase the number of their brands and products to satisfy diverse consumer needs. The trend of product and brand proliferation has become prominent in many industries (Kumar 2003). However, despite product proliferation, some companies cannot improve their sales. On the contrary, there are companies improving their performance by deleting products. For instance, Snackco, a leading U.S. snack foods company, increased its new offerings by 20% between 1987 and 1989; however, overall sales remained flat during that period. But, by cutting the number of filler products, Snackco found that it could increase its market share and profitability (Quelch and Kenny 1994). Under what conditions, then, does a firm's product proliferation strategy work? Or to look at it another way, where product line breadth is not beneficial, what are the problems? Despite the importance of product line breadth, we lack a complete understanding of how breadth impacts firm performance (Dowell 2006). This research aims to reveal the ways in which product proliferation does not work.

Literature Review

The product line management literature addresses the problem of how many products a firm should have in its portfolio. Product proliferation has both advantages and disadvantages; firms consider both, then decide whether or not to adopt a proliferation strategy.

Advantages of Product Proliferation

Firms try to address diverse consumer needs by introducing many products and brands. The advantages of product proliferation can be broadly classified into economies of scope, deterrence of new entries, and satisfaction of consumer needs. First, firms can use existing production capacity more effectively by broadening their product line (Quelch and Kenny 1994). Second, established firms may be able to use their broader product lines to deter entry by competitors (Schmalensee 1978; Bonanno 1987). Third, broader product lines enable firms to satisfy a greater diversity of consumer needs, which may allow them to charge higher prices (Levy and Reitzes 1993). In addition, empirically, both Roberts and Samuelson (1988) and Kekre and Srinivasan (1990) find a positive relationship between product line breadth and market share.

Disadvantages of Product Proliferation

Although a broader product line offers many advantages, there are disadvantages to proliferation as well. These can be broadly classified into increased costs, shifting bargaining power, and consumer confusion. First, a broader product line will increase the firm's per unit production cost when economies of scale are present (Baumol, Panzar, and Willing 1982); production of many items may also lead to additional design costs (Bayus and Putis 1999) and increased inventory costs (Kekre and Srinivasan 1990). Second, product proliferation creates an environment of increased competition for limited shelf space, which improves the bargaining leverage of retailers (Messinger and Narasimhan 1995; Chu and Messinger 1995). Third, product variety makes the consumer confused. Aaker (2004) suggests that when there are too many products, it is difficult for the consumer to understand the products and brands.

Determinants of Product Line

Firms consider the many factors above in strategically increasing the number of products they offer. A host of internal and external factors affect a firm's optimal product line; important among these are competitive factors (Bayus and Putis 1999). Bayus and Putis (2001), for example, note that when competitors offer multiple products to a heterogeneous consumer population in a competitive environment, a firm with only one or two products may be at a distinct competitive disadvantage. Thus, these pressures suggest that a prisoner's dilemma may exist, in which all firms may have excessively-broad product lines. When competitors' product lines proliferate, product proliferation may be an effective defensive strategy.

Theoretical Framework and Hypothesis

These findings in the literature describe a situation in which firms find it difficult to reduce the number of their products or brands, with the result that there is no choice but product line proliferation. In this situation, a broader product line may not necessarily be positively related to a firm's performance, especially to its profitability. Previous research has addressed competitive factors (e.g., the number of products offered by competitors, or the overlap in a firm's product line with those of its rivals) as external, while few studies consider inter-business relationships.

Therefore, in this paper, I consider the connection between product proliferation and firms' performance, focusing on inter-business relationships. Among those, I specifically address the manufacturer-retailer relationship. I hypothesize that the manufacturer-retailer relationship affects a firm's product line management, and does not result in improved performance.

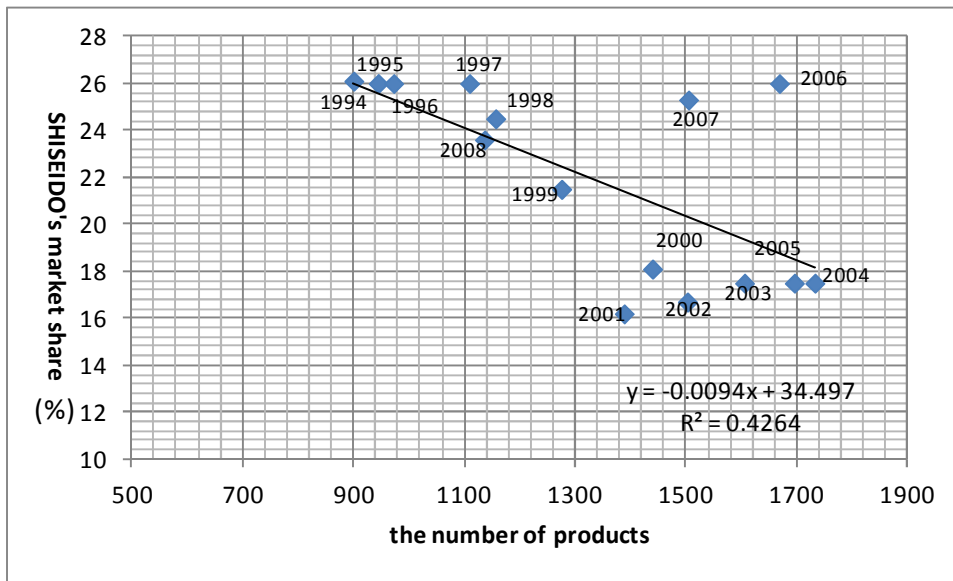
Proposed Methodology

To identify the mechanisms by which product proliferation adversely impacts firm performance, detailed research is needed. This study employs a case study of Shiseido, a famous Japanese cosmetics company, during the period 1994–2008. The data on Shiseido's product line are from Shukan-Shogyo Corporation's *Cosmetics in Japan*, which contains information about trends in the Japanese cosmetics industry and on almost all cosmetics products sold in Japan. Annual reports, newspaper articles, and

interviews were used to confirm the firm's intent.

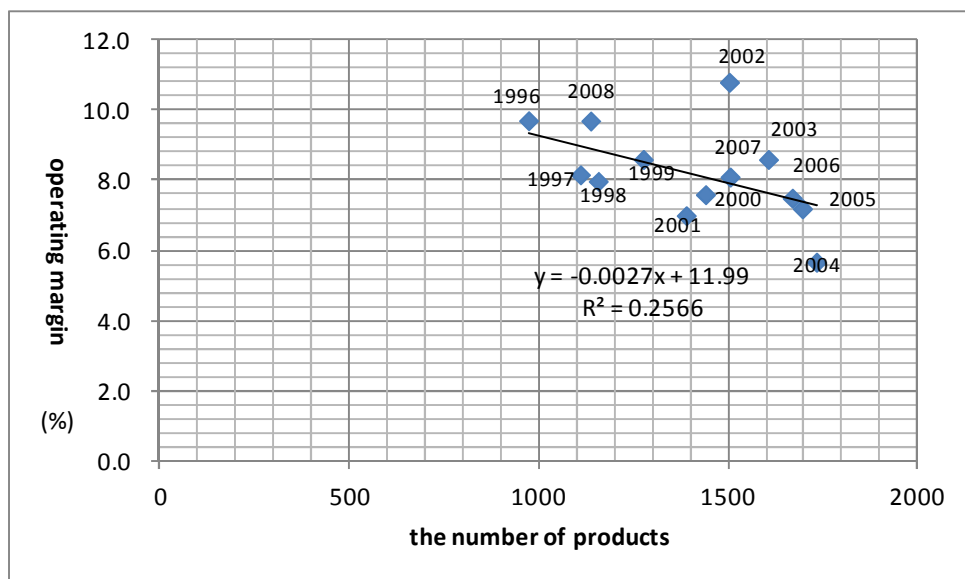
Although Shiseido broadened its product line until 2005, the firm did not necessarily improve its performance, as measured in this study by market share and operating margin. As suggested in Figure 1, an increased variety of products tended to be accompanied by a decreased market share for the company.

Figure 1: Shiseido's product counts and market share



In addition, as seen in Figure 2, a broader product line did not necessarily improve the firm's profitability. (The considerable improvement to profitability in 2002 can be credited, not to a broadening product line, but to reductions in costs, resulting, for example, from stock reduction and POS machine installation.)

Figure 2: Shiseido's product counts and operating margin



Over the period, product proliferation is very evident. Furthermore, until 2005, Shiseido performed poorly in the cosmetics market; after that, it improved its performance by cutting product counts. Therefore, this case is an appropriate one for examining a situation in which product proliferation does not improve a firm's performance.

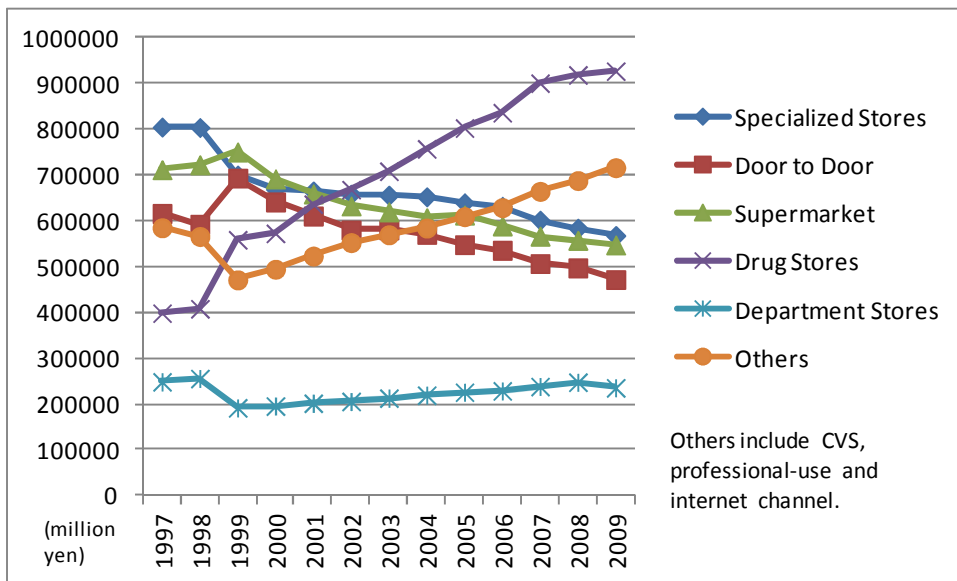
Anticipated Results

The cosmetics industry in Japan experienced a drastic change in distribution channels in the late 1990s (see Figure 3). Until then, the main distribution channel had been independent specialty shops. But, by the late 1990s, drug stores had gained power as a distribution channel. Shiseido had attained a competitive advantage by building its own distribution channel, called the "Chain Store System" within Japan, since 1923. This was a system by which Shiseido assured those specialized "chain store" shops of access to the same products, the same shop price, and identical service. Shiseido could exercise stable management over that system. Almost all retailers at that time were small and independent, and the chain store system in which those retailers were organized was a win-win arrangement for both them and Shiseido.

But with the emergence of drug stores, consumers were able to buy the same products at lower prices than in chain stores. Most chain stores were small and their

price competitiveness, therefore, was low. As a result, the less-competitive chain stores were weakened. To differentiate chain stores from drug stores, Shiseido introduced brands which were to be sold only at chain stores. Nevertheless, sales volume in the chain store channel continued to decrease. Considering this rationally, Shiseido could have decided not to invest further in the chain store channel; instead, however, Shiseido continued to introduce new products into the channel.

Figure 3: Drastic distribution channel change in the Japanese cosmetics industry



Fundamentally, Shiseido continued to try to revive the chain store channel, which had been a very important one for the company, and one on which it had built its competitive advantage. Also, it had a long-term business relationship with that channel. Therefore, Shiseido considered it appropriate to continue introducing products into that channel, at the expense of economic rationality.

Conclusion

Firms that have a competitive advantage within established distribution channels may face difficulties when distribution channel change occurs. In such a situation, they may choose product proliferation, which results in a decline in performance.

My results contribute to the literature that addresses the relationship between product line breadth and firm performance. While competitive factors are considered as external factors, the distribution channel factor has often been overlooked. This study

highlights those particular factors, as faced by firms in the Japanese cosmetics industry.

My findings suggest that managers, facing distribution channel shift, have difficult choices to make in product line management. They must consider carefully both the advantages and disadvantages of new product introductions into established channels.

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