Abstract:
We examine two-sided adverse selection in a sharing economy context where a platform matches service providers with consumers and both providers and consumers derive heterogeneous payoffs depending on whom they are matched with. Unlike the more prevalent unilateral review scheme in which only consumers rate providers, many sharing economy platforms use a bilateral review scheme in which both consumers and providers rate each other to reduce the information asymmetry on both sides of the market and to facilitate superior matches. However, we show that the bilateral review scheme does not necessarily lead to a higher social welfare than either the unilateral review scheme or the no review scheme. If the proportion of the low-cost consumers is less than a threshold, consumers are better off, the platform is worse off, and the providers are worse off under the bilateral review scheme than the unilateral review scheme. The key driver for these results is that the price competition between providers for the low-cost consumers can be fundamentally different under the different review schemes; the price competition affects the consumer preference for a provider and hence the match between consumers and providers, which ultimately determines the payoffs to participants and the social welfare. Our results highlight the importance of addressing the consumer-side adverse selection first to eliminate a market failure even in the sharing economy context. Our findings also contribute to the adverse selection literature by identifying the critical role played by demand and supply conditions on the impact of adverse selection.

Bio:
Murat M. Tunc is a Ph.D. candidate in Information Systems at Jindal School of Management, University of Texas at Dallas under the supervision of Srinivasan Raghunathan and Huseyin Cavusoglu. He is broadly interested in economic modeling and data-driven decision making with a focus on applications in managing digital platform's information strategy in competitive online marketplaces. In particular, his research covers topics ranging from online platforms, sharing economy and blockchain projects. His work is accepted for publication at MIS Quarterly and his papers are presented at prestigious conferences such as WISE, CIST, ICIS, INFORMS and Platform Strategy Symposium.