

DISSERTATION PROPOSAL

Essays on Technology-Enabled Platforms

Tat Koon Koh

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324 GSIA (West Wing)

Nowadays, firms use various technology-enabled platforms, such as Business-to-Business (B2B) exchanges and crowdsourcing platforms, in their business operations. B2B exchanges widen firms' supply chain networks from local and regional marketplaces to global marketplaces. These exchanges play an important role in connecting firms in an increasingly globalized world. Crowdsourcing platforms move the frontiers of innovations and creative tasks from within the firms to the crowd. For example, firms can use design marketplaces to acquire designs for logos or banner ads from a large and diverse crowd, instead of creating these designs internally or contracting to an outside designer. My dissertation consists of three essays that focus on user behavior, interactions, and the resulting outcomes on such platforms.

In the first essay, we look at how activity levels on B2B exchanges affect buyers' preferences for the exchanges. Using a unique dataset of buyers' usage in two exchanges, we find that buyers' preferences are (i) positively associated with selling activity levels on the exchanges, but (ii) non-monotonically related to buying activity levels. Our results show that both market factors and social information conveyed by users on the exchanges affects individual users' preferences and competition between exchanges.

In the second essay, we study the formation and development of trust between buyers and suppliers on global B2B exchanges. Using information signaling theory, we examine how (i) buyers' perceptions of national integrity and legal structure of suppliers' country, and (ii) third-party verifications of suppliers on B2B exchanges affect buyers' trust. The results from a global survey of organizational buyers on a B2B exchange show that perceptions of national integrity and legal structure, and supplier verifications are all positively related to buyers' trust. However, the number of prior transactions between buyers and suppliers moderates the impact of perceived legal structure on buyers' trust.

In the final essay, we investigate how firms can achieve higher design quality for marketing elements (such as online banner ads) on design marketplaces. On many design marketplaces, the default and/or preferred approach in conducting design contests is to use open gallery contests, where solvers can view each other's submissions during the contest. (On some design marketplaces, seekers can choose to use closed gallery contests, where solvers cannot view other solvers' submissions.) We posit that solvers may be fixated on other solvers' designs that they observe in open gallery contests. Design fixation would restrict the design originality of their submissions, and negatively impact their design quality. Therefore, the popular use of open gallery contests on design marketplaces may not be ideal as such contests limit the creative potential of the crowd.