

## *Commentary by Gary L. Lilien*

### Research Traditions in Marketing

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As someone who has spent most of his academic life working on models of nonconsumer markets, I was delighted to read about the progress that has been made in this area. Brand and Leeflang do a nice job identifying the peculiarities of the industrial marketplace that make market modeling there challenging. But it is important to note the great heterogeneity in industrial (or, the term I prefer—business) markets. Telephone systems are sold to essentially all organizations; titanium dioxide is not.

During a recent meeting of Penn State's Institute for the Study of Business Markets, at a session on institutional estimation, the speaker asked if it would be valuable to the industry participants to have a high quality list of likely buyers and their sales potential. "Our biggest problem!" stated a telecommunications company market research manager. "No value at all—we know our customers," said a chemical company marketing research manager.

My point is that the traditional focus on the distinction between consumer and industrial (business) markets may mask enormous variation in problems *within* the business marketplace. This great variation within requires a broad modeling portfolio targeted at a range of problems peculiar to different types of business markets.

I will cite four areas that interest me and that I feel merit consideration for further research.

(1) Negotiations Models. Few transactions occur in the business marketplace without some bargaining and negotiation taking place. The literature in the area is vast, and yet there is a gap between the problems that researchers are focusing on and the problems that appear in practice. We [Eliashberg, Lilien, and Kim 1993] found that issues such as power, venue, cultural differences, agenda setting, and the like profoundly affect the structure and outcome of negotiations but that those issues have been largely ignored by both the behavioral science researchers and those researchers building models of the bargaining process as well.

The growth in the use of computer networks as intermediaries, via electronic mail and the like, permits us to capture more of the negotiation process than ever before. I expect that these data will allow us to build

better models of the negotiation process, which will be of more interest to marketers than the rather austere equilibrium-based models of bargaining outcomes favored by economists. (See Osborne and Rubinstein [1990] for example.)

(2) Internal Diffusion Models and Adoption Models. Most of the literature on innovation diffusion assumes one unit of the item will be purchased by an individual or household. Yet it is quite common for organizations to try a new product or process on a limited basis and gradually roll out its adoption within the organization. In office products, units of an organization will slowly standardize on one form of hardware or software, and the experience they have with such products may profoundly affect what and how rapidly other units of the organization adopt.

This has several implications. First, even for the adoption of durables, organizations may undergo a form of trial-repeat process with some factors affecting trial and testing and others affecting the rate and level of penetration in the firm [Sinha and Lilien 1992].

Second, our diffusion models generally consider internal and external influence, where internal influence involves the traditional word-of-mouth effect. Clearly, experience with a product in another unit of the same firm should have a different (greater?) impact than experience in other organizations, and our models should admit such differences.

Third, since some organizations are very large customers by themselves, they can be viewed as markets for some products; it may be valuable to develop separate models of the diffusion process for such market-organizations. Models of the diffusion of information are critical to marketers trying to understand and influence the adoption process within such organizations.

(3) Boundary-Spanning Models. Brand and Leeflang cite the need for more integrated logistics models as MRP and JIT become more important. I don't think they go far enough here: firms are becoming more integrated, from product development and production to the ultimate customer. Production capabilities (flexible manufacturing) allow firms to satisfy customer needs in ways that many customers do not fully understand. Thus, as firms bring suppliers into their own design processes to reduce total costs, it becomes increasingly important to build models that span functions within and across firms. The network models reviewed elsewhere in this volume address some of these issues; Eliashberg and Steinberg [1994] provide some other illustrations of where some fruitful model-based research might emerge.

(4) Normative Purchasing Models. While normally functionally separated from the marketing department and, indeed, placed at the far end of the organization, the effective operation of the purchasing function is a

key focus of marketing. Business marketers must understand the operation of the purchasing process to adapt to it; further, the efficiency of the business marketplace depends on how efficient the purchasing process is. Some issues that are important here are:

How can a firm become a qualified supplier? (This is analogous to the consideration set problem in the consumer marketplace [Roberts and Lattin 1991].)

How can a purchasing organization determine the value of a product offering? (See Anderson, Jain, and Chintagunta [1993] for a state of practice study.)

What information does and should the purchasing organization use to help make the best decisions?

Brand and Leeflang have done a fine job of providing a perspective on model-based research in the business market area. I have outlined some areas that reflect my own interests; I hope they merit being appended to Brand and Leeflang's list.

## References

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