Chapter VI

Perceived Risk and Escrow Adoption in Online Consumer-to-Consumer Auction Markets: An Economic Analysis

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Abstract

Escrow is an emerging trust service in online consumer-to-consumer auction markets in preventing Internet fraud. This chapter studies the effect of traders’ perceived risk on the adoption of online escrow service (OES). This research establishes decision-making models for both the
honest trader and the monopolist OES provider. Perceived risk rate (PRR), a dynamic measure of perceived risk for online traders, is introduced to link the two decision-making models together. A calculative model for PRR is proposed, and the primary outcomes from the computer simulation for PRR measurement are presented. This chapter reveals that OES adoption is positively correlated to the estimated level of traders’ PRR. A higher PRR definitely leads to a higher OES adoption rate and hence reduces the Internet fraud in the auction markets. In addition, an overestimate of PRR leads to higher adoption rate, lower defrauding rate, and higher fraud blocking rate.

Introduction

In the past several years, commercial activity on the World Wide Web has brought about leaps in electronic commerce. In particular, customer-to-customer (C2C) online auctions have turned virtually every Internet user into a potential trader. The growing revenues received by C2C businesses, such as eBay, show a promising future for e-commerce. However, the increasing amount of Internet fraud makes potential traders reluctant to trade online. According to the Internet Fraud Watch, operated by the National Consumers League, fraudulent online auction sales have remained the number one source of Internet fraud in the past several years. During 2002, 90% of the fraud cases reported to the Internet Fraud Watch were online auction related, rising from 70% in 2001. Also the average loss per claim for online auction fraud rose from $326 in 2000 to $411 in 2001 (Internet Fraud Watch, 2002). These statistics reveal the risks of losses due to fraud that current online traders face, as well as the potential loss of trust in online markets among traders due to fraud.

Recently, online escrow is emerging as an important type of trusted third party (TTP) in Internet-based auction marketplaces.¹ Online escrow service (OES) providers, such as Escrow (www.escrow.com), have become major players in preventing Internet fraud. OES providers act as a TTP in an online auction, providing secure methods for transferring items and payments to both parties. Therefore, OES has received much interest from most C2C auction businesses. Internet-based auction marketplaces are characterized by asymmetric information (Choi, Stahl & Whinston, 1997), meaning that the transacting parties do
Customer Loyalty and Electronic Banking: A Conceptual Framework
Daniel Tomiuk and Alain Pinsonneault (2002). Strategies for eCommerce Success (pp. 89-109).
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