Title:

Business Models in the Sharing Economy: Manufacturing durable goods in the presence of Peer-to-Peer rental markets

Abstract:

Business models that focus on providing access to assets rather than on transferring ownership of goods have become an important industry trend, representing a challenge for incumbent firms, but also an opportunity to adjust their own business models. This paper analyzes the interaction of a peer-to-peer (P2P) rental market and an original equipment manufacturer (OEM). Our analysis highlights the important role of consumer heterogeneity in usage rates as a driving factor of the mechanisms that explain the different market outcomes. Indeed, both the OEM and consumers can benefit from P2P rental markets for intermediate ranges of consumer heterogeneity in usage rates, but both can be worse-off when the heterogeneity is too low or too high. P2P rental markets have an equalizing effect, as low-usage consumers earn relatively more from P2P rentals than high-usage consumers. We investigate alternative market structures for the OEM, and show that under intermediate consumer heterogeneity in usage rates, it is best for the OEM to operate in the presence of a P2P rental platform. If heterogeneity in usage rates is too low, the OEM prefers to operate as a monopoly, offering sales only, whereas if heterogeneity is too high, the OEM prefers to offer sales and rentals directly to consumers. Further, if a P2P market is unavoidable, the OEM would not necessarily be better-off by introducing its own rentals to compete against P2P. Thus, contrary to what could be expected, the OEM has an incentive to facilitate P2P rentals in a large variety of cases.

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