inf<u>D11115</u> doi 10.1287/mksc.1070.0341 © 2008 INFORMS

Commentary Defensive Marketing Strategies

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For every new product and service entrant, there are usually many incumbents who must defend their positions in the market. Hence, defensive strategy is as least as critical as new-product strategy. Our 1983 article argued that defensive strategy critically depends on the distribution of buyer preferences and the position of the new entrant relative to the position of the incumbent in a multidimensional attribute space. Since the appearance of our 1983 article in *Marketing Science*, research in defensive strategy has progressed in both prescriptive and descriptive directions. Subsequent research on defensive strategy has also addressed empirical, methodological, theoretical, and substantive issues. Today, defensive strategy is more important than ever, with shorter new-product life cycles, persistent service innovation, remarkable technological change, global competition, and the invention of new channels of distributions.

Key words: marketing theory; strategy; defensive strategy; competitive strategy; heterogeneous buyer preferences; product positioning; multidimensional perceptual spaces; new-product strategy; pricing; advertising; distribution decisions; marketing strategy

The Genesis of Defender

"Defensive Marketing Strategies" (Hauser and Shugan 1983) began as an applications-focused idea. Assessor[®] (Silk and Urban 1978) revolutionized new product evaluation, replacing costly and timeconsuming test markets with accurate simulated stores. However, most applications of Assessor were by competitors. In fact, Right Guard deodorant (Gillette) funded the very first Assessor application to monitor a test market by a competitor, Sure (P&G). For every entrant, there were many defenders.

Unlike traditional new product models, one issue with defensive strategy was the need to very promptly estimate the new entrant's threat (e.g., Sure[®] deodorant) and formulate an immediate response. With insufficient time to collect traditional Assessor data, firms needed to adjust marketing-mix decisions quickly with no more than sales data. This task required departure from traditional choice models, which made a priori assumptions about how new products would capture sales from extant competitors (e.g., proportional Luce-type models). Therefore, we sought a model that would estimate who the new entrant might hurt and by how much.

Critical ideas

Several key ideas emerged that shifted the manuscript from an estimation method to a strategic model: incorporating price into a perceptual map, heterogeneous preferences, competitive response, and a focus on qualitative strategy rather than quantitative tactics.

We realized that price was central to defense and defending firms quickly changed (almost always lowered) prices. At the time, Lancaster (1966, 1980) provided the best empirical *and* theoretical approach for incorporating price into perceptual maps. We added price through a consumer budget constraint resulting in "per dollar" perceptual maps (later known as "value maps").

Although firms usually lowered price, some raised price. This observation suggests that consumer preferences probably vary. We allowed preferences to vary continually with a "taste distribution." Uniformly distributed tastes resulted, as expected, in optimal strategies with lower prices, but nonuniformly distributed tastes sometimes yielded optimal strategies with prices higher than before entry. The structure of the preference distribution (uniform, multimodal, etc.) was one critical determinant of the appropriate Defensive strategy is inherently competitive. However, the economic literature at the time was anything but univocal (e.g., Lane 1980). Equilibria were quite different, depending upon the foresight afforded to the entrant or the defenders and upon the specification of the game. We chose to allow the entrant to enter with perfect foresight, anticipating the defender's response. This condition allowed us to hold the entrant's marketing variables fixed. The assumption was quite controversial at the time, but subsequent research demonstrated that this assumption was not critical for our results.

Finally, we found that the direction of response (decrease awareness advertising, position to your strength, lower price if tastes are uniform, etc.) was independent of the specific parameters. The manuscript shifted from a tactical methodology to an analytical article on general defensive strategies. (An historic note: Publishing an analytic paper in marketing without data took some convincing. We thank Subrata Sen, the editor of *Marketing Science* in 1983, for his encouragement.)

Development into a Decision Support System¹

After publication, our manuscript inspired empirical research in different directions. Hauser and Gaskin (1984) developed the concepts in our theoretical manuscript into a full-fledged decision-support system, aka DEFENDER. Management Decision Systems, Inc. (later IRI, still later M/A/R/C) began applying the Defender decision support system. Steven Gaskin, in his Master's thesis, solved the "zero-point" problem, and Defender became a practical model. (An interesting tidbit: Without graphical software and faced with applications to more than two perceptual dimensions, MDS used Lego bricks to display taste distributions to clients.)

Defender was sold as a standalone model and as an add-on to Assessor. Early applications included plastic wraps (Dow versus Reynolds), Japanese margarines, Grey PouponTM mustard, sugar-free MetamucilTM in response to FiberallTM (bulk laxatives), OTC analgesics (first in response to competitive acetaminophen products and later in response to the ibuprofen products when they first went OTC), insecticides, automatic dishwashing detergents, microwavable pasta, toilet bowl cleaners, laundry detergents, sandwich bags, and plastic storage bags. Each application raised new challenges. For example, the points on perceptual maps were not points, but "clouds," and the model needed to reflect that uncertainty. Moreover, strong loyalty caused continued sales of some products that were dominated on the perceptual map requiring further modifications. Finally, perceptual dimensions were tricky—Japanese consumers stated a preference for margarine to taste like butter, but, in reality, did not like the taste of butter. Some applications opened new categories (form factors in the laundry category), leading to hierarchies in perceptual maps. Like many successful decision models, Defender became a mix of science and art.

Perhaps the most important meta-insight from Defender applications was how critical the choice of attributes for perceptual map was to the success of the application. After one disastrous pasta application in which every client-generated attribute was a rewording of "made by Italian moms," a better method that was less dependent on clients was required. This search eventually led to the "voice of the customer," but that's another story.

Today, perceptual maps have become hierarchies of customer needs and heterogeneous taste distributions now come from hierarchical Bayes methods, but the basic concepts and structure underlie many applications, including recent applications in the credit cards category.

Early Applications with Scanner Data

Shugan (1987) developed the theoretical model in another direction by providing a method for estimating the original Defender perceptual map from only aggregate supermarket scanner sales data. This research derived brand maps for toothpaste, mouthwash, and dishwashing liquids from only aggregate supermarket sales data. The results indicated that: (1) the various customer segments buy different brand sizes causing perceptual map dimensions to differ by size; (2) perceptual maps derived from price changes may differ from maps generated from similarity or advertising changes; (3) brand proximity in the per dollar map does not imply proximity in the regular map; (4) brands produced by the same manufacturer are often in proximity; and (5) most manufacturers attempt to achieve dominance on only one dimension.

Academic Literature

We are pleased that our research inspired many subsequent research studies. It is only possible to acknowledge a few of the subsequently published articles. Some notable studies include Kumar and Sudharshan (1988). Among other results, they found that our basic original strategic recommendation survives generalizations of the response function. Gruca

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¹Our thanks to Steven Gaskin of Applied Marketing Science, Inc., who kept amazing notes of the early Defender applications.

et al. (1992) were able to derive a unique Nash equilibrium and incorporate the defender's market share into the analysis. Carpenter and Nakamoto (1990) explored late entry and the ability of preference asymmetries to protect defenders. Robinson (1988) studied 115 entrants into oligopolistic markets and found very simple reactions on only one marketing mix variable or none at all. This is consistent with the Defender models' prediction that most defenders need not respond, but it also brings attention to the need to study dynamic strategies. Bowman and Gatignon (1995) examined reaction time of the defender to the new entrant. They found that organizational constraints were an important determinant. Kalra et al. (1998) found that some defenders delay response to a new entrant because of their fear of signaling consumers who might interpret very aggressive defensive actions as vindication of the new entrant's superiority. Erickson (1993) developed, using a modified Lanchester game, closed-loop strategies for offensive and defensive marketing expenditures of duopolistic competitors in a market share rivalry. Roberts et al. (2005) developed both a defensive and pre-emptive strategy to assist a defender, Telstra, in defending its competitive position against Optus, the subsidiary of two large multinationals, which was about to enter its market.

The topic of defensive marketing strategy continues to grow with recent publications in many journals including the *European Journal of Operational Research* (Wilhelm and Xu 2002), the *Journal of Consumer Marketing* (Gamliel and Herstein 2007), the *Journal of Consumer Research* (Chernev 2007), the *Journal of Marketing Research* (Bordley 2003), the *Journal of the Academy of Marketing Science* (Gruca et al. 2002; Shugan 2004, 2005), *Marketing Science* (Steenkamp et al. 2005, Syam et al. 2005, Singh et al. 2006), *Psychology and Marketing* (Klemz and Gruca 2003), *Review of Marketing Science* (Bayus and Chintagunta 2003), and the *International Journal of Research in Marketing* (Rhima and Cooper 2005).

We hope the best is yet to come.

References

- Bayus, B., C. Pradeep. 2003. Competitive entry and pricing responses to product innovation. *Rev. Marketing Sci.* 1(3) 1–24.
- Bordley, R. 2003. Determining the appropriate depth and breadth of a firm's product portfolio. J. Marketing Res. **40**(4) 39–53.
- Bowman, D., H. Gatignon. 1995. Determinants of competitor response time to a new product introduction. J. Marketing Res. 32(1) 42–53.
- Carpenter, G. S., K. Nakamoto. 1990. Competitive strategies for late entry into a market with a dominant brand. *Management Sci.* 36(10) 1268–1278.

- Chernev, A. 2007. Jack of all trades or master of one? Product differentiation and compensatory reasoning in consumer choice. *J. Consumer Res.* **34**(4) 430–444.
- Erickson, G. M. 1993. Offensive and defensive marketing: Closedloop duopoly strategies. Perspectives on multiple category choice. *Marketing Lett.* 4(4) 285–295.
- Gamliel, E., R. Herstein. 2007. The effect of framing on willingness to buy private brands. J. Consumer Marketing 24(6) 334–339.
- Gruca, T. S., S. Sudharshan, K. R. Kumar. 2002. Sibling brands, multiple objectives, and response to entry: The case of the marion retail coffee market. J. Acad. Marketing Sci. 30(1) 59–69.
- Gruca, T. S., K. R. Kumar, D. Sudharshan. 1992. An equilibrium analysis of defensive response to entry using a coupled response function model. *Marketing Sci.* **11**(4) 348–358.
- Hauser, J. R., S. Gaskin. 1984. Application of the "Defender" consumer model. *Marketing Sci.* 3(4) 327–351.
- Hauser, J. R., S. M. Shugan. 1983. Defensive marketing strategies. Marketing Sci. 2(4) 319–360.
- Kalra, A., S. Rajiv, K. Srinivasan. 1998. Response to competitive entry: A rationale for delayed defensive reaction. *Marketing Sci.* 17(4) 380–405.
- Klemz, B., T. S. Gruca. 2003. Dueling or the battle royale? The impact of task complexity on the evaluation of entry threat. *Psych. Marketing* 20(11) 999–1016.
- Kumar, R., D. Sudharshan. 1988. Defensive marketing strategies: An equilibrium analysis based on decoupled response function models. *Management Sci.* 34(7) 805–815.
- Lancaster, K. 1966. A new approach to consumer theory. J. Political Econom. 74(2) 132–157.
- Lancaster, K. 1980. Competition and product variety. J. Business 53(3) S79–S103.
- Lane, W. J. 1980. Product differentiation in a market with endogenous sequential entry. *Bell J. Econom.* 11(1) 237–259.
- Rhima, H., L. G. Cooper. 2005. Assessing potential threats to incumbent brands: New product positioning under price competition in a multisegmented market. *Internat. J. Res. Marketing* 22(2) 159–182.
- Roberts, J. H., C. J. Nelson, P. D. Morrison. 2005. A pre-launch diffusion model for evaluation of market defense strategies. *Marketing Sci.* 24(1) 150–164.
- Robinson, W. T. 1988. Marketing mix reactions to entry. *Marketing Sci.* 7(4) 368–385.
- Shugan, S. M. 1987. Estimating brand positioning maps using supermarket scanning data. J. Marketing Res. 24(1) 1–18.
- Shugan, S. M. 2004. Consulting, research, and consulting research. Marketing Sci. 23(2) 173–179.
- Shugan, S. M. 2005. Comments on competitive responsiveness. Marketing Sci. 24(1) 3–7.
- Silk, A. J., G. L. Urban. 1978. Pre-test-market evaluation of new packaged goods: A model and measurement methodology. J. Marketing Res. 15(2) 171–191.
- Singh, V. P., K. T. Hansen, R. C. Blattberg. 2006. Market entry and consumer behavior: An investigation of a Wal-Mart supercenter. *Marketing Sci.* 25(5) 457–476.
- Steenkamp, J.-B., V. R. Nijs, D. M. Hanssens, M. G. Dekimpe. 2005. Competitive reactions to advertising and promotion attacks. *Marketing Sci.* 24(1) 35–54.
- Syam, N. B., R. Ruan, J. D. Hess. 2005. Customized products: A competitive analysis. *Marketing Sci.* 24(4) 569–584.
- Wilhelm, W. E., K. Xu. 2002. Prescribing product upgrades, prices and production levels over time in a stochastic environment. *European J. Operational Res.* 138(3) 601–621.