

Designing On-Line Mediation Services for C2C Markets

Xia Zhao, Fang Fang, and Andrew B. Whinston

ABSTRACT: This paper proposes an on-line mediation services (OMS) mechanism to alleviate the consequences of asymmetric information for traders in C2C markets. In an adverse-selection setting, the mechanism facilitates on-line transactions by (1) inducing traders to negotiate efficiently in the presence of *ex post* discrepancy, and (2) enabling sellers with higher probability of selling a high-quality product to signal their superiority and enjoy a price premium. The mechanism can also be implemented as a profitable business model.

KEY WORDS AND PHRASES: C2C market; information asymmetry; negotiation; on-line mediation services.

The rapid development of information technology (IT) and wide accessibility of the Internet have provided the basis for the evolution of e-commerce. On-line C2C markets, an important component of e-commerce, enable individuals to conduct convenient and economical “garage sales” of books, clothing, baseball cards, and even homemade artifacts [7, 10]. C2C market providers do not engage in conventional commercial activities, such as buying and selling, but generate wealth simply by offering transaction platforms and charging commission fees.

Despite their enormous growth, the performance of C2C markets is significantly undermined by their inherent information asymmetry, caused largely by the “shrinkwrap” phenomenon [6] and by the on-line anonymity of market participants. The shrinkwrap phenomenon refers to the fact that there is a time lag between the buyer and seller agreeing on a contract and the buyer directly experiencing the good. As a consequence, buyers bear tremendous quality uncertainty. Quality concerns are exacerbated by the ability of anonymous sellers to disappear without compensating unsatisfied buyers. Such concerns make buyers less willing to pay for items and, in consequence, reduce sellers’ expected profits.

Information asymmetry leads to an adverse-selection problem in C2C markets. Sellers have private information, namely, the probability that they are selling high-quality items. This probability is referred to as the seller’s type. Since buyers do not know the sellers’ types, they tend to discount their bids based on the average quality in the marketplace, and this makes transactions unprofitable for sellers with higher types. As a result, sellers with higher types leave the marketplace earlier, which further reduces the expected value of the items to buyers. Information asymmetry of this kind adversely affects buyer expectations and impedes the growth and performance of C2C markets [1]. This paper proposes effective mechanisms that can alleviate the adverse consequences of information asymmetry.

The ability of on-line feedback mechanisms (also known as “reputation systems”) to eliminate information asymmetry and build up trust has been