Trust as an Enabler of E-Commerce

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INTRODUCTION

E-commerce is a viable mode of shopping. Forrester Research Inc. estimates that the U.S. online sales will reach $316 billion by 2010, which accounts for 12% of total U.S. retail sales. However, security, privacy, and delivery concerns remain issues of concern to both buyers and sellers. Since trust alleviates these concerns, while the lack of trust prevents buyers from buying online, managing buyer trust is crucial. This article discusses how institutional and interpersonal mechanisms can increase trust by reducing social uncertainty. An illustrative example based on eBay is included.

BACKGROUND

Trust is the willingness of a person or group to rely on another because of confidence in the trusted party (Mayer, Davis, & Schoorman, 1995; Zand, 1972). Trust is based on the expectation that the other party will not indulge in opportunistic behavior by taking advantage of the situation (Gefen, 2002). Generally, the need for trust arises because of social uncertainty (Deutsch, 1958; Johnson-George & Swap, 1982; Kee & Knox, 1970), which is the inability to predict human behavior with certainty because people do not always behave rationally (Lewis & Weigert, 1985). Since making calculated decisions requires reducing this social uncertainty, people tend to trust others and in doing so assume away the possibility of unacceptable social conduct (Gefen, 2000).

ROLE OF TRUST IN E-COMMERCE

Trust is essential in e-commerce because social uncertainty and risk are prevalent also in e-commerce, and more so than in other types of commerce because of the online nature of transactions (Lee, 1998). Online buyers and sellers may not have a prior acquaintance, may be separated in time and space, and may have no social cues which might enable a buyer to make judgments if to trust a seller (Gefen, 2000; Gefen, Karahanna, & Straub, 2003b; Gefen & Straub, 2004; Kim, Xu, & Koh, 2004; Reichheld & Schefter, 2000). Moreover, the Internet makes verification of real identity problematic (Ba & Pavlou, 2002; Gefen et al., 2003b). Trust reduces these perceptions of risk and makes e-commerce possible (Gefen, 2000; Gefen & Straub, 2004; Jarvenpaa, Tractinsky, & Vitale, 2000; McKnight, Choudhury, & Kacmar, 2002; Pavlou & Gefen, 2004).

DIMENSIONS OF TRUST

Mayer, Davis, and Schoorman (1995) conceptualized trust as being the product of three dimensions of trustworthiness beliefs: ability, integrity, and benevolence. Ability is the belief in the skills and competence of the trusted party. Integrity is the belief in the trusted party's adherence to the expected ethical or moral code. Benevolence is the belief that the trusted party cares about the buyer. This model of trust have been extensively verified (Gefen, 2002; McKnight et al., 2002; McKnight, Cummings, & Chervany, 1998). Integrity and ability are typically the most salient beliefs in initial contacts, with benevolence developing over time as the parties get to know each other (Mayer et al., 1995).

INITIAL AND ONGOING TRUST

Trust develops gradually over time (Blau, 1964; Lewis & Weigert, 1985; Zand, 1972). Typically, people enter new relationships with a degree of initial trust which develops into ongoing trust as the relationship develops over time. Initial trust and ongoing trust are different. Initial trust is not based on a detailed acquaintance with the trusted person or organization (Bigley & Pearce, 1998), but is a general credit extended to the other person based on unrelated considerations. After gaining experience in the relationship, people's initial trust evolves into ongoing trust. This ongoing trust is based primarily on prior experience with the trusted party (Gefen, Karahanna, & Straub, 2003a).

There are several modes of creating these types of trust, and these modes change in relative importance as the transition from initial trust to ongoing trust is made. Accordingly, initial trust may sometimes be greater than ongoing trust (McKnight et al., 1998). Both initial and ongoing trust are based on a person's disposition to trust (personality-based trust), on calculative-based trust, on institutional-based trust, and on transference-based (Stewart, 2003; Strub & Priest, 1976), but more so in initial trust (McKnight et al., 1998) because in ongoing trust familiarity with the trusted party takes the lead as the determinant of trust (Gefen, 2000).

Disposition to trust, also known as personality-based trust, is a general tendency to trust others based on a person's life experience and socialization (Gefen, 2002; McKnight et al., 1998; Rotter, 1980). As an example, a potential buyer at eBay, the leading online auction house, may refrain from taking part in any such activity because of fear of being cheated based on childhood experience of being taken advantage of by others whom he or she trusted.

Calculative-based trust is based on the assessments of whether it is worth the other party's while to cheat (Brewer & Silver, 1978; Lewis & Weigert, 1985; Meyerson, Weick, & Kramer, 1995). Calculative-based trust is a scrupulous estimate made by the trusting party about the probable behavior of the trusted party (Shapiro, Sheppard, & Cheraskin, 1992). It affects both initial trust (Doney & Cannon, 1997; Lewicki & Bunker, 1995; Shapiro, Sheppard, & Cheraskin, 1992) and ongoing trust (Gefen et al., 2003b). Calculative-based trust is formed based on a calculation that people will refrain from opportunistic behavior if it is not in their advantage to do so (Shapiro, Sheppard, & Cheraskin, 1992). To continue the eBay example, a shrewd buyer may decide to place a bid with one seller and not with another based on a calculated assessment of whether each seller could get away with cheating if it wished to, considering the type of product, seller location, and so on.

Transference-based trust is based on trusting an unknown person or organization because a person whom the trustor believes in trusts this person (Stewart, 2003; Strub & Priest, 1976). In our example of the eBay buyer, a person who has never bought from eBay before may decide to trust a seller because his or her friend recommends this seller. Trust transference happens from a trusted person (Uzzi, 1996), a trusted source (Henslin, 1968), a trusted institutions, or an industry association (Milliman & Fugate, 1988). Usually, transference creates trust when there is no prior interaction with the trusted party, but there is a high level of trust in the transference party (Ba, 2001; Lewicki & Bunker, 1995; Stewart, 2003; Uzzi, 1996). If a person trusts eBay, the transference party, he or she is more likely to trust an unknown seller in this online auction house (Pavlou & Gefen, 2004).

Institutional-based trust is based on the guarantee mechanisms provided by a trusted third party (Shapiro, 1987; Stewart, 2003; Zucker, 1986). These mechanisms may include situational safeguards and structural assurances that are built into environment (Ba & Pavlou, 2002; Gefen et al., 2003; McKnight et al., 2002; Pavlou & Gefen, 2004; Zucker, 1986), escrow services, credit card protection, and feedback mechanisms on a portal (Pavlou & Gefen, 2004). Institutional-based trust, when available, is a primary mode of trust creation (Gefen et al., 2003b; McKnight et al., 2002; Pavlou & Gefen, 2004). In the eBay example, institutional trust may convince a buyer to trust a seller based on the escrows, security, and privacy mechanisms eBay provides (Pavlou & Gefen, 2004).

Familiarity-based trust, in contrast to the above modes which are not based on a personal interaction between the parties (Kim & Prabhakar, 2004; McKnight et al., 2002), is based on prior experience with the seller. Generally, familiarity is the primary trust builder in ongoing trust, while institutional-based, when available, is the primary builder in initial trust. Knowing the trusted party based on previous interactions with it typically the primary creator of trust (Blau, 1964). These relationships are shown in Figure 1.

The modes of trust creation create a sense of trustworthiness and trust. This trust then results in behavioral intentions. In the eBay example, trust will be one of the contributors to the decision if he or she is going to place a bid with a specific seller. Also part of the model is the role of feedback. Positive and negative experiences (Holmes, 1991; Lewicki & Bunker, 1995) affect both trustworthiness beliefs and trust (Mayer et al., 1995), as well as the modes of trust creation (Marsh, 1994).

FUTURE TRENDS

Institutional-based trust (Gefen et al., 2003b; McKnight et al., 2002; Pavlou & Gefen, 2004; Zucker, 1986), disposition-based trust, calculative-based trust (McKnight et al., 2002; McKnight et al., 1998), and transference-based trust (Stewart, 2003) are salient modes in the formation of initial trust. In the lack of actual familiarity with the trusted party, these modes take precedence. These modes help to reduce buyers' perceptions of uncertainty in e-commerce transactions while providing a subjective measure of security and probability of success of e-commerce transactions. The importance of institutional-based trust as a major contributor to initial trust in online transactions is made possible by the availability of third party guarantees, accreditations, escrow, credit card guarantees and other security enhancing mechanisms (Pavlou & Gefen, 2004). After successive positive experiences, the salience of institutional-based trust decreases as familiarity takes