Qiaoni Shi

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Google Scholar

Education

Ph.D. candidate in Marketing, University of Pittsburgh

M.A. in Economics, Indiana University (Passed all PhD qualify exams with high honor)

M.S. in Marketing, University of Florida

B.A. in Economics, Peking University

B.S. in Information System, Beijing Language and Culture University

Papers

Publications

1. Shugan, Steven M., Jihwan Moon, Qiaoni Shi, and Nanda S. Kumar. Product Line Bundling: Why Airlines Bundle High-end While Hotels Bundle Low-end. *Marketing Science* (2017): 36(1), 124-139.

Working Papers

2. "Designing Entry Strategies for Subscription Platforms", with Esther Gal-Or (Revise and Resubmit at *Management Science*)

3. "When Walmart Leaves Town: How Store Closures Impact Consumer Shopping Behavior", with Jeffrey Inman and Dinesh Gauri (Under review at *Journal of Marketing Research*)

Work in Progress

4. "Video Content Analysis to understand Consumer Behavior", with Jeffrey Inman, Meheli Basu, and Subhabrata Bhattacharya

5. "Strategies of Multi-homing Individual Vendors on Platform", with Esther Gal-Or

6. "Platform Monetization and Innovation Ecosystem Inequality: a Natural Experiment on Goodreads", with Kai Zhu

Early Publications in Computer Science

7. Yaodong Ni, Qiaoni Shi, Zhiyuan Wei, Optimizing Influence Diffusion in a Social Network with Fuzzy Costs for Targeting Nodes. *Journal of Ambient Intelligence and Humanized Computing* (2017): 8(5), 819-826.

8. Yaodong Ni, Qiaoni Shi, Minimizing the Complete Influence Time in a Social Network with Stochastic Costs for Influencing Nodes. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems* (2013): 21(s1), 63-74.

Honors, Awards, Research Grants and Scholarships

AMA-Sheth Foundation Doctoral Consortium Fellow, Indiana University, 2020

Marketing Science Institute Research Grant ($10,000), Marketing Science Institute, 2019

Marketing Science Doctoral Consortium Fellow, New York University and University of Roma Tre, 2019

Mitsubishi Fellow, University of Pittsburgh, 2017-present

Teaching Experience

Instructor

Introduction to Marketing, Undergraduate, Spring 2020

Instructor Evaluation: **4.75/5**

The second part of the course was moved online

Remote Instruction Effectiveness Evaluation: **4.94/5**

Teaching Assistant

Marketing Research, Spring 2019, Spring 2020

Introduction to Marketing, Fall 2019

Conference Presentations and Participation

Presentations

"When Walmart Leaves Town: How Store Closures Impact Consumer Shopping Behavior" presented at *Marketing Science* in Roma, Italy, 2019

"When Walmart Leaves Town: How Store Closures Impact Consumer Shopping Behavior" presented as poster for *Marketing Academic Research Colloquium* at Georgetown University, 2019

Participation

INFORMS Marketing Science Conference (ISMS), 2020

Marketing Academic Research Colloquium (MARC), Penn State University, 2018

Summer Institutes in Computational Social Science, University of Colorado Boulder, 2018

Platform Strategy Research Symposium, Boston University, 2018

Conference on Digital Experimentation (CODE), MIT, 2017

Skills

Methodology

Game theory, Econometrics, Causal Inference, Machine Learning, Natural Language Processing

Programming

Primary	Python (numpy, pandas, sklearn, gensim, nltk, scrapy, tensorflow) R (data.table, dplyr, tidyr, ggplot) Mathematica
Secondary	C, C++, C#, JAVA, SQL, Stata, Excel VBA

Selected Coursework

Marketing

Marketing Models
Market Strategy
Market Behavior Research
Consumer Behavior

Economics

Microeconomics
Game theory and Applications
Contract Theory and Theory of Incentive
Behavioral Economics
Econometrics I & II
System and Panel Econometrics models

Statistics and Computer Science

Probability and Statistics
Mathematical Statistics
Bayesian Statistics
Computer Network
Operation System
Database Theory
Computer Programming in C/C++
Fundamentals of Programming and Computer Science in Python
Computational Linguistics in Python
Text Analysis in Python
Natural Language Processing

Reference

J. Jeffrey Inman (Co-Chair)

Associate Dean for Research and Faculty
Albert Wesley Frey Professor of Marketing
Katz Graduate School of Business
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Esther Gal-Or (Co-Chair)

Glenn Stinson Chair in Competitiveness
Professor of Business Administration
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Steven M. Shugan

McKethan-Matherly Eminent Scholar Chair and Professor
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Selected Abstracts

"Product Line Bundling: Why Airlines Bundle High-End While Hotels Bundle Low-End", with Steven M. Shugan, Jihwan Moon, Nanda S. Kumar (Published at *Marketing Science*)

Product lines are ubiquitous. For example, Marriott International manages high-end ultra-luxury hotels (e.g., Ritz-Carlton) and low-end economy hotels (e.g., Fairfield Inn). Firms often bundle core products with ancillary services (or add-ons). Interestingly, empirical observations reveal that industries with ostensibly similar characteristics (e.g., customer types, costs, competition, distribution channels, etc.) employ different bundling strategies. For example, airlines bundle high-end first class with ancillary services (e.g., breakfast, entertainment) while hotel chains bundle ancillary services (e.g., breakfast, entertainment) at the low-end. We observe, unlike hotel lines that are highly differentiated at different geographic locations, airlines suffer low core differentiation because all passengers (first-class and economy) are at the same location (i.e., same plane, weather, delays, cancellations, etc.). In general, we find product lines with low core differentiation (e.g., airlines, amusement parks) routinely bundle high-end while product lines with highly differentiated cores (e.g., hotels, restaurants) routinely bundle low-end. High-end bundling makes the high-end more attractive, increasing line differentiation (less intraline competition) while low-end bundling decreases line differentiation. Therefore, bundling allows optimal differentiation given a differentiation constraint (complex costs). Last, firms may use strategic bundling for targeting in their core products; e.g., low-end hotels bundle targeted add-ons unattractive to high-end consumers such as lower-quality breakfasts and slower Internet.

"Designing Entry Strategies for Subscription Platforms", with Esther Gal-Or (Revise and Resubmit at *Management Science*)

We consider a subscription platform that offers services to variety seeking consumers who incorporate transportation costs in their decision of how many and which vendor services to consume. ClassPass in fitness and MoviePass in entertainment are examples of such platforms. We find that for the platform to be successful, it should enter markets where vendors are sufficiently differentiated. In such markets, the added benefit consumers derive from diversifying their consumption is relatively high, thus strengthening the position of the platform in negotiations with the vendors. As well, managers should consider entering markets where competition between the vendors is relatively weak, and in particular, where vendors benefit from local monopoly positions due to high transportation costs incurred by consumers. When entering such markets, offering the subscription contract is likely to attract new customers that are not active when the platform does not exist. Moreover, appropriate crafting of the agreement with the vendors in this case, allows the parties to fully extract the surplus derived by platform customers. Last, the platform's managers should be cognizant of the need to identify tools that facilitate alleviated price competition with vendors. Negotiating over an appropriate transfer fee per customer to pay the vendor or imposing restrictions on the level of service that their customers can use may be such tools. Offering customers lower quality services when using the vendor in comparison with the quality they could obtain by buying directly from him is not a successful tool to alleviate price competition.

Selected Abstracts

"When Walmart Leaves Town: How Store Closures Impact Consumer Shopping Behavior", with Jeffrey Inman and Dinesh Gauri (Under review at *Journal of Marketing Research*)

Multistore retailers have closed myriad stores over the past several years, representing billions of dollars in sales. Despite the huge practical impact on shoppers, surprisingly little research has examined the impact of retail store closures on consumer shopping behavior. In this research, we leverage two disruptive events – Walmart's closure of 154 stores in the United States in early 2016 and a large warehouse chain's closure of 63 stores in early 2018 – and apply a difference-in-difference matching estimation to empirically investigate the impact of store closings on the affected households as well as nearby retailers. We find that overall, the Walmart large-scale store closure did not lead to a windfall for competing retailers. Rather, the majority of households simply switched to the nearest open Walmart, albeit this was moderated by distance from the household to the open Walmart store. This result indicates that in the Walmart store closure, consumers largely bore the cost of store by incurring greater travel costs. Additionally, we find that many consumers shopped more from Walmart online than before, suggesting that the store closure provided a nudge for consumers to explore the online channel. In terms of the impact on consumer surplus. our analysis reveals that households who switched to other retail formats bore a basket-level price increase of 3-5%. Finally, we find a similar pattern for the warehouse club closures that clubs near a closed club will see an significant increase in its sale. However, the warehouse club lost over 70% of the revenues from the closed stores. This indicates the importance of retail density and a strong online presence in moderating the impact of store closures on shoppers and the focal retailer.