

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Department of Information Systems, Business Statistics and Operations Management

IS SEMINAR ANNOUNCEMENT

Platform Design, Earnings Transparency and Minimum Wage Policies: Evidence from A Natural Experiment on Lyft

by

Ms. Rubing LI
New York University

DATE	24 November 2025 (Monday)
TIME	2:30 pm - 4:00 pm
VENUE	4/F Meeting Room (Room 4047), LSK Business Building

ABSTRACT

We study the effects of a significant design and policy change at a major ridesharing platform that altered both provider earning guarantees and participant transparency, examining how it altered outcomes for drivers, riders and the parent platform, discussing the economic implications of platform-led versus government mandated regulation, and providing managerial insights about how to balance competing stakeholder interests during platform transitions while amplifying impact and avoiding unintended consequences. In February 2024, Lyft introduced a policy guaranteeing drivers a minimum fraction of rider payments while also increasing their per-ride earnings transparency. The rollout of this policy was staggered and first introduced in "major markets" that were more urban, setting up a natural experiment. Using trip-level data from over 47 million rides in a major urban market and its neighboring suburban markets across 12 months, we apply dynamic staggered difference-in-differences models coupled with a geographic border strategy to measure the causal effects of these platform design changes on supply- and demand-side outcomes, ride production efficiency and platform outcomes. We show that the design change led to substantial changes in driver engagement, and that the ensuing supply increases induced positive demand spillovers. Drivers with lower pre-policy earnings fraction and lower tolerance for income uncertainty displayed stronger treatment effects, consistent with the earnings guarantee and the enhanced transparency having distinct effects on platform outcomes. Using a new self-supervised machine learning model that leverages driver trajectory embeddings to predict multihoming behavior, we also present evidence suggesting that supply increases came from both the expansion of driver activity as well as substitution from competing platforms. However, the increases in platform transparency may have induced unintended strategic driver behavior that increased the inequality of some market outcomes. Finally, we outline a counterfactual simulation framework that models ride production as a function of driver supply hours and rider intents, and illustrate how small changes in driver choices could have further amplified the positive effects of the intervention. Our results show that platform-led interventions present an intriguing self-regulatory alternative to government-led minimum pay regulation, and provide new strategic insights into managing platform change.

BIOGRAPHY

Rubing Li is a Ph.D. candidate at New York University's Stern School of Business in the Department of Technology, Operations, and Statistics. Rubing's work is grounded in economics and statistics, while also leveraging advanced tools from AI and machine learning. Her research has studied the impact of transparent platform design on ride-hailing markets, natural language processing for real-world decision systems, the use of AI for real-time in-store targeting, the modeling of trust in generative AI agents, and the role of digital platforms in enabling sustainable consumption. Methodologically, she draws on a diverse toolkit that includes econometrics, structural IO models, applied machine learning, randomized experiments, and game theory, and she has extensive experience with geospatial and video data. She has given over 20 conferences and invited presentations and has two papers under advanced stages of review at Information Systems Research. She has won and been nominated for awards that include the ICIS Nunamaker-Chen award, the ICIS best paper award, and the Fubon doctoral fellowship. Her research involves close collaborations with industry partners and aims to bridge theoretical insights with practical impact. She holds bachelors and masters degrees in mathematics and statistics from the University of Minnesota.