Siqi PEI

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EDUCATION

Chinese University of Hong Kong

Doctoral Candidate in Information Systems, 2016 – 2022.01(expected)

Adviser: Zhang, Michael Xiaoquan (https://mikezhang.com/)

Jilin University 2015

B.S. in Actuarial Science 2015

B.A. in Applied Finance

RESEARCH INTERESTS

Economics of IS, Intelligent Systems, Business Analytics, Digital Platforms, Financial Technologies, Healthcare Informatics and Analytics

Methods: Applied Econometrics, Econometric Modeling, Field Experiments, Lab Experiments, Natural Experiment, Machine Learning

PAPERS UNDER REVIEW (*Equal Contribution)

1) *Liu Jialu, **Pei Siqi**, and Xiaoquan (Michael) Zhang, "Online Food Delivery Platforms and Female Labor Force Participation", ***Major Revision*** *at Information Systems Research*
   - Winner, 2020 WISE Best Paper Award

2) *Liu Jialu, **Pei Siqi**, and Xiaoquan (Michael) Zhang, "Technology and the Political Agency Problem in Combating Water Pollution: A Regression Discontinuity Design", ***Major Revision*** *at Management Science*

3) **Pei Siqi**, and Kim Keehyung, "Rewarding Experts in Revenue-sharing Crowdfunding: An Experimental Study", ***Under review*** *at Management Science*

WORKING PAPERS (*Equal Contribution)

1) ***Siqi Pei***, Yiying Zhang, Juan Feng, and Xiaoquan (Michael) Zhang, "Personal Information, Product and Platform Uncertainty, and Profitability of Online Shopping Platforms". *In preparation for submission*

2) *Tao Lu, **Siqi Pei**, Hao Ying, and Xiaoquan (Michael) Zhang, "Influencer Marketing: A Model of Optimal Pricing", *In preparation for submission*

3) *Jialu Liu, **Siqi Pei**, and Keehyung Kim, "An Experimental Investigation of Risk Disclosure Policy in Crowdfunding", *In preparation for submission*

RESEARCH IN PROGRESS

1) "Anchoring or Mental Accounting? How Does Increased Price Lead to Increased Demand: A Field Experiment", with Miaozhe Han, Jie Song, Xiaoquan (Michael) Zhang, and Feng Zhu. *Manuscript in preparation*

2) "Blind Box Marketing: A Pricing Model to Increase Manufacturer Profits", with Jie Song, Hao Ying, and Xiaoquan (Michael) Zhang. *Model estimation in progress*

HONORS & AWARDS

Selected for ICIS Doctoral Consortium	2021
Hong Kong Research Grants Council, General Research Fund (264,876 HKD)	2020-2022
Workshop on Information Systems and Economics (WISE), Best Paper Award	2020
Hong Kong Information and Communication Technologies (HKICT), Innovation Award	2019
Chinese University of Hong Kong, Postgraduate Studentships (PGS) Award	2016-2021
"Challenge Cup" Chinese College Student Business Plan Competition, Gold Prize	2014

CONFERENCE PRESENTATIONS

"Understanding Spillover Effects of Various Digital Platforms," International Conference on Information Systems (ICIS), 2021

"An Experimental Investigation of Risk Disclosure Policy in Crowdfunding," Statistical Challenges in Electronic Commerce Research (SCECR), 2021.

"Online Food Delivery Platforms and Female Labor Force Participation," Workshop on Information Systems and Economics (WISE), 2020.

"Rewarding Experts in Revenue-sharing Crowdfunding: An Experimental Study," Statistical Challenges in Electronic Commerce Research (SCECR), 2020.

"Social News Sentiment and Equity Trading Indicators," China Meeting of the Econometric Society (CMES), 2018.

TEACHING INTERESTS

Management Information Systems, Information System Research, Cybersecurity, Technology Innovation and Entrepreneurship, Applied Econometrics, Business Analytics, Decision Models and Applications, FinTech, Machine Learning, Microeconomics, Behavioral Economics, Finance

TEACHING EXPERIENCE

Teaching Assistant, **CUHK Business School**   Instructor

Strategic Information Systems, **EMBA**, 2021	Zhang, Michael Xiaoquan
Entrepreneurship in Finance, **MBA in Finance**, 2020	Zhang, Michael Xiaoquan
Applied Econometrics for Business Decisions, Fall 2019	Li Hongyi
Business Forecasting, Spring 2019	Li Hongyi
Basic Economics for the Hospitality and Tourism Industry, 2018	Lien Jaimie
Economics for Business Studies, 2017	Wu Qinggong
Decision Models and Applications, 2016	Lau, William Ka

PROFESSIONAL SERVICES

Reviewer, International Conference on Information Systems (ICIS)	2019, 2020
Reviewer, Pacific Asia Conference on Information Systems (PACIS)	2019, 2020

DOCTORAL COURSEWORK

Course	Instructor
Information Systems	
Advanced Management Information System Research Seminar	Zhang, Michael Xiaoquan
Thesis Research	Zhang, Michael Xiaoquan
Web Analytics and Intelligence	Bang Youngsok
Econometrics	
Econometric Theory and Application	Shi Zhentao
Applied Econometrics	Wang Xiaohu
Economics	
Microeconomic Theory	Wong Kam Chau

Advanced Business Economics Research Seminar	Xiao Junji
Research Methods in Microeconomics	Xia Xiaoyu
Industrial Organization	Ng Travis
Business Forecasting	Li Hongyi

REFERENCES

Xiaoquan (Michael) Zhang (Committee Chair)

Chair Professor of Decision Sciences and Managerial Economics

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Tsinghua University

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Chu Dang

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APPENDIX – SELECTED ABSTRACTS

"Technology and the Political Agency Problem in Combating Water Pollution: A Regression Discontinuity Design", *Major Revision at* **Management Science**

Exploiting the spatial discontinuity in monitoring water pollutants, we examine whether technology can reduce the political agency problem in the context of combating water pollution by examining the corruptive activities between firms and local officials. We find that technology alone is not effective in reducing the corruption between firms and local officials. However, corruption is significantly reduced when technology is complemented by organizational changes. Further analyses show that the reduction in corruption is significantly larger in locations where local officials have stronger political promotion incentives. Our findings demonstrate that to mitigate the political agency problem in combating pollution, policymakers should introduce accompany new technologies with organizational changes.

"Online Food Delivery Platforms and Female Labor Force Participation", *Major Revision at* ***Information Systems Research***

Female labor force participation is often explained by factors such as schooling, wage gap, fertility, etc. We identify how technology-induced time savings from household chores led to increased female labor force participation in South Korea. Using a leads-and-lags difference-in-differences model, we find that the entry of an online food delivery platform significantly increased the female employment rate in the next three years. We estimate the positive externality generated by the online food delivery platform: this new technology-induced female employment accounts for 0.27% of South Korea's GDP, or 17 times the revenue of the online food delivery platform.

"Rewarding Experts in Revenue-sharing Crowdfunding: An Experimental Study", Under review at ***Management Science***

Crowdfunding platforms often utilize expert investors to provide professional advice to help crowd investors make more informed investment decisions. In return, an incentive mechanism implemented

in the platforms allows experts to collect a small fee (carry) from crowd investors or startup companies. This study experimentally examines (1) how the carry structure (the existence and the source of the carry) affects the objectivity of the expert's report and (2) whether the startup and the crowd investor can strategically respond by anticipating the expert's bias. We introduce an abstract model that captures key features of revenue-sharing crowdfunding with three parties (a startup, an expert, and a crowd investor) where the expert's report plays an influential role. Experimental results show that the expert tends to overreport to favor the startup when the startup pays the carry. However, the expert exhibits aversion to lying when the carry is from the crowd investor. This suggests that the expert reciprocates to the party who covers the payment. Furthermore, both the startup and the crowd investor anticipate the expert's reporting behavior and strategically respond by adjusting project quality and investment amount. For example, both project quality and investment amount are the highest in the least biased treatment (when the carry is from the crowd investor). To explain the empirical regularities, we develop and estimate a behavioral model that captures the expert's psychological tradeoff between being self-interested and remaining objective. Our findings provide insights to crowdfunding platform designers and policymakers in designing an effective incentive mechanism.

"Personal Information, Product and Platform Uncertainty, and Profitability of Online Shopping Platforms", *In preparation for submission*

Availability of personal data on consumers' demographics and behavior history is usually thought to be helpful to boost the revenue of online shopping platforms by effectively recommending the products for these consumers. In this study, we identify a countervailing market force: Since consumers with different levels of experience with the products and the platforms may have different perceptions of uncertainty, more personal information may not always lead to desirable outcomes. We examine this issue by conducting a field experiment on a popular online shopping platform. Before our experiment, all users received globally-popular recommendations, which do not use any personal information. In our experiment, we generate personalized recommendations for the consumers in the treatment group. The other half of randomly selected consumers are in the control group and still received globally-popular recommendations. The experimental results show that the conversion rates are not different between the two groups at the aggregate level, which is inconsistent with most previous studies that favor personalized recommendations. When considering subgroups of consumers, personalized recommendations work better for some groups. We then explore how and through which mechanisms personal information helps influence which consumers throughout different shopping stages. We find that uncertainty arising for products and platforms plays a significant role in influencing the outcomes of the recommender systems.

"Influencer Marketing: A Model of Pricing", *In preparation for submission*

Influencer marketing is one of the most successful and most widely used approaches to promote a brand's products and services on social media platforms nowadays. Different from celebrity

endorsement, the wide range of social media influencers' impact and the emerging influencer marketing challenges make it difficult for brands to settle on an optimal pricing strategy to make the best out of influencers' social impact. In practice, the most common way of pricing is to pay the influencers according to their follower numbers. However, the simple pricing method suffers several problems, the most severe one is that the aggregate value various influencers created jointly for the advertisers is not linear with respect to the follower numbers. To the advertiser, the advertising cost should be proportional to the incremental market value (effectiveness of advertisement) each influencer generates, rather than their follower numbers. The transparency of social media enables us to quantify the effectiveness of each influencer's advertisement, we thus propose a model which takes advantage of the unique features of influencer marketing and identify influencers' marketing strategies (price charged for advertising) according to the share of the total commercial value (relative market value) that they capture. We measure influencers' relative market values based on the relative proportion of their followers and their capability to attract visitors. The model has several important implications for the industry.