Marketing: Selected Doctoral Theses

TITLE:

COMMITTEE:
Juanjuan Zhang (chair), Tony Ke, John Hauser

ABSTRACT:
This dissertation investigates the implications of consumer inattention and uncertainty for firms' advertising and pricing decisions. The first chapter is an overview of the problems addressed in the dissertation and the main findings.

The second chapter develops a theory-based, cost-effective method to estimate the demand for new products using choice experiments. The premise is that consumers are uncertain about their valuation of a new product and need to spend costly effort to learn their valuation. The effort consumers spend is affected by the probability of their choice being realized, and as a result will change the manifested demand curve derived from choice experiments. We run a large-scale choice experiment on a mobile game platform, where we randomize the price and realization probability of a new product. Data support our theoretical hypothesis. We then estimate a structural model of consumer decisions. The structural estimates allow us to accurately infer actual demand based on choice experiments of small to moderate realization probabilities.

The third chapter examines firms' advertising strategy on social media under consumers' limited attention. Advertising on social media faces a new challenge as consumers can actively select which advertisers to follow. A Bayesian learning model suggests that consumers with limited attention may rationally choose to unfollow a firm. This happens if consumers already know about the firm's value well and if the firm advertises too intensely. However, we find that intensive advertising may still be the optimal strategy for firms. If a firm is perceived as providing low value, it will want to advertise aggressively to change consumers' mind; if a firm is perceived as providing higher value, it will also want to advertise intensively, but in an effort to crowd-out advertising messages from its competitors. Tracking company accounts of 49 TV shows on the most popular tweeting website in China provides empirical evidence that both popular and non-popular firms advertise intensively, although the number of followers does go down when a firm advertises too intensively.

The fourth chapter investigates channel coordination in search advertising. Given that consumers have limited attention, there are only a limited number of advertising slots on search engine platforms that can attract positive number of clicks. A manufacturer can sponsor retailers to advertise its products while at the same time compete with them in a position auction with limited number of slots. We prescribe the optimal cooperative search advertising strategies for the manufacturer. We find that it may not be optimal for a manufacturer to cooperate with all of its retailers, even when these retailers are ex ante the same. This finding reflects the manufacturer's tradeoff between higher demand and higher bidding cost caused by more intensified competition. With two asymmetric retailers, the manufacturer should support the retailer with the higher channel profit per click to get a higher position than the other retailer. The manufacturer should take a higher position than a retailer when its profit per click via direct sales exceeds the channel profit per click of the retailer. We also investigate how a manufacturer uses both wholesale and advertising contracts to coordinate channels with endogenous retail prices.

COMMITTEE: John Hauser (chair), Drazen Prelec, Renee Gosline, Jason Riis

ABSTRACT: Essay 1: "Yes/No/Not right now." Yes/No response formats can increase response rates even in non-forced-choice settings. Although yes/no response formats have been used to increase enrollment rates in several different types of programs, their use has been largely limited to forced choice settings. Across two field experiments, we demonstrate a substantial advantage in click-through rates for a yes/no response format over traditional opt-in response formats in an email context where choice is not forced. The increase in click-through rate does, under certain conditions, also persist through downstream program enrollment and participation. Finally, though noting that the yes/no format advantage is probably multi-determined, we discuss several potential psychological mechanisms, which are particularly relevant in non-forced choice settings. Essay 2: The Effect of Benefit Quantification on Goal Setting and Persistence. We look at how language used to describe rewards, specifically the quantification of an expected reward, might lead participants to create specific targets for their own performance based on that language. Through a combination of field and lab experiments, we demonstrate that the use of a high number to describe rewards leads to higher interest and enrollment, but also higher expectations of performance and a higher drop-out rate from the program when the reward is difficult to achieve. Marketers should be aware of this issue when describing benefits to potential customers, particularly if they wish to motivate persistent behavior. Essay 3: A Picture is Worth a Thousand Words: Photographs as Anchors for Expectations. Marketers often use images to increase the vividness of their communications to customers. These images should make the message easier to process, thereby increasing liking for the product and certainty of expectations. In a series of experiments, I demonstrate that images do indeed increase certainty of preference estimates, both within and between respondents, but may have more mixed effects on the valence of estimates of preference. I also begin to examine how these estimates might impact evaluations of actual products and propose some areas for future exploration.


COMMITTEE: Birger Wernerfelt (chair), Duncan Simester, Juanjuan Zhang

ABSTRACT: This dissertation consists of three essays on the implications of consumer heterogeneity and uncertainty for firms' strategies. The first essay analyzes how firms should develop add-on policies when consumers have heterogeneous tastes and firms are vertically differentiated. The theory provides an explanation for the seemingly counter-intuitive phenomenon that higher-end hotels are more likely than lower-end hotels to charge for Internet service, and predicts that selling an add-on as optional intensifies competition, in sharp contrast to standard conclusions found in the literature. The second essay examines how firms should develop product and pricing policies when customer reviews provide informative feedback about improving product or service quality. The analysis provides an alternative view of customer reviews such that they not only can help consumers learn about product quality, but also can help firms learn about problems with their products or services. The third essay studies the implications of cognitive simplicity for consumer learning problems. We explore one viable decision heuristic - index strategies, and demonstrate that they are intuitive, tractable, and plausible. Index strategies are much simpler for consumers to use but provide close-to-optimal utility. They also avoid exponential growth in computational complexity, enabling researchers to study learning models in more-complex situations.