Abstract

Online reputation trading is a new phenomenon facilitated by the prosperity of e-commerce and social networks. Whether reputations will be reliable when people can purchase rather than build them originally is a natural concern and also a challenge to online marketplaces. In the present study, we examine a reputation market in an infinitely repeated game setting, where agents sell products and trade their online reputations. Agents exert effort to provide products, and their reputations are updated based on consumer feedback. High-type agents have a lower cost of effort than low types. In addition to reputation system, we consider products that are randomly audited, and agents do not receive payment for products that fail the audit. Our analysis depicts a separating equilibrium: high-type agents can be sorted out from low-type agents by their reputations, which contrasts with the results in Tadelis (2002). In a separating equilibrium, reputations become a perfect indicator of agents’ types, effort levels, and product quality. We demonstrate the key role of auditing in separating different types of agents, and reveal the substitution effect between auditing frequency and harshness of reputation systems. We also study the design of the reputation system and the audit mechanism in order to achieve different equilibria in the reputation market. By proposing online reputations as an asset, our paper generates implications for establishing reliable online environments and promoting effective online interactions.

Keywords: Reputation, online community, audit, identity management, electronic market