Lu Huang

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EDUCATION

Ph.D.	Marketing	2020 (expected)
	University of Connecticut, Storrs, CT	
M.S.	Applied Economics	2014
	University of Connecticut, Storrs, CT	
M.S.	Finance	2012
	Shandong University, Jinan, China	
B.S.	Applied Physics	2006
	School of the Gifted Young	
	University of Science and Technology of China, Hefei, China	

RESEARCH INTERESTS

Substantive: Marketing Analytics, Online Marketplace, Relationship Management, Social

Media, Empirical Models of Consumer Behavior

Methodological: Dynamic Modeling, Machine Learning, Structural Modeling

PUBLICATIONS

- 1. Zheng, Hualu, **Lu Huang**, and William T. Ross (2019), "Reducing Obesity by Taxing Soft Drinks: Tax Salience and Firms' Strategic Responses," *Journal of Public Policy & Marketing*, forthcoming.
- 2. **Huang, Lu** and Yizao Liu (2017), "Health Information and Consumer Learning in the Bottled Water Market," *International Journal of Industrial Organization*, 55, 1-24.

WORKING PAPERS & WORK IN PROGRESS

- 1. "Dynamic Relationship Management with Spillovers in B2B Markets," with Jian Ni and Hongju Liu (*Job Market Paper*), manuscript in preparation for submission to *Marketing Science*
- 2. "Marketing Tools, Learning, and Exit: Evidence from China's Largest E-commerce Platform," with Hongju Liu, model development phase, target: *Marketing Science*
- 3. "Owned Social Media Advertising: Brand Purchase and Spillovers," with Hualu Zheng, manuscript in preparation for submission to *Journal of Marketing*
- 4. "Price Discrimination and Vertical Product Differentiation in the Carbonated Soft Drinks Market," with Yizao Liu and Shu Shen, manuscript in preparation for submission to *Quantitative Marketing and Economics*
- 5. "Video Streaming and Consumer Engagement," data collection phase, target: *Journal of Marketing Research*

TEACHING EXPERIENCE

Instructor

Introduction to Marketing Management

-Teaching Evaluation **4.7/5**-Teaching Evaluation **4.6/5**Spring 2017, class size: 35
Spring 2019, class size: 36

Teaching Assistant

Marketing Planning and Strategy Fall 2018

Marketing Research Fall 2017 – Spring 2018 Introduction to Marketing Management Fall 2014 – Fall 2016

Integrated Marketing Communications in the Digital Age Fall 2014
Empirical Industrial Organization Spring 2014

Business Strategies and Policy in Food Industries Spring and Fall 2013

Food Policy Spring 2013

Business Finance in Food and Resource Industries Spring and Fall 2012

PROFESSIONAL EXPERIENCE

Engineer, Samsung Electronics Co., 2006 - 2008

COMPUTATIONAL SKILLS

Programming Languages: C/C++, MATLAB, R, Python

Statistical Packages: Stata, SAS

CONFERENCE PRESENTATIONS

INFORMS Marketing Science Conference, Rome, 2019 (Scheduled)

INFORMS Marketing Science Conference, Baltimore, 2015

Agricultural & Applied Economics Association's 2014 Annual Meeting, Minneapolis, 2014 Agricultural & Applied Economics Association's 2013 AAEA & CAES Joint Annual Meeting, Washington DC, 2013

11th Annual International Industrial Organization Conference, Boston, 2013

HONORS AND AWARDS

University of Connecticut

University Doctoral Dissertation Fellowship, 2019

Department of Marketing Outstanding Ph.D. Student Fellowship, 2019, 2016, 2015

Department of Marketing Ph.D. Student Teaching Award, 2018

AMA-Sheth Foundation Doctoral Consortium Fellow, 2017

Dean's Summer Fellowship, School of Business, 2017

ING Global Ph.D. Fellowship, 2016

University Pre-Doctoral Fellowship, 2015

Dean's Pre-doctoral Fellowship, School of Business, 2015

Eileen and Jerry Lieberman Scholarship, 2014

School of Business Outstanding Applicant Award, 2014

Stewart Johnson Scholarship, 2012-2013
Bishop-Carder Scholarship, 2013
AAEA Young Professional and Graduate Student Travel Grant, Agricultural & Applied Economics Association, 2013

University of Science and Technology of China Guanghua Scholarship, School of the Gifted Young, 2004

SELECTED GRADUATE COURSEWORK

Marketing and Economics

Advanced Quantitative Application in Marketing Introduction to Research in Marketing Socio-Cultural Aspects of Consumer Behavior Strategic Applications in Marketing Microeconomics Applications Econometrics II Econometrics III Empirical Industrial Organization II

Machine Learning, Statistics, and Engineering

Advanced Statistical Methods
Information Control and Games
Statistical Computing (Statistical Learning)
Machine Learning (Audit)
Neural Networks for Classification and Optimization

Advanced Empirical Industrial Organization Macroeconomics II Bayesian Econometrics Analysis Microeconomics II Microeconomics III Advanced Mathematical Economics I Advanced Financial Mathematics

REFERENCES

Debanjan Mitra (*Chair*)

Voya Financial Chair Professor of Marketing School of Business University of Connecticut

Email: debanjan.mitra@uconn.edu

Joseph Pancras

Associate Professor of Marketing School of Business University of Connecticut

Email: jpancras@business.uconn.edu

Hongju Liu (Chair)

Professor of Marketing Guanghua School of Management Peking University

Environmental Economics

Email: hliu@gsm.pku.edu.cn

William Ross Jr

Professor Emeritus of Marketing School of Business University of Connecticut

Email: william.ross_jr@uconn.edu

Dynamic Relationship Management with Spillovers in B2B Markets (Job Market Paper)

Lu Huang, Jian Ni, and Hongju Liu

Key words: relationship management, spillover, sales force, hidden Markov models, Bayesian analysis

A company's relationship with its sales representatives is crucial for the company to succeed. However, identifying and retaining capable independent sales representatives and managing the relationship between the company and the representatives are challenging. Specifically, independent sales representatives are not employees, companies have no institutional control over the representatives. The asymmetric information between the two parties leads to an unequal and unobserved relationship, which forces companies to rely heavily (perhaps solely) on sales outcomes when segmenting and targeting independent representatives. In this study, we propose a bivariate Tobit Hidden Markov model to capture the dynamics of the unobserved relationship between companies and independent sales representatives. By examining an insurance company and its financial advisors, we investigate the relationship in the insurance industry and discover the factors that affect advisors' long- and short-term performance. We find that the relationship between financial advisors and the company can be described by three latent states. Advisors in different states have different willingness to sell for the company. Marketing contacts such as sales calls and face to face sales meetings have significant contemporaneous effects on sales. They also impose long-term effects on switching the relationship state between the company and financial advisors to different levels. Moreover, our model captures several cross effects in the company-sales representative system: (1) the company's relationship management activities targeting at a specific advisor have negative impacts on sales of other advisors who work in the same branch of a brokerdealer firm, and (2) advisors affect each other on their sales performance positively. We discuss how our results can help managers allocate marketing resources to independent representatives and optimize long-term returns.

Marketing Tools, Learning, and Exit: Evidence from China's Largest E-Commerce Platform Lu Huang and Hongju Liu

Key words: online marketplace, demand uncertainty, Bayesian learning, entry and exit

In this study, we examine the effect of marketing tools (pay per click advertising, for example) on online sellers' exit decisions. E-commerce platforms provide vendors with marketing tools that can increase the number of visits to online stores. However, our data indicate that the adoption of these tools may induce online sellers to exit the market faster and that more than 70% of sellers leave the platform within the first year. The effect could be attributed to the costs associated with these marketing tools and the faster resolution of demand uncertainty. On one hand, marketing tools are the most important revenue source for an online marketplace. On the other hand, the fast exit may have a negative impact on the growth of an online marketplace, as fewer sellers make the platform less attractive to consumers. Aiming at identifying a balance between the promotion of marketing tools to online sellers and the long-term growth of an online marketplace, we use a structural

approach to model online sellers' exit decisions as to the result of a dynamic learning process. This study provides critical managerial implications to online business practitioners. The results help online stores allocate budgets toward marketing tools effectively and inform online sellers about the most optimal way of adopting these tools.

Owned Social Media Advertising: Brand Purchase and Spillovers

Lu Huang and Hualu Zheng

Key words: owned social media, advertising, intrabrand competition, demand

Spillovers occur if advertising one brand affects the performance of another brand. This study examines the spillover effects of TV and owned social media (OSM) advertising in the U.S. soft drink industry. OSM refers to firm-owned brand pages on networking sites such as Facebook. Using a random coefficients logit model, we investigate within a brand portfolio, 1) how one brand's OSM advertising spills over to other brands, 2) how OSM advertising spillovers differ from the spillovers in TV advertising, and 3) how OSM and TV advertising jointly influence consumer purchase. Companies often manage individual brand pages in their OSM to yield optimal marketing outcomes for their entire brand portfolio. Therefore, the knowledge of how spillovers operate among one company's brand pages is of great interest to brand managers in maximizing the profit of the brand family. Our results suggest that advertising one brand on TV increases sales of other brands in the family, while one brand's OSM advertising restrains another brands' demand. The negative spillover of OSM may limit the overall effectiveness of OSM advertising on the sales of the entire portfolio, whereas, due to the positive spillover, the combined effects of TV advertising may exceed the sum of the effects of individual brands' TV advertising. We also find that combining TV and OSM advertising leads to nonlinear effects on brand purchase. This study provides important managerial implications to marketers on setting budgets toward TV and OSM advertising, allocating OSM resources within a brand portfolio, and developing OSM competition strategies.