Consumers’ Initial E-Trust Building Process: Development of an Integrative Model and Research Propositions

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Trust is a widely studied phenomenon across numerous disciplines. Researchers of e-commerce have conducted several studies on consumer trust in e-commerce. Despite the extensive interest in consumer trust, there are only few studies that concentrate on how consumers build trust in e-commerce. The present article seeks to amend this situation by conceptualising consumers’ initial e-trust building process. Different affective and cognitive mechanisms that consumers may use to build e-trust are introduced. Moreover, the influence of different consumer characteristics and the context in consumer’s e-trust building process is addressed. As a consequence, five propositions for further research are developed.

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ABSTRACT
Trust is a widely studied phenomenon across numerous disciplines. Researchers of e-commerce have conducted several studies on consumer trust in e-commerce. Despite the extensive interest in consumer e-trust, there are only few, if any, studies that concentrate on how consumers build trust in e-commerce. The present article seeks to amend this situation by conceptualizing consumers’ initial e-trust building process. Different affective and cognitive mechanisms that consumers may use to build e-trust are introduced. As a consequence, five propositions for further research are developed.

INTRODUCTION
Trust plays an important role in human relationships, allowing individuals to engage in a relationship with each other. In the Internet context, trust is particularly emphasized. The lack of trust is seen to be one of the main reasons inhibiting consumers’ e-commerce adoption (e.g. McKnight, Choudhury, and Kaemar 2002). Thus trust could be understood as a basis and necessity for consumers’ decision to make online purchases.

The phenomenon of consumer e-trust (consumer trust in e-commerce) is widely discussed, and many conceptualizations of e-trust have been given (e.g. Gefen, Karahanna, and Straub 2003; Tan and Sutherland 2004). The problem with the current research is that it concentrates almost exclusively on trustees’ (trustee is the target of trust, such as an e-vendor) e-trust increasing attributes and their influence on consumer e-trust development. For example, dynamic pricing (Garbarino and Lee 2003) and perceived legal and technical environment (Tan and Sutherland 2004) have been found to influence consumer e-trust. In contrast, the understanding of the processes on the consumers’ side that contribute to consumer e-trust is limited (e.g. Pennanen, Tiainen, and Luomala, 2007).

The aim of this article is to contribute to e-trust literature by developing an integrative model for consumers’ initial e-trust building process, culminating in five research propositions to stimulate further studies. The aim will be pursued through four goals. The first goal is to discuss the concepts of consumer e-trust and closely related concepts of e-trust. The second goal is to describe consumers’ affective and cognitive e-trust building behavior. The third goal is to discuss the role of different consumer characteristics and the effect of the context in which the e-commerce occurs on consumers’ e-trust building process. The fourth goal is to assess the novelty value of the developed model and research propositions in relation to what is already known about consumers’ e-trust building.

CONSUMER E-TRUST, E-TRUSTWORTHINESS, AND PERCEIVED RISKS
Before introducing the model for consumers’ initial e-trust building process, a discussion of the concept of e-trust will be made in detail. In addition, the concepts of trustworthiness of e-commerce and the perceived risks will be addressed, because they are considered to be closely related concepts to consumer e-trust (Serva, Benamati, and Fuller 2005).

Due to the broad field of trust-research, the concept of trust has attained many-faceted meanings (Corritore, Kracher, and Wiedenbeck 2003). However, what is common in many definitions of trust is that they see trust as a trustor’s psychological state, such as expectation (Mayer, Davis, and Schoorman 1995) or confidence (Morgan and Hunt 1994). Definitions usually contain two parties (trustor and trustee) and emphasize that trust is only necessary in a situation containing risk (Mayer et al. 1995).

Recently, the definition of trust provided by Mayer et al. (1995) has been widely accepted among the e-trust researchers (e.g. Garbarino and Lee 2003). Mayer et al. (1995, 712) define trust as: “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.”

The rapid development of e-commerce in the late 1990s expanded trust research also in the context of e-commerce. Combining social psychologists’ (e.g. Cook and Wall, 1980), sociologists’ (e.g. Lewis and Weigert 1985), and psychologists’ (e.g. Rotter 1971) views on trust, consumer e-trust is treated as a three-dimensional construct, including interpersonal (trust in e-vendor), institutional (trust in technology or surrounding environment such as society), and dispositional (individuals propensity to trust) elements (McKnight et al. 2002).

Many researchers have confused the concepts of e-trust and e-trustworthiness and handled them as synonyms for each other (Serva et al. 2005). The distinction between the concepts is that trust is the trustor’s psychological state, while e-trustworthiness is a characteristic of the trustee (Corritore et al. 2003). The traditional trust literature treats trustworthiness as a multidimensional construct including, for example, dimensions of ability (Mayer et al. 1995), consistency, and openness (Hosmer 1995). However, the e-trust literature emphasizes the importance of three dimensions: namely competence (trustor’s belief in trustee’s abilities, skills and expertise), benevolence (belief that trustee acts in trustor’s interests), and integrity (trustor’s belief that trustee acts in an honest way) (e.g. Tan and Sutherland 2004).

Mayer et al. (1995, 712) argue that trust is “…the willingness of a party to be vulnerable to the actions of another party…” This willingness to be vulnerable means willingness to engage in a relationship including an element of uncertainty. Thus, perceived risks could be seen as the antecedents to e-trust, because the need for trust arises only in a risky situation. This view of the relationship between trust and risk is prevalent in the majority of traditional trust literature (Doney and Cannon 1997; Morgan and Hunt 1994).

AN INTEGRATIVE MODEL FOR CONSUMERS’ INITIAL E-TRUST BUILDING PROCESS
The definition of trust by Mayer et al. (1995, 712) stresses that someone is willing to be vulnerable to the actions of another party ”…based on the expectation that the other will perform a particular action important to the trustor…” From the viewpoint of consumers’ initial e-trust building, that expectation is in a key position, because it raises the question how it is developed.

Figure 1 presents an integrative model for consumers’ initial e-trust building. As seen in the model, consumers can evaluate the trustworthiness of an e-vendor (interpersonal aspect) and technology (institutional aspect) by affective and cognitive e-trust building (building the expectation). Based on the expectation, the threshold of perceived risk is either exceeded or not leading to trust or distrust.
In addition, our model attempts to explain the role of consumer characteristics, context and trustees’ behavior in the consumer initial e-trust building. In the next chapters, we will discuss more thoroughly the content of affective and cognitive e-trust building and the role of the consumer characteristics and the context in consumers’ initial e-trust building. In addition, five propositions to stimulate further research will be presented.

**CONSUMER E-TRUST BUILDING**

Our model includes a presumption that the desired goal of consumers’ e-trust building behavior is trust. In order to reach the goal, we argue that the consumers use different mechanisms to build e-trust. However, the word ‘use’ is somewhat problematic, because it refers to some conscious act made by the consumer. For example, Bargh (2002, 280) asks: “To what extent are people aware of and in control of the influences and their reasons for purchasing and consumption behavior?” Although Bargh was not interested in consumer e-trust, his question is quite interesting in that context too, because it raises another question: to what extent consumers’ e-trust building process is conscious in nature?

Consumer decision making literature offer some answers to the previous question. The literature in question has traditionally emphasized rational decisionmaking (Hoch and Loewenstein 1991). However, numerous studies suggest that also affective processes have influence on consumer decisionmaking (Luce 1998; Shiv and Fedorikhin 1999), which serves as ground to treat consumers’ e-trust building as a two-fold phenomenon, including affective and cognitive aspects, too.
Affective e-Trust Building

Consumers in an initial e-trust building stage do not have the previous knowledge of the specific trustee at their disposal (McKnight, Cummings, and Chervany 1998). Thus, in this article, consumers’ affective e-trust building is understood in terms of Berkowitz’s (1993) first order, relative automatic and associative, process. In contrast, affective decision making based on the previous experiences or cognitions is ruled out.

Yeung and Wyer (2004) found that when a consumer sees some product before receiving additional information about it, they use the initial affective impression as a basis for judgments. Following that, we argue that in e-commerce settings, the first impressions regarding the e-vendor or some institutional aspects of e-commerce serve as ground for consumers’ affective decisions related to the interpersonal or institutional trustworthiness.

Website design research literature offers several examples of first impressions that might trigger affective e-trust building. For example, Egger’s (2001) findings offer evidence that the first impression related to a website’s attributes, such as graphic design and usability, will lead to assessment of e-trust. Wang and Emurian (2005) found that the visual design affected consumer e-trust; and Kim, Xu, and Koh (2004) found that the information quality in a website affected significantly potential customers e-trust. Furthermore, Santos (2003) found that the appearance and the different colors in a website were either perceived as positive or negative among web users.

Previous examples are related to the evaluations of the interpersonal e-trustworthiness. In terms of affective institutional e-trust building, Etzioni (1988) argues that the choice to work in the U.S.A., Mexico or Canada is not a question of wages or taxes for Americans but more likely their national identity. Thus the affective reactions have a stronger effect on the decision where to work than the rational decision-making. In a context of e-commerce, Pennanen (2006) found that consumers perceived domestic e-vendors as trustworthy than the foreign ones. Following this, we argue that the society in which the e-vendor operates on the large that using a website may have influence on consumers’ perceptions of institutional e-trustworthiness. Moreover, the frustration regarding the Internet infrastructure, such as instability of the Internet or slow connections, may cause affective evaluation of institutional e-trustworthiness.

Cognitive e-Trust Building

In this chapter, the cognitive side of consumer initial e-trust building is discussed. Basically, cognitive e-trust building means some conscious act made by the consumer to evaluate the e-trustworthiness. In order to illustrate the consumer cognitive e-trust building, we adopt the model of consumers’ trust formation process by Pennanen (2006). Pennanen’s (2006) model presents four trust formation strategies, which are based on Mick and Fournier’s (1998) study concerning consumer coping with technology. More specifically, Pennanen (2006) found that the consumers evaluate the e-trustworthiness (interpersonal and institutional) by pretesting e-commerce, using different buying heuristics, extending decision making and exploring warranties the trustee offers to consumers.

*Pretest* refers to a situation in which a consumer is using someone else’s product temporarily or purchases some product but is not sure if the product is going to own the product after the return policy or warranty expires (Mick and Fournier 1998). According to Pennanen (2006), consumers may use pretesting in evaluation of the trustworthiness of e-commerce. For example, a consumer may test an e-vendor’s service before any purchasing or transactions occur in order to assure him/herself about the competence or the integrity of the e-vendor.

*Buying heuristics* refer to a situation in which consumers use different buying rules in order to solve problems or make decisions (Mick and Fournier 1998). Regarding buying heuristics as e-trust building mechanism, Pennanen (2006) found that the consumers are convinced about the trustworthiness of e-vendors with a widely known brand or a reliable brand. More specifically, consumers evaluated the trustworthiness of different e-vendors, and the well-known brand of the e-vendor convinced the consumers about the trustworthiness of both the e-vendor (interpersonal e-trustworthiness) and the Internet as a trustworthy channel (institutional e-trustworthiness).

The third cognitive strategy that consumers may use to build e-trust is *extended decision making* (Pennanen 2006). Mick and Fournier (1998) define extended decision making as searching diligently for detailed product or brand information and then purchasing the most appropriate alternative in a careful, calculating manner. In terms of e-trust building, Pennanen (2006) found that consumers asked their friends’ help when they perceived risks related to some products. Moreover, other methods for consumers to extend their knowledge could be identified in the literature. For example, consumers may ask advice from certain professionals concerning some product or service (Cho and Lee 2006) or use different discussion boards in order to obtain information about the products they are interested in purchasing (Grönroos et al. 2000).

The last cognitive e-trust building mechanism is *exploration of warranties*. Pennanen’s (2006) findings indicate that especially the exploration of money-back guarantee was important for consumers. That is, a consumer may evaluate the trustworthiness of an e-vendor by ascertaining if the e-vendor offers a money-back guarantee for consumer. Two other categories of warranties can be identified in the literature, too. These are extended warranty and maintenance contract (Mick and Fournier 1988). According to Mick and Fournier (1998), extended warranty and maintenance contracts seem to reduce the risk perceived by their informants. Also various trusted third parties’ recommendations might have an effect on consumers’ evaluations about the e-trustworthiness of an e-vendor or technology (Srinivasan 2004).

At the beginning of the article, we argued that the majority of current e-trust literature suggests that consumer’s behavior is in a key position in convincing the consumer to trust. However, in the previous chapters we introduced consumer affective and cognitive e-trust building. Thus, we argue that the unilateral view on consumer e-trust development should be re-considered. Based on that, we propose,

**P1:** Consumer overall initial e-trust is a function of affective e-trust building, cognitive e-trust building, and a trustee’s e-trustworthiness increasing behavior.

Relationship between Affective and Cognitive e-Trust Building

The relationship between the affective and cognitive decision making has confused researchers (e.g. Anand, Holbrook, and Stephens 1988). Some studies imply that the cognitive processing precedes the affective processing (Anand et al., 1988), while some others imply that the affective processing precedes the cognitive processing (e.g. Shiv and Fedorikhin 1999). In terms of consumer initial e-trust building, we argue that the affective e-trust building precedes the cognitive e-trust building, because of the stage of the relationship. If the relationship between the two parties is mature, then the previous experiences or memories, based on
cognitive processing, could be the sources for affective reactions. In contrast, if the relationship is in an initial stage (as in our model), then the first impressions might cause primary affective reactions that precede the cognitive processing (cf. Berkowitz 1993). Thus, we propose,

P2: Affective e-trust building predominates over and precedes cognitive e-trust building in conditions of consumers’ initial e-trust development.

The Role of Consumer Characteristics in Consumers’ Initial e-Trust Building Process
The existing literature stresses that consumer characteristics, such as demographics, have an effect on consumers’ risk perception. For example, Garbarino and Strahilevitz (2004) found that women perceive more risks than men in an online environment. Furthermore, experience with using e-commerce (Miyazaki and Fernandez 2001) and personal values (Pennanen et al. 2007) have been shown to affect the amount of risk that a consumer perceives.

Since we consider perceived risks as the antecedents to e-trust, then the e-trust building process of consumers with different characteristics may vary. For example, women who perceive more risks (Garbarino and Strahilevitz 2004) may favor both affective and cognitive e-trust building. Contrarywise, men might favor more affective e-trust building and avoid cognitive e-trust building due to their lower level of perceived risk. The idea is in line with the findings that women are found to be more comprehensive in information processing than men (e.g. Hess, Fuller, and Mathew 2006), which means that they may use both affective and cognitive e-trust building while men favor affective e-trust building. Thus we propose,

P3: Consumers’ characteristics, such as personal values, personality, demographics, socio-economics, dispositional trust, and experience in using e-commerce, affect how consumers utilise affective, cognitive or hybrid processes in e-trust building

Consumers’ Initial e-Trust Building Process as a Context-Dependent Phenomenon
Consumer decisionmaking literature emphasizes that consumers’ decisionmaking is different under high or low-involvement conditions (Bienstock and Stafford 2006). Decisions made under the low-involvement context could be routines for consumers, while the decisions made under the conditions of high involvement require more extensive decision making.

As e-commerce is a relatively wide concept including several contexts (e.g. electronic newspapers, electronic banking systems, and electronic health care), the previous discussion implies that consumers’ decision making could vary in different e-commerce contexts. This means, the importance of cognitive e-trust building could be higher, for example, in the context of electronic health care than in a context of electronic newspapers due to consumers’ perception of involvement. Some empirical evidence supports the idea. Yang et al. (2006) applied the elaboration likelihood model in their study regarding consumer initial e-trust and found that highly involved consumers used a central route, which emphasizes cognitions as the basis for the decisions, to build initial e-trust. In contrast, less involved consumers preferred a peripheral route, which means that affections were the basis for decisions. Although Yang et al. (2006) did not study consumer e-trust building between different contexts but products, their results also serve as evidence that consumer e-trust building could vary based on the context as well. Following the previous discussion we propose,

P4: Consumers favor cognitive e-trust building over affective e-trust building in high involvement context.

P5: Consumers favor affective e-trust building over cognitive e-trust building in low involvement context.

CONCLUSIONS
The aim of this article was to develop an integrative model for consumers’ initial e-trust building process. In this article, we described concepts which are important in terms of consumers’ initial e-trust building, namely consumer e-trust, e-trustworthiness, perceived risks, affective and cognitive e-trust building, trustee’s behavior, consumer characteristics, and context.

Compared to the majority of existing e-trust literature (e.g. Gefen et al. 2003; McKnight et al. 2002), our model brings out the versatility of consumer e-trust instead of concentrating on only e-vendors’ or technologies’ attributes and their influence on consumer perception of e-trustworthiness. This contributes to understanding how consumer overall e-trust is built and also emphasizes the need for further research in terms of the relative importance of both consumer e-trust building and trustee’s trustworthiness increasing behavior in consumer overall e-trust development.

We proposed that in conditions of initial e-trust building the affective e-trust building predominates over and precedes cognitive e-trust building. Our argument contradicts some results from the conventional shopping, which shows that the situation is the opposite (Anand et al. 1988) but is in line with some other studies (Shiv and Fedorikhin 1999). This issue deserves more research, as there exists a lack of empirical studies related to the predominance and/or precedence of affective-cognitive e-trust building.

We proposed that consumer characteristics affect the e-trust building process. We argued that, due to the level of perceived risks, for example, women favor both affective and cognitive e-trust building, while men favor affective e-trust building. When comparing this idea to the current literature, we found that the influence of consumer characteristics on consumer perceived risks in e-commerce is widely acknowledged (Garbarino and Strahilevitz 2004; Pennanen et al. 2007), but the influence of consumer characteristics on consumer e-trust building is as yet unexplored. Thus more research is needed. This kind of research would contribute to understanding how different consumer segments build e-trust and what kind of e-services should be offered for different consumers.

As discussed earlier in this article, e-commerce is a broad concept, which includes several contexts. We divided the contexts into high and low involvement contexts and proposed that consumers’ e-trust building varies as a function of the context. Although the influence of context in the consumer decision making has been recognized in offline research (Bienstock and Stafford 2006), there exists a lack of knowledge on how different contexts affect consumers’ e-trust building. Studying this issue would be beneficial. From researchers’ viewpoint, the future studies could verify or refute the earlier findings from the conventional shopping related to the context and decision making. From the viewpoint of e-trust research, future studies could open an interesting discussion on the importance of the context in consumer e-trust.

Our article has limitations. Firstly, the model lacks empirical validation and therefore it should be treated as a building block...
for further research. Secondly, the propositions developed in this article are general in nature. The reason for the latter was the need to challenge the unilateral view on consumer e-trust development and offer as extensive model as possible to explain consumers’ side of the issue. Thus, the propositions’ role is rather to draw attention to important issues (as seen by the author) than to offer ready-made hypotheses for empirical research. Thirdly, our model concentrates solely on e-commerce, and the adoption of the model in the conventional shopping context is questionable. Fourthly, in terms of affective and cognitive e-trust building, only a few individual mechanisms to build e-trust were introduced. There is no question that also other mechanisms to build e-trust would exist. Finally, our model concentrates on consumers’ initial e-trust building. Thus, the model could not be generalized to apply in mature relationships.

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