Pricing and Openness Strategy of Online Ride-hailing Platform with Network Effects

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Abstract

As a representative practice of the sharing economy, the ride-hailing platform effectively alleviates the conflict between supply and demand in traditional taxi market. In recent years, some ride-hailing companies have chosen to transform their closed platforms based on the B2C model (only platform owned cars provides service to passengers) into open platforms based on the B2C&C2C hybrid model (company owned cars and private cars serve passengers together on the platform). According to the theory of two-sided markets, this paper constructs the pricing model of ride-hailing platform under the closed-platform strategy and the open-platform strategy in the monopoly market. By comparing the optimal profit of the ride-hailing company under different strategies, we explore whether the traditional closed platform should adopt an open strategy which allows private cars to participate. Our research illustrates the impact of network effects on pricing strategy and finds the optimal opening strategy in different situations.

Keywords: Sharing economy, Two-sided markets, Ride-hailing platform