

## RESEARCH INTERESTS

I view myself as a managerial-oriented quantitative modeler with research interests involving the interface between Marketing and Operations Management. This interface is becoming increasingly important as advances are made in supply chain management (the supply side) and customer relationship management (the demand side). Retailers, and other businesses, can realize significant benefits from coordinating these activities. My unique cross-discipline background affords me the opportunity to exploit these opportunities by conducting both empirical and analytical research.

Two issues of special interest to me are (1) the impact of coordinating marketing and operation strategies, e.g., the impact of customized operational and marketing activities on customer behavior, and (2) the actions firms can take to coordinate marketing and operation management, focusing especially on the opportunity to customize interface decisions based on the vast amount of customer information now available to firms.

My dissertation consists of three projects, all of which collectively investigate issues related to the marketing operations interface and the costs and benefits of customized marketing. For example, one interesting issue is the strategic reactions of consumers towards different types of customization. My dissertation research project, "Rewarding Some and Punishing Others, an Empirical Study of Frequent Shopper Discounts," studies how customized promotion activities, as one type of price discrimination, influence consumers' in-store purchase behavior. One interesting finding is that, while non-card holders tend to switch away from items offered with card-holder-only discounts, price discrimination may not decrease these customers' overall in-store spending. Other research along this line includes:

- Personalized service and fairness perceptions on short- and long-term consumer buying behavior
- Preferential service or exclusive deals: Whether and how to reward good customers and/or punish bad ones
- Customization and consumers with privacy concerns

With respect to developing normative implications for coordination, my second dissertation research project, "Managing Stockouts in Online Retailing," examines the value of incorporating the yield management concept in managing inventory and order fulfillment for online retailers. By analyzing consumer transaction history data, I have found that the impact of product unavailability on customer lifetime value differs across customer segments. The policy experiment shows that a retailer can realize about 80 percent of the potential benefit of eliminating all stockouts by guaranteeing high product availability for only a small subset of customers during a certain life cycle and with specific basket contents. Other projects along this stream of research include:

- Managing product returns through an integrated view of relationship marketing and operations management
- Customized logistic management in online retailing
- Reducing errors in the perpetual inventory system and improving demand forecasting
- Integrated pricing/promotion and inventory management: The value of dynamic pricing in retailing
- Customizing merchandise assortments to the needs of local markets