Wenyan Tuo



Department of Marketing Eller College of Management wenyant@arizona.edu 110 S Church Ave. Personal Website Tucson, Arizona 85701 Phone: +1 (240) 413-0598

Fields Substantive: Digital Platforms, Private Label Strategy, Influencer Marketing

Method: Applied Machine Learning, Causal Inference, Heterogeneous Treatment Effect

Education Ph.D., Quantitative Marketing, University of Arizona (expected) 2026

> Dissertation: How Platform Private Labels Affect Consumer, Seller, and Marketplace Committee: Yong Liu (Co-chair), Xinying Hao (Co-chair), Zach Nolan, Bobby Zhou

Minor: Management Information System

M.Sc., Marketing Analytics, University of Maryland 2020

B.A., Economics, University of International Business and Economics 2018

Job Market Paper

"The Competitive and Perceptual Consequence of Platform Brand Entry" Award and Grant:

- 2024 ISMS Early-stage Dissertation Research Award
- 2023 Eller College of Management Small Research Grant

Working **Papers**

"From Person to Brand: Tailoring Content Strategy to Influencer Audience Size"

Award:

• Best Paper Award, 2024 Singapore Rising Scholar Conference

Work in **Progress**

"Strategic Differentiation and Optimal Product Design Under Algorithmic Muting"

Data analysis in progress

"How does Platform Brand Entry Affect Cross-Platform Keyword Market"

Data analysis in progress

Fellowship & Awards

| ISMS Doctoral Early-Stage Dissertation Research Award | 2025 |
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| Best Paper Award, Singapore Rising Scholar Conference | 2024 |
| Platform Strategy Symposium Doctoral Fellow | 2024 |
| INFORMS Society for Marketing Science Doctoral Fellow | 2023, 2024 |
| Eller College Small Research Grant | 2024 |
| University of Houston 40th Annual Symposium Doctoral Fellow | 2023 |
| Mittelstaedt & Gentry Symposium Doctoral Fellow | 2022 |

Industry Experien

| / | Deloitte Consulting Intern, Dept. of Advanced Quantitative Analysis | 2018 |
|-----|---|------|
| nce | Nielsen Intern, Telecom & Technology Vertical | 2017 |
| | GE Healthcare Intern, Marketing Department | 2017 |

Teaching

University of Arizona

Instructor:

Digital Marketing, Teacher Evaluation: 4.6/5.0

Fall 2023

Teaching Assistant:

Marketing of Innovation (Executive MBA), Yong Liu Spring 2025 Use-centered Design (Professional MBA), Yong Liu Spring 2022,2024,2025 Marketing Research for Managers (MBA, MSMA), Martin Reimann Spring 2025 Marketing Analytics (Undergraduate), Xinying Hao Spring 2021-2024

University of Maryland Teaching Assistant:

> Advanced Marketing Analytics (MSMA), Michel Wedel Fall 2019 Data Analysis (MBA), P.K. Kannan Spring 2019

Conference Presentations

2025 INFORMS Marketing Science Conference, Washington D.C 2025 2025 AMA Winter Academic Conference, Phoenix, AZ 2025 2024 Platform Strategy Symposium, Boston, MA 2024 2024 INFORMS Marketing Science Conference, Sydney, Australia 2024 University of Houston 40th Annual Doctoral Symposium, Houston, TX 2023 2023 INFORMS Marketing Science Conference, Miami, FL 2023 Mittelstaedt & Gentry Doctoral Symposium, Lincoln, NE 2022

Service

Ad-hoc Reviewer for Pacific Asia Conference on Information Systems 2023, APACR 2024

Languages

Python, R, Stata, Matlab

English (fluent); Mandarin (native); Japanese (N2)

Yong Liu

Xinying Hao Department of Marketing Department of Marketing

Eller College of Management Robert H. Smith School of Business

University of Arizona University of Maryland

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References

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Job Market Paper

"The Competitive and Perceptual Consequence of Platform Brand Entry"

Abstract: This paper examines the competitive and perceptual consequences of Amazon's private label (PL) product entry. Using a novel search-based market definition and a rich panel of Amazon data, we estimate the market-level treatment effect via staggered Synthetic Difference-in-Differences and explore heterogeneity using Double Machine Learning. we find that Amazon PL entry leads to a significant decrease in average market prices, alongside increases in review volume and ratings. However, these changes do not translate into improved consumer value perceptions. Aspect-based sentiment analysis reveals that, post-entry, reviews shift focus from product quality to value, with both perceived quality and value becoming less favorable overall. The heterogeneous treatment analysis uncover distinct patterns: first-party products show signs of internal price compression, while many third-party sellers raise prices following PL entry—suggesting reduced competitive pressure or niche differentiation. Our findings carry key implications for regulators, platform strategists, and third-party sellers. For regulators, the study highlights anti-competitive risks that go beyond pricing. For platforms, it challenges assumptions about universal consumer benefit. And for sellers, it provides guidance on vulnerability and strategic repositioning in platform-dominated markets.

Working Papers:

"From Person to Brand: Tailoring Content Strategy to Influencer Audience Size"

Abstract: The rise of influencers underscores the growing importance of personal branding in the digital landscape. This study explores how influencers with different follower size can strategically select posting topics and craft messages to enhance their audience engagement. Using BERTopic modeling to analyze topic selection, generative AI for feature annotation to assess message appeal across 16,600 YouTube posts from 63 influencers, and two controlled experiments, we suggest that influencers face the challenge of balancing human-like relatability with brand-like credibility to maximize their appeal. Small influencers, often perceived as more human than brand-like, can boost perceived credibility by consistently aligning content with their domain expertise and employing cognitive appeals. Conversely, large influencers, typically seen as brand-like entities, benefit from humanizing their image by sharing relatable personal stories and adopting affective language. These findings provide actionable insights for influencers, agencies, and brands to optimize content strategies across the influencer growth stage.

Work in Progress

"Strategic Differentiation and Optimal Product Design Under Algorithmic Muting"

Abstract: This project studies how third-party sellers adjust pricing and inventory in response to algorithmic muting on Amazon. Using Buy Box win probability as the outcome, we examine how strategic responses vary by product differentiation and APL presence. The findings highlight invisible competition and platform-driven constraints on seller visibility and design choices.

"How does Platform Brand Entry Affect Cross-Platform Keyword Market"

Abstract: This project investigates how Amazon Private Label entry alters consumer search and purchase behavior across competing retailers. Leveraging keyword-level data on search volume, clicks, and transactions across major e-commerce platforms, the study explores spillover effects in attention and demand beyond Amazon. The findings inform how platform branding strategies reshape cross-platform competition.