DOES ROLE OF SIGNAL ON MITIGATING INFORMATION ASYMMETRY VARY WITH PRODUCT USAGE CONDITIONS? EVIDENCE FROM EBAY

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ABSTRACT

The Internet created an enormous electronic commerce (e-commerce) market where most transactions occur among entities that have never met (Ba and Pavlou, 2002), and online auction is the most prosperous e-commerce in the Internet marketplace. Previous studies have confirmed that seller's reputation is one of important ways to mitigate the problems of informational asymmetry in the online auction, and enable an auctioneer to earn price premiums (Livingston, 2005; McDonald and Slawson, 2002; Mikhail and Alm, 2002, 2005). By the way, Akerlof (1970) and Heal (1976) have pointed out that sellers could counteract the effect of quality uncertainty by investing credible signals. Therefore, bidders' beliefs guide them on whether to place a bid, and if they do, how much to bid, may not only be affected by the reputation of the seller only. From a practical standpoint, understanding the barriers that inhibit a buyer's purchasing intention enables auction site providers to design better mechanisms to facilitate the transaction process. Moreover, most of the existing literature on the effects of reputation in online auctions is based on homogeneous or standardized goods (e.g., Lucking-Reiley et al., 2000; Melnik and Alm, 2002; Standifird, 2001). Studies using hetergenous goods may provide more information to understand whether diagnostic role of seller's signals for buyers to diminish asymmetric information varies or not under different product condition.

Hence, the major purpose of our study is to find a comprehensive model of online auction behavior and to investigate the factors that influence participants' bidding strategy and behavior. First, testing hypotheses were developed based on theoretical foundations. Second, although past research found that as the reputation signal is important to reduce information asymmetry, a web site may deliver other signals that affect buyers' purchasing decisions. Thus, we code and classify meaningful signals as seller's reputation, auction condition, product condition, and argument, then to estimate its influence on auction outcomes. Finally, we classified product condition into three levels to investigate whether the impact of signals on bidders' need for information is different under the specified conditions. The data sets used for empirical estimates were coded from eBay auction site. Results show that signals such as sellers' reputation, auction format, product condition, and arguments presented on the web page are significantly related to three outcome variables: number of bids, possibility of auction success and willingness to pay. In addition, there is evidence in support of the degree of signals on bidders' need for information is different under product usage status classified. Bidders are inclined to reward more for the signals when being an auction for the used products which have greater uncertainty on its actual performance. Relatively, signal effect lessens when buyer bidding for brand new product. We conclude with a discussion of the practical implications of our research findings for online auction and suggestion of future study.