Zibin (Ben) Xu

USC-Marshall School of Business 3660 Trousdale Parkway, ACC 306E Los Angeles, CA 90089-0443 Mobile: +1 (337) 371-7949 Email: <u>zibin.xu@gmail.com</u> Website: <u>https://sites.google.com/site/zibinxu</u>

EDUCATION

Ph.D. Candidate in Marketing, University of Southern California (USC), Los Angeles, CA	2017
M.S. in Statistics, University of Missouri-Kansas City (UMKC), Kansas City, MO	2011
B.S. in Mathematics and Computational Science, Cum Laude, Wuhan University, Wuhan, China	2006

SELECTED HONORS & AWARDS

University Award for Excellence in Teaching, USC	2015
Marshall School PhD Teaching Award, USC	2015
Finalist in Research Competition, USC Graduate School	2014
USC Doctoral Student Summer Institute Award (\$2000)	2013
Meritorious (First Prize) Winner of International Mathematical Contest in Modeling	2005

INTERESTS

Pricing Strategies, Communication Strategies, Privacy, Digital Markets, Preference Matching	Research
Marketing Strategy, New Product Development, Entrepreneurship, Market Research	Teaching

WORKING PAPERS

Zibin Xu & Anthony Dukes, "The Implications of Data Collection when Consumers have Uninformed Preferences." (*Job-Market Paper*)

Zibin Xu & Anthony Dukes, "Price Discrimination in a Market with Uninformed Consumer Preferences." (Submitted to *RAND Journal of Economics*)

Zibin Xu, Yi Zhu, & Shantanu Dutta, "The Impact of Paid Inclusion on Niche Seller Screening and Consumers' Overall Service Experience." (Submitted to *Marketing Science*)

MANAGMENT PUBLICATION

Zibin Xu, Mark Parry, & Michael Song (2011), "The Impact of Technology Transfer Office Characteristics on University Invention Disclosure", vol. 5, no. 2, pp. 212 - 227, *IEEE Transactions on Engineering Management*

SELECTED TEACHING

Full-responsibility Instructor , Marketing Fundamentals, <i>USC</i> , Undergraduate Core, Course Evaluation: 4.5/5.0	2014
Teaching Assistant , Pricing Strategy, Marketing Strategy, New Product, Global Marketing Professors: Anthony Dukes, Shantanu Dutta, Matt Selove, Diane Badame, & Dennis Schorr	2012-2015
Full-responsibility Instructor , Entrepreneurial Marketing and Finance, <i>UMKC</i> , Undergraduate Elective, Course Evaluation: 4.4/5.0	2009-2010
CONFERENCE PRESENTATIONS	
The Impact of Long Tail Sellers on Consumers' Overall Service Experience and Welfare, 33 rd Annual Marketing Ph.D. Symposium, University of Houston, TX	2015
	2015 2014

University Ph.D. Research Competition, USC Graduate School, CA

SELECTED SERVICE

Assistance in Reviewing: Marketing Science, Journal of Marketing Research	2012-2015
Ad Hoc Reviewer: IEEE Transactions on Engineering Management, Technovation	2010-2011
Coordinator, Regnier Family Foundation Business Plan Competition, Kansas City, MO	2009

SELECTED DOCTORAL COURSEWORK

Marketing Quantitative Modeling	Anthony Dukes, Sha Yang & Dina Mayzlin
Choice Modeling and Marketing Strategy	S. Siddarth & Gerry Tellis
Consumer Behavioral	Kristin Diehl & Joseph Priester
Microeconomics and Theoretical Game Theory	Tony Marino, Juan Carrilo & Yilmaz Koser
Theory of Contract Design & Industrial Organization	Heikki Rantakari & Guofu Tan
Strategy Management	Kyle Mayer
Applied Econometrics	Chang Hsiao
Dynamic Programing in Operation Management	Amy Ward
Applied Game Theoretical Design (UCLA)	Bill Zame
Matching and Auction (UCLA)	Marek Pycia
Empirical Industrial Organization (Caltech)	Matt Shum
Convex Optimization (Caltech)	Chris Shannon
Marketing Models on Entrepreneurship (UMKC)	Mark Parry
	2

DISSERTATION

Chair: Anthony Dukes Committee: Dina Mayzlin, Matt Selove, & Guofu Tan

Three Essays on Firm Strategies in a Market with Uninformed Consumer Preferences

Essay 1: Personalized Pricing in a Market with Uninformed Consumer Preferences

Status: Submitted to RAND Journal of Economics

We study the price discrimination problem when consumers have uninformed preferences – imperfect prior knowledge about their match values with the firm's product. Each consumer receives a private noisy signal that is correlated with her value. If the firm can collect and aggregate these signals, it is able to learn beyond the consumer's private knowledge. This confounds the monopolist's ability to extract differential surpluses. We show that the firm can effectively price discriminate, but it requires the firm to signal to consumers through personalized prices and a list price. Several novel results arise from this setting: (i) under certain conditions, uniform pricing is more profitable than price discrimination; (ii) the optimal uniform price can decrease with the portion of consumers whose value is higher than others; (iii) relative to uniform pricing, price discrimination may be a strong Pareto improvement, strictly increasing the payoff for the firm and every consumer.

Essay 2: The Impact of Data Collection when Consumers have Uninformed Preferences *Job Market Paper*

This research examines the incentives of a monopoly firm to collect anonymous consumer data for the purposes of product line design and of consumers to opt-out from data collection. Data collection can arise in equilibrium under certain conditions. Uninformed preferences means consumers are imperfectly informed of their match value for a new product or service. By collecting consumer data in aggregate, the firm improves its understanding of the distribution of consumers' preferences and their knowledge. It is possible that the firm can infer a consumer's match value even if the consumer does not observe it. Consumer suspicion, however, may prevent the firm from exploiting its superior information and manipulating consumers' beliefs. It may be optimal for the firm to signal consumers' high match values by lowering the price for its high quality product while simultaneously raising the quality of its low quality product. This tends to reverse the classic quality distortion in product line design. Equilibrium data collection can be Pareto optimal *ex-post*. In other cases, however, data collection merely helps the firm extract more consumer surplus through its increased ability of price discrimination, which leads consumers to opting out.

Essay 3: Advertising Matching for Consumers with Uninformed Preferences

Status: Work in Progress

LANGUAGE

Mandarin (Native), English (Fluent), French (Basic), SAS, R, Matlab, C, Mathematica

SELECTED RESEARCH ABSTRACTS

Zibin Xu, Yi Zhu, and Shantanu Dutta, "The Impact of Paid Inclusion on Niche Seller Screening and Consumers' Overall Service Experience and Welfare." *Submitted to Marketing Science*

Online shopping platforms have enabled niche sellers that offer differentiable products to compete against mass-market sellers. However, some niche sellers may provide low service because of their limited service abilities. Platforms claim that screening mechanisms such as paid inclusion can filter the low-service niche sellers and consequently improve consumers' overall service experience. To examine this claim, we develop an analytical model in which niche sellers and mass market sellers differ by the distribution of their matching probabilities with consumers. Several novel results arise from this setting. First, paid inclusion may drive out the high-service niche seller, if that seller's service efficiency is sufficiently high. Second, paid inclusion may induce different service responses from the surviving sellers. Particularly, mass market seller may shirk on service when paid inclusion filters the low-service niche seller with either sufficiently high service efficiency or sufficiently low service efficiency. Otherwise paid inclusion may improve consumers' overall service experience and welfare.

Mark Parry, Chuck Ingenes, and **Zibin Xu**, "Resale Price Maintenance: Customer Service and Channel Breadth." *Work in Progress*

Resale price maintenance (RPM) enables a manufacturer to constrain the prices that its retailers charge. To address the impact of RPM's recent legalization, we derive a manufacturer's globally-optimal RPM strategy when it distributes through competing, heterogeneous retailers who provide service that enhances product demand. Our analysis yields several insights into a manufacturer's use of RPM. First, an optimal RPM strategy can entail a ceiling that lowers the price unconstrained retailers would charge, or a floor that raises retail prices. The choice of ceiling or floor depends on service effectiveness, retail heterogeneity, and retailer competition. Second, in some cases the manufacturer will impose a price floor that constrains the pricing flexibility of the smaller retailer, but does not directly impact the larger retailer. Third, there are scenarios in which a manufacturer chooses to not constrain prices even though it can legally do so. Fourth, the optimal application of RPM may cause the manufacturer to restrict channel breadth. Fifth, the optimal use of RPM often benefits the manufacturer while lowering total channel profit. Sixth, RPM always disadvantages the smaller retailer, but it sometimes benefits the larger retailer.

REFERENCES

Anthony Dukes USC Marshall School Phone: (213) 740-3846 dukes@marshall.usc.edu Shantanu Dutta USC Marshall School Phone: (213) 740-5038 sdutta@marshall.usc.edu Dina Mayzlin USC Marshall School Phone: (213) 740-3360 mayzlin@marshall.usc.edu