

Do Ride-Sharing Services Affect Traffic Congestion? An Empirical Study of Uber Entry

Friday, March 17, 2017 3:00pm to 4:30pm

Please join us in Schwada Building (SCOB) room 101 2

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Sharing economy platforms, which leverage information technology (IT) to re-distribute unused or underutilized assets to people who are willing to pay for the services, has received tremendous attention in the last few years. Its creative business models have disrupted many traditional industries (e.g., transportation, hotel) by fundamentally changing the mechanism to match demand with supply in real time. In this research, we investigate how Uber, a peer-to-peer mobile ride-sharing platform, affects traffic congestion and environment (carbon emissions) in the urban areas of the United States. Leveraging a unique data set combining data from Uber and the Urban Mobility Report, we examine whether the entry of Uber car services affects traffic congestion using a difference-in-difference framework. Our findings provide empirical evidence that ride-sharing services such as Uber significantly decrease the traffic congestion after entering an urban area. We perform further analysis including the use of instrumental variables, alternative measures, a relative time model using more granular data to assess the robustness of the results. A few plausible underlining mechanisms are discussed to help explain our findings.

Yili (Kevin) Hong is an Assistant Professor and co-director of the Digital Society Initiative in the Department of Information Systems at the W. P. Carey School of Business of Arizona State University. He obtained his Ph.D. in Business Administration at the Fox School of Business, Temple University. Dr. Hong's research focuses on areas of the Sharing Economy, Online Platforms and User-generated Content. His research has been published in premier journals such as Information Systems Research, Management Information Systems Quarterly, Management Science, Journal of the Association for Information Systems and Journal of Consumer Psychology. Dr. Hong is the winner of the ACM SIGMIS Best Dissertation Award and runner-up of the INFORMS ISS Nunamaker-Chen Dissertation Award. His papers have won best paper awards at the International Conference on Information Systems, Hawaii International Conference of System Sciences and the America's Conference on Information Systems. He is an external research scientist for a number of companies, including Freelancer, Fits.me, Yamibuy, Meishi, Picmonic and Ports America.





