Xin (Stella) Zhou

Application: NBER Digital Economics and AI Tutorial
January 20-21, 2027 | Stanford University

Bocconi University, Milan, Italy
Email: xin.zhou@phd.unibocconi.it | Website: xinzhou1016.github.io

Graduate study and research interests

I am a PhD student in Marketing at Bocconi University, enrolled since 2023. My doctoral research focuses on quantitative questions at the intersection of marketing and digital economics. My advisor is Kai Zhu, and my co-advisor is Sara Valentini. Before joining Bocconi, I earned an MSc in Management Science from Wuhan University and a BS in Statistics from Nankai University.

My research examines how platform rules and emerging technologies shape participation, competition, and consumer behavior. I study creator incentives and platform governance, network effects in platform markets, and the value of AI-enabled consumer services. These projects share a concern with how firms' design choices change individual behavior and aggregate market outcomes. My empirical work emphasizes causal inference using platform data, with ongoing research extending into field experiments.

More specifically, I am interested in how digital platforms sustain participation through creator incentives and network effects. My current work asks how access to direct payments changes content supply, and how the arrival of new users changes the value of a matching platform for existing participants. Across these settings, I examine how responses vary with creator size and local market conditions, and how individual incentives translate into broader patterns of platform activity and competition.

Research on digital platforms

Creator monetization. In *Monetizing the Long Tail through Direct Audience Support: Platform Design and Creator Responses*, coauthored with Kai Zhu (Major Revision at *Marketing Science*), we study Twitch's 2017 Affiliate Program, which extended channel subscriptions and virtual donations to smaller creators. Using a time-shifted difference-in-differences design, we find that the program increased weekly streaming hours by 42% among sampled incumbent creators. Relative responses were strongest among smaller creators, broadening the distribution of content production. Per-stream viewership did not detectably decline despite the increase in supply. Monetization access also changed creators' content strategies. These findings identify expanded access to direct audience support as a platform-design lever for cultivating the long tail.

The design compares the 2017 cohort with a reweighted 2016 cohort aligned in event time. Smaller creators gained production share relative to the counterfactual, and follower acquisition increased; these outcomes do not establish platform-wide audience growth. Descriptive patterns around later qualification are consistent with attainable milestones motivating effort, but qualification timing also depends on creators' own activity. We distinguish these patterns from causal effects. The findings suggest that monetization design can shape both content supply and creators' production strategies.

Network effects and competition. In *When New Users Stop Arriving: Replenishment and Incumbent Activity on Matching Platforms*, coauthored with Kai Zhu, Qiaoni Shi, and Sara Valentini, we investigate how network effects shape user engagement and platform competition. We are currently finalizing the manuscript. The central question is how an interruption to new-user acquisition affects existing users. On matching platforms, new arrivals may create value beyond their own activity by renewing the opportunities available to incumbents. A large installed base may therefore be insufficient to sustain engagement when the inflow of new users slows.

Using daily data for major dating apps across 100 Chinese cities, we study Tantan's 2019 suspension from major Android app stores, which sharply restricted acquisition while largely preserving incumbent access. Bayesian synthetic controls show declines of 56% in registrations, 64% in the active contribution of recent cohorts, and 16% in incumbent activity. Null pre-suspension placebos and the cumulative depletion of recent cohorts support a replenishment-based interpretation. Under a replenishment exclusion restriction, the ratio of the incumbent and recent-cohort effects implies a fresh-to-incumbent elasticity of 0.25. A cohort-feedback model uses this conditional estimate as a benchmark calibration to examine how acquisition shocks propagate through retention, incumbent participation, and later acquisition.

The closest casual-dating rival gained registrations, whereas the marriage-oriented Jiayuan did not, indicating differentiated substitution. Across cities, thicker pre-shock markets were associated with smaller acquisition losses but larger incumbent-activity declines. These results distinguish cumulative platform size from the active local pool that creates matching opportunities. The project connects individual participation decisions to competitive outcomes and shows why acquisition and incumbent engagement should be considered jointly.

Ongoing research on AI and platform governance

The value of domain-specific data for AI. My ongoing project with Boohee asks when domain-specific data create value in AI-enabled consumer services beyond general-purpose models. We are developing a field experiment comparing a specialized AI coach, a general-purpose language model, and a condition without model support. The proposed study would examine health-management behavior, weight outcomes, and purchasing and continued service use. The design and implementation are being developed with the platform.

The economic question is whether firms' domain-specific data improve the usefulness of AI and the outcomes consumers achieve. Potential benefits include more relevant guidance and support for sustained behavior. The planned comparison evaluates overall service configurations; isolating the contribution of data from differences in model design and service integration requires further experimental development. I am particularly interested in connecting investment in data to consumer value, and in distinguishing greater engagement or spending from improved consumer outcomes.

Copyright enforcement and content supply. My ongoing DMCA project studies creators' responses to the 2020 copyright enforcement wave on Twitch. Its central question is whether enforcement discourages future production beyond the creators or material directly targeted. Uncertainty about enforcement may lead creators to reduce activity or avoid particular content even without receiving a notice themselves. I am collecting historical streaming data and developing comparisons based on creators' prior content choices, including their reliance on music-related content.

A central identification challenge is separating the consequences of direct enforcement from broader responses to perceived risk. I also plan to examine differences by creator size and changes in content composition. This project extends my monetization research by studying how constraints, as well as rewards, shape creative participation. It motivates a broader interest in how enforcement and licensing arrangements balance rights protection with continued content production.

Motivation for attending

The tutorial would be especially valuable at this stage because the design choices in my AI and copyright projects remain open. I would benefit from discussions of how to measure the economic value of AI applications, distinguish adoption from sustained benefits, and connect individual responses to platform-level outcomes. For the Boohee project, these discussions would help refine how to isolate the value of domain-specific data and select relevant consumer outcomes. For the DMCA project, they would help refine the distinction between direct enforcement and broader deterrence.

I would bring experience studying creator incentives and local platform competition, together with concrete questions from developing a field experiment with a digital service provider. Interacting with researchers at the tutorial and the accompanying Digital Economics and AI meetings would help me connect these projects to broader economic questions about technology, governance, and value creation.