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Education

Doctor of Philosophy, Marketing, Carnegie Mellon University, expected in 2009

Master of Science, Marketing, Carnegie Mellon University, 2006

Master of Science, Computer Science, University of Illinois at Urbana-Champaign, 2002

Bachelor of Engineering, Indian Institute of Technology, Roorkee, India, 1999

Awards, Fellowships

AMA Sheth Foundation Doctoral Consortium Fellow, 2007

Student Fellow, Theory Rich Marketing Modeling Workshop, Duke University, 2007

William Larimer Mellon Fellow, Carnegie Mellon University, 2003-2006

University Merit Scholarship, Indian Institute of Technology, Roorkee, 1995-1999

Research Interests

Competitive Marketing Strategy, Analytical Modeling, Game Theory

Applications: Emerging Markets, Customer Information Management

Dissertation

Package Sizing and Pricing in Emerging Markets

Committee: Kannan Srinivasan (Chair), Preyas Desai, Kinshuk Jerath, Baohong Sun

Papers Under Review

Kalra, Ajay and Sameer Mathur "When Should Firms Reveal Their Bestsellers?", in preparation for second review at the *Journal of Marketing Research*

Mathur, Sameer, Kannan Srinivasan and Baohong Sun "When Should Firms Share Information About Expensive Customers?", in preparation for second review at *Quantitative Marketing and Economics*

Working Papers

Billeter, Darron, Ajay Kalra and Sameer Mathur "How Purchase Behavior Differs for Vice and Virtue Products", manuscript under preparation for submission to *Journal of Marketing Research*

Mathur, Sameer and J. Jeffrey Inman "How Do Purchase Behavior and Seller Strategy Differ During the Holidays?", manuscript under preparation for submission to *Management Science*

Conference Presentations

Kalra, Ajay and Sameer Mathur. 2008. "When Should Firms Reveal Their Bestsellers?," *Summer Institute in Competitive Strategy, University of California at Berkeley*

Mathur, Sameer, Kannan Srinivasan and Baohong Sun. 2007. "Should Firms Share Information About Expensive Customers?" *Summer Institute in Competitive Strategy, University of California at Berkeley*

Billeter, Darron, Ajay Kalra and Sameer Mathur. 2007. "How Purchase Behavior Differs for Vice and Virtue Products" *INFORMS Marketing Science Conference, Singapore, June.*

Teaching Experience

Instructor, *International Marketing*, Carnegie Mellon University, 2007.
(Instructor Rating: 3.5/5, Course Rating: 3.5/5)

Instructor, *Introduction to Marketing*, Carnegie Mellon University, 2007.
(Instructor Rating: 3.8/5, Course Rating: 3.5/5)

Teaching Assistant, *Database Management Systems*, University of Illinois at Urbana-Champaign, 2001.

Teaching Assistant, *Data Structures*, University of Illinois at Urbana-Champaign, 2000.

Teaching Assistant, *Numerical Methods*, University of Illinois at Urbana-Champaign, 2000.

Doctoral Coursework

Course	Instructor
Microeconomic Theory	Robert Miller
Game Theory	Paul Schewinzer
Contract Theory	Paul Schewinzer
Econometrics I	Holger Sieg
Econometrics II (GMM)	Fallow Sowell
Econometrics III (Discrete Choice Models)	Holger Sieg
Econometrics IV (Non-parametric estimation)	George Gayle
Behavioral Foundations of Marketing	Ajay Kalra
Consumer Behavior	J. Jeffrey Inman (U. Pittsburgh)
Discrete Choice Models in Marketing	Erjen Van Nierop
Analytical Models in Marketing	Kannan Srinivasan
Bayesian Statistics in Marketing	Alan Montgomery
Advanced Data Analysis	Vishal Singh
Consumer Behavior in Online Environments	Alan Montgomery
Seminar in Information Systems II	Pei-yu Chen
Seminar in Information Systems III	Korhan Gurkan
Seminar in Information Systems IV	Tridas Mukhopadhyay

Industry Experience

Research Programmer, *National Center for Supercomputing Applications*, Champaign IL, 2002-2003.

Intern, *Management Science Associates*, Pittsburgh PA, Summer 2001.

Intern, *Pudumjee Industries*, Pune, India Summer 1998.

References

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ABSTRACTS

"Package Sizing and Pricing in Emerging Markets"
(Dissertation Essay I)

Emerging markets like China and India are becoming dominant in the global economy. Such markets have a majority of poor, cash-constrained consumers, living on less than $3 a day. This paper studies the implications of global firms selling high quality products in relatively smaller package sizes in such emerging markets. We develop a model to compare the package sizing and pricing decisions of two competing high- and low- quality firms in an emerging market, with a benchmark, developed market. In the model, the emerging market has two segments of consumers - a cash-constrained segment, which can afford the low quality product, but cannot afford the high quality product and an unconstrained segment which can afford both products. In contrast, the benchmark, developed market has only unconstrained consumers. In the emerging market, the firms decision-making is in three stages. First, the high-quality firm decides to either exclusively sell to the unconstrained segment, or alternately, lower its price and sell to both segments. Second, both firms set their package sizes and finally, their prices. The purpose of the analysis is to compare the firms pricing and package sizing decisions in the presence of cash-constrained consumers, with their decisions in the absence of cash-constrained consumers. The analysis suggests that in the case when the high-quality firm lowers its price and sells to both segments in the emerging market, it also reduces its package size. More interestingly, the low-quality firm leaves its package size unchanged and raises its price in the emerging market, relative to the developed market. In the second case, when the high-quality firm exclusively sells to the unconstrained segment in the emerging market, each firm leaves its package size unchanged and raises its price, relative to the developed market. The main contribution of this paper is to show that low-quality products sell for higher prices in the presence of cash-constrained consumers in emerging markets, as compared to their prices in a benchmark market without cash-constrained consumers. Importantly, this is true, regardless of whether the high quality firm chooses to exclusively sell to unconstrained consumers or chooses to sell to unconstrained and cash-constrained consumers by setting a smaller package size. Moreover, in both cases, consumer surplus is lower and the low-quality firm earns a higher profit. These results have important managerial implications for package sizing and pricing decisions in emerging markets.

"When Should Firms Reveal their Bestsellers?"
(with Ajay Kalra)

Some manufactures and retailers reveal which products are their bestselling items while others elect not to. We examine the conditions under which it is more profitable for a firm to reveal their bestsellers. The effect of the announcement is that customer' perceptions of their match with the bestselling product increase. This effect leads to shift in consumer preferences and impacts the prices that the firm charges. We investigate when either the high price or low priced product is the bestseller. We show that the decision to reveal the bestseller depends on the extent of heterogeneity in consumers' valuation for quality, the heterogeneity in consumers' taste preferences and the quality difference between the two products. We find that consumers must be relatively highly heterogeneous either in valuation for quality or in taste preferences but not in both. We experimentally test the assumption that bestseller announcements change consumer preferences and also find

empirical evidence that firms' pricing behavior is linked to their strategy of announcing bestsellers. We also show that posting the bestsellers reduces consumer welfare.

"When Should Firms Share Information About Expensive Customers?"
(with Kannan Srinivasan and Baohong Sun)

Advances in information technology increasingly allow firms to identify expensive, high-cost customers, who are not only individually less profitable for firms but also raise the average marginal cost incurred by firms and thus impose a negative externality on inexpensive customers. Should competing firms share information that identifies such customers? The answer to this question has important implications for firm profitability, consumer welfare, and privacy laws that currently constrain firms' ability to share information. Considering consumers to be heterogeneous in terms of the cost they impose on firms, this paper presents an analytical model to examine the conditions in which two differentiated Bertrand competitors prefer to share information. The firms' incentives to share information differ according to the degree of product differentiation, the relative proportion of expensive customers in the market, the relative marginal cost of selling to expensive customers and the level of noise in the information. A Prisoner's Dilemma results when firms selling substitutable products share information identifying expensive customers. The competing firms benefit from sharing information, but the benefits from a firm individually reneging on an information-sharing agreement are even higher; paradoxically, in equilibrium, both firms deviate and keep their information private. A third-party agency such as an industry trade association might serve to supervise and coordinate information-sharing agreements between competing firms. In contrast, when the firms sell complementary products, they always have an incentive to share information. Importantly, this paper establishes that sharing information identifying expensive customers increases the welfare of inexpensive customers. Privacy laws thus protect expensive customers more than inexpensive customers. In certain conditions, the aggregate consumer welfare might increase, when firms share information identifying expensive customers. This research recommends relatively weaker, not stronger, privacy laws, which is counterintuitive to the recommendations of the popular press.

"How Purchase Behavior Differs for Vice and Virtue Products"
(with Ajay Kalra and Darron Billeter)

We propose that the visceral drive in the purchase of vice products is relatively stronger than for virtuous products because they are more tempting. Visceral effects suggest that the purchase of the vice products are characterized by (i) hedonic impact that require immediate resolution to the drive state and (ii) attention narrowing. Using an experimental approach, we find evidence of the hedonic impact as, compared to virtuous products, consumers engage in search for information for vice products earlier and are also willing to pay a higher price for their immediate acquisition. Attention narrowing manifests greater errors in remembering product attributes such as price in the purchase of vice products. We also examine data from completed auctions on ebay for the purchase of relatively vice and virtue products in two categories: movie DVD and books. Consistent with the attention

narrowing account, consumers pay a higher shipping price (as a percentage of total price) for the relatively vice products. We also find that the percentage of consumers purchasing from sellers with perfect reputations is lower for vice products than for virtue products. Additionally, there is evidence for a hedonic impact as there is significantly more sniping (% of bidding in the last minute) in the vice auctions than in the virtuous auctions. Overall, the results of the experiments and auction data confirm that the process of acquiring a vice product is a relatively intense, visceral experience with important marketing implications.

"How Do Purchase Behavior and Seller Strategy Differ During the Holidays?"
(with J. Jeffrey Inman)

We investigate how consumer purchase behavior and seller strategy differs during the critically important holiday season - the time between Thanksgiving and Christmas, as compared to the rest of the year. We focus on how consumer purchase behavior is influenced while purchasing gifts under time pressure during the holidays. We analytically model the impact of the holiday season on a retailer's profit-maximizing choice of price and service quality. We assume that consumers have a higher average marginal valuation for quality during the holidays and that consumers incur a higher average marginal disutility from transaction costs during the holidays. Our model predicts that the retailer raises its equilibrium quality of service and also charges a correspondingly higher price during the holidays, leading to higher profits during the holidays. Our equilibrium analysis further demonstrates that consumer surplus increases during the holidays, despite the higher prices, and argues against the deadweight loss of Christmas identified in prior research. We empirically support our analysis with a field study of online sales of toys, movies and videogames on eBay, during and after the 2006 holiday season. We report three key results. First, consumer willingness-to-pay, as measured by winning bids in auctions, is higher during the holidays, compared to after the holidays. Second, consumers experience a greater marginal disutility from incurring transaction costs during the holidays. We compare the relative fraction of fixed-price buy-it-now sales during the 2006 holidays, with those after the holidays. We find that consumers have a greater preference for the fixed-price channel during the holidays and pay higher prices to hedge against the risks of not winning the item or receiving it post-Christmas. Third, we empirically demonstrate that retailers raise prices during the holidays. Retailers rationally anticipate that consumers experience a higher willingness-to-pay for gifts under deadlines during the holiday season and successfully sell them the same products at higher prices. We report that the buy-it-now prices set by retailers during the holidays are higher than those set after the holidays.