VAASAN YLIOPISTO

KYÖSTI PENNANEN

The Initial Stages of Consumer Trust Building in e-Commerce

A Study on Finnish Consumers

Reviewers   Professor of Marketing Hannu Kuusela
Department of Management Studies
FI–33014 University of Tampere
Finland

Professor of Marketing (Acting) Heikki Karjaluoto
School of Business and Economics
P.O. Box 35 (MaE)
FI–40014 University of Jyväskylä
Finland

Julkaisun nimike

Kuluttajan ensivaiheen luottamuksen muodostumisprosessi verkkokaupankäynnissä

Tiivistelmä

Sähköisen liiketoiminnan yleistymisen myötä Internetissä kuluttajakauppaa harjoittavien toimijoiden määrä on lisääntynyt voimakkaasti. Verkkokaupankäynnin erityispiirteiden johdosta kuluttajan luottamuksen sähköistä liiketoimintaa kohtaan on katsottu olevan yksi tärkeimmistä tekijöistä liiketoiminnan kehityksessä.

Tutkijat ovat luoneet useita malleja, joissa kuvataan kuluttajan luottamuksen ja erilaisten konstruktioiden välisiä suhteita. Erityisesti kuluttajan luottamusta lisääviä palveluntarjoajan ja Internet-teknologian ominaisuuksia on tutkittu laajasti. Lisäksi tutkimuksissa on analysoitu kuluttajan luottamuksesta johtuvia seurauksia (esim. ostohalukkuus, lojaalisuus, kuluttajan sitoutuminen palveluntarjoajaan) sekä kuluttajan henkilökohtaisten ominaisuuksien vaikutusta luottamukseen sähköistä kaupankäyntiä kohtaan.

Tämän tutkimuksen tavoitteena on tutkia miten kuluttaja rakentaa ensivaiheen luottamusta sähköistä liiketoimintaa kohtaan. Tutkimus tehdään kuluttajan näkökulmasta. Tutkimuksen tavoitteen saavuttamiseksi tutkimuksessa hyödynnetään sekä laadullisia että määrällisiä tutkimusmenetelmiä. Tutkimuksen lopputuloksena rakennetaan malli, joka kuvaa kuluttajan ensivaiheen luottamuksen muodostumisprosessia sähköisessä kaupankäynnissä.

Mallissa kuluttajan luottamuksen nähdään rakentuvan kuluttajan affektiivisten sekä kognitiivisten luottamuksen muodostumistrategioiden sekä luotettavuusarvion kohteena olevan toimijan ominaisuuksien ja käytöksen yhteisvaikutuksesta. Lisäksi mallissa esitetään kuluttajan henkilökohtaisten ominaisuuksien ja sähköisen liiketoiminnan kontekstin vaikuttavan kuluttajan luottamuksen muodostumisprosessiin.

Asiasanat
luottamus, luotettavuus, verkkoliiketoiminta, kuluttajakäyttäytyminen

Title of publication

The initial stages of consumer trust building in e-commerce: a study on Finnish consumers

Abstract

The rapid development of e-commerce in the late 1990's increased significantly the amount of e-vendors. Due to the nature of e-commerce, consumer trust in e-vendor and in Internet infrastructure in general are seen as important factors in facilitating successful relationships between consumers and different actors in e-commerce.

The widespread interest in consumer trust in e-commerce concretises in several studies dealing with the relationships between consumer e-trust and different constructs. One stream of research emphasizes the antecedents (e.g. e-vendor's brand or structural characteristics of the Internet) to consumer e-trust. Researchers in another stream of research have been interested in the consequences of consumer e-trust (e.g. intention to purchase, loyalty and commitment). In addition, the role of consumer characteristics in consumer e-trust has inspired researchers.

The main research question of the present study is: How consumers build initial trust in e-commerce? The study applies consumers' perspective. To answer the research question, both qualitative and quantitative methods are utilized. As a consequence, an integrative model for consumers' initial e-trust building process is developed. According to the model, consumers' e-trust development is dependent on consumers' affective and cognitive e-trust building efforts and trustee's behaviour. In addition, the model suggests that consumer personal characteristics, such as personal values, gender or experience in using e-commerce, and the context of e-commerce influence the breadth and depth of consumers' cognitive and affective e-trust building.

Keywords

trust, trustworthiness, e-commerce, e-trust, consumer behaviour

Acknowledgements

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THE ARTICLES COMPRISING THE MAIN BODY OF THE STUDY

1. Pennanen, K., Paakki, M.-K. & Kaapu, T. (2008). Consumers' views on trust, risk, privacy and security in e-commerce: a qualitative analysis. In T. Kautonen & H. Karjaluoto (Eds). *Trust and New Technologies: Marketing and Management on the Internet and Mobile Media*. Cheltenham, UK and Lyme, US: Edward Elgar. 108–123.

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2. Pennanen, K., Tiainen, T. & Luomala, H. T. (2007). A qualitative exploration of a consumer's value-based e-trust building process: a framework development. *Qualitative Market Research: An International Journal* 10: 1, 28–47.

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3. Pennanen, K. (2006). How consumers build trust in e-commerce: towards a trust formation model. In S. Gonzales & D. Luna (Eds). *Latin American Advances in Consumer Research Vol. I.* Duluth, MN: Association for Consumer Research. 38–43.

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4. Pennanen, K. Is interpersonal and institutional e-trustworthiness equally important in consumer e-trust development? Implications for consumers' e-trust building behaviours. The article is under review process (2nd round) in *Journal of Consumer Behaviour.*

5. Pennanen, K. (forthcoming in 2009). Consumers' initial e-trust building process: development of an integrative model and research propositions. In S. Samu, R. Vaidyanathan & D. Chakravarti (Eds). *Asia-Pacific Advances in Consumer Research, Vol. 8.*

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1. INTRODUCTION

Trust is seen as one of the most important phenomenon in facilitating successful relationships between different actors (e.g. Tschannen-Moran & Hoy 2000). Trust has been studied for decades in several disciplines. For example, sociologists began to study trust as a means to survive in a complex society (Luhmann 1979). Social psychologists were interested in the role of trust in close personal relationships, due to the high divorce rates in American society in the beginning of the 1980s (e.g. Cook & Wall 1980; Johnson-George & Swap 1982; Holmes & Rempel 1989). Psychologists have been interested in trust as a personal trait which determines how willing an individual is to trust in other persons or institutions (e.g. Rotter 1967; Frost, Stimpson & Maughan 1978; Good 1988). Furthermore, marketing researchers have been interested in the links between trust and distribution channels (Young & Wilkinson 1989; Anderson & Narus 1990), as well as studying how trust facilitates long-term relationships and commitment between companies (e.g. Dwyer, Schurr & Oh 1987; Morgan & Hunt 1994; Guenzi 2002; Humphries & Wilding 2004). In management research, trust is studied as a phenomenon that enhances business performance, for example, allow employees to work more efficiently (Mayer, Davis & Schoorman 1995), predict satisfaction in organizational decision making (Driscoll 1978) or enhance confidence in partner cooperation (Das & Teng 1998).

Forrester research Inc. calculated that US online retail reached 175 billion dollars in 2007 and it will grow to 335 billion dollars in 2012 (Forrester 2008). Despite the significant growth of online shopping, consumers still perceive threats included in the e-commerce. For example, the lack of security regarding paying by credit card was found to be the main reason why consumers are not willing to use credit card in online context (eMarketer 2009). Thus, consumer trust in e-commerce could be considered as important phenomenon from academians', but also from practitioners' perspective to facilitate successful online shopping. To answer the need to understand the phenomenon, trust studies were expanded to include e-commerce at the end of the 1990s (Ratnasingham 1998; Jarvenpaa & Tractinsky 1999). Most of the e-trust studies were conducted in the information systems disciplines. For example, the relationship between the Davis (1989) Technology Acceptance Model and consumer e-trust inspired several IS researchers (e.g. Gefen, Karahanna & Straub 2003a; Pavlou 2003). In addition to IS researchers, also consumer researchers found the phenomenon important, which has concretised in several studies into consumer e-trust (e.g. Garbarino & Lee 2003; Yousafzai, Pallister & Foxall 2005; Yang et al. 2006). After a decade of research in different disciplines, four main stream of consumer e-trust research can be identified in the literature: 1) the development of general models for

consumer trust in e-commerce (e.g. Tan & Thoen 2000–2001; Lee & Turban 2001 McKnight, Choudhury & Kacmar 2002a; Tan & Sutherland 2004); 2) the antecedents to consumer e-trust (e.g. Garbarino & Lee 2003; Gefen & Straub 2004); 3) the role of consumer characteristics in e-trust (e.g. Kolsaker & Payne 2002; Gefen & Heart 2006); and 4) the consequences of consumer e-trust (e.g. So & Sculli 2002; Yoon 2002; Ratnasingham & Pavlou 2003).

Most of the previous studies deal with trustee's (a trustee is defined as the target of consumer trust, for example, an e-vendor or some institution such as the society in which the e-commerce occurs) attributes and their influence on consumer perception of e-trustworthiness and the consequences of that perception. Contrary, consumers' behaviour has not reached as much attention, which generates a hazard that research leads to somewhat one-sided view on understanding how consumers' overall e-trust develops. The major problem with such a view is the implication that the consumer is a weak-willed object immediately affected by trustees' e-trust increasing behaviour. It also contradicts the vast research available on consumer behaviour (e.g. consumer decision-making), which indicates the opposite by suggesting that consumers are capable of making well-considered, deliberate decisions. Thus, there is a need to do research leading to a more multifaceted view on how consumer e-trust develops.

1.1   Research question, objectives and organisation of the study

This study focuses on how consumers build trust in e-commerce. The phenomenon will be mainly viewed from consumer's viewpoint. Formally stated, the main research question in this study is: *How consumers build initial trust in e-commerce?* As sub-questions we strive for answering: What consumer trust in e-commerce is? What are the antecedents to consumer trust building in e-commerce? What are the consequences of consumer trust building in e-commerce?

The research questions are pursued to answer through five objectives: The first objective is to review the literature regarding conventional- and e-commerce trust research in order to examine what concept of trust means. Also close concepts to trust and their relationships with trust are examined in the literature review. The second objective has two distinct but closely related parts: this objective studies consumer's perceptions and values by first (Objective 2a) looking at how consumers perceive risk, trust, privacy and security in e-commerce, and then (Objective 2b) investigating how the consumers' values affect the process of

developing e-trust. The third objective is to develop a tentative model of how consumers build e-trust. The fourth objective is to analyse the effect of interpersonal and institutional e-trustworthiness on consumer e-trust building behaviour. The fifth objective is to create a conceptual model and propositions for consumers' initial e-trust building behaviour.

The study is organised as follows: The study begins with the introduction of different approaches to trust from five different disciplines; namely sociology, social psychology, psychology, management, and marketing. After that, a review of the most recent literature pertaining to e-trust is provided. This is followed by a discussion of concepts related to trust (risk and e-trustworthiness). In addition, different views of trust development are analysed and the concept of initial e-trust is defined. The review of the literature ends with a summary and the definition of trust within the scope of this study. Also a view on the relationship between risk and e-trust as well as e-trustworthiness and e-trust will be discussed. The study continues by an introduction of the methodological choices and the five individual articles included in this study. Finally, a discussion of study's contribution both to the e-trust and the conventional trust research will be carried out.

1.2   Logic and location of the study in relation to current theory

This study consists of an introduction and five individual articles. While each of these articles could stand alone as a complete study in its own right, each succeeding article grows out of and is closely related to the article that came before it. The final article summarises the findings of the four other articles. Figure 1 illustrates the role of each individual part of this study in the light of the study purpose and objectives.

As shown in Figure 1, the present study is composed of five main sections, which combine to achieve the study's purpose and objectives. Section 1, the literature review, serves as background for the five individual articles which form the main body of the study: it also demonstrates the need for studying consumer e-trust building and provides an overview on the concept of trust as defined and used in different disciplines. In addition, Section 1 gives the definition of 'trust' used within the scope of the present study and explains the major concepts used in this study in order to help the evaluation of the individual articles. Section 1 concludes with a brief summary of the four articles and a discussion of the present study's contribution to the field.

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┌─────────────────────────────────────────────┐
│        Section 1. Review of the Literature    │
│ Objective 1.                                  │
│ To examine what trust is and how it is related│
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│                                               │
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│ To develop a conceptual model and propositions│
│ for consumers' initial e-trust building       │
│ behaviour.                                    │
│ Article 5                                     │
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Figure 1.   The logic of the study.

Section 2 is exploratory in nature, consisting of Article 1 and Article 2 of the five articles that comprise the main body of the study. Article 1 relates to Objective 2a

and empirically investigates the four concepts (e-trust, consumer perceived risks, privacy and security), considered important in the e-trust literature. Article 1 emphasises the need for consumer-specific e-trust research and suggests that consumers do not understand the central concepts regarding e-trust in the way that previous e-trust studies suggest. The approach taken in Article 2, which fulfils objective 2b, is a qualitative exploration related to consumers' value-based e-trust building. The second article introduces consumers' e-trust building behaviour and serves as background for more thorough examination of the phenomenon.

Section 3 consists of Article 3 and fulfils the third objective of the present study by investigating consumer e-trust building behaviour more in depth. At the end of Section 3, a model describing how consumer e-trust is built is developed, based on the empirical evidence and conceptual elaboration. This part of the study introduces several mechanisms that consumers have at their disposal and may use to build e-trust. The findings of Article 3 imply that more research is needed to verify these mechanisms and to discover how they are actually used in practice.

Section 4, which consists of Article 4, follows on from and is based on Section 3 (Article 3). In this Section, the relative importance of interpersonal and institutional e-trustworthiness in consumer e-trust building is studied and the mechanisms for building consumer e-trust that were proposed in Article 3 are approached using quantitative data and statistical methods. This fulfils Objective 4.

The final part of the study consists of Article 5, reporting on a study aimed at fulfilling Objective 5. Article 5 combines the empirical findings of the present study and the previous literature on trust, e-trust and consumer behaviour. This leads to an integrated model for consumers' initial e-trust building which is developed and presented at the Article 5. In addition, five propositions are introduced which could serve as starting points for further research.

The present study lies within the overlapping conjunction of three theoretical discussions (see Figure 2 below). E-trust research is an outgrowth of conventional trust research. In particular, the five fields of sociology, social psychology, psychology, management, and marketing have contributed significantly to e-trust research. The subject of this study is the consumer e-trust building process. For that reason, findings from consumer research will also be used here. The third theoretical basis for the present study is previous research into consumer e-trust. As Figure 2 below indicates, the present study lies within the small segment where these three bodies of research conjoin and overlap.

Figure 2.   Location of the study in regard to relevant previous research.

1.3   Conceptual phases for trust

Trust has been studied extensively for several decades in several disciplines. For example, in her meta-analysis of trust research, Ebert (2007) found over 800 articles published in well-regarded peer-reviewed journals between 1966 and 2006. Surprisingly (or perhaps due to the wide range of research on 'trust' carried out in several disciplines), the literature on conventional trust is in some confusion regarding what 'trust' actually is. For example, Hosmer (1995: 380) argues that there exists "a widespread lack of agreement on a suitable definition of the concept." Mayer et al. (1995) state that the literature lacks, for example, suitable definitions of trust and distinctions between trust and concepts closely related to it. For that reason, a review of the relevant literature on 'trust', including the view of trust presented by researchers from the fields of sociology, psychology, social psychology, management, and marketing, are presented below.

Moreover, an understanding of how trust is treated in these different disciplines is of importance, because the basis for e-trust research lies in the conventional trust literature. For example, the elements of consumer e-trust (interpersonal,

institutional and dispositional e-trust) origin from the previous research done in different disciplines. In the end, we consider that conducting the literature review contributes on readers' understanding of the different (sometimes confusing) concepts used in the five articles included in this thesis. Also the distinction and the relationships between the concepts are made visible in the following discussion in order to ease readers' evaluations of the articles. This means that the main role of the following literature review is to serve as an introduction to the vast trust literature. We do not strive for deeper analysis of the literature but more in a description of how the concept of trust is treated in different disciplines. The actual research done in a scope of this study is introduced in the individual articles. However, in the end of the literature review, the most important features (as seen by the author) of trust literature are summed up to help the reader to understand the main concepts of this study and their relationships. The other role of the literature review (especially consumer e-trust literature review) is to bring forth the one-sided view regarding consumer e-trust building and for its part to justify the existence of the current study.

The main method to conduct the literature review was searching research articles from EBSCOhost, Emerald, ProQuest, JSTOR, ScienceDirect and Wiley Interscience databases. The keywords used to search the articles were trust, e-trust, trust in e-commerce, online trust, consumer e-trust, trustworthiness, consumer risk perception and consumer perceived risks. Also modifications of those keywords were used. Other important method to review the literature was the usage of different articles reference-lists in order to find articles that were not found via the previously mentioned databases by using keywords. We also browsed through some of the top-class marketing (e.g. Journal of Marketing, Journal of Consumer Research, European Journal of Marketing, Psychology & Marketing and Journal of Retailing) and IS journals (e.g. MIS Quarterly, Information & Management, International Journal of Electronic Commerce and Information Systems Research) to get access to the most influential research regarding consumer e-trust.

1.3.1   *Trust as a theoretical concept in sociology*

Research in the field of sociology acknowledges trust as an important phenomenon which allows different actors to engage in relationships with each other (e.g. Lewis & Weigert 1985). According to some sociologists, one function of trust is to reduce complexity in a society (Luhmann 1979; Lewis & Weigert 1985). These researchers agree with Simmel (1964), who argues that if trust would not exist in a society, the resultant enormous complexity would make

actions almost impossible. As an example, Bok (1978) argues that if trust disappears, then institutions collapse.

Two main trends in sociological trust research can be identified. Firstly, sociologists have studied the antecedents to trust. These antecedents are divided into two categories, namely 'structural assurance' and 'situational normality' (McKnight et al. 2002a). Structural assurance means that the person who trusts, called the 'trustor' in the literature, believes in, for example, guarantees, regulations and promises made by the society (Zucker 1986; Shapiro 1987, adapted from McKnight et al. 2002a: 339). Situational normality, in turn, means that the society is in proper working order and the trustor may act successfully (Garfinkel 1963; Baier 1986, adapted from McKnight et al. 2002a: 339). Secondly, sociologists acknowledge that trust has consequences. For example, Barber (1983) states that trust facilitates social ordering and Gambetta (1988) argues that trust is important in terms of cooperation development.

Some typical features of trust are described in the sociology literature (see, Table 1.). First, sociologists emphasize that trust can only exist in situations including uncertainty (Lewis & Weigert 1985; Gambetta 1988; Coleman 1990; Möllering 2001). Secondly, trust is seen either as a function which facilitates interdependence and behaviour between trustor and trustee (e.g. Bok 1978; Barber 1983; Lewis & Weigert 1985; Gambetta 1988; Möllering 2001) or it is seen as a psychological state which emphasizes the trustor's willingness to be vulnerable (Coleman 1990). Third, trust has antecedents (Gambetta 1988) and consequences (Bok 1978). Finally, in sociology, the trustors' trust is defined as being placed in institutions, not in other individuals (e.g. Bok 1978). For that reason, the sociologists' view of trust is commonly labelled as 'institutional' trust (e.g. McKnight, Cummings & Chervany 1998).

Table 1.   Sociologists' definitions of trust.

Author(s)	Definition
Bok (1978: 25)	"Trust in some degree of veracity functions as a foundation of relations among human beings; when this trust shatters or wears away, institutions collapse."
Barber (1983)	Trust has two functions: trust has the general function of social ordering in providing cognitive and moral maps for actors and systems in relationships. A second and more dynamic function of trust is social control.
Lewis & Weigert (1985)	Trust is indispensable in social relationships and includes cognitive-, emotional- and behavioural aspects and dimensions, an unavoidable element of risk, and potential doubt.
Gambetta (1988: 217)	"Trust, or (symmetrically) distrust, is a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action, both before he can monitor such action (or independently of his capacity to ever be able to monitor it) and in a context in which it affects his own action. When we say we trust or that someone is trustworthy, we implicitly mean that the probability that he will perform an action that is beneficial or at least not detrimental to us is high enough for us to consider engaging in some form of cooperation with him."
Coleman (1990: 100)	"Trust includes voluntarily placing resources at the disposal of another or transferring control over resources to another."

1.3.2   *Trust as a theoretical concept in social psychology*

Social psychologists treat trust as an important concept that facilitates close relationships between actors (Harvey & Omarzu 1997; Miller & Rempel 2004).

Unlike the sociologists, social psychologists emphasize trust between individuals. For example, Miller & Rempel (2004) studied trust in a context of married couples. Although the view of social psychologists differs from that of sociologists, there exist similarities as well. For example, social psychologists emphasise that trust is only relevant in situations including uncertainty, and that it facilitates relationships (Deutsch 1958; Schlenker, Helm & Tedeschi 1973).

Table 2.   Social psychologists' definitions of trust.

Author(s)	Definition
Deutsch (1958: 266)	"An individual may be said to have trust in occurrence of an event if he expects its occurrence and his expectation leads to behavior which he perceives to have greater negative motivational consequences if the expectation is not confirmed than positive motivational consequences if it is confirmed."
Schlenker, Helm & Tedeschi (1973: 419)	"Trust is reliance upon information received from another person about uncertain environmental states and their accompanying outcomes in a risky situation."
Cook and Wall (1980: 39)	"Trust is the extent to which one is willing to ascribe good intentions to and have confidence in the words and actions of other people."
Holmes & Rempel (1989: 188)	"Trust is confidence that one will find what is desired from others, rather than what is feared."

Table 2 presents four social psychologists' definitions of trust. In summary, the main themes in the social psychologists' views of trust are: First, trust only exists in an uncertain situation (Deutsch 1958; Schlenker et al. 1973; Cook & Wall 1980; Holmes & Rempel 1989). Second, most of the definitions stress that trust is an individual's psychological state, in which they believe that the trustee will act in a desirable manner (Schlenker et al. 1973; Cook & Wall 1980; Holmes & Rempel 1989). However, Deutsch (1958) defines trust as behaviour. Third, trust has antecedents (Schlenker et al. 1973) and consequences (Deutsch 1958). Finally, a trustor's trust is placed in some individual trustee. Thus, the social psychologists' view of trust is commonly labelled as 'interpersonal' trust (e.g. Tan & Sutherland 2004).

1.3.3   *Trust as a theoretical concept in psychology*

The psychologists' view of trust (e.g. Rotter 1967; Frost et al. 1978; Good 1988) emphasizes the trustors' willingness to trust (Rousseau et al. 1998). Psychologists have been interested in how willingness to trust develops and have found that, for example, experiences in life can have an effect on a predisposition to trust (Rotter 1967). For example, a child who has been constantly disappointed in life would grow up with a general suspicion of other peoples' motives and actions, while a child with a better childhood would be more willing to trust in other people in general (Tschannen-Moran & Hoy 2000).

According to psychologists, a trustor's disposition to trust (trustor's belief that other persons are generally well-meaning and reliable), and a trustor's trusting stance (the belief that whether others are well-meaning and reliable or not, a better result in relationships will be obtained when the others are treated as trustworthy) taken together determine the level of trust the trustor has in others (e.g. Wrightsmann 1966; Rotter 1967; McKnight et al. 1998). A disposition to trust is seen as affecting an individual's behaviour. Researchers have found that individuals with a high disposition to trust will act in a more trustworthy manner than will individuals with a low disposition to trust, even in a situation where untrustworthy behaviour would be beneficial (Tschannen-Moran & Hoy 2000). According to Wang & Emurian (2005), although the majority of studies of trust in the field of psychology concentrate on trust between individuals (c.f. social psychologists' view), the role of dispositional trust in individual trust in institutions has also been studied (c.f. sociologists' view).

Table 3.   Psychologists' definitions of trust.

Author(s)	Definition
Rotter (1967: 651)	"Trust is an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon."
Frost, Stimpson & Maughan (1978: 103)	"Trust is an expectancy held by an individual that the behavior of another person or a group will be altruistic and personally beneficial."
Good (1988), adapted from Blomqvist (1997: 273)	"Trust is based on an individual's theory as to how another person will perform on some future occasion, as a function of that target person's current and previous claims, either implicit or explicit, as to how they will behave."

As the psychologists' definitions of trust given in Table 3 reveal, some main features of psychologists' view on trust can be identified: First, trust appears in situations where unfavourable outcomes may appear (e.g. Frost et al. 1978). Thus, the relationship between risk and trust is acknowledged among psychologists. Second, trust is treated as an individual's psychological state (expectation or individual's theory) (Rotter 1967; Frost et al. 1973; Good 1988). Third, there exist antecedents to trust, such as current and previous claims (Good 1988). Finally, psychologists share both sociologists' and social psychologists' views regarding the target of trust. That is, trust may be placed in both individuals and/or institutions (Rotter 1967; Frost et al. 1978).

1.3.4   *Trust as a theoretical concept in management*

Trust is studied widely in management research. Particularly in the 1990s, trust research intensified, because trust was found to be of importance to business performance (Mayer et al. 1995; Mooradian, Renzl & Martzler 2006). Some trends in trust research can be identified in the management literature. One research trend emphasises trust within organisations. For example, Driscoll (1978) studied trust and organisational decision-making. In addition, other areas which have attracted the interest of management researchers are: the role of trust in managerial relationships (Larson 1992; Atkinson & Butcher 2003), in organisational innovativeness (Ellonen, Blomqvist & Puumalainen 2008), in leadership (Gillespie & Mann 2004) and trust formation through interaction and exchange in organisations (Nugent & Abolafia 2006).

Another area of emphasis in managerial trust research is the role of trust in relationships between organisations. For example, Chow & Holden (1997) found that trust generates loyalty between partners and protects companies from the costs that would result from changing partners. Das & Teng (1998) also emphasized the role played in partner cooperation by trust and confidence. In addition to those just mentioned, other areas of trust research have emerged within the context of management. These include, for example, the relationship between trust and risk (Das & Teng 2001; Das & Teng 2004), formation of initial trust between organisations (McKnight et al. 1998; Vlaar, Van den Bosch & Volberda 2007), the role of a political system in employees' trust (Pearce, Branyiczki & Bigley 2000), and the relationship between trust and distrust (Bigley & Pearce 1998).

What is interesting is that relatively little empirical research regarding trust per se has been done in the field of management (Atkinson & Butcher 2003). Instead, a vast number of studies have been carried out to develop different conceptual

models that investigate trust in relation to other factors and concepts. For example, Ferrin, Bligh & Kohles (2007) developed a model that illustrates the relationship between trust, monitoring and cooperation in interpersonal and intergroup interactions. Bhattacharya, Devinney & Pillutla (1998) introduced a formal model of trust based on outcomes and Das & Teng (1998) proposed a model to explain the relationship of trust and control in strategic alliances. Finally, McKnight et al. (1998) developed a model to explain initial trust formation in new organisational relationships.

Table 4.   Management researchers' definitions of trust.

Author(s)	Definition
Mayer, Davis & Schoorman (1995: 712)	"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."
Bhattacharya, Devinney & Pillutla (1998: 462)	"Trust is an expectancy of positive (or non-negative) outcomes that one can receive based on the expected action of another party in an interaction characterized by uncertainty."
McKnight, Cummings & Chervany (1998: 474)	"Trust means that one believes in, and is willing to depend on, another party. Trust as a concept can be broken into two concepts: 1) trusting intention, meaning that one is willing to depend on the other person in a given situation and 2) trusting beliefs, meaning that one believes the other person is benevolent, competent, honest, or predictable in a situation."
Rousseau et al. (1998: 395)	"Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another."

Table 4 presents five definitions of trust given in the management literature. Management researchers' definitions of trust share similar features of trust with other disciplines. First, trust exists only in a situation involving risk (Mayer et al. 1995; Bhattacharya et al. 1998; Bigley & Pierce 1998). Second, trust is a psychological state of the trustor (an expectation or a belief) (Bhattacharya et al.

1998; McKnight et al. 1998; Rousseau et al. 1998). Third, trust has consequences, such as a willingness to be vulnerable (Mayer et al. 1995), and antecedents, such as positive expectations (Rousseau et al. 1998). Finally, trust is directed in some other party. Management researchers' definitions of trust do not specify whether the target of trust is an individual or some institution. However, trust is studied between organizations (e.g. Chow & Holden 1997; Das & Teng 1998), which refer to interpersonal trust, but also between societies and organizations (e.g. Pearce et al. 2000), which refers to institutional trust. Thus, it is obvious that management researchers acknowledge that trust could be directed in interpersonal and institutional trustee.

1.3.5   *Trust as a theoretical concept in marketing*

Marketing researchers have studied trust from various aspects for decades. One branch of research emphasises trust in the context of distribution channels (e.g. Young & Wilkinson 1989; Anderson & Narus 1990; Canning & Hanmer-Lloyd 2007). These studies stress the role of power and conflict in the channel relationships, and the role of trust in those relationships (Young & Wilkinson 1989). In general, researchers have found that the more power the other party has, the less trust would be involved in the relationship (Dwyer et al. 1987; Anderson & Weitz 1989).

Perhaps the most comprehensive research regarding trust in marketing literature deals with the relationships between buyer and seller (e.g. Anderson & Narus 1990; Ganesan 1994; Morgan & Hunt 1994; Garbarino & Johnson 1999; Guenzi 2002; Humphries & Wilding 2004; Kingshot & Pecotich 2007). These studies emerged in the late 1980s and were driven by the fact that trust could reduce high switching costs between companies. A fundamental argument made by marketing researchers studying relationships stresses that trust is one of the most important foundations for future collaboration between firms (Dwyer et al. 1987; Ganesan 1994; Morgan & Hunt 1994).

Studies of relationship marketing have investigated, for example, the impact of psychological constructs on trust and commitment (Kingshott & Pecotich 2007), the role of trust in long-term orientation in buyer-seller relationships (Ganesan 1994), and the relationship between trust and commitment (Morgan & Hunt 1994). Moreover, several antecedents and consequences of trust have been studied in regard to relationship marketing. Antecedents include: the firm's reputation, length of the relationship, salesperson's expertise and power (Doney & Cannon 1997), shared values (Morgan & Hunt 1994), confidentiality, expertise, sincerity (Moormann, Deshpandé & Zaltman 1993), ethical sales behaviour

(Roman 2003), customer satisfaction with the company (Selnes 1998; Roman 2003), benevolence, and credibility (Sichtmann 2007). Regarding the consequences of trust, Grayson & Ambler (1999) found that trust facilitates commitment and increases interaction quality, involvement and performance. Moormann, Zaltman & Deshpandé (1992) studied trust between providers and users of market research. They found that trust between the two parties enhanced the quality of the interaction and the market researcher's level of involvement and had an indirect effect on research utilisation. Roman (2003) found that trust in a company led to loyalty. Finally, Wang & Huff (2007) found that a trustor's integrity-based, perceived likelihood of violation decreased trust.

Trust has been studied in several other marketing contexts as well, including: trust in service settings (Crosby, Evans & Cowles 1990; Roman 2003; Doney, Barry & Abratt 2007), in industrial buying settings (Doney & Cannon 1997), in terms of brand and trust (Ambler 1997; Delgado-Ballester & Munuera-Aleman 2001; Elliot & Yannopoulou 2007; Sichtmann 2007), in negotiation situations (Mintu-Wimsatt, Garci & Calantone 2005), and in different organizational levels (Fang et al. 2008). Moreover, researchers have also been interested in: differences in the manufacturers' and the purchasing executives' views on how trust could be built (Hawes, Mast & Swan 1989), cultural effects on trust and business relationships (Harris & Dibben 1999; Zabkar & Brensic 2004), the relationships between satisfaction, product satisfaction and store satisfaction (Grossman 1999), and the influence of perceptions of trustworthiness and trusting behaviours on satisfaction and task performance (Smith & Barclay 1997).

Interestingly, consumer researchers have ignored trust. A review of the literature reveals only a few studies that deal with consumer trust. Sichtmann (2007) found that trust has a significant effect on purchase intentions and on consumers' WOM (Word of Mouth) behaviour. Erdem & Swait (2004) studied how brand credibility influenced brand choice. They found that the perceived brand credibility increases consumers' willingness to choose a given brand. They also found that consumers' perception of trustworthiness, rather than their perception of expertise, affected consumer choices and brand consideration. Delgado-Ballester & Munuera-Aleman (2001) studied brand trust and its role in consumer loyalty and commitment to the seller. Their results show that brand trust facilitates consumer loyalty, especially in the high involvement contexts. Additionally, Elliot & Yannopoulou (2007) studied brand, trust and risk. They found that trust is especially important in terms of symbolic brands and high involvement buying situations, in which the perception of risk is high. No such effect was found in terms of functional brands involving little risk. Finally, Chaudhuri & Holbrook (2001) were interested in consumers' brand trust effect on consumer purchase

loyalty and attitudinal loyalty. They found that consumer brand trust significantly increased both dimensions of loyalty.

Brand trust seems to be the most popular topic among consumer researchers. However, trust studies have been conducted in some other contexts as well. FitzPatrick, Friend & Costley (2005) found that gender has an effect on consumer trust in the context of health care. Schurr & Ozanne (1986) studied how the seller's tough bargaining, and trust, affect consumer buying-behaviour and the buyer-seller relationship. They found that when a consumer believes that a seller will use tough bargaining methods and, at the same time, the consumer perceives the seller to be untrustworthy, then the relationship will be unfavourable to the seller. In contrast, if the consumer expects tough bargaining but (s)he perceives the seller as trustworthy, then the consumer would be more integrative, and less distributive in their relationship with the seller. Singh & Sirdesmukh (2000) proposed a conceptual model for the role of agency in relation to trust mechanisms in consumer satisfaction and loyalty judgments. They proposed that the pre-encounter trust affects consumer satisfaction with the seller. Moreover, they suggest that experiences with the seller have an effect on post-encounter trust, which, in turn, has an effect on consumers' loyalty judgements. Finally, Sirdesmukh, Singh & Sabol (2002) studied consumer trust, value and loyalty in relational exchanges. They found that perceived trustworthiness influences consumer trust, which, in turn, has a direct effect on value and a moderating effect on loyalty.

As can be seen in the above examples, consumer trust has received only scarce attention from consumer researchers. Most of the studies involved consumer brand trust, or trust as an antecedent to consumer loyalty: these topics are similar to those studied in the B2B (Business to Business)-context. It is interesting that some basic issues, such as the role of consumer demographics in trustworthiness perception, or the role of consumer decision-making in consumer trust development, have not interested consumer researchers.

Table 5.   Marketing researchers' definitions of trust.

Author(s)	Definition
Anderson & Narus (1990: 45)	"Trust is the firm's belief that another company will perform actions that will result in positive outcomes for the firm, as well as not take unexpected action that would result in negative outcomes for the firm."
Moorman, Deshpandé & Zaltman (1993: 82)	"Trust is a willingness to rely in an exchange partner in whom one has confidence."
Morgan & Hunt (1994: 23)	"Trust exists when one party has confidence in an exchange partner's reliability and integrity."
Doney & Cannon (1997: 36)	"Trust is the perceived credibility and benevolence of a target of trust."
Sirdesmukh, Singh & Sabol (2002: 17)	"Trust is the expectation held by the consumer that the service provider is dependable and can be relied on to deliver on its promises."

Table 5 presents five marketing researchers' definitions of trust. Definitions differ somewhat from definitions in other fields. First, unlike the scholars in other disciplines, marketing researchers do not emphasize the role of risk in their definitions. Only Anderson & Narus (1990) acknowledge the possibility of some negative outcome of trust. However, although the definitions do not contain risk, marketing researchers have acknowledged risk as a vital part of trust (e.g. Swan et al. 1988; Kumar, Scheer & Steenkamp 1995). Second, marketing researchers' definitions of trust suggest that trust is a psychological state of the trustor (belief, willingness to rely, confidence or expectation) (Anderson & Narus 1990; Moorman et al. 1993; Morgan & Hunt 1994; Doney & Cannon 1997; Sirdesmukh et al. 2002). Third, trust has antecedents, such as perceived reliability and integrity (Morgan & Hunt 1994), and consequences, such as positive outcomes (Anderson & Narus 1990). Finally, trust is directed toward some other party. Marketing researchers' definitions of trust do not specify whether the trustee is an individual actor or some institution. Most of the studies of trust conducted in the field of marketing concentrate on B2B or B2C-relationships. Thus, it is evident that the marketing literature acknowledges the concept of interpersonal trust. However, some trust-studies involving cultural issues (Harris & Dibben 1999; Zabkar & Brensic 2004) indicate that institutional trust is also taken into account in the research on trust carried out in the field of marketing.

1.4   Consumer trust in e-commerce

At the end of the previous century, alongside the rise of the Internet, trust studies were expanded into e-commerce (Ratnasingham 1998; Jarvenpaa & Tractinsky 1999). Particularly consumer e-trust was considered to be an important issue. Most of the studies were conducted in the information systems disciplines (e.g. Gefen et al. 2003a; Pavlou 2003), but consumer researchers have also shown interest in consumer e-trust (e.g. Garbarino & Lee 2003; Yousafzai et al. 2005; Yang et al. 2006).

There is similar confusion in e-trust research as that in conventional trust research in regard to the nature and definition of trust (e.g. Serva, Benamati & Fuller 2005). What to include within the concept of 'trust' appears to be particularly problematic. For example, Bhattacherjee (2002) treats trustworthiness as a dimension of trust, although some others consider trustworthiness to be a characteristic of a trustee and an antecedent to trust. Similar confusion occurs in Gefen & Straub (2004), who state that trust includes three distinct trusting beliefs (all of which beliefs refer to trustworthiness). Moreover, Kim & Prabhakar (2004) argue that, for example, calculus-based trust is trust, although the concept of calculus-based trust originated within the field of economics, where it means the development of trust by calculating costs and rewards in a financial or economic relationship.

As the above examples demonstrated, there indeed exists confusion related to e-trust. However, if the e-trust literature is analysed it can be divided into four major areas of research.

1. General models, which strive for explaining the phenomenon of consumer e-trust in general (e.g. Tan & Thoen, 2000–2001; Lee & Turban 2001; McKnight et al. 2002a; Corritore, Kracher & Wiedenbeck 2003; Tan & Sutherland 2004).
2. Antecedents to consumer e-trust (e.g. Garbarino & Lee 2003; Gefen & Straub 2004; Bart et al. 2005).
3. Consumer characteristics and e-trust (e.g. Kolsaker & Payne 2002; Brown, Poole & Rodgers 2004; Gefen & Heart 2006).
4. Consequences of e-trust (e.g. So & Sculli 2002; Yoon 2002; Ratnasingham & Pavlou 2003).

These areas will be discussed in more detail in what follows below.

1.4.1   *General models for consumer e-trust*

Some e-trust researchers have developed general models for consumer e-trust (e.g. Tan & Thoen 2000–2001; Lee & Turban 2001; McKnight et al. 2002a; Corritore et al. 2003; Tan & Sutherland 2004). The major contribution of these models is that they combine views on trust presented in several fields, namely social psychology, sociology and psychology, and attempt to provide a general overview of different aspects and concepts regarding consumer trust in e-commerce. For instance, Tan & Thoen (2000–2001), Lee & Turban (2001), McKnight et al. (2002a) and Tan & Sutherland (2004) treat consumer e-trust as a concept which includes interpersonal, institutional and dispositional trust. As the e-trust research has evolved, those three elements of trust have attained a significant position in the e-trust research in explaining the targets of consumer e-trust. They are defined as follows.

Consumer interpersonal e-trust refers to an individual's trust in another specific party (McKnight & Chervany 2001–2002). The concept of consumer interpersonal e-trust has its origins in social psychology, and stresses consumer trust in some specific e-vendor (Tan & Sutherland 2004). For instance, a manifestation of interpersonal trust is consumer trust in an e-bank, e-bookstore, electronic grocery shop or electronic newspaper.

The concept of consumer institutional e-trust comes from sociology and refers to consumer trust in Internet infrastructure in general or in some other institutional aspect of e-commerce rather than individuals (McKnight et al. 2002a). For example, consumer trust in legal and technical protection (Tan and Sutherland 2004) or in some trusted third party such as Visa (Cheung & Lee 2006) serves as manifestation of institutional e-trust. McKnight et al. (2002a) follow the division of institutional e-trust into two constructs, as presented in the sociology literature. These two constructs are: situational normality, which refers to proper order and functioning of the Internet environment; and structural assurances, which means that structures such as guarantees and regulations are in place to promote success in e-commerce in the Internet environment (McKnight et al. 2002a).

Consumer dispositional e-trust is the individual's ability to show trust in general, and is based on the individual's belief that other people are well meaning and reliable (Tan and Sutherland 2004). As discussed earlier, psychologists divide trust into dispositional trust and trusting stance (see chapter 1.3.3.). This two-dimensional view of dispositional trust is acknowledged in e-trust research as well (McKnight et al. 2002a).

In addition to discussing the basic concepts regarding consumer e-trust, the authors have studied e-trust in relation to different constructs. In the next chapters these other constructs and their relations to e-trust are reviewed.

1.4.2   *Antecedents to consumer e-trust*

A second major area of e-trust research deals with the antecedents to consumer e-trust. As in conventional trust research, several different antecedents to consumer trust have been found in the e-commerce context as well. These antecedents may be divided into interpersonal and institutional antecedents. The nature of the following antecedents is that they can increase or decrease consumers' perception of e-trustworthiness, which contribute to consumer trust.

Several interpersonal antecedents have an effect on consumer e-trust, including e-vendors' size and reputation (Jarvenpaa, Tractinsky & Vitale 2000), dynamic pricing (Garbarino & Lee 2003), and social presence (Gefen & Straub 2004). Ha (2004) studied the antecedents to consumer brand trust in e-commerce and found that security, high privacy, brand name, WOM and quality of information increased consumer trust. Koehn (2003) in his article about the nature and conditions for online trust suggests that e-vendor's reputation increases consumer perception of trustworthiness. Kim, Xu & Koh (2004) studied potential and repeat customers in the light of antecedents to e-trust and verified Koehn's (2003) proposition. They found that e-vendors' reputation and information quality increased both potential and repeat customers' e-trust, while the perceived level of service increased only repeat customers' e-trust. Also Koufaris & Hampton-Sosa (2004) and McKnight, Choudhury & Kacmar (2002b) provided empirical support to Koehn (2003) in initial e-trust settings. In addition to reputation, Koufaris & Hampton-Sosa (2004) found that e-vendor's willingness to provide customized products and services had significant effect on consumer initial e-trust. Cazier, Shao & St.Louis (2006) found that value congruence increased consumer e-trust while value conflict reduced it. Mukherjee & Nath (2007) tested Morgan & Hunt's (1994) commitment-trust theory in an online context and found that shared values, communication, privacy and security increased consumer e-trust, while the e-vendor's opportunistic behaviour decreased it. Casalo, Flavián & Guinalíu (2007) and Eastlick, Lotz & Warrington (2006) found that the e-vendor's good reputation and consumer satisfaction increased consumer e-trust. Srinivasan (2004) suggests in his study that the antecedents to consumer e-trust are: easy access to description of products and services, ease of placing orders, order confirmation, order tracking, and post-sales services. Finally, Pavlou & Gefen (2004) studied the effectiveness of a feedback mechanism and its impact

on consumer e-trust. Their results confirm that an effective feedback mechanism increases consumer e-trust.

Several researchers have studied how website characteristics affect consumer interpersonal e-trust. For example, Yoon's (2002) results suggest that transaction security and site properties served as antecedents to consumer e-trust. Everard & Galletta (2005–2006) found that presentation flaws such as poor style, incompleteness of the web-site, and typographical, grammatical and factual errors, have significant effects on consumers' perceived quality of online store, which in turn has a significant effect on consumer e-trust. Flavián, Guinalíu & Gurrea (2006) studied the relationship between web site quality and consumer e-trust. Their findings confirm that the high quality of a web site contributes significantly to consumer e-trust. Also Hwang & Kim's (2007) findings indicate similar situation. Hampton-Sosa & Koufaris (2005) were interested in web site usability and web site appeal and their influence on consumer initial e-trust. Their findings provide evidence that web site appeal (web site appeal means consumers' perception of web site's usefulness and enjoyment in using web site) has significant effect on consumer e-trust while web site usability did not have similar effect. Roy, Dewitt & Aubert (2001) found that ease of navigation, ease of learning, perceptual limitation, user guidance, and user support within the website served as antecedents to consumer e-trustworthiness perceptions. Wang & Emurian (2005) studied how interface design factors affect consumer trust in e-vendors. Their results suggest that graphic design (e.g. colours and photographs), content design (e.g. seals of approval and current product information), and social-cue design (e.g. possibility to communicate with the vendor or inclusion of representative photographs) have a significant effect on consumer e-trust. Moreover, Merrilees & Frye (2003) found that effective interaction between website and consumer enhanced consumer trust; and Pavlou & Dimoka (2006) found that written feedback increased consumer e-trust. Bart et al. (2005) discovered that in high risk and involvement sites brand strength was the most important antecedent to consumer e-trust. Also privacy and order fulfilment were found as important. In informative-intensive sites the most important determinant of trust was ease of navigation. Finally, Nicolaou & McKnight (2006) found that consumers' perceived quality of the information presented in a website had a positive effect on consumers' belief in the trustworthiness of the vendor.

As regards the institutional antecedents to consumer e-trust, Grabner-Kraeuter (2002) proposes that guarantees could be an efficient source for consumer e-trust. She claims that especially guarantees provided by third parties, which are focused on legal, technical and organizational factors could be potential sources for consumer increased e-trust. Coetzee & Eloff (2005) are in line with Grabner-

Kraeuter (2002) when proposing that structural information (laws, assurances and security) increases consumer e-trust. Yousafzai et al. (2005) suggest that structural assurances (e.g. security- and privacy policy) and situational normality (e.g. web quality) increase consumers' perception of trustworthiness, while third-party signs and customer testimonials have no influence on consumer e-trust. Kimery & McCord (2006) confirmed the latter in their study, but a study by Ba & Pavlou (2002) found that feedback ratings have influence on consumer e-trust. Also Aiken & Boush (2006) found that third-party signs (they label those as trustmarks) have a significant effect on consumer trustworthiness perception. They also found that increased amount of third-party seals (e.g. user reports and 'verified by Visa'-sign in the same web site) in a single web site does not increase consumers' trustworthiness perception. They explain that consumers perceive a context-specific expert source trustworthier than, for example, peer-reviews. Another way to promote institutional trust is provided by Ba (2001) who claims that online communities can be a powerful source for e-trust. More specifically, Ba (2001) argues that the reputation of some online community could convince a single member about the trustworthiness of some trustee even in initial trust development settings. Finally, Corbitt, Thanasankit & Yi (2003) discovered that both consumers' perceived high technical trustworthiness and perceived site quality increased their e-trust.

1.4.3   *Consumer characteristics and e-trust*

The third major area of e-trust research concentrates on consumer characteristics and e-trust. Consumer characteristics could be understood as antecedents to consumer e-trust, but unlike the antecedents discussed above, consumer characteristics are consumer-specific antecedents to e-trust. For that reason, they should not be mixed with the interpersonal and institutional antecedents to e-trust. More specifically, consumer characteristics are present in every trusting-situation, while the interpersonal and institutional antecedents to e-trust are trustee-specific and present only in trusting situations involving some specific trustee. Thus, consumer characteristics are treated here as a separate concept.

Most of the studies in this branch of research deal with dispositional trust. For example, Brown et al. (2004) propose that the level of individual dispositional trust affects e-trust. This idea has been empirically validated in several studies (e.g. Kim & Prabhakar 2004; McKnight, Kacmar & Choudhury 2004; Thompson & Jing 2007), which serves as evidence that the psychologists' view of trust is applicable in the e-commerce context, too. In terms of personality, Tan & Sutherland (2004) propose that consumer personality features, such as

extraversion, neuroticism, agreeableness, conscientiousness and openness to experience, have influence on consumer e-trust. However, in their empirical study, Walczuch & Lundgren (2004), found no such effect between personality and e-trust.

Other consumer characteristics have been found to affect consumer e-trust as well. For example, Shankar, Urban & Sultan (2002) propose that consumer past Internet shopping behaviour, 'Internet intelligence', place of web usage, predisposition to technology and feeling of control influences consumer e-trust. Bhattacherjee (2002) found that consumer familiarity with the e-vendor increased e-trust. This finding recurred in Walczuch & Lundgren's (2004) study. Corbitt et al. (2003) found that the consumers with a high level of experience in e-commerce have higher trust than consumers with a low level of experience. Again, Walczuch & Lundgren (2004) found similar effect between the two constructs. Yoon (2004) confirmed that consumer personal variables, such as familiarity with e-commerce and receptivity to new technological innovations, have a positive effect on consumer e-trust. Hwang & Kim (2007) found in their study that consumers who perceive enjoyment in using computer systems show high levels of e-trust, while consumers with high computer system anxiety (individual's fear in using computer systems) show low levels of e-trust. Finally, Chen & Dhillon (2003) propose that individual characteristics such as dispositional trust, attitude towards online shopping, personal values, gender, age and educational level, have a significant effect on consumer e-trust. Kolsaker & Payne (2002) offer some empirical evidence related to the effect of gender on consumer e-trust. They found that no statistically significant effect was found between gender and consumer e-trust.

1.4.4   *Consequences of consumer e-trust*

The areas of research discussed above dealt with the antecedents to e-trust. The fourth main branch of research regarding consumer e-trust deals with the consequences of consumer e-trust. Consequences of consumer e-trust mean the outcomes that consumer perception of interpersonal or institutional e-trustworthiness generates.

Most of the studies among this branch concentrate on the consequences of consumer interpersonal e-trust. For example, Gefen & Straub (2004) studied how consumers' perceptions of an e-vendor's trustworthiness affect their purchase intention: their results show that consumers' perceived e-vendor integrity and predictability increased the intention to purchase, while perceived e-vendor's ability and benevolence did not have a similar effect. In terms of consumer initial

interpersonal e-trust, Hampton-Sosa & Koufaris (2005) found that e-trust significantly affects consumer intention to use a web site. Moreover, Eastlick et al. (2006) hypothesized that consumer trust in e-vendor leads to commitment toward the e-vendor. Their empirical findings confirmed the relationship between the constructs. Jarvenpaa et al. (2000) found that consumer trust in an e-vendor led to a positive attitude toward the e-vendor and decreased consumers' risk perception. Van der Heijden, Verhagen & Creemer's (2003) results are in line with Jarvenpaa et al. (2000), indicating that consumer trust in the e-vendor decreases their risk perception. McKnight et al. (2002b) studied consumer initial e-trust and its impact on consumers' intentions to transact with an e-vendor that provides legal counselling. According to their results, consumer initial e-trust leads to intention to follow e-vendor's advice, willingness to share personal information and willingness to make purchases. Pavlou (2003) studied several consequences of consumer interpersonal e-trust and found that it decreases risk perception, and increases consumers' intention to transact along with an increased perception of usefulness and ease of use. Ba & Pavlou's (2002) study reveals that a higher level of trust leads to price premiums. Thompson & Jing (2007) conducted a cross-cultural study regarding e-trust in e-commerce between the United States, Singapore and China. Their results indicate that in all three countries consumer trust in the e-vendor leads to a positive attitude toward the e-vendor and diminishes risk perception. Ha (2004) studied consumer brand trust in e-commerce, and found that positive brand trust is positively related to consumers' brand commitment. Finally, Shankar et al. (2002) in their conceptual article suggested that consumer online trust increases consumer satisfaction and loyalty. In terms of loyalty, Harris & Goode (2004) and further Flavián et al. (2006) verified the relationship. Regarding the relationship between e-trust and satisfaction, Harris & Goode's (2004) study offered a partial verification.

Some researchers have studied the consequences of consumer institutional e-trust. Kim & Prabhakar (2004) studied consumer e-trust in the context of Internet banking. They found that consumer trust in an e-channel as a banking medium significantly increased consumer adoption of Internet banking. Pavlou & Gefen (2004) found that consumer trust in a community of sellers was positively related to their transaction intentions. Nöteberg, Christiaanse & Wallage (2003) studied consumer trust in electronic channels. They found that the third-party assurances increased consumer likelihood to purchase and reduced consumers' concerns related to privacy. Yoon (2004) found that consumer trust in a website increased website satisfaction and purchase intention.

Antecedents to e-trust:

Interpersonal:
e-vendor's size, reputation, social presence, security, privacy, brand, quality of information, level of service, values, communication, functionality of the service, feedback mechanism, site properties, presentation flaws, web site quality, web site design, ease of navigation, information quality, web site appeal, willingness to customize

Institutional:
guarantees, structural information, security and privacy policy, system quality, third-party seals, online community

Consumer specific:
disposition to trust, satisfaction, shared values, perceived web-site quality, perceived system quality, familiarity with the e-vendor, past experiences, receptivity to new technological innovations, attitudes toward e-commerce, personal values, demographics, socio-economics, personality, past Internet shopping behaviour, Internet intelligence, place of web usage, predisposition to technology, feeling of control

+/−

Consumer e-trust

+/−

Consequences of e-trust:
loyalty, purchase intention, attitude toward e-vendor, level of perceived risks, perception of usefulness and ease of use, brand commitment, willingness to adopt e-commerce, likelihood to purchase, website satisfaction, price premiums, commitment, intention to follow e-vendor's advice, willingness to share information with the e-vendor

Figure 3.   Summary of the e-trust literature.

In the previous chapters we have introduced how consumer trust is studied in e-commerce literature. Figure 3 above sums up the findings of the literature review. As demonstrated in the figure, the concept of e-trust is usually studied in relation

to some other constructs which are either antecedents or consequences of e-trust. As discussed earlier, antecedents to e-trust are usually seen to increase or decrease the level of consumer trust in e-commerce. In terms of consequences of e-trust, e-trust is seen to have similar effect; it either has positive or negative influence on, for example, consumer loyalty or satisfaction.

In the previous chapters, we reviewed consumer e-trust literature and presented how the concept is treated in the literature. Next, we will discuss how consumer e-trust is defined among the vast literature.

1.4.5   *Definitions of trust in e-commerce*

Table 6 presents five e-trust researchers' definitions of trust. It seems that the e-trust researchers follow Hosmer's (1995) request and do not make trust research more confusing by re-defining the concept. Of the five studies presented in the table, three adopt Mayer et al.'s (1995) definition of trust. In fact, Garbarino & Lee (2003) state that Mayer et al.'s definition of trust is the most widely accepted definition of trust among e-trust researchers. Of the other two definitions, Yousafzai et al. (2005) also follow Mayer et al.'s definition, although they have modified it to better suit their online banking context. Only Corritore et al. (2003) redefine trust: they understand trust as a psychological state (expectation) in a risky situation.

E-trust researchers' definitions of trust emphasise that trust can only exist in a risky situation (e.g. Garbarino & Lee 2003; Yousafzai et al. 2005). All the definitions also argue that trust is a trustor's psychological state (e.g. trustor's expectation) and that trust has antecedents and consequences. Finally, trust is placed in some other party. Although the definitions of trust do not specify what or who the other party is, the vast e-trust literature most often states that the other party, the trustee, can be an e-vendor (interpersonal approach) or a technology or a society (institutional approach) (e.g. Tan & Thoen 2000–2001; Lee & Turban 2001; McKnight et al. 2002a; Corritore et al. 2003; Tan & Sutherland 2004).

Table 6.   e-Trust researchers' definitions of trust.

Author(s)	Definition
Koufaris & Hampton-Sosa (2002: 1) Quoting Mayer et al. (1995: 712)	"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."
Corritore, Kracher & Wiedenbeck (2003: 740)	"Trust is an attitude of confident expectation in an online situation of risk that one's vulnerabilities will not be exploited."
Garbarino & Lee (2003: 500) Quoting Mayer et al. (1995: 712)	"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."
Kim & Prabhakar (2004: 52) Quoting Mayer et al. (1995: 712)	"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."
Yousafzai, Pallister & Foxall (2005: 183)	"Trust is a willingness of customers to perform on-line banking transactions, expecting that the bank will fulfil its obligations, irrespective their ability to monitor or control banks' actions."

1.5   Concepts closely related to trust

Different views on trust from different disciplines were introduced in the previous chapters. The review of the literature revealed that there is some confusion in defining key concepts related to trust. One thing is clear: trust involves risk. In addition, the concept of trustworthiness is frequently confused with trust both in the conventional trust literature and in the e-trust literature (Serva et al. 2005), which makes a discussion of the relationship between these concepts necessary here. The present study deals with the development of consumer e-trust, including the mechanisms by which e-trust is built. The conventional trust literature

presents some models of mechanisms which describe how trust develops: these mechanisms will be introduced below. Since this study has an objective developing an integrative model for consumers' initial e-trust building process, this section will conclude with a discussion of 'initial trust' and how it differs from 'basic trust'.

1.5.1   Trust and risk

Conventional trust literature stresses that trust occurs only in a condition of uncertainty (e.g. Lewis & Weigert 1985; Morgan & Hunt 1994; Mayer et al. 1995; Doney & Cannon 1997; Rousseau et al. 1998). More specifically, if there is no risk, then trust is not necessary. Risks could be seen as antecedents to trust, because the need for trust arises only in a risky situation, which makes the concept of risk important in terms of trust.

The relationship between trust and risk has confused researchers. For example, Mayer et al. (1995: 711) state: "it is unclear whether risk is an antecedent to trust, is trust, or is an outcome of trust". According to Gefen, Rao & Tractinsky (2003b), the literature offers three different approaches (mediating relationship, moderating relationship and threshold model) to explain the relationship between the two concepts. The mediating relationship is present when, "the existence of trust reduces the perception of risk" (Gefen et al. 2003b: 6). For example, Grayson, Johnson & Chen (2008) support this concept when they propose that trust will reduce those trustor's risks which are related to the trustor's partner. In addition, some empirical evidence supporting the 'mediating relationship' has been found. Morgan & Hunt's (1994) commitment-trust theory includes the assumption that trust reduces uncertainty. They argued that trust has a direct effect on risk and decreases the partner's decision-making uncertainty, because the trustor has confidence in the trustee's trustworthiness. Empirical testing of their model validated the mediating relationship between trust and risk. In terms of e-trust, Nicolau & McKnight (2006) confirmed that the mediating relationship between the two concepts also applies in the context of e-commerce.

The moderating relationship includes the idea that, "trust on behaviour is different when the level of risk is low versus when the level of risk is high" (Gefen et al. 2003b: 6). More specifically, when the risk is high, trust is relevant. Conversely, when the risk is low, trust is not relevant. Das & Teng's (2001, 2004) findings are similar to the concepts found in the moderating relationship. They claim that risk perception and the trustor's propensity to trust are mirror images, thus, high risk perception includes low trust and vice versa. According to Gefen et al. (2003b), Kollock (1994) validated the moderating relationship empirically in terms of

conventional trust. Grazioli & Wang (2001) tested the moderating relationship in e-trust settings, but their data did not support it.

The threshold model stresses that "if the level of trust surpasses the threshold of perceived risks, then the trustor will engage in a risky relationship" (Gefen et al. 2003b: 6). This approach is based on Mayer et al's. (1995) model and implies that when the level of trust surpasses the level of perceived risks then the trustor can engage in a risky relationship. Mayer et al. (1995: 724) argue that "one does not need to risk anything in order to trust; however, one must take a risk in order to engage in trusting action". Thus, Mayer et al. (1995) emphasise risk-taking behaviour when describing the relationship between trust and risk. They argue that trust is willingness to assume risk, while trusting behaviour is assuming risk. For that reason, trust will lead to risk taking, that is, if trust exceeds the threshold of perceived risks then the trustor will engage in a relationship.

Since risk and trust are recognized as being closely related concepts, some studies have been conducted to specify which types of risks have an influence on trust. In the conventional trust research, several types of risks have been investigated. For example, Crosby et al. (1990) proposed that financial risk (transaction costs or uncertainty of future benefits), and complexity of service exchange settings, have an influence on trust. Fang et al. (2008) argue that the leakage of a firm's tacit knowledge and placement of strategic resources are risks which may lead to negative financial outcomes. Guenzi (2002) stresses that loosing customers to competitors is one type of risk. Kumar et al. (1995) argue that environmental risks (volatility and unpredictability of reseller's territory for supplier's products) occur in trusting relationships. Moormann et al. (1992) list as a risk, for example, the loss of control in a relationship. However, many researchers (e.g. Dwyer et al. 1987; Moorman et al. 1993; Garbarino & Johnson 1999; Malhotra & Murnighan 2002; Roman 2003) treat risks simply as uncertainty or some unspecified risk, and do not introduce any specific typology for risks. The few studies that concentrate on consumers and conventional trust do not specify the types of risks (e.g. Delgado-Ballester & Munuera-Alemán 2001; Erdem & Swait 2004).

Despite the relevancy of risks in terms of consumer e-trust, it is interesting to note that only a few types of risks and their relationship with consumer e-trust have been studied. Most researchers simply refer to risk as just risk, or as uncertainty, but do not define any specific types of risk. This situation could be a result of many conceptualisations and the lack of empirical research related to risk and e-trust. If researchers wish to approach the relationship between trust and risk empirically, their methodology and approach should specify what risk actually is and what type of risks could be present.

Although incomplete and sparse, some empirical work can be found, however, on types of risk in the context of consumer e-trust. Bart et al. (2005) stress that 'financial' and 'information' risks in e-commerce do have an influence on consumer e-trust. Financial risk refers to uncertainty about losing money while interacting online; and information risk is uncertainty about providing information online. In previous research, information risk was related to privacy, which is the most studied risk in the context of consumer e-trust (see e.g. Urban, Sultan & Qualls 2000; Belanger, Hiller & Smith 2002; Jamal, Maier & Sunder 2003; Olivero & Lunt 2004; Bart et al. 2005; Dinev et al. 2006; Pan & Zinkhan 2006; Mukherjee & Nath 2007). According to Belanger et al. (2002), privacy issues in e-commerce include unwanted spam, usage tracking and data collection, and sharing private information with third parties. Security (or the lack of it) has also been widely studied in relation to e-trust (e.g. Suh & Han 2003; Bart et al. 2005; Yousafzai et al. 2005; Mukherjee & Nath 2007). Other types of risk have been defined by Ratnasingham & Pavlou (2003) as 'technology' risk (how well technology performs), 'relational' risk (trading partner's lack of knowledge or expertise) and 'general' risk (poor business practices, environmental risks and lack of standards and policies).

1.5.2   Trust and trustworthiness

Several researchers have confused the concepts of trust and trustworthiness. For example, Ganesan (1994) treats trust as a multidimensional construct which includes credibility and benevolence. On the other hand, he stresses that trust is the trustor's psychological state of mind. This makes the confusion between the two concepts. As we saw above in terms of trust definitions in different disciplines, trust is mainly defined as the trustor's psychological state of mind. Contrary, trustworthiness is a trustee-specific concept manifesting its characteristics (e.g. credibility and benevolence) (Mayer et al. 1995). This means that trustworthiness is not a dimension of trust, but it is an antecedent to trust.

Several dimensions of trustworthiness can be found in the conventional trust literature (see Table 7).

Table 7.   Dimensions of trustworthiness in the conventional trust literature.

Author(s)	Dimension(s) of trustworthiness
Cook & Wall (1980)	ability
Rempel, Holmes & Zanna (1985)	predictability, dependability
Crosby, Evans & Cowles (1990)	integrity
Moormann, Deshpandé & Zaltman (1993)	credibility
Ganesan (1994)	credibility, benevolence
Morgan & Hunt (1994)	reliability, integrity
Hosmer (1995)	integrity, competence, consistency, openness
Mayer, Davis & Schoorman (1995)	ability, benevolence, integrity
Doney & Cannon (1997)	benevolence, credibility
McKnight, Cummings & Chervany (1998)	benevolence, competence, honesty, predictability
Sheppard & Sherman (1998)	reliability, competence, integrity, predictability, consistency
Zaheer, McEvily & Perrone (1998)	reliability, predictability
Sirdesmukh, Singh & Sabol (2002)	competence, benevolence
Sichtmann (2007)	competence, credibility

According to Mayer et al. (1995), there are three dimensions of trustworthiness, namely ability (this is also referred to as competence), benevolence, and integrity (this is also referred to as honesty), which appear most often in the research on conventional trust. They also mention that these three dimensions explain the major portion of the trustor's overall perception of trustworthiness. It is also evident that diminishing the dimensions of trustworthiness in three, eases the understanding of the concept. For example, one can claim that reliability, credibility, consistency and dependability are basic properties for a competent trustee. Similarly, openness and predictability could be allocated under integrity, because an open and predictable trustee could be considered as honest. Naturally, positioning these dimensions under three main dimensions requires re-operationalization of the concepts, but the benefit of the re-allocation could be more understandable concept of trustworthiness.

Confusion similar to that found in the conventional trust literature can also be seen in the e-trust literature. For example, Serva et al. (2005) argue that the concepts of e-trust and e-trustworthiness are often handled as analogous. Bhattacherjee (2002) provides a concrete example of the confusion when he labels ability, benevolence and integrity, which Mayer et al. (1995) gave as the dimensions of trustworthiness, as the dimensions of e-trust. Therefore, in the case

of e-trust literature too, it is of importance to emphasize that e-trustworthiness should be treated as a characteristic of the trustee.

In the e-trust literature, e-trustworthiness is seen as a multidimensional construct. For instance, Chen & Dhillon (2003) repeat Mayer et al.'s three different dimensions of e-trustworthiness: ability, benevolence and integrity. Compared with the many different definitions given in the conventional trust literature, e-trust researchers have widely accepted Mayer et al. (1995) three-dimensional approach to trustworthiness and almost completely ignored the others (see Table 8). Some other dimensions, such as predictability (Ratnasingham & Pavlou 2003; Tan & Sutherland 2004), have also been suggested as dimensions of e-trustworthiness, but the consensus among researchers heavily emphasizes the previously mentioned three dimensions.

Table 8.   Dimensions of trustworthiness given in the e-trust literature.

Author(s)	Dimensions of Trustworthiness			
	Competence	Benevolence	Integrity	Some Other
Bhattacherjee (2002)	x	x	x	
Chen & Dhillon (2003)	x	x	x	
Garbarino & Lee (2003)	x	x		
Gummerus et al.(2004)	x	x	x	
Lee & Turban (2001)	x	x	x	
McKnight, Choudhury & Kacmar (2002a)	x	x	x	
Nöteberg, Christiaanse & Wallage (2003)			x	
Ratnasingham & Pavlou (2003)	x	x		predictability
Roy, Dewit & Aubert (2001)	x	x	x	
Serva, Benamati & Fuller (2005)	x	x	x	
Tan & Sutherland (2004)	x	x	x	predictability
Tan & Thoen (2000–2001)	x	x		

Tan and Sutherland (2004) define competence as trustee's abilities, skills, and expertise within a certain domain. This means that trustee fulfils the promised service in a reliable manner. In the case of e-commerce, competence can be considered as trustee's ability to do what it has promised, for example, to deliver products at the right time. The dimension of benevolence is defined as trustee's acts that demonstrate care about trustor and its motivation to act in trustor's interest (e.g. McKnight & Chervany 2001-2002). In the case of e-commerce, this means that the trustee will act in the consumer's interest rather than its own. The third dimension of trustworthiness, integrity, refers to the trustee's willingness to act in an honest way and adhere to an accepted set of principles and standards (e.g. McKnight & Chervany 2001-2002; Tan & Sutherland 2004). In the case of

e-commerce, integrity means that trustee will not, for example, tell lies to the consumer or act unethically.

As discussed earlier, the e-trust literature recognizes both interpersonal and institutional aspects of e-trust. Since e-trustworthiness is a trustee's characteristic, it follows that both the e-vendors and institutional trustees can demonstrate trustworthiness. Thus, e-trustworthiness is divided into two separate aspects; interpersonal e-trustworthiness and institutional e-trustworthiness. Both these two aspects share the three individual dimensions of e-trustworthiness of competence, benevolence, and integrity.

1.5.3 Development of trust

This study is concerned primarily with the process by which trust is built up in consumers in e-commerce. Thus, it is important to present a discussion of trust development as it appears in the conventional and in the e-trust literature.

Conventional trust literature argues that trust can develop through 'cognitions'. This area of research is called cognitive-based trust. Cognitions are treated as sources for trust by various authors in the fields of sociology (e.g. Lewis & Weigert 1985; Miller & Rempel 2004), management (McAllister 1995; Johnson & Grayson 2005) and marketing (Moorman et al. 1992; Ganesan 1994; Doney & Cannon 1997; Michell, Reast & Lynch 1998). Lewis & Weigert (1985: 970), define cognitive-based trust as "a cognitive process that discriminates among persons and institutions that are trustworthy, distrusted, and unknown." They argue that the trustor can base the choice to trust on "good rational reasons", which serve as evidence of the trustee's trustworthiness. Johnson & Grayson (2005) argue that cognitive-based trust arises from accumulated knowledge that allows the trustor to make decisions related to the trustee's trustworthiness with some level of confidence. Moreover, Miller & Rempel (2004) argue that trust represents a cognitive process that has an effect on current and future events.

Cognitive-based trust has interested several marketing and management researchers. McAllister (1995) studied managers' belief of their peers' trustworthiness and found that the phenomenon could be measured in terms of cognitive-based trust. Johnson & Grayson (2005) studied the antecedents to consumer cognitive-based trust and found that cognitions related to a service provider's expertise and perceived product performance had an influence on trust. Michell et al. (1998) also explored the antecedents to cognitive-based trust and found that the trustor's cognitions regarding the reliability of the trustee and the satisfaction provided by the trustee contributed to trust. Furthermore, Ganesan

(1994) found that a strong, good reputation contributed to the trustor's perception of trustworthiness.

Doney & Cannon (1997) divide the processes which may lead to cognitive-based trust into three types: namely capability, intentionality and transference. The 'capability process' refers to a process by which the trustor can determine another party's abilities to meet their obligations. For example, a salesperson may promise prompt delivery to the customer although the customer knows this might be difficult. However, if the customer trusts that the salesperson can keep his/her promises, then the customer will trust the promise based on the their perception of the salesperson's credibility. In defining the 'intentionality process', Doney & Cannon (1997) cite Lindskold (1978) who states that the 'intentionality process' is the trustor's interpretations of the trustee's words and behaviours, and subsequent attempts to determine the trustee's intentions in a relationship. The 'transference process' assumes that trust can be transferred from some third party to the trustor (Doney & Cannon 1997). According to Milliman & Fugate (1988), transference-based trust requires trust in the third party. The suggestions and recommendations from the third party serve as proof that the actual trustee is trustworthy. For example, a bank which is a trusted third party may recommend some contractor to a trustor who does not have prior knowledge or experience with building a house.

Another branch of research emphasizes that trust is based on affect. Affective-based trust is trust which is based on the feelings (affects) generated by the trustee (Johnson & Grayson 2005). According to Lewis & Weigert (1985), affective-based trust consists of an emotional bond among the participants in the relationship; this emotional bond is especially important in close relationships. In such relationships, the betrayal of trust may lead to emotional outrage, which could permanently damage the foundations of the relationship (Lewis & Weigert 1985).

Affective-based trust has been of some empirical interest among management and marketing researchers. Their studies have found several antecedents and consequences of affective-based trust. For example, Michell et al. (1998) found that the trustee's fair-mindedness, truthfulness and confidence has a positive influence on trust. Johnson & Grayson (2005) found that a solid reputation, and similarity between the trustor and trustee, served as affective attributes which foster trust. McAllister (1995) found that the frequency of former interactions between the trustor and trustee, as well as altruistic behaviour, are affective foundations of trust. In regard to the consequences of the development of affective trust, Johnson & Grayson (2005) found that affective-based trust has a

positive influence on the trustor's anticipations of future interaction with the trustee. Moreover, McAllister (1995) found that trust based on affects leads to a higher level of managers' need-based monitoring (taking into account the other party's needs) and increased their interpersonal citizenship behaviour (to provide help and assistance that is outside a managers' normal job description) toward the trustee.

Affective-based trust is seen to be a complement to cognitive-based trust (Lewis & Weigert 1985). McAllister (1995) even argues that some level of cognitive-based trust is necessary for affective-based trust to develop. The idea underlying that approach is that the trustor will not engage in a relationship before obtaining some evidence of the trustee's trustworthiness. According to McAllister (1995), the required evidence will be obtained through cognitions and, for that reason, cognitions precede affects. In the B2C (Business to Consumer) context, Johnson & Grayson (2005) verified empirically that cognitive-based trust exists before affective-based trust.

Economists argue that trust is based on calculations (e.g. Dasgupta 1988; Williamsson 1993; Moore 1999). This approach to trust is labelled as calculative-based trust; it emphasizes that trust is based on calculative processes. Rousseau et al. (1998) define calculative-based trust as rational choice. They argue that calculative-based trust emerges in situations where the trustor perceives that the trustee may perform a beneficial action. Moreover, Hoffman (2002) states that the trustee's discretion prevents the trustor being certain about the trustee's interests, which forces the trustor to calculate the risks in order to make rational decisions about the trustee. Calculative-based trust is mostly seen to exist in relationships between companies, but not in B2C relationships, because consumers have less contractual safeguards at their disposal and their level of knowledge does not usually facilitate calculations related to companies *(*Johnson & Grayson 2005).

The final area in conventional trust research discussed here in relation to the development of trust stresses that trust is based on knowledge. Knowledge-based trust is trust that emerges between trustor and trustee based on the quality of their relationship (Tschannen-Moran & Hoy 2000). That is, previous experiences within the relationship generate knowledge about how the other party will behave in certain situations, resulting in evaluations of the other party's trustworthiness. For example, as a relationship between two companies matures, the salespersons' knowledge on both sides increases and makes the future relationship more predictable and, at the same time, reduces the uncertainty in the relationship (Swan & Nolan 1985; Anderson & Narus 1990; Doyle & Roth 1992; Ganesan 1994).

Marketing researchers have found evidence of knowledge-based trust. For example, Anderson & Narus (1990) studied the channel relationship phenomena and found that cooperation between firms is more likely an antecedent to than a consequence of trust. More specifically, the cooperation and shared experiences alongside and within the relationship fostered trust. Dwyer et al. (1987: 18) argued that in an exploratory phase of relationship development, "direct experience is likely to be the principal basis for judging the trustworthiness." Doney & Cannon (1997) suggested in their study of customer trust in industrial buying that the customer can predict a trustee's future behaviour based on the assessment of their credibility and benevolence which, in turn, requires knowledge related to the trustee's past behaviour. Although Doney & Cannon (1997) labelled this type of trust development as prediction-based trust, their ideas are strictly in line with the descriptions of knowledge-based trust.

The above sections presented how trust is seen to develop in the conventional trust literature. In terms of differences between the conventional trust views, it seems that cognitive-based and calculative-based trust are fairly similar and differ from affective-based trust and knowledge-based trust which are very similar to each other. Cognitive-based trust develops based on the trustor's intended cognitions. Calculative-based trust is also based on cognitions and seems even more deliberate: the question arises if the calculation process even is trust building, it appears more like a method of controlling and limiting risks.

Regarding affective-based trust and knowledge-based trust, it is difficult to separate these two views. Both seem to acknowledge that trust can develop based on affects which emerge during the relationship. Perhaps the major difference between these two views is that the definition of knowledge-based trust does not rule out the opportunity that trust can develop based on cognitions as well as affect. Thus, it seems that knowledge-based trust is a combination of affective and cognitive-based trust.

This concludes the review of the development of trust as presented in the literature on conventional trust. The following sections will concentrate on the development of consumer e-trust. Several researchers formally state that they are interested in consumer e-trust building (e.g. Kim et al. 2004; Pavlou & Gefen 2004; Yousafzai et al. 2005; Pavlou & Dimoka 2006). However, most of their studies do not actually concentrate on how consumers build e-trust, but on how different characteristics or behaviours of trustees affect consumers' perceived e-trustworthiness (i.e. what is being studied are the antecedents to consumer e-trust and their effect on consumers' perceived e-trustworthiness). For example, Kim et al. (2004) found that consumer trust develops when the e-vendor's reputation,

Internet structural assurances and website quality indicate trustworthiness. The findings of other studies that claim to concentrate on consumer e-trust building also seem to be more related to trustee's characteristics and their effect on consumer e-trustworthiness perception rather than consumer' side of the issue (process of building trust). For example, Yousafzai et al. (2005) studied how an online bank's trust-building strategies influenced consumers' perception of e-trustworthiness and Srinivasan (2004) proposed that different interpersonal (e.g. branding, and product or service offerings) and institutional (e.g. third-party seals of approval) antecedents to e-trust enhance consumer e-trust.

On the other hand, one study was found that concentrated on the consumer side of e-trust building: Yang et al. (2006) studied consumer initial e-trust development from the elaboration likelihood model perspective. They studied consumers' usage of central or peripheral decision-making routes to build e-trust. Their results indicate that when consumers are less involved with the trustee, they use a peripheral route (affect-based) to build e-trust. In contrast, when consumers are highly involved with the trustee, they use a central route (cognitive-based) to build e-trust.

1.5.4   Initial trust

This study culminates in developing a model for consumers' initial e-trust building. For that reason, this section will discuss the concept of initial trust. McKnight et al. (1998: 473) define initial trust as trust "when parties first meet or interact." Researchers are not in agreement about initial trust, because some studies imply that the trustor may have a high level of initial trust in the trustee without any previous experiences or interaction with the trustee at all (McKnight et al. 1998; Lewicki, Tomlinson & Gillespie 2006). This phenomenon is labelled as the high initial trust paradox, because typically trust theories expect that trust begins at zero and increases with time (Lewicki et al. 2006).

McKnight et al. (1998) attempt to explain the high initial trust paradox in their conceptual model. They argue that the trustor's disposition to trust, institution-based trust, and different cognitive processes enable high levels of initial trust. More specifically, dispositional trust is explained as being of importance to the trustor in the initial trust conditions. For example, a general high faith in humanity could explain a high level of initial trust (Tschannen-Moran & Hoy 2000). Moreover, trust in institutions, for example in the society in which the trustee operates, may provide evidence of trustworthiness and lead to high initial trust (McKnight et al. 1998). Finally, McKnight et al. (1998) state that different cognitive processes, such as categorization processes and the illusions of control

process, allow the trustor to make rapid initial judgements about the trustee, which lead to increased/decreased initial trust.

Although there has been conceptual interest in initial trust, there have been few empirical studies in this area. In a recent study, Wood, Boles & Babin (2008) studied the antecedents to initial trust in the context of sales encounters. They found that the trustor's dispositional trust did not have significant influence on initial trust. However, they found that the salesperson's verbal and nonverbal cues, and the company's physical appearance, have an effect on initial trust. Compared with the findings of McKnight et al. (1998), their results do not provide empirical support for the idea that dispositional trust affects initial trust.

Some interest in initial trust has emerged in e-commerce settings. In one of the few articles in the literature, Kim & Prabhakar (2004) developed a model for consumer initial trust in Internet banking. They followed McKnight et al.'s (1998) ideas of initial trust, and found that consumer dispositional trust, structural assurances, and word-of-mouth are positively related to initial e-trust. They also found that the high level of consumer initial e-trust has a positive effect on consumers' adoption of Internet banking. Chen & Barnes (2007) studied antecedents and consequences of initial e-trust. They found that perceived usefulness, perceived security and privacy, perceived good reputation, perceived willingness to customise, and dispositional trust are positively related to consumer initial e-trust. They also found that initial e-trust led to a higher purchase intention.

As the above examples show, in the context of e-commerce, it is mainly antecedents and consequences of the initial trust that are studied, along with consumer dispositional trust and its role in initial e-trust development.

1.6   The present study and trust

As one of the sub-research questions, we strived for answering what consumer trust in e-commerce is. In this section, we aim to answer the question by defining what consumer e-trust is in a scope of this study. The sections above constitute a review of the literature on trust and presents definitions of trust from six different disciplines. The literature contains several definitions of trust with different emphases. Table 9 below summarizes how trust is treated in the different disciplines.

Table 9.   Summary of different disciplines' views of trust.

	Sociology	Social Psychology	Psychology	Management	Marketing	e-Trust Research
What is trust?	1) trustor's belief 2) antecedent to favourable conditions in society 3) trustor's behaviour	1) trustor's reliance 2) trustor's confidence 3) trustor's behaviour	1) trustor's expectation 2) trustor's theory as to how other person will behave	1) trustor's expectation 2) trustor's belief	1) trustor's belief 2) trustor's willingness to rely 3) trustor's confidence 4) trustor's expectation 5) perceived credibility and benevolence of a target of trust	1) trustor's expectation
Who is the trustor?	1) individual 2) some agent	1) individual	1) individual 2) group	1) individual 2) company	1) company 2) consumer	1) consumer
Who is the trustee?	1) society 2) group of agents	1) individual trustee	1) individual trustee 2) group	1) individual trustee 2) institution	1) individual trustee 2) institution	1) individual trustee 2) institution
Other important concepts	1) risk 2) antecedent to trust 3) consequence of trust	1) risk 2) antecedent to trust 3) consequence of trust	1) risk 2) antecedent to trust	1) risk 2) antecedent to trust 3) consequence of trust	1) risk 2) antecedent to trust 3) consequence of trust 4) trust-worthiness	1) risk 2) antecedent to trust 3) consequence of trust 4) trust-worthiness

As the table 9 shows, the views of trust in the different disciplines do not differ as much as might be expected. One thing that makes the understanding of the concept of trust difficult is the usage of several different terms to mean essentially same thing. For example, trust is defined as a trustor's theory, expectation, confidence, belief, willingness to rely, or reliance. If those terms are scrutinised in more detail, it seems that all of them refer to the trustor's psychological state of mind regarding the trustee. Some authors also treat trust as behaviour, although one could claim that behaviour is a consequence of trust, which makes understanding the concept more difficult. Trust literature is also versatile including studies regarding antecedents to trust, consequences of trust and the relationship between trust and other concepts such as risk which make the literature obscure. Also mixing concepts such as trustworthiness and trust do not make the evaluations of the literature easy. Next, a summary of the versatile literature is made and trust is defined as understood in the scope of the present study.

Previous sections have presented how trust is treated and defined in five different disciplines and in the e-trust literature. Concepts closely related to trust were also discussed. As Hosmer (1995) and Mayer et al. (1995) have argued and also Table 9 shows, there is certainly confusion as to what constitutes trust, and a number of

different views on trust exist. However, some general characteristics of trust and close concepts to it can be derived from the extensive literature available on the subject:

1. Trust is the trustor's psychological state of mind regarding the trustee. Although some authors (mostly sociologists) argue that trust is behaviour (e.g. Deutsch 1958; Bok 1978; Lewis & Weigert 1985), behaviour based on trust will be considered as a consequence of trust in the present study.

2. There have to be a trustor and a trustee in every trusting situation. The trustor can be an individual, an organization or an institution. The trustee can be an individual or an organisation (interpersonal approach), or some institution such as a country or Internet (institutional approach). It is important to understand the distinction between the organisational and the institutional trustee. An individual's or an organisation's trust in an organisational trustee is interpersonal, not institutional trust. For example, consumer trust in an e-vendor is interpersonal e-trust.

3. Trust is subjective. Different trustors in the same situation may have different levels of trust in the same trustee. This is the psychologists' view of an individual's dispositional trust.

4. All disciplines acknowledge that trust can only occur in situations including uncertainty or risk. Thus, risk is an antecedent to trust.

5. Trustworthiness is not trust. Trustworthiness is a characteristic of the trustee.

6. Trust has antecedents (e.g. shared values, satisfaction, credibility) and consequences (e.g. intention to purchase, loyalty, risk taking).

7. Both trustor and trustee can develop trust, which means that trust is not a static phenomenon; trust may develop or vanish. The prevalent view in the literature stresses that trust can develop based on cognitions, affects, calculations or knowledge.

8. Trust is a voluntary phenomenon. A situation in which a trustor is forced to take part in a relationship is not a manifestation of trusting situation, because the decision to trust always has an option: the decision to distrust. In a forced situation, this option does not exist.

9. Trust is a situation and context specific phenomenon. For example, in high-involvement contexts, trust may be more important than in low-involvement contexts.

Drawing from the previous characteristics of trust, this study accepts and uses the definition of trust given in Mayer et al. (1995: 712). Accordingly, trust is:

> "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."

Mayer et al.'s (1995) definition of trust includes almost all of the characteristics of trust presented above. They see trust as a trustor's psychological state of mind regarding the trustee (an expectation that the trustee will behave favourably). The notion that the trustor is willing to be vulnerable "… based on the expectation that the other will perform a particular action important to the trustor …" includes the presumption that the result of the willingness to be vulnerable would not be certain, thus, there are risks. Mayer et al. (1995) do not claim that trustworthiness is trust. Moreover, their definition does not rule out the idea that trust has both antecedents (the expectation that trust develops based on something, for example, on the trustor's disposition or the trustee's trustworthiness) and consequences (trust would naturally lead, for example, to a purchase or some other relationship). Furthermore, both trustor and trustee are included in the definition. This definition acknowledges that trust is "…based on the expectation…", which implies that the trustor can foster trust by developing the expectation (e.g. through cognitions or affects). The definition includes the idea of voluntary risk-taking (willingness to be vulnerable). Finally, the definition used in the present study does not rule out the fact that trust is subjective and situation- and context-specific.

Several other definitions of trust were presented in the sections above. However, sociologists' definitions of trust were rejected since they emphasize trust as behaviour, although behaviour is a consequence of trust. Marketing researchers' definitions of trust were rejected as well, because they confuse trust and trustworthiness (e.g. Morgan & Hunt 1994; Doney & Cannon 1997) and do not include the concept of risk. The definitions of trust used in management, social psychology and psychology (excluding Deutsch's (1958) definition, which treat trust as behaviour) could have been adapted for use in this study. However, the present study will adopt the definition most often used in the e-trust literature, which is Mayer et al's. (1995). This choice to use an already existing definition also honours Hosmer's (1995) request to not redefine trust, although the context of this study is not conventional trust. Because Mayer et al's. (1995) definition is not context-specific, it can be considered suitable for use in the context of e-commerce, too.

As discussed earlier, the relationship between trust and risk is important. Three different approaches, which explain this relationship, were presented above: namely the 'threshold model', the 'mediating' relationship, and the 'moderating' relationship. Of those three, the 'threshold' model is used in the present study. One of the objectives of the present study is to construct a model describing the process of building initial trust in consumers in the context of e-commerce. Therefore it would not be reasonable here to adopt the 'mediating' relationship, because that approach assumes that trust already exists. Naturally, if trust already exists, then it cannot be initial trust. The 'moderating' relationship was not adopted since the present study does not aim to provide information on how consumers' behaviour changes in situations where the level of risk varies, but rather to describe how the initial e-trust is built. Consequently, the threshold model is the most suitable for the purposes of the present study, because it is the only one of the three models which is relevant in the context of building initial e-trust.

The concepts of trust and trustworthiness are frequently confused both in conventional and in e-trust literature. Several different dimensions of trustworthiness, such as consistency, openness, benevolence and integrity, found in the conventional trust literature were presented above. The review of the e-trust literature found that three individual dimensions of e-trustworthiness, namely competence, benevolence and integrity, were used by researchers in this field. The present study follows the e-trust literature and acknowledges the three-dimensional approach to trustworthiness. Moreover, the present study also recognises the existence of both interpersonal, and institutional e-trustworthiness in the context of building initial trust in e-commerce.

1.7　Research methodology

This section provides an overview of the science philosophical background**,** materials and methods of the present study. Next, starting with the science philosophical background, we will discuss all the issues from the viewpoint of the present study.

In every scientific study it is crucial to bring forth the science philosophical underpinnings that guide the research. These underpinnings have impact on researcher's views on the nature of reality and knowledge, which influence researcher's choices. Especially, it is important to spell out researcher's ontological and epistemological premises. Our ontological and epistemological premises are in line with constructivism.

Constructivists thinking emphasizes that reality is understood as relative. This means that reality is subjective in nature, although individuals' may have similar perception of reality (Metsämuuronen 2006). According to Niiniluoto (2002), constructivism considers reality as a construct, which is generated in human mind. Constructivism has similarities with realism, conceptualism and nominalism. However, the major difference between constructivism and the previous trends is that constructivism does not rule out the influence of different, for example, physical objects that exist without human activity. More specifically, constructivism argues that the world that is generated by human activities and human mind is relatively independent, but also other 'worlds' have influence in reality. For example, Niiniluoto (2002) quotes Popper (1972) and argues that there can exist three different worlds; the 'first world' includes physical objects, the 'second world' includes human understanding and attitudes and the 'third world' includes numbers and realities developed based on human mind. Constructivism assumes that the 'third world' cannot exist without the other two worlds while, for example, realism states that the 'third world' existence is not dependent on the other worlds. Thus, constructivists' understanding of reality states that human thinking and activities generate reality, but the reality cannot exist without the other 'worlds', because it has features that human mind has not consciously placed in the reality (Niiniluoto 2002).

Language is seen to have an essential role in constructivism and especially in humans' communication of reality (Kakkuri-Knuuttila & Heinlahti 2006). Niiniluoto (2002) states that humans can use words to form logical entities and these entities are representations of the reality. An important characteristic of language is that words can be used logically even if they seem artificial and do not express any physical feature of the object which they are used to describe. In a nutshell, constructivism postulates that human thinking and activities combined with other features of the world generate reality and language has essential role in producing manifestations of that reality.

In terms of the present study, the constructivists' ontological premise means that the 'image of reality' we gain regarding consumer e-trust building reflects the realities of individual consumers generated by their activities and thinking. This means that the reality is subject-specific. However, we acknowledge that the reality has also features which are not based on human mind. We also understand that in reality, consumer e-trust building may be manifested in some other than lingual level (e.g. actual behaviour), but we concentrate on studying manifestations of the reality that becomes visible via language the consumers use.

Regarding the constructivists epistemological premise, we understand that the nature of the knowledge we can gather is subjective in nature. This requires interaction with consumers and the reported findings are based on our interpretation (c.f. Metsämuuronen 2006).

Both the science philosophical background and the aim of the research are important in terms of methodological choices. As the constructivism suggests, researcher can gain knowledge from reality by interacting with the subject of the study. This means that constructivist research is hermeneutical in nature (i.e. seeking understanding about the reality by interpretation). Also the aim of the study influences researcher's choices of the method used in the study. For example, if the aim of the study is to reveal causal relationships between different constructs then a quantitative approach could be well suited. However, if the aim of the study is to provide descriptions or produce content regarding some phenomenon, then qualitative approach could be the most useful.

In this study, a qualitative approach was selected as main method, because the phenomenon studied has not yet been clearly conceptualised. This choice reflects constructivist science philosophy and also means that the current study is normative in nature and applies inductive reasoning. In other words, we strive for making descriptions, generalizations and guidelines regarding how consumers build initial e-trust based on single observations gathered in the interviews. It is also important to notice that the descriptions made in this study are not statistical generalizations but rather descriptions of different phenomena, which are based on researcher's interpretation.

However, we also used quantitative method in article 4 to gather statistical information regarding the phenomenon studied. According to Metsämuuronen (2006), there is no reason to regard qualitative and quantitative methods as being contradictory or in conflict with each other, rather, they should be seen as being more like a continuum or complementary to each other. Thus, combining both approaches was deemed more promising for reaching the study's aim than a qualitative or quantitative approach alone. We consider that statistical information (hence descriptive in nature) would increase the validity of our qualitative findings.

The present study is a combination of individual articles which all have individual research questions. However, the overall purpose of the study as a whole is to study how consumers build initial trust in e-commerce. For that reason, it is important to discuss the methodological choices made in the individual articles and what is their relationship in the light of the main purpose of the study.

In the first three articles, attempts were made to generate understanding regarding consumer e-trust building. A qualitative method was deemed to be the most appropriate choice, because it would offer more possibilities to understand and also provide content to different phenomena related to consumer e-trust building than would be the case with quantitative methods. The aim of the first three articles is to generate understanding about how consumers build trust in e-commerce and also provide opportunities to develop descriptions and concepts regarding the mechanisms that consumers use to build e-trust. In contrast, a quantitative method was used in the fourth article. The aim of this article is to provide statistical information regarding the concepts that were developed based on the previous qualitative studies. We considered that statistical information about the studied phenomenon would provide support for our qualitative findings. The fifth article is conceptual in nature and is based on our empirical findings and conceptual elaboration. The aim of the fifth article is to provide a general model that discusses how consumers build trust in e-commerce. We considered the development of a general model crucial in order to discuss how our empirical findings are related with the other important concepts discussed in e-trust literature. The fifth article also differs from the other articles by adopting deductive reasoning to generate propositions based on the model developed in the article.

1.7.1   Data collection

One could study how consumers build trust in e-commerce by observing their actual behaviour while using e-commerce or by conducting surveys. A problem with such approaches could be the missing of some important aspects of the studied phenomenon due to the lack of interaction with the consumers. For example, observing consumers' behaviour that seems like e-trust building could lead to misinterpretations, because the behaviour does not necessary be trust building from consumer's perspective. For that reason, it is important to give room for consumer's voice and his/her own perceptions regarding the studied phenomenon.

In order to avoid the previous problems, we decided to adopt qualitative method, more specifically a semi-structured theme interview, as a main data collecting method. In semi-structured theme interviews the questions are prepared beforehand, but the interviewees are not required to select their answers from a set of readymade answers. Instead, they can answer the questions freely (Hirsjärvi & Hurme 2000). This kind of procedure releases interviewee from researcher's

perspective and gives room for interviewee's own perceptions about the studied phenomenon.

Semi-structured theme interview is seen to be a reasonably well method for data collection, especially when the interviews deal with the issues that the people interviewed do not discuss on a daily basis (Hirsjärvi & Hurme 1991). Another reason for selecting semi-structured theme interviews was a need to restrict the issues discussed in the interviews to certain themes considered relevant in the study. This was done, because we wanted to avoid a situation in which the interview meanders. Although semi-structured theme interview can generate problems regarding the interpretation, analysis and reporting (Hirsjärvi & Hurme 2000) we decided to use the method, because we considered that theme interviews could enable us to receive such material that can bring forth some new aspects about consumer e-trust building. In case of, for example survey, we would have placed us in danger to be imprisoned by our own thinking regarding consumer e-trust building and therefore in danger to miss some important aspects of the phenomenon.

While conducting empirical research it is important to take a stand on the study's reliability and validity. Reliability refers to the repeatability of the empirical study while validity refers to study's ability to measure what it is supposed to measure. In qualitative research reliability means the repeatability of the analysis and validity the attachment of theory and empiricism (Uusitalo 1991). Eskola & Suoranta (1998) argue that in order to assess qualitative study, researcher should pay attention to the 1) study's credibility, 2) the transferability of the findings, 3) study's reliability and 4) strength. Study's credibility means that researcher's conceptions and interpretations are similar with the interviewees'. The transferability of the findings means that they can be transferred under certain conditions. Taking into account different random effects that can interrupt data collection can increase study's reliability. Finally, study's strength means that the interpretations made in the study are verified in other studies.

In order to increase present study's reliability and validity, we took the previously mentioned issues into account. During the interviews, we tried to make sure that both the researcher and the interviewee understand each other. In practise, this meant that the researcher made some additional questions if he was not sure that he and the interviewee were discussing about the same issue. Also the interpretations made in the analysis were sent to the interviewees in order to confirm that researcher had not made misinterpretations. In order to attach theory and empiricism, the interview guides (see, Appendices 3 and 4) were developed based on theoretical frameworks. The interview guides were also tested before the

actual interviews in order to avoid possible interruptions and the interviewees were treated anonymously in order to make them speak as freely as possible. Finally, all interviews were tape-recorded and transcribed.

Qualitative data for the present study was collected in interviews, in two phases, Phase 1 in the summer of 2003 (note, this material was primarily collected for the author's masters thesis, which is about consumer perceived risks and risk reduction strategies in e-commerce) and Phase 2 in the summer of 2004. Ten interviews were conducted by the author of the present study in Phase 1; a total of 30 interviews were conducted in Phase 2, ten by the author and 20 by other researchers. Thus a total of 40 interviews were conducted to obtain qualitative data for the present study. A more detailed description of the sample is provided in Table 10.

The themes chosen for the interviews in Phase 1 dealt with the risks perceived and risk reduction strategies used by consumers (see, Appendix 3). The themes for Phase 2 were consumer, e-vendor's web site, e-vendor, social surrounding, e-vendor's service/product and consumers' risk reduction strategies (see, Appendix 4), within three different contexts of e-commerce, namely electronic grocery shopping, electronic health care, and electronic media.

In addition to qualitative material, also quantitative data was collected. In this study the Vignette-method is used. The Vignette-method means the usage of short written scenarios, which are supposed to have influence on participants' decision making process (Alexander and Becker 1978). The Vignette-method is seen as a useful method to study intentions, believes, actions (Barter and Renold 2000) or judgements (Rooks et al. 2000) in different situations. In addition to written scenarios, also video material (Wirtz, Mattila & Tan 2000), cartoons (Wilks 2004) and fictional radio plays (Surprenant & Solomon 1987) have been utilised in vignette-studies. Vignette-method has been used in several disciplines, for example, in social sciences (Wilks 2004), management (Rooks et al. 2000) and also in several marketing studies (Folkes 1984; Surprenant & Solomon 1987; Bitner 1990; Wirtz 2000; Wirtz et al. 2000; Wirtz & Mattila 2001).

Vignette-method is seen to include both advantages and disadvantages. In terms of the advantages; firstly, the usage of vignettes makes large-scale surveys possible, while still retaining the advantages of experimental design (Jörg et al. 2006). Secondly, vignettes are seen as useful to study sensitive topics. According to Wilks (2004), respondents consider vignette-based studies non-personal and less threatening, which increase the possibilities to gain knowledge about the issues the respondents might not be willing to discuss normally. Thirdly, Bitner (1990) emphasises that a vignette-study enables researcher to conduct expensive

and difficult manipulations relatively easy. She also notes that using scenarios allows researcher to control otherwise unmanageable variables. Fourthly, vignette-method reduces the time-span of the study, which enables researcher to conduct a large-scale study more rapidly than would be the case with, for example, an experiment (Bitner 1990).

In terms of disadvantages, Rooks et al. (2000) note that the respondents have to make hypothetical decisions, which they would not make in real life situations. This generates questions about the validity of the results obtained in a vignette-study. Also Wilks (2004) considers vignette-studies' validity. He raises a question about the reality of the situation described in written scenarios and what is the value of the conclusions made based on the study's results. This means, if the scenario does not reflect reality then how can the results and conclusions made based on the results reflect it? Moreover, Surprenant & Solomon (1987) discuss the disadvantages included in vignette-studies. They argue that there exists a danger that the respondents lack involvement regarding the study subject, which can have influence on results. Finally, Wirtz & Mattila (2001) argue that it is important to rule out the respondents past experiences about the study's subject, because they can have influence on respondents' expectations. For example, the respondents should not be familiar with the company used in the written scenarios. This reduces the risk that the manipulations carried out in the scenarios would not be successful.

In the scope of the present study, we consider vignette-study as useful to study consumers' e-trust building. We were interested in the influence of perceived interpersonal and institutional e-trustworthiness in consumer e-trust building. This means that we had two options at hand to conduct the study; an experiment or a vignette-study. The experimental approach would have required us detailed planning and enormous resources, while there still would exist a considerable danger that the experiment would not have been successful (see more detailed discussion about the vignette-method's benefits compared to experimental approach in article 4). Thus, we decided to adopt the vignette-method, because it allowed us to conduct an expensive and time-consuming study easier than would have been the case with an experiment. We especially considered that using the scenarios would enable us to control the study more comprehensively and rule out several unmanageable features of experiment.

As discussed earlier, the major disadvantage included in the vignette-studies is related to the study's validity. In order to increase the validity of our study we strove for making as realistic scenarios as possible; we used a relatively well-known product, a computer, in the scenario and all the manipulations were strictly

based on the literature. After that, a pretest was made in which 20 respondents read the scenarios and filled out a questionnaire (and also the questionnaire which were used in the actual study), which measured their perceptions about the manipulations done in the questionnaire. After conducting the pretest they also had opportunity to discuss with the researcher about the study and their concerns regarding it. As a conclusion, pretests showed that the scenario did not require alterations but the questionnaire were modified based on the pretests.

Surprenant & Solomon (1987) argued that there exists a danger that the respondents lack involvement regarding the study subject. For that reason, the product that the fictional consumer was buying in the scenario was chosen to be a computer, because it is relatively expensive and also a neutral product. Furthermore, we considered that buying a computer online would manifest a realistic buying situation for most of the respondents that would take part in the actual study. In terms of Wirtz & Mattila's (2001) concerns regarding respondents' past experiences related to study's subject and its influence on the results, we used as neutral name as possible for the company that was included in the scenarios.

The quantitative data was collected during the autumn of the 2007 among Finnish college students (see, Appendix 1 for scenarios and Appendix 2 for the questionnaire used in this study). Altogether 218 respondents took part in the study, but due to the lack of proper answers, the final sample consisted of 205 respondents (see, Table 10).

Table 10. Individual articles' samples and time of data collection.

Article	Sample size	Time of data collection
1	30	summer of 2004
2	30	summer of 2004
3	20	summer of 2003 and summer of 2004
4	205	autumn of 2007
5	–	–

 In the present chapter we discussed the methods used to collect empirical material. In the next chapter, we will discuss the data analysis process more thoroughly.

1.7.2   Data analysis

The qualitative data was gathered and analysed in two phases. It is noteworthy to mention that the interviews done in the phase 1 were not in a first place conducted to study consumer e-trust building but how consumers reduce risks in e-commerce. However, the findings we achieved in study phase 2 inspired us to re-analyse the material gathered in phase 1, too. Next, we will first discuss the data analysis done in the phase 2.

The data collection in phase 2 was done in a multi-disciplinary research group, which included IS and consumer researchers. The aim of the study was to investigate consumers' value-based perceptions of e-trustworthiness in three different contexts (electronic media, electronic health care and electronic grocery shopping). To reach the aim, 10 semi-structured theme interviews were done in all three contexts. As the main analysis method, the research group developed a tool, which was supposed to be used in the analysis. The tool consisted of different theory-based categories for e-trustworthiness (namely benevolence, competence and integrity) and categories for consumers, technology, e-vendor, society and third parties. By using this tool, the study aimed in gaining understanding regarding e-trustworthiness from different angles.

However, after reading the interview material we discovered that, in addition to their perceptions of e-trustworthiness, the interviewees discussed how they build trust in e-commerce and how different external factors influenced their e-trust building. We also had a 'gut feeling' that the e-trust building and the external factors were discussed differently between the value-groups. That is, we felt that excitement-minded interviewees were not as interested in the e-trust building than the security-minded interviewees. This 'gut feeling' triggered a need for a more systematic analysis in order to discover if these differences really can be identified from the material. Thus, the previously developed tool for analysis was abandoned, because it was not usable to analyse external factors and e-trust building.

To conduct a more systematic analysis, we read the material several times and at the same time strove for iteration. Iteration means a continuous movement between individual transcripts and the emerging understanding of the entire set of textual data. This means that provisional understanding is developed, challenged and further developed through an ongoing iterative process (Thompson 1997; Thompson & Troester 2002). This approach is closely related to Grounded Theory methodology, in which the researcher is striving for developing data-driven categories about the studied phenomenon (see, Glaser & Strauss 1967; Strauss & Corbin 1990).

In practise, we asked questions to individual interviewee's transcripts. Asking questions is seen important in terms of data analysis (Hirsjärvi & Hurme 2000) and it means that the researcher confronts the material in order to find important issues regarding the phenomenon studied. Thus, we made several questions to the material. What external factors there exist that influence e-trust building? What is the nature of these external factors? How are they related to e-trust building? How interviewee builds e-trust? Why s(he) uses these e-trust building mechanisms? What is the nature of these e-trust building mechanisms?

Answers to the previous questions contributed to our understanding of the phenomenon and allowed us to form different e-trust building categories for individual interviewees. After that, we compared the categories between the interviewees. This is labelled as contrasting (Thompson 1997; Thompson & Troester 2002) and means the development of categories based on similarities and differences between the single interviewees. The first comparison was made between security- and excitement-minded interviewees. After that, the comparison was made between the value-groups within every three contexts included in the study. Finally, we compared the interviewees' transcripts between the three contexts. Based on the analysis, two external factors that influence consumer e-trust building and three e-trust building patterns were discovered (see more detailed description of the findings in Article 2).

The findings in study phase 2 generated a need for a more systematic study regarding consumer e-trust building. For that reason, we decided to re-analyse the material gathered in phase 1 and also material from 10 interviews gathered in phase 2. The reason for using the data collected in phase 1 was that we considered the e-trust building patterns quite similar with the risk reducing strategies found in the earlier analysis of phase 1 data. This similarity convinced us that a more systematic re-analysis of the data, this time from the e-trust building viewpoint, could be worthwhile.

The actual re-analysis of the data began with listening the interview tapes and reading the previously written transcripts several times. In the re-analysis, we used a more systematic approach to analyse the data than in phase 2. In practise, this meant that we formed four categories of possible e-trust building mechanisms (pretest, buying heuristics, extended decision-making and extended maintenance and warranty contract) based on previous theories regarding consumer risk reducing. After that, the transcripts were analysed in order to discover whether the interviews would provide empirical evidence regarding the theory-based categories and whether these strategies could be useful from the viewpoint of consumer e-trust building. Again, we decided to confront the empirical material

by asking questions. What risk reducing strategies the interviewees use in e-commerce? Why they use these strategies? What is the nature of these strategies? Are these strategies used just to reduce risks or can they be used to evaluate e-trustworthiness as well? In what kind of situations are these strategies used? If interviewees use these strategies, are they used to evaluate both interpersonal and institutional e-trustworthiness? What are the possible outcomes of the strategies? Are there some attributes that affect the usage of these strategies? If there is, what are those attributes and what is their role in e-trust building?

Asking questions turned out to be fruitful. In case of single transcripts, we found several e-trust building mechanisms. Again, we contrasted the individual transcripts in order to reveal similarities or differences between the transcripts. Contrasting resulted in finding that the interviewees use some of the strategies among the four main categories. The analysis also convinced us that the interviewees use these strategies to reduce risks but also to evaluate interpersonal and institutional e-trustworthiness. This meant that we were able to develop a more systematic description of the studied phenomenon. The findings of the analysis are reported in Article 3.

In addition to qualitative data, also quantitative data was gathered and analysed in a scope of this study. The aim of the quantitative study was to study how consumers' perceptions of interpersonal- and institutional e-trustworthiness affect their intention to build e-trust. In a nutshell, we developed four hypothetical buying situations in which the levels of interpersonal- and institutional e-trustworthiness varied (a more specific description of the study design is provided in Article 4). We considered that consumers' intention to use different e-trust building strategies would vary based on the perceived level of e-trustworthiness. If the empirical material would provide support to our assumption, it would also strengthen our ideas about consumer e-trust building received in the previous qualitative analyses.

To analyse the quantitative data, we used SPSS-program. In order to study the differences between the four groups formed in the study, we applied one-way ANOVA to analyse the data and reveal possible statistically significant differences between the groups. A more specific description of the results obtained is provided in Article 4.

1.8 Summary of the five articles, conclusions and recommendations

In this chapter, the five articles included in this study are briefly presented and summarised. Furthermore, the discussion of the ways in which the articles contribute to the ongoing theoretical discussion is presented. The section concludes with the discussion of the limitations of the study, indications for further research and managerial implications.

1.8.1 Article 1: summary, conclusions and recommendations

Article 1 is related to the four important concepts that emerged from the review of the e-trust literature: trust, risk, privacy and security. The basis of the article is that these four concepts are recognised as important in terms of consumer e-trust, but they are mainly viewed from the trustees' perspective. For example, privacy and security are treated as important attributes that enhance consumer perception of the trustworthiness of the trustee, but information on how consumers understand these concepts is missing. Thus, the aim of Article 1 is to generate an understanding of what definitions and meanings consumers give to the four concepts and the relationships between and among these concepts.

Consumer e-trust is viewed in the literature primarily from the trustees' point of view. For example, e-trust is seen to develop based on attributes of the trustee which foster consumer e-trust. For that reason, the major contribution of Article 1 is the discussion of these four concepts from the consumers' point of view. Previous literature on the subject treats privacy and security as technological concepts, which they indeed are, but consumers do not necessarily perceive them as such. The findings of Article 1 indicate that consumers perceive privacy and security as concepts that involve or generate emotions. For example, consumers do not perceive the lack of security as the lack of some technology. They perceive it as a phenomenon which may generate frustration or anxiety. Thus, in order to gain a more holistic view, Article 1 argues that issues related to consumer e-trust should be studied from the consumers' perspective as well as that of e-vendors' or technology.

The findings of Article 1 indicate that consumers perceive several risks in e-commerce. As was mentioned above, in the review of the literature presented here in the Introduction, it was found that risks in e-trust are treated as being mainly risks related to the lack of privacy (e.g. Belanger et al. 2002; Jamal et al. 2003; Mukherjee & Nath 2007). Bart et al. (2005) also presented financial risk as one

type of risk related to consumer e-trust. In contrast to these studies, the findings of Article 1 indicate that in regard to e-trust, consumers perceive social, psychological, technological and time-loss risks in e-commerce, as well as financial risks and risks related to privacy. All of these risks are familiar in the conventional risk literature (e.g. Havlena & DeSarbo 1991; Ho & Ng 1994; Campbell & Goodstein 2001) as well as in the literature regarding consumer perceived risks in e-commerce (e.g. Vijayasarathy & Jones 2000; Liebermann & Stashevsky 2002). For some reason they are not discussed in terms of e-trust. Thus, the findings of Article 1 contribute to e-trust literature by suggesting that there are other risks in e-commerce than those related to privacy or financial risks. This finding implies that, in future, researchers might wish to investigate further the relationship between risk and e-trust. For example, it would be interesting to know the relative importance of different types of risks in consumer e-trust development.

As discussed earlier, the e-trust literature treats privacy as risk. However, the findings of Article 1 indicate that privacy should be considered more as an antecedent to consumer perceived risks than as a risk in itself. For example, it was found that the lack of privacy may lead the consumer to perceive psychological (hurt feelings, frustration), technological (e.g. viruses), time-loss (time is wasted due to unwanted e-mails), social (socially uncomfortable content of e-mails), or financial (money lost due to hackers) risks. In the light of these findings, it appears that the relationship between privacy and consumer e-trust should be reconsidered. Risks are considered as antecedents to e-trust, but the relationship between privacy and consumer e-trust seem to be mediated by consumer perceived risks. Thus, Article 1 suggests that privacy should not be treated as a risk as such, but as an antecedent to several types of risks.

The literature on e-trust handles security as a purely technological concept, which protects consumers from different threats in the Internet (e.g. losing credit card information). Consumers, on the other hand, did not understand security as a technological concept, but rather understood security as an affect based on something other than a given technology or technological features. For example, Article 1 showed that consumers perceived domestic e-vendors as being more secure than foreign ones for no factual reason. Thus, the perception of security was not based on trustees' statements regarding the technology they used, but was more likely an affect generated by the domicile of the e-vendor. This finding is supported by the findings of certain studies in the e-trust literature. For example, Kimery & McCord (2006) found that third-party seals do not increase consumers' perception of e-trustworthiness. So, Article 1 suggests that, in terms of e-trust, security should be approached in a more diverse manner, and should consider

more than purely technological factors. For example, the language and rhetoric used in a website might increase consumer perception of security, which in turn would lead to a more positive assessment of e-trustworthiness.

1.8.2   Article 2: summary, conclusions and recommendations

Article 2 deals with consumers' personal values and their relationship with consumer e-trust and e-trust building. The topic was considered important because a discussion of the consumer side of e-trust development could not be found in a review of the literature. Moreover, the role of consumer characteristics (such as personal values) in consumer e-trust development has attracted very little attention from researchers. Thus, the aim of the article is to explore how consumers' personal values affect consumer e-trust development in order to provide theoretical building blocks for future conceptual elaboration. The analysis of the data revealed differences between the two value-groups in their risk perception. Interviewees who valued security seemed to perceive more risk than those who valued excitement over security. In terms of e-trust development, the security-minded recognized more different e-trust building patterns, and also used those more extensively, than did the excitement-minded: this was seen as evidence of the effect of values on consumer e-trust building. Article 2 concludes with a framework for describing the development of e-trust in consumers.

Article 2 adds to the knowledge base of e-trust through a study of the relationship between consumers' personal values and the concept of e-trust. It was shown above that e-trust research has not evinced much interest in investigating the relationships between consumer characteristics and e-trust: Article 2 thus fills a gap. The findings of Article 2 showed that a consumer's personal values have an influence on that consumer's risk perception in e-commerce, and on the patterns and mechanisms used by that consumer in building e-trust. These findings thus add to the understanding of the role of consumer characteristics in consumer e-trust.

The primary contribution of Article 2 is the introduction of the discussion of e-trust from the consumer's side of e-trust building. As discussed above when the literature was reviewed, consumer e-trust has previously been studied from the point of view of trustees, and has been seen as developing based on trustees' attributes. The present study, encompassing all five articles, and beginning in Article 2, turns this around and emphasizes the consumers' side of the e-trust building process. The study in Article 2 found that friends' e-service usage, pretesting, and previously ordering via the Internet served as e-trust building mechanisms for consumers. It also found that the intensity in the usage of those e-

trust building mechanisms was mediated by the personal values held by consumers. In terms of consumer e-trust development, the findings of the present study indicate that consumer e-trust development should be considered as consisting of both trustees' and trustors' (consumers') behaviour. For that reason, future research in this area should not concentrate only on the antecedents to consumer e-trust (i.e. attributes and behaviour of trustees), but also on consumers' (trustors) attributes and behaviour in actively building e-trust, in order to understand more holistically the process by which consumers' develop e-trust.

As discussed earlier, the concept of consumer e-trust includes the dispositional elements of e-trust. Previous studies have verified that the level of dispositional trust has an effect on consumer perception of e-trustworthiness (e.g. Kim & Prabhakar 2004; McKnight et al. 2004; Thompson & Jing 2007). However, these studies have not concentrated on the antecedents to dispositional trust. The present study suggests that consumers' personal values have an effect on consumer dispositional trust. More specifically, the consumers who value excitement seem to have a higher disposition to trust than consumers who emphasize security as a key value in their life, which means that an individual's personally held values may explain their level of dispositional trust. In terms of other consumer characteristics, the present study proposes that consumer characteristics act as moderators in the e-trust building process, as well as having an effect on the intensity of consumers' e-trust building. As the review of the literature revealed, these issues have not previously been discussed.

1.8.3   Article 3: summary, conclusions and recommendations

Article 3 introduces a tentative model for consumers' trust formation in e-commerce. The ideas presented in Article 1 and Article 2 are studied in more depth in Article 3. The scientific basis of the article is similar to that of the first two articles. Since the review of the literature revealed that consumers' e-trust development was treated primarily as a result of attributes increasing trustees' e-trustworthiness, there appeared to be a need to take a more holistic view which also acknowledged the trustor's role in e-trust development. Thus, the aim of the Article 3 was to develop a model that presents how consumers build trust in e-commerce. The findings in Article 3 indicate that consumers use different risk reduction strategies in order to build e-trust. The data analysis revealed that consumers evaluate interpersonal and institutional e-trustworthiness by: pretesting, using different heuristic buying strategies, extending decision-making, and exploring whether the e-vendor offers different guarantees. The article concludes with a tentative model of the consumer e-trust formation.

Article 3 takes a more systematic approach to the study of consumers' e-trust building mechanisms. To this end, literature related to traditional consumer risk-reduction strategies (e.g. Roselius 1971; Akaah & Korgaonkar 1988; Van den Poel & Leunis 1996; Mick & Fournier 1998) provided the theoretical background, because the e-trust literature did not offer a useful starting-point for approaching the phenomenon. The study in Article 3 found that consumers use four mechanisms to build e-trust, namely: pretesting, buying heuristics, extended decision-making, and exploration of warranties. Article 3 concludes with a tentative model for consumers' e-trust formation, based on these findings and the relevant literature. The model assumes that consumer characteristics have an effect on consumers' risk perception that, in turn, affects the usage of the four e-trust building mechanisms.

The study in Article 3 contributes to the e-trust literature by deepening the understanding of the processes taking place on the consumers' side of e-trust building. The findings presented in Article 3 strengthen the idea that consumer e-trust development is a two-sided issue, and implies that more consideration should be given to the consumers' side of the process, because it is relevant in terms of the overall development of e-trust in consumers. Moreover, Article 3 also emphasises the role of dispositional trust and its effect on e-trust. In previous e-trust studies, dispositional, interpersonal and institutional trust have usually been treated simultaneously as a combination (Tan & Thoen 2000–2001; Lee & Turban 2001; McKnight et al. 2002a; Tan & Sutherland 2004). Article 3 proposes that dispositional trust should be seen as being more of a consumer characteristic than an element of e-trust similar to interpersonal and institutional e-trust. Article 3 goes on to recommend that the concept of dispositional trust and its role as one element of e-trust should be reconsidered. Such a reconsideration could help in the redefinition of e-trust and simplify study of the concept: it is proposed that e-trust should be divided into elements which are those of the trustees (interpersonal and institutional trust) and those which are elements of the trustor (consumer characteristics including dispositional trust), and that, further, dispositional trust should be seen as an antecedent to interpersonal and institutional trust.

1.8.4 *Article 4: summary, conclusions and recommendations*

Article 4 deals with the relative importance of interpersonal and institutional e-trustworthiness in consumer e-trust development. Article 4 is based on and is an outgrowth of the three qualitative studies, presented above, in which the different e-trust building mechanisms were described. Two objectives were set for the study in Article 4. The first objective was to obtain statistical support regarding

the use of the consumer e-trust building mechanisms. The second was to study how consumer e-trust building behaviour alters in situations where the level of perceived interpersonal and institutional e-trustworthiness varies. The results of the study emphasised that the different e-trust building mechanisms described in the qualitative studies presented above seem important to consumers. Pretesting in particular was found to be important for consumers. In regard to the second objective of the study, consumers did not perceive interpersonal and institutional e-trustworthiness as equally important.

The review of the literature presented above discussed the idea that consumer e-trust includes interpersonal and institutional elements (e.g. Tan & Thoen 2000–2001; Lee & Turban 2001; McKnight et al. 2002a; Corritore et al. 2003; Tan & Sutherland 2004), implying that consumer e-trust is based on consumers' evaluations about interpersonal and institutional e-trustworthiness. The prevalent view in the literature reviewed is that both dimensions are equal contributors to consumers' overall perception of e-trustworthiness. However, literature did not provide empirical verification for this idea. For that reason, Article 4 approached the issue empirically.

The findings of Article 4 contradict the prevalent view: it was found that the perceived interpersonal e-trustworthiness predominated over the perceived institutional e-trustworthiness in regard to building of e-trust by consumers. More specifically, positively perceived interpersonal e-trustworthiness decreased, and negatively perceived interpersonal e-trustworthiness increased the consumers' intention to use different e-trust building mechanisms: that is, the more positively interpersonal e-trustworthiness was perceived, the less likely consumers were to use mechanisms to build e-trust, as evidently they were not perceived to be necessary. In contrast, the level of perceived institutional e-trustworthiness did not produce such an effect. The results of Article 4 add to the e-trust knowledge base by proposing that the relative importance of the interpersonal and institutional e-trustworthiness in consumer e-trust development should be reconsidered in future studies.

The results of Article 4 also suggest that consumers' intention to use individual e-trust building mechanisms varied significantly in different trusting situations. For example, the consumer's intention to pretest varied significantly more often than their intention to extend decision-making or to utilise exploration of warranties. Based on these results, Article 4 argues that consumers consider pretesting to be the most useful mechanism for building e-trust. Furthermore, although the relevance of extended decision-making, and exploration of warranties was not as significant, the results nonetheless suggest that these mechanisms are still relevant

for consumers. The results of Article 4 help fill a gap in previous e-trust studies by strengthening the current understanding of consumers' usage of individual e-trust building mechanisms.

1.8.5 Article 5: summary, conclusions and recommendations

Article 5 investigates how consumers initially build e-trust. Several aspects of consumer e-trust building were revealed and discussed in the other four articles, but none offered a sufficient overall picture of the phenomenon. Thus, the aim of Article 5 was to develop an original, integrative model for the process by which consumers build initial e-trust. After presenting the model, Article 5 concludes with five propositions for new research to stimulate further studies.

The sections above on conclusions and recommendations discussed the first four articles. Article 5 is a synthesis of the four articles preceding it. The discussion of Article 5 presented below is thus also that of the overall study. Article 5 integrates the empirical findings of the present study with those found in the relevant e-trust, conventional trust, and consumer behaviour literature. The result of this integration is a model for consumers' initial e-trust building. In the beginning of this study, we stated that the main research question in this study is: how consumers build initial trust in e-commerce? The model (see, figure 4) developed in the fifth article is aimed to answer the research question.

The model states that consumers can utilize affective- and cognitive mechanisms to build e-trust. The model includes several other constructs as well which address the sub-research questions of the present study. We asked: 1) What are the antecedents to consumer trust building in e-commerce? and 2) What are the consequences of consumer trust building in e-commerce? The model includes several antecedents which have influence on consumers' utilization of different e-trust building mechanisms. We argue that consumer characteristics, trustees' behaviour and context in which the online shopping occurs have effect on the depth and breadth of consumer's utilization of, for example, cognitive e-trust building mechanisms (see more detailed discussion in article 5). In terms of consequences of e-trust building, the model does not provide as much information. The model assumes that the outcomes of consumers' e-trust building are trust or distrust. However, as the literature review showed, e-trust has several consequences (see, Figure 3). We acknowledge that these could be the outcomes of e-trust building as well, although they are not included in the model. Next, we will discuss the contribution of the fifth article (and the complete study) to the e-trust, conventional trust and consumer behaviour literature.

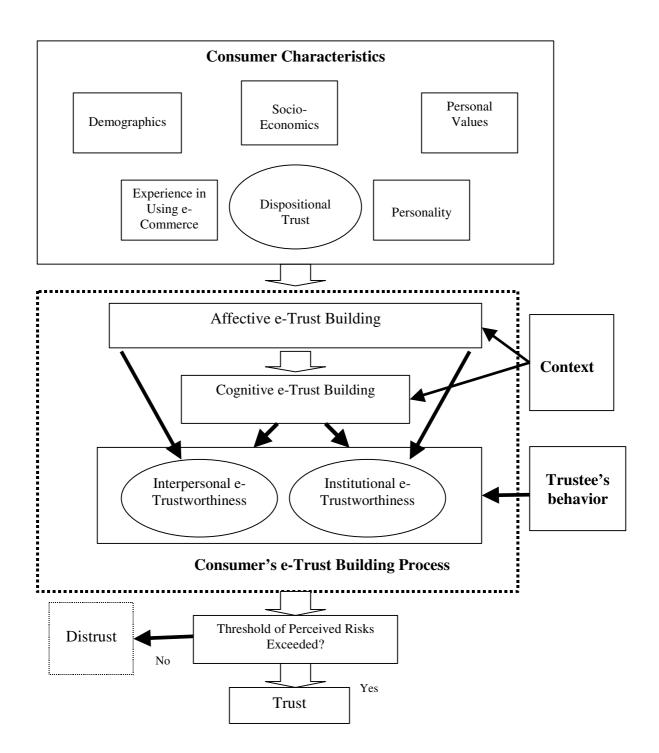**Figure 4.**   An integrative model for consumers' initial e-trust building process.

In the literature review, four major branches of consumer e-trust research were presented: general models to explain consumer e-trust, antecedents to e-trust, consumer characteristics and e-trust, and consequences of e-trust. The present study adds to the knowledge base in each of these areas except that of the

consequences of e-trust. In terms of the general models, the present study posits that the role of dispositional trust, as an element of e-trust similar to interpersonal and institutional e-trust, should be reconsidered. In terms of the antecedents to e-trust, the overall study presents mechanisms at the consumers' disposal which serve as antecedents to e-trust. The model presented here assumes that consumer characteristics have an effect on consumer e-trust development, which opens a new line of studies regarding consumer characteristics and e-trust related phenomena. Thus, at a general level, the primary contribution of the overall study to the knowledge base for e-trust is the introduction of research on the consumers' side of e-trust. In what follows below, the contributions of the overall study will be presented in more specific detail.

The empirical studies presented here investigated those consumer e-trust building behaviours which are cognitive in nature. However, in the fifth article we conceptualise different affective mechanisms as well, which might have effect on consumers' e-trust development. This was done, because the conventional trust literature emphasises that also affections can generate trust. Theories of consumer affective decision-making were adapted and transferred to an investigation of their application to e-commerce and e-trust building.

The above discussion implies that consumer e-trust development is a two-folded issue; both affective and cognitive e-trust building might exist. This contributes to e-trust literature in which the few efforts (e.g. Yang et al. 2006) that have been made to increase knowledge regarding consumer e-trust building have concentrated on the cognitive side of the issue. We argue that more emphasis should be placed on studying consumer e-trust development as a combination of three aspects; consumer affective- and cognitive e-trust building and trustees' behaviour. In our opinion, this kind of approach has some advantages. Firstly, it would provide more holistic understanding of consumer e-trust. Secondly, it would provide possibilities for further research regarding the relative importance of these three aspects in consumer e-trust development. Our model offers possibilities to approach the phenomena by conceptualising the possible causal relationships between the constructs.

Articles 2 and 3 discussed the role of consumer characteristics in consumers' e-trust building. In the model for consumers' initial e-trust building presented in Figure 4, the empirical findings of the study are integrated with findings from the relevant literature. The model suggests that consumer personal values, dispositional trust, demographics, personality, socio-economics and experience in using e-commerce all have an effect on consumer e-trust building. This means

that, for example, women who are found to perceive more risks than men in general might use more cognitive efforts to build e-trust than men.

Previous e-trust literature has studied the role of several consumer characteristics from the viewpoint of consumers' e-trustworthiness perception (see figure 3). Thus, from that point of view our model does not suggest anything that the previous research has not found already. However, the contribution lies in the argument that consumer characteristics have effect on the mechanisms consumers use to build e-trust. This extends the current understanding of the consumer characteristics' role in consumer e-trust related phenomena. Instead of only studying the direct causal effects between consumer characteristics and the perceived e-trustworthiness, our model suggests that e-trust building mechanisms can have a mediating role in e-trustworthiness perception. More specifically, we suggest that consumers' perceptions of e-trustworthiness are not completely based on their characteristics but also e-trust building can partially explain the phenomenon. As a concrete example we can consider a consumer who visits some e-vendor web site for the first time. S(he) might consider the e-vendor as (un)trustworthy based on the affections that the e-vendor generates. If the perception is studied only from his/her characteristics' viewpoint, it is possible that the results get distorted, because the effect of e-trust building has not taken into account. This might explain why, for example, consumer's personality (Walczuch & Lundgren 2004) has not been found to have significant influence in e-trustworthiness perception. For instance, extraverted personalities most probably base their judgement regarding e-trustworthiness in affective e-trust building while neurotic personalities might favour cognitive e-trust building. In the end, the level of the measured e-trustworthiness might be similar due to the e-trust building. If the e-trust building is not considered in the study, then the results show that personality does not have significant effect in e-trustworthiness although it actually might have, but the e-trust building has faded the effect. Thus, we argue that the possible role of the consumers' e-trust development should also be taken into account in the future e-trust studies.

In the fifth article, we also argue that consumer characteristics have influence in the utilization of affective- and cognitive e-trust building. This contributes by providing building blocks for further empirical studies to study how, for example, gender affects the utilisation of affective e-trust building.

E-commerce occurs in several contexts. As Article 2 argued, the behavioural patterns used to build e-trust varied in these different contexts: consumers utilised cognitive e-trust building in the contexts of electronic health care and electronic grocery shopping (which could be considered as high-involvement contexts),

while in the context of electronic newspapers (low-involvement context) consumers were not as concerned with trust building. These findings agree with those in the traditional consumer decision-making literature, which emphasise that consumers' decision-making is different under conditions of high or low involvement (e.g. Petty, Cacioppo & Schumann 1983; Gabbot and Hogg 1999; Bienstock and Stafford 2006).

As could be seen in our model, we state that the context in which the e-commerce occurs affects consumers' utilisation of affective- or cognitive e-trust building. We argue that taking the context into account would contribute by deepening the understanding regarding consumer e-trust. For example, results obtained from different contexts would provoke researchers to consider why consumer e-trust receives different forms in different contexts. In the end, the process would most probably end up in a more deep and rich descriptions about consumer e-trust related phenomena. For example, we can again consider the relationship between consumer characteristics and consumers' e-trustworthiness perception. At this moment, we do not have sufficient knowledge about how the context affects the relationship between consumer characteristics and e-trustworthiness perception. Taken even further, it would be interesting to study how consumers' e-trust building affects consumer characteristics-based e-trustworthiness perception in different contexts. At this point of e-trust research when the basic knowledge is gathered, it would be of importance to direct efforts to gain wider and deeper understanding of the phenomenon. We consider that our model could contribute to such development by suggesting that also consumer e-trust development can be context-dependent.

One of the aims of the present study is naturally to contribute to the body of knowledge of e-trust as presented in the literature. However, as the e-trust literature is derived in good part from the research literature on conventional trust, it makes sense to compare the present study with conventional trust studies, as well as with studies of consumer trust.

The e-trust literature reviewed here lacks a discussion of how trustors' build e-trust. In contrast, studies in the conventional trust literature acknowledge trustors' cognitions as a basis for trust (e.g. Lewis & Weigert 1985; Moorman et al. 1992; Ganesan 1994; McAllister 1995; Doney & Cannon 1997; Johnson & Grayson 2005). For example, Doney & Cannon (1997) suggest that capability, intentionality and transference processes may lead to cognitions which will contribute to trust. The findings of the present study agree well with the findings of conventional studies of cognitive trust building. However, the conventional trust literature is lacking provision of detailed explanations on specific

mechanisms that a trustor may use to develop cognitions. One of the major reasons for this gap may be the lack of empirical research into specific details. Of the studies done on this topic, for example Doney & Cannon (1997) only conceptualise three different processes that may lead to cognitive-based trust but they do not provide empirical evidence to support their arguments. Thus, the findings of the present study regarding cognitive e-trust building contribute to conventional trust literature by providing empirical evidence on the actual mechanisms that consumers may use to build trust. These mechanisms include pretest and buying heuristics which are capability processes, exploration of warranties which is both capability and transference process, and extended decision-making which refers to transference process. However, caution should be exercised when generalizing the findings of the present study and extending them to conventional contexts, because the context of e-commerce itself could be a factor having an influence on consumers' adoption of different mechanisms.

Conventional trust literature emphasises that trust may be based on affects (e.g. Lewis & Weigert 1985; Johnson & Grayson 2005). In the conventional context, affective-based trust is understood in terms of affects that arise from previous interactions with the trustee. Most of the conventional trust studies emphasise that cognitions precede affects in trust development (e.g. McAllister 1995; Johnson & Grayson 2005). However, it is proposed here that in the initial stages of building trust, affective trust precedes cognitive trust. This proposition applies to both e-trust and conventional trust, and could serve as the basis for future research, since the initial conditions of trust building have not been considered widely in the literature to date. Although some studies have approached initial trust (e.g. McKnight et al. 1998), these have not considered the possibilities of affective trust building (e.g. McKnight et al. (1998) only discuss the cognitive processes as sources for initial trust, and ignore the affective processes). Understanding affective trust building could be useful in considering the initial trust paradox, which researchers have explained as a result of dispositional and institutional trust. However, affective processes may also explain some of the initial trust paradox. For example, a clean environment in a store might trigger an affective evaluation of trustworthiness, which may lead to positive initial trust.

For some reason, conventional consumer research literature has almost completely ignored consumer trust. As was said above, only a few studies of consumer trust have been conducted in conventional settings. For that reason, there is little previous knowledge as regards how consumers build trust. In that light, the present study might serve, with some restrictions due to the e-context, as a theoretical building block for consumer trust studies in conventional contexts as well. In carrying out the present study, several ideas and theoretical backgrounds

from consumer research literature have been adapted and applied, including the division of consumers based on their characteristics, since studying the role of consumer characteristics in consumer behaviour is one of the fundamental features of consumer research. Another idea from conventional consumer research that was adapted here was using theories of consumers' decision-making to conceptualise the consumers' initial e-trust building process. Due to this cross-over approach, the present study also makes a contribution to consumer research by expanding the affective-cognitive decision-making theory to apply to consumer trust building behaviour.

1.8.6 Limitations of the study

As every scientific study, this study too, has limitations. In the model for consumers' initial e-trust building process, we proposed several causal relationships between different constructs. It is important to bring forth that the proposed relationships are not verified empirically in this study. In contrast, the model is developed based on the elaboration of our descriptive empirical material and previous theoretical discussion. So, there exists a substantial need for further empirical validation of the model.

Further limitation in a scope of the present study is related to the validity of the methods used. This limitation influences the reliability and validity of the conclusions made based on the empirical findings. In terms of the vignette-study, there exists debate regarding the validity of the conclusions made based on the results obtained in such studies (see the discussion in methodology-section). Especially, there is a danger that scenarios used in different studies do not reflect reality which complicates the evaluation of the studies and their value. It would be wrong to argue that this danger would not concern our study. It is true that the hypothetical buying situations described in the scenarios do not reflect any actual real-world buying situation. However, we consider that, at least to some extent, that kind of buying situation might exists. The scenarios were developed based on the existing literature and pretested to check whether the buying situations described would be considered as realistic. This means that the scenarios were developed systematically in order to increase the study's validity and reliability. Thus, we consider that the conclusions made based on the study are, at least to some extent, valid. However, we have exercised caution while making statements based on the results.

One could address critique toward the qualitative methods used in the present study. Although the qualitative methods are widely used within marketing discipline, there always remain questions regarding the quality of the

interpretations made by the researcher. While conducting the present study, we acknowledged the problems and tried to avoid them by conducting two qualitative studies; one which was completely interpretive in nature (phase 2) and other which was more systematic in nature (phase 1). We considered that conducting a systematic phase after the interpretive phase would make our study more reliable and valid compared to a study including only interpretive phase. We also followed the procedures provided by methodological-guides in order to increase the reliability and validity of our qualitative studies.

In conclusion, we consider both the empirical studies and conclusions presented in this study mainly valid and reliable. It is also noteworthy to mention that in order to increase the reliability and validity of the individual articles, they were exposed to peer-review process. At this moment, four out of the five articles are checked and accepted by the peer-reviewers. The final article has gone through an initial review process. The reviewers suggested some revisions to improve the quality of the article.

1.8.7 *Directions for further research*

In the present study, we developed an integrative model for consumers' initial e-trust building process. The model includes several relationships between different constructs but as we discussed above, the model lacks empirical validation. Thus, in the future studies the model could be validated empirically.

In the fifth article, we developed five general propositions to guide further research. In terms of proposition 1, it would be interesting to study the relative importance of consumer affective- and cognitive e-trust building and trustees' behaviour in order to understand consumer e-trust building more holistically. At this moment, we know that all these aspects are important but we lack understanding of the phenomenon in a wider scope.

The second proposition discusses the possible dominance of affective- and cognitive e-trust building mechanisms in initial e-trust building settings. As the current e-trust literature does not provide comprehensive knowledge regarding the situation, we consider that this dominance should receive more attention in the future. This kind of research could, in addition to increased knowledge about e-trust related phenomena, add to the theoretical discussion took place in the consumer research literature.

Proposition 3 presented in the fifth article deals with consumer characteristics and affective- and cognitive e-trust building. Based on the theoretical discussion we

argued that consumer characteristics, such as demographics and consumer personal values, could influence the utilization of affective- and cognitive e-trust building mechanisms. The relationships between these constructs are worth studying for in future, because it would increase our knowledge how different consumers build e-trust. This kind of study would be beneficial, because if some differences could be found, a segmentation of consumers would be possible. In addition, the results obtained in such studies could contribute to conventional consumer research literature too by adding results from e-commerce context to the knowledge base.

Propositions four and five argue that the e-commerce context affects consumers' utilization of different affective- and cognitive e-trust building mechanisms. We state that in the low-involvement contexts consumers prefer affective e-trust building while in high-involvement contexts they prefer more cognitive e-trust building. Future studies could validate our proposition. Such studies would expand our current understanding regarding different contexts and their influence on e-trust related phenomena. We consider that e-commerce should not be treated as one wide concept but rather as many different contexts. This kind of approach would make the results obtained in different studies more visible and also ease the evaluation of the studies. It is evident that similar studies conducted in, for example, electronic newspapers and electronic health care contexts would not produce similar results. Thus, it is problematic to refer some study's results as results obtained in 'e-commerce', because they more likely are context-specific and thus cannot be generalised to apply in all contexts.

1.8.8 Managerial implications

As discussed at length in this study, trust is a necessity in almost every relationship between different agents. For example, the marketing literature emphasises the importance of trust in facilitating long-term relationships and commitment between companies. All in all, several disciplines have found trust to be important, and several approaches to understanding the issue have emerged over the past five decades.

Consumer trust has not, however, attracted much research until the past decade when the Internet facilitated interactions between consumers and e-vendors. Since then it has become evident for both researchers and practitioners that trust plays an important role in e-commerce in generating successful relationships between consumers and e-vendors. Several e-trust studies have concentrated on the antecedents and consequences of consumer e-trust, which are useful for e-vendors in developing trustworthy e-commerce. Since the present study contributes to

ongoing e-trust research, it should also help e-vendors to better manage their services. It seems evident that understanding the consumers' e-trust building process is as important for e-vendors as understanding the process of creating trustworthy e-services.

In terms of the different e-trust building mechanisms discussed here, e-vendors could benefit by providing consumers with possibilities for using these mechanisms. For example, consumers should have an opportunity to test the e-vendor's service before any actual purchase of goods or services is made. If consumers cannot test these, they might perceive that the e-vendor has something to hide, which might increase risk perception and lead to disuse of the e-vendor's site. Furthermore, e-vendors should be careful to always provide excellent service. Nowadays, the negative/positive word-of-mouth (WOM) information spreads extremely rapidly in different discussion boards. Consumers can easily find WOM by using search engines to find information regarding the e-vendor. As competition is fierce between the e-vendors, and since consumers can easily change an e-vendor with a single mouse click, negative WOM could have serious consequences for the e-vendor. Thus, understanding that consumers extend their decision-making by including several sources of information could prove to be a powerful marketing tool for e-vendors. The present study argues that integrating the trustees' e-trust development with consumers' e-trust building behaviour, would be more beneficial for e-vendors than solely concentrating on the antecedents to e-trustworthiness.

The present study divided the mechanisms used by consumers to build initial e-trust into affective- and cognitive mechanisms. Cognitive mechanisms were discussed above in terms of the possibilities of customers to test an e-vendor's services. However, affective mechanisms also contribute to consumers' perception of e-trustworthiness. It is important that the e-vendors are careful in their website design. A website should be logically laid out, include neutral colours and avoid grammatical and typological errors, just to mention few attributes of a good web site. This is discussed in more detail in Article 5, which is presented later in this study. According to the present study, consumers' affective e-trust building is based on first impressions and is unconscious in nature. This means that a consumer's decision to (dis)trust may form rapidly and lead to disuse of the e-service, sometimes without any cognitive processing at all. For that reason, it is important that the e-vendors place sufficient emphasis on designing the website. It is also important to understand that "good" websites may not necessarily need to include all of the current state-of-the-art technological features. Most online consumers are probably ordinary consumers who do not understand the importance of, and may even be irritated by, for example, videos

in a website. In fact, some technological features may even slow down a consumer's Internet connections so much that it may lead to frustration and result in the consumer clicking over to a competitor's service.

The model presented here for consumers' initial e-trust building emphasises that consumer characteristics have an influence on their usage of different e-trust building mechanisms. Among other characteristics, it was argued that gender or personal values would affect consumers' propensity to use different e-trust building mechanisms. From the e-vendors' perspective this means that consumers could be segmented and specifically targeted. For example, e-vendors could conduct a simple survey to study their customers' demographics. Based on the results, the e-vendors might revise their e-services. For example, if most of the customers are women, then the e-vendors should emphasise options that will induce cognitive e-trust building. If most of the customers are men, then emphasizing the website design might be more useful in building trust. The same applies to other consumer characteristics as well: an e-service that appeals to consumers who value excitement might be advised to concentrate more on the visual design of the website, because excitement-minded consumers are more likely to use affects in their e-trust building, and thus efforts aimed at fostering cognitive evaluation of an e-vendor's trustworthiness would be of little or no use in building e-trust in consumers.

The model presented in this study suggests that the context of e-commerce also affects consumer e-trust building behaviour. The present study argues that, in low-involvement contexts, consumers favour affective e-trust building, while in high-involvement contexts, cognitive e-trust building is emphasized. Thus, e-vendors should understand whether consumers consider their context as high- or low-involvement context. If the context is high-involvement (such as electronic grocery shopping or electronic health care), then the e-vendors should provide opportunities for consumers to engage in cognitive e-trust building. In contrast, e-vendors operating in low-involvement contexts (such as electronic media) may perhaps not need to invest as much in providing consumers opportunities for cognitive e-trust building, but concentrate more on providing a satisfactory first impression to the consumers.

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APPENDICES

Appendix 1. Scenarios used in the study.

OHJEET TUTKIMUKSEEN OSALLISTUVALLE

Olet osallistumassa tutkimukseen, jossa tutkitaan kuluttajan käyttäytymistä sähköisessä kaupankäynnissä. Tutkimuksessa Sinun pitää lukea tarina kuvitteellisesta Jaakosta ostamassa tietokonetta Internetin välityksellä. Tarinan luettuasi Sinun pyydetään eläytyvän Jaakon rooliin ja vastaavan kysymyslomakkeessa esitettyihin väittämiin. Vastatessasi kysymyslomakkeeseen voit aina halutessasi palata lukemaan tarinaa. Vastaamisen jälkeen palauta molemmat lomakkeet tutkimuksen suorittajalle. Halutessasi saat lisätietoa tutkimuksesta tutkija Kyösti Pennaselta sähköpostitse osoitteesta kyosti.pennanen@uwasa.fi

TARINA (NUMERO 1)

Jaakko on 33-vuotias mies, joka käyttää Internetiä kotona pääasiassa laskujen maksamiseen, netissä surffailuun sekä jonkin verran tekstinkäsittelyyn ja satunnaiseen pelaamiseen. Hänellä on ollut käytössä sama tietokone noin viisi vuotta. Koneen iästä johtuen hän kokee tietokoneen hidastuneen; muun muassa nykyaikaiset nettisivut multimedioineen ja muine ominaisuuksineen eivät enää toimi Jaakkoa tyydyttävällä tavalla. Tästä johtuen hän aikoo ostaa uuden tietokoneen.

Jaakko tietää jonkin verran tietokoneista, omasta mielestään hän on keskinkertainen tietokoneen käyttäjä. Lisäksi hänellä on kokemusta tietotekniikasta siinä määrin, että hän tietää tietokoneita myytävän perinteisten kauppojen lisäksi myös Internetissä. Hän on kuullut, että tietokoneen ostopäätöksen perustuessa pääasiassa hintaan, se voi olla kannattavaa ostaa Internetin välityksellä. Jaakko on myös ostanut aikaisemmin cd-levyjä Internetin välityksellä, joten Internet ostoskanavana on hänelle entuudestaan tuttu.

Etsiessään uutta tietokonetta Jaakko käyttää hyväkseen Internetissä toimivaa hakukonetta, jolla voi etsiä tietokoneita myyviä sähköisiä kauppoja. Tutkittuaan aikansa tarjontaa hän päätyy Oy Tietokoneliike Ab:n kotisivuille. Koska hän ei ole aikaisemmin asioinut Oy Tietokoneliike Ab:n kanssa, hän haluaa tutustua liikkeen kotisivuihin ja tarjontaan ennen kuin edes suostuu harkitsemaan tietokoneen tilaamista.

Jaakko aloittaa liikkeeseen tutustumisen tutkimalla millaisia tietokoneita Oy Tietokoneliike Ab:lla on tarjolla. Liikkeen tarjonta vaikuttaa Jaakon mielestä laajalta; tarjolla on tunnettujen valmistajien merkkituotteita sekä liikkeen itse kokoamia malleja. Verrattuaan eri valmistajien tietokoneiden ominaisuuksia ja hintoja omiin tarpeisiinsa, Jaakko tulee siihen lopputulokseen, että hänelle kelpaisi hyvin Oy Tietokoneliike Ab:n itse kokoama tietokone. Liikkeen hinnat vaikuttavat myös kilpailukykyisiltä verrattuna esimerkiksi erään suuren kodinkoneketjun mainostamiin tietokoneisiin.

Tietokoneen hinta ja yrityksen laaja valikoima saavat Jaakon kiinnostumaan Oy Tietokoneliike Ab:n tarjoamasta tietokoneesta. Hän kuitenkin haluaa tutustua yritykseen vielä hieman tarkemmin ja ryhtyy tutkimaan yrityksen yhteystietoja. Yhteystiedot ovat helposti ja selkeästi löydettävissä linkistä, joka on yrityksen etusivulla. Painettuaan linkkiä hän huomaa yrityksen olevan kotimainen. Lisäksi sillä on fyysinen liiketila Helsingin keskustaan rakennetussa uudessa Kampin keskuksessa. Yhteystietosivulta käy ilmi myös yrityksen puhelinnumero, Y-tunnus sekä yrityksen toimitusjohtajan ja myymäläpäällikön nimet, kuvat ja heidän henkilökohtaiset kännykkänumerot. "Hyvä, hyvä", Jaakko miettii, "On aina mukava tietää minkä nimisten ja näköisten ihmisten kanssa on tekemisissä."

Yrityksen tietoja tutkittuaan Jaakko tulee siihen tulokseen, että hän voisi seuraavaksi kokeilumielessä tutustua tietokoneen tilausprosessiin. Aluksi hän siirtää tietokoneen liikkeen sivustolla olevaan ostoskoriin ja yllättyy iloisesti, ettei hänen tarvitse rekisteröityä palveluun. Aiempien ostokokemustensa perusteella Jaakko odotti joutuvansa taas luomaan yhden uuden käyttäjätunnuksen ja salasanan, jotka hän kuitenkin unohtaisi muutamassa viikossa. Tietokoneen ostoskoriin siirron jälkeen sivustolle aukeaa tilauslomake, johon Jaakon pyydetään kirjoittavan oma nimi, osoite, puhelinnumero ja sähköpostiosoite. Jaakko ei kuitenkaan mielellään anna omia tietoja tuntemattomille palveluntarjoajille, joten hän pysähtyy miettimään hetkeksi ja tutkii hieman tarkemmin tilaussivua.

Hetken sivua tarkasteltuaan hänen silmiinsä osuu pieni keltainen lukon symboli selaimen alapalkissa. Jaakko muistaa lukeneensa Osuuspankin sivuilla olleen asiakastiedotteen, jonka mukaan lukon symboli ilmaisee yhteyden hänen ja liikkeen välillä olevan salattu. Lukon havaittuaan Jaakko huomaa myös Verified by Visa-merkinnän sivun ylälaidassa. "Näin sen olla pitää!", Jaakko ajattelee. "Ainakaan kukaan ei pääse käsiksi henkilökohtaisiin tietoihini, jos päätän tilata tietokoneen tästä liikkeestä."

Ennen mahdollisen ostopäätöksen tekoa Jaakko haluaa myös tietoa tietokoneen toimitus- ja maksutavoista. Hän huomaa sivun vasemmassa reunassa linkin

"toimitus- ja maksuehdot". Painettuaan linkkiä esiin tulee sivu, jossa yritys esittelee tuotteiden toimitus- ja maksutapoja. Jaakko huomaa yrityksen tarjoavan laajan valikoiman eri toimitustapoja, muun muassa noudon liikkeestä, toimituksen suoraan kotiovelle, toimituksen lähimpään postiin tai toimituksen asiakkaan haluamaan osoitteeseen. Vaihtoehtojen joukossa on myös Jaakon oma suosikki, toimitus lähimpään postiin. Jaakko kiinnittää huomiota myös maksutapojen kattavuuteen. Tilatut tuotteet voi maksaa luottokortilla, tilisiirrolla tai postiennakolla. Jaakko on mielissään useista eri maksutavoista ja erityisesti häntä miellyttää postiennakon mahdollisuus, sillä hän ei pidä luottokortin numeron antamista verkossa hyvänä ideana.

Toimitus- ja maksutapoihin tutustuttuaan Jaakko painaa sivun vasemmassa reunassa olevaa "hyvä tietää tilatessa"-linkkiä, jonka takaa löytyy yrityksen antama seikkaperäinen selostus siitä, miten tilaus käytännössä etenee. Jaakko on ihmeissään ja tyytyväinen, koska ei ole törmännyt vastaavaan kaltaiseen asioita selkeyttävään selvitykseen aiemmin. Linkin takaa löytyvistä tiedoista käy ilmi muun muassa se, että tilauksen jälkeen asiakkaan sähköpostiin lähetetään tilausvarmistus, johon on listattu asiakkaan tiedot, tilattu tuote, hinta, toimitus- ja maksutapa sekä toimitusaika ja -paikka. Lisäksi sivulla painotetaan, että mikäli asiakas ei saa tilausvahvistusta vuorokauden kuluessa, hänen pitää ottaa yhteyttä yrityksen asiakaspalveluun sillä tällöin tilauksen käsittelevässä tietojärjestelmässä on luultavasti ollut jotain vikaa. Sivulla on myös kerrottu asiakaspalvelun suora numero.

Vierittäessään sivua alas Jaakko huomaa takuu- ja palautusoikeus linkin. Klikattuaan linkkiä tietokoneen näytölle avautuu sivusto, josta käy ilmi miten tuotteen voi palauttaa, millainen takuu eri tuotteilla on sekä tuotteiden toimitusajat. Tietokoneen kohdalla Jaakko havaitsee takuuajan olevan kolme vuotta sekä toimitusajan liikkeessä kasatuille tietokoneille seitsemän päivää. "Ei paha", Jaakko ajattelee. "Kolmen vuoden takuu ja kone on kotona viikossa." Yritys myös lupaa myymilleen tietokoneille kahden viikon palautusajan, mikäli asiakas ei ole tyytyväinen tietokoneeseen.

Edellisten seikkojen lisäksi Jaakko huomaa yrityksen lupauksen antaa asiakkaan muuttaa tilausta vielä tavaran toimituksen jälkeen. "Hienoa!" Jaakko on tyytyväinen, koska hän muistaa viisi vuotta sitten tapahtuneen episodin näytönohjaimen sekavien mallimerkintöjen kanssa hänen hankkiessaan nykyistä tietokonettaan. Vieläkin hän kiroaa mielessään typerät markkinamiehet, jotka keksivät niin vaikeita ja sekavia nimiä tuotteille, ettei tavallinen kuluttaja erota niitä helposti toisistaan. "XDSUPERGIGA5000, TURBOPOWER2000GTI", Jaakko manaa. "Mitä tuollaiset edes tarkoittavat, huijausta sanon minä!" Hänen

verenpainettaan kohottaa vieläkin tietokoneen myyneen liikkeen kieltäytyminen muuttaa tilausta. Liikkeen toiminnasta johtuen Jaakko oli joutunut ostamaan erikseen uuden näytönohjaimen. "No, ainakin tämä Oy Tietokoneliike Ab lupaa antaa kuluttajan muuttaa tilausta myös jälkikäteen", Jaakko miettii. Hän myös hämmästelee, kuinka sujuvasti yrityksen sivusto toimii. "Normaalisti aina jossain on joku katkos tai sivu ei lataudu tai muuta ikävää", Jaakko miettii. "Tämän kaupan sivusto kuitenkin toimii oikein sujuvasti!" Mielestään Jaakko on tutustunut yritykseen tarpeeksi ja nyt hänen on vain tehtävä päätös tilatako tietokone...

SIIRRY NYT VASTAAMAAN SINULLE ESITETTYIHIN KYSYMYK-SIIN. VOIT PALATA LUKEMAAN TARINAA VASTATESSASI, MIKÄLI HALUAT PALAUTTAA JOTAIN MIELEESI. MUISTATHAN MYÖS MERKITÄ LUKEMASI TARINAN NUMERON KYSYMYSLOMAK-KEESEEN!

OHJEET TUTKIMUKSEEN OSALLISTUVALLE

Olet osallistumassa tutkimukseen, jossa tutkitaan kuluttajan käyttäytymistä sähköisessä kaupankäynnissä. Tutkimuksessa Sinun pitää lukea tarina kuvitteellisesta Jaakosta ostamassa tietokonetta Internetin välityksellä. Tarinan luettuasi Sinun pyydetään eläytyvän Jaakon rooliin ja vastaavan kysymyslomakkeessa esitettyihin väittämiin. Vastatessasi kysymyslomakkeeseen voit aina halutessasi palata lukemaan tarinaa. Vastaamisen jälkeen palauta molemmat lomakkeet tutkimuksen suorittajalle. Halutessasi saat lisätietoa tutkimuksesta tutkija Kyösti Pennaselta sähköpostitse osoitteesta kyosti.pennanen@uwasa.fi

TARINA (NUMERO 2)

Jaakko on 33-vuotias mies, joka käyttää Internetiä kotona pääasiassa laskujen maksamiseen, netissä surffailuun sekä jonkin verran tekstinkäsittelyyn ja satunnaiseen pelaamiseen. Hänellä on ollut käytössä sama tietokone noin viisi vuotta. Koneen iästä johtuen hän kokee tietokoneen hidastuneen; muun muassa nykyaikaiset nettisivut multimedioineen ja muine ominaisuuksineen eivät enää toimi Jaakkoa tyydyttävällä tavalla. Tästä johtuen hän aikoo ostaa uuden tietokoneen.

Jaakko tietää jonkin verran tietokoneista, omasta mielestään hän on keskinkertainen tietokoneen käyttäjä. Lisäksi hänellä on kokemusta tietotekniikasta siinä määrin, että hän tietää tietokoneita myytävän perinteisten kauppojen lisäksi myös Internetissä. Tosin Jaakko on lukenut lehdistä juttuja, että

Internetistä ostaessa voi joutua huijatuksi ja siksi nettiostamiseen kannattaa suhtautua varauksella, erityisesti itselleen tuntemattomien kauppojen ollessa kyseessä. Toisaalta Jaakko on ostanut aikaisemmin cd-levyjä netin välityksellä, joten Internet ostoskanavana on hänelle entuudestaan tuttu.

Etsiessään uutta tietokonetta Jaakko käyttää hyväkseen Internetissä toimivaa hakukonetta, jolla voi etsiä tietokoneita myyviä sähköisiä kauppoja. Tutkittuaan aikansa tarjontaa hän päätyy Oy Tietokoneliike Ab:n kotisivuille. Koska hän ei ole aikaisemmin asioinut Oy Tietokoneliike Ab:n kanssa, hän haluaa tutustua liikkeen kotisivuihin ja tarjontaan tarkemmin ennen kuin edes suostuu harkitsemaan tilaamista.

Jaakko aloittaa liikkeeseen tutustumisen tutkimalla millaisia tietokoneita Oy Tietokoneliike Ab:lla on tarjolla. Liikkeen tarjonta vaikuttaa Jaakon mielestä laajalta; tarjolla on tunnettujen valmistajien merkkituotteita sekä liikkeen itse kokoamia malleja. Verrattuaan eri valmistajien tietokoneiden ominaisuuksia ja hintoja omiin tarpeisiinsa, Jaakko tulee siihen lopputulokseen, että hänelle kelpaisi hyvin Oy Tietokoneliike Ab:n itse kokoama tietokone. Liikkeen hinnat vaikuttavat myös kilpailukykyisiltä verrattuna esimerkiksi erään suuren kodinkoneketjun mainostamiin tietokoneisiin.

Tietokoneen hinta ja yrityksen laaja valikoima saavat Jaakon kiinnostumaan Oy Tietokoneliike Ab:n tarjoamasta tietokoneesta. Yht'äkkiä hän kuitenkin muistaa parin viikon takaiset Kymmenen uutiset. Uutisissa tietotekniikan ammattimies, jonkin sortin professori, varoitti kuluttajia sähköisen kaupankäynnin vaaroista ja huijatuksi tulemisesta. Vaikka professorit ovatkin Jaakon mielestä hieman omalaatuisia, niin hän ei usko varoitusten olevan tuulesta temmattuja. Tästä johtuen hän haluaa tutustua Oy Tietokoneliike Ab:hen hieman tarkemmin.

Tutustumisen Jaakko aloittaa tutkimalla yrityksen yhteystietoja. Yhteystiedot ovat helposti ja selkeästi löydettävissä linkistä, joka on yrityksen etusivulla. Painettuaan linkkiä hän huomaa yrityksen olevan vain pelkkä verkkokauppa ilman fyysistä liiketilaa. Yhteystietosivulta käy ilmi myös yrityksen puhelinnumero ja Y-tunnus sekä yrityksen toimitusjohtajan ja myymäläpäällikön nimet, kuvat sekä heidän henkilökohtaiset kännykkänumerot. Yhteystietojen perusteella Jaakolle tulee myös selväksi, että suomenkielisistä kotisivuista huolimatta yritys on ulkomaalainen. "Mjaa", Jaakko miettii, "On aina mukava tietää minkä näköisten ihmisten kanssa on tekemisissä, mutta tuo ulkomaisuus hieman mietityttää..."

Yrityksen tietoja tutkittuaan Jaakko tulee siihen tulokseen, että hän voisi seuraavaksi kokeilumielessä tutustua tietokoneen tilausprosessiin. Aluksi hän

siirtää tietokoneen liikkeen sivustolla olevaan ostoskoriin ja yllättyy iloisesti, ettei hänen tarvitse rekisteröityä palveluun. Aiempien ostokokemustensa perusteella Jaakko odotti joutuvansa taas luomaan yhden uuden käyttäjätunnuksen ja salasanan, jotka hän kuitenkin unohtaisi muutamassa viikossa. Tietokoneen ostoskoriin siirron jälkeen sivustolle aukeaa tilauslomake, johon Jaakon pyydetään kirjoittavan oma nimi, osoite, puhelinnumero ja sähköpostiosoite. Hän ei kuitenkaan mielellään anna omia tietoja tuntemattomille palveluntarjoajille, varsinkaan ulkomaisille, joten hän pysähtyy miettimään hetkeksi ja tutkii hieman tarkemmin tilaussivua.

 Jaakko muistaa lukeneensa Osuuspankin sivuilla olleen asiakastiedotteen, jonka mukaan selaimen alalaidassa oleva keltainen lukon symboli ilmaisee yhteyden hänen ja liikkeen välillä olevan salattu. Vaikka kuinka etsisi, hän ei löydä keltaista lukkoa sivuilla. Jaakko ei myöskään löydä mistään Verified by Visa-merkintää, joka yleensä on aika monen sähköisen kaupan sivulla. "Hmmm..", Jaakko miettii. "Onkohan tässä nyt jollain mahdollisuus päästä käsiksi henkilökohtaisiin tietoihini, jos päätän tilata tietokoneen tästä liikkeestä?"

Ennen mahdollisen ostopäätöksen tekoa Jaakko haluaa myös tutustua tietokoneen toimitus- ja maksutapoihin. Hän huomaa sivun vasemmassa reunassa linkin "toimitus- ja maksuehdot". Painettuaan linkkiä esiin tulee sivu, jossa yritys esittelee tuotteiden toimitus- ja maksutapoja. Jaakko huomaa yrityksen tarjoavan laajan valikoiman eri toimitustapoja, muun muassa noudon liikkeestä, toimituksen suoraan kotiovelle, toimituksen lähimpään postiin tai toimituksen asiakkaan haluamaan osoitteeseen. Vaihtoehtojen joukossa on myös Jaakon oma suosikki, toimitus lähimpään postiin. Jaakko kiinnittää huomiota myös maksutapojen kattavuuteen. Tilatut tuotteet voi maksaa luottokortilla, tilisiirrolla tai postiennakolla. Jaakko on mielissään useista eri maksutavoista ja erityisesti häntä miellyttää postiennakon mahdollisuus, sillä hän ei pidä luottokortin numeron antamista verkossa hyvänä ideana.

Toimitus- ja maksutapoihin tutustuttuaan Jaakko painaa sivun vasemmassa reunassa olevaa "hyvä tietää tilatessa"-linkkiä. Sen sijaan, että "hyvä tietää tilatessa" sivu avautuisi, avautuu vain valkoinen sivu, jossa lukee "Internal server error" ja jotain numeroita sen perässä. "Mitä ihmettä nyt? Pitääkö tämän tekniikan aina reistailla?", Jaakko manaa mielessään ja painaa selaimen "päivitä"-nappia. Muutaman "päivitä"-napin painamisen jälkeen oikea sivu lopulta avautuu. Sivulta löytyy yrityksen antama seikkaperäinen selostus siitä, miten tilaus käytännössä etenee. Jaakko on ihmeissään ja tyytyväinen, koska ei ole törmännyt vastaavaan kaltaiseen asioita selkeyttävään selvitykseen aiemmin. Linkin takaa löytyvistä tiedoista käy muun muassa ilmi, että tilauksen jälkeen asiakkaan sähköpostiin

lähetetään tilausvarmistus, johon on listattu asiakkaan tiedot, tilattu tuote, hinta, toimitus- ja maksutapa sekä toimitusaika ja -paikka. Lisäksi sivulla painotetaan, että mikäli asiakas ei saa tilausvahvistusta vuorokauden kuluessa, hänen pitää ottaa yhteyttä yrityksen asiakaspalveluun sillä tällöin tilauksen käsittelevässä teknologiassa on luultavasti ollut jotain vikaa. Sivulla on myös kerrottu asiakaspalvelun suora numero.

Vierittäessään sivua alas Jaakko huomaa takuu- ja palautusoikeus linkin. Klikattuaan linkkiä tietokoneen näytölle avautuu sivusto, josta käy ilmi miten tuotteen voi palauttaa, millainen takuu eri tuotteilla on sekä tuotteiden toimitusajat. Tietokoneen kohdalla Jaakko havaitsee takuuajan olevan kolme vuotta sekä toimitusajan liikkeessä kasatuille tietokoneille seitsemän päivää. "Ei paha", Jaakko ajattelee. "Kolmen vuoden takuu ja kone on kotona viikossa." Yritys myös lupaa myymilleen tietokoneille kahden viikon palautusajan, mikäli asiakas ei ole tyytyväinen tietokoneeseen.

Edellisten seikkojen lisäksi Jaakko huomaa yrityksen lupauksen antaa asiakkaan muuttaa tilausta vielä tavaran toimituksen jälkeen. "Hienoa!", Jaakko on tyytyväinen, koska hän muistaa viisi vuotta sitten tapahtuneen episodin näytönohjaimen sekavien mallimerkintöjen kanssa hänen hankkiessaan nykyistä tietokonettaan. Vieläkin hän kiroaa mielessään typerät markkinamiehet, jotka keksivät niin vaikeita ja sekavia nimiä tuotteille, ettei tavallinen kuluttaja erota niitä helposti toisistaan. "XDSUPERGIGA5000!! TURBOPOWER2000GTI!!", Jaakko manaa. "Mitä tuollaiset edes tarkoittavat, huijausta sanon minä!" Hänen verenpainettaan kohottaa vieläkin tietokoneen myyneen liikkeen kieltäytyminen muuttaa tilausta. Liikkeen toiminnasta johtuen Jaakko oli joutunut ostamaan erikseen uuden näytönohjaimen. "No, ainakin tämä Oy Tietokoneliike Ab lupaa antaa kuluttajan muuttaa tilausta myös jälkikäteen", Jaakko miettii. Mielestään Jaakko on tutustunut yritykseen tarpeeksi ja nyt hänen on vain päätettävä tilatako tietokone...

SIIRRY NYT VASTAAMAAN SINULLE ESITETTYIHIN KYSYMYK-SIIN. VOIT PALATA LUKEMAAN TARINAA VASTATESSASI, MIKÄLI HALUAT PALAUTTAA JOTAIN MIELEESI. MUISTATHAN MYÖS MERKITÄ LUKEMASI TARINAN NUMERON KYSYMYSLOMAK-KEESEEN!

OHJEET TUTKIMUKSEEN OSALLISTUVALLE

Olet osallistumassa tutkimukseen, jossa tutkitaan kuluttajan käyttäytymistä sähköisessä kaupankäynnissä. Tutkimuksessa Sinun pitää lukea tarina kuvitteellisesta Jaakosta ostamassa tietokonetta Internetin välityksellä. Tarinan luettuasi Sinun pyydetään eläytyvän Jaakon rooliin ja vastaavan kysymyslomakkeessa esitettyihin väittämiin. Vastatessasi kysymyslomakkeeseen voit aina halutessasi palata lukemaan tarinaa. Vastaamisen jälkeen palauta molemmat lomakkeet tutkimuksen suorittajalle. Halutessasi saat lisätietoa tutkimuksesta tutkija Kyösti Pennaselta sähköpostitse osoitteesta kyosti.pennanen@uwasa.fi

TARINA (NUMERO 3)

Jaakko on 33-vuotias mies, joka käyttää Internetiä kotona pääasiassa laskujen maksamiseen, netissä surffailuun sekä jonkin verran tekstinkäsittelyyn ja satunnaiseen pelaamiseen. Hänellä on ollut käytössä sama tietokone noin viisi vuotta. Koneen iästä johtuen hän kokee tietokoneen hidastuneen; muun muassa nykyaikaiset nettisivut multimedioineen ja muine ominaisuuksineen eivät enää toimi Jaakkoa tyydyttävällä tavalla. Tästä johtuen hän aikoo ostaa uuden tietokoneen.

Jaakko tietää jonkin verran tietokoneista, omasta mielestään hän on keskinkertainen tietokoneen käyttäjä. Lisäksi hänellä on kokemusta tietotekniikasta siinä määrin, että hän tietää tietokoneita myytävän perinteisten kauppojen lisäksi myös Internetissä. Hän on kuullut, että tietokoneen ostopäätöksen perustuessa pääasiassa hintaan, se voi olla kannattavaa ostaa Internetin välityksellä. Jaakko on myös ostanut aikaisemmin cd-levyjä Internetin välityksellä, joten Internet ostoskanavana on hänelle entuudestaan tuttu.

Etsiessään uutta tietokonetta Jaakko käyttää hyväkseen Internetissä toimivaa hakukonetta, jolla voi etsiä tietokoneita myyviä sähköisiä kauppoja. Aikansa tarjontaa tutkittuaan Jaakko päätyy Oy Tietokoneliike Ab:n kotisivuille. Koska hän ei ole aikaisemmin asioinut Oy Tietokoneliike Ab:n kanssa, hän haluaa tutustua liikkeen kotisivuihin ja tarjontaan tarkemmin ennen kuin edes suostuu harkitsemaan tilaamista.

Jaakko aloittaa liikkeeseen tutustumisen tutkimalla millaisia tietokoneita Oy Tietokoneliike Ab:lla on tarjolla. Liikkeen tarjonta vaikuttaa Jaakon mielestä suppealta; tarjolla on vain kahden Jaakolle tuntemattoman valmistajan tuotteita.

Liikkeen hinnatkaan eivät ole Jaakon mielestä kovin kilpailukykyisiä verrattuna esimerkiksi erään suuren kodinkoneketjun mainostamiin tietokoneisiin.

Tietokoneen hinta ja yrityksen suppea valikoima eivät tehneet Jaakkoon vaikutusta. Hän kuitenkin haluaa tutustua yritykseen vielä hieman tarkemmin ja ryhtyy tutkimaan yrityksen yhteystietoja. Yhteystiedot ovat löydettävissä linkistä, joka on yrityksen etusivulla. Painettuaan linkkiä hän huomaa yrityksen olevan kotimainen. Lisäksi sillä on fyysinen liiketila Helsingin keskustaan rakennetussa uudessa Kampin keskuksessa. Jaakon hämmästykseksi yhteystietosivulla ei mainita yrityksen osoitteen lisäksi muuta kuin sähköpostiosoite, johon voi ottaa yhteyttä. Yritys ei muun muassa kerro puhelinnumeroaan eikä Y-tunnusta. Myöskään yrityksen henkilöstön nimiä, kuvista puhumattakaan, ei löydy yhteystietosivulta. ”Hmm..”, Jaakko miettii, ”Onpa outoa ettei yritys kerro itsestään tämän enempää...”

Yrityksen tietoja tutkittuaan Jaakko tutustuu seuraavaksi kokeilumielessä tietokoneen tilausprosessiin. Aluksi hän yrittää siirtää tietokoneen liikkeen sivustolla olevaan ostoskoriin. Tämä ei kuitenkaan onnistu, koska palvelu vaatii Jaakkoa rekisteröitymään ennen kuin tilaaminen, tai edes palvelun testaaminen, on mahdollista. Jaakkoa harmittaa, koska hän joutuu taas luomaan yhden uuden käyttäjätunnuksen ja salasanan, jotka hän kuitenkin unohtaisi muutamassa viikossa. Painettuaan “rekisteröidy”-nappia sivustolle aukeaa lomake, johon Jaakkoa pyydetään kirjoittamaan oma nimi, osoite, puhelinnumero ja sähköpostiosoite. Jaakko ei kuitenkaan mielellään anna omia tietoja tuntemattomille palveluntarjoajille, joten hän pysähtyy miettimään hetkeksi ja tutkii hieman tarkemmin rekisteröinti-sivua.

Hetken sivua tarkasteltuaan hänen silmiinsä osuu pieni keltainen lukon symboli selaimen alapalkissa. Jaakko muistaa lukeneensa Osuuspankin sivuilla olleen asiakastiedotteen, jonka mukaan lukon symboli ilmaisee yhteyden hänen ja liikkeen välillä olevan salattu. Lukon havaittuaan Jaakko huomaa myös Verified by Visa-merkinnän sivun ylälaidassa. ”Näin sen olla pitää!”, Jaakko ajattelee. ”Ainakaan kukaan ei pääse käsiksi henkilökohtaisiin tietoihini, jos päätän tilata tietokoneen tästä liikkeestä.” Lisäksi hän hämmästelee, kuinka sujuvasti yrityksen sivusto toimii. ”Normaalisti aina jossain on joku katkos tai sivu ei lataudu tai muuta ikävää”, Jaakko miettii. ”Tämän kaupan sivusto kuitenkin toimii oikein sujuvasti!”

Ennen mahdollisen ostopäätöksen tekoa Jaakko haluaa myös tietoa tietokoneen toimitus- sekä maksutavoista. Hän huomaa sivun vasemmassa reunassa linkin ”toimitus- ja maksuehdot”. Painettuaan linkkiä esiin tulee sivu, jossa yritys esittelee tuotteiden toimitus- ja maksutapoja. Jaakko huomaa yrityksen tarjoavan

vain yhden toimitustavan, toimituksen lähimpään postiin. Jaakko kiinnittää huomiota myös maksutapojen suppeuteen. Tilatut tuotteet voi maksaa vain luottokortilla tai ennen tavaran vastaanottamista suoritettavalla tilisiirrolla. Jaakon suosimaa postiennakkoa ei maksutapojen joukosta löydy.

Toimitus- ja maksutapoihin tutustuttuaan Jaakko etsii tietoa miten tietokoneen tilaus käytännössä etenee. Erityisesti häntä kiinnostaa vahvistaako Oy Tietokoneliike Ab asiakkaan tilauksen jollain tavalla sekä miten mahdollisissa ongelmatapauksissa pitäisi toimia. Jaakko on myös kiinnostunut tietokoneen takuusta, toimitusajasta sekä palautusoikeudesta. Sitkeistä etsinnöistä huolimatta hän ei löydä tarkkoja tietoja edellä mainituista asioista. Takuun ja palautusoikeuden suhteen sivustolta ei löydy mitään tietoja. Tietokoneiden toimitusajaksi liike mainitsee neljä viikkoa. "Hmm..", Jaakko ajattelee, "onkohan tietokoneella nyt sitten mitään takuuta ja miten sen toimituskin voi kestää neljä viikkoa..?"

Edellisten seikkojen lisäksi Jaakko huomaa, ettei yrityksen sivulla oteta millään tavalla kantaa siihen voiko asiakas muuttaa tilausta vielä tavaran toimituksen jälkeen. "Hmph!" Jaakko ei ole järin tyytyväinen, koska hän muistaa viisi vuotta sitten tapahtuneen episodin näytönohjaimen sekavien mallimerkintöjen kanssa hänen hankkiessaan nykyistä tietokonettaan. Vieläkin hän kiroaa mielessään typerät markkinamiehet, jotka keksivät niin vaikeita ja sekavia nimiä tuotteille, ettei tavallinen kuluttaja erota niitä helposti toisistaan. "XDSUPERGIGA5000, TURBOPOWER2000GTI", Jaakko manaa. "Mitä tuollaiset edes tarkoittavat, huijausta sanon minä!" Hänen verenpainettaan kohottaa vieläkin tietokoneen myyneen liikkeen kieltäytyminen muuttaa tilausta. Liikkeen toiminnasta johtuen Jaakko oli joutunut ostamaan erikseen uuden näytönohjaimen. "Hmph.. Käyköhän minulle nyt samalla tavalla tämänkin koneen kanssa.. joku osa ei kuitenkaan ole sitä mitä tarkoitin ja liike ei suostu vaihtamaan osaa ilmaiseksi.." , Jaakko pohtii. "No ei auta, nyt on tehtävä päätös ostaako vai ei.."

SIIRRY NYT VASTAAMAAN SINULLE ESITETTYIHIN KYSYMYKSIIN. VOIT PALATA LUKEMAAN TARINAA VASTATESSASI, MIKÄLI HALUAT PALAUTTAA JOTAIN MIELEESI. MUISTATHAN MYÖS MERKITÄ LUKEMASI TARINAN NUMERON KYSYMYSLOMAKKEESEEN!

OHJEET TUTKIMUKSEEN OSALLISTUVALLE

Olet osallistumassa tutkimukseen, jossa tutkitaan kuluttajan käyttäytymistä sähköisessä kaupankäynnissä. Tutkimuksessa Sinun pitää lukea tarina kuvitteellisesta Jaakosta ostamassa tietokonetta Internetin välityksellä. Tarinan luettuasi Sinun pyydetään eläytyvän Jaakon rooliin ja vastaavan kysymyslomakkeessa esitettyihin väittämiin. Vastatessasi kysymyslomakkeeseen voit aina halutessasi palata lukemaan tarinaa. Vastaamisen jälkeen palauta molemmat lomakkeet tutkimuksen suorittajalle. Halutessasi saat lisätietoa tutkimuksesta tutkija Kyösti Pennaselta sähköpostitse osoitteesta kyosti.pennanen@uwasa.fi

TARINA (NUMERO 4)

Jaakko on 33-vuotias mies, joka käyttää Internetiä kotona pääasiassa laskujen maksamiseen, netissä surffailuun sekä jonkin verran tekstinkäsittelyyn ja satunnaiseen pelaamiseen. Hänellä on ollut käytössä sama tietokone noin viisi vuotta. Koneen iästä johtuen hän kokee tietokoneen hidastuneen; muun muassa nykyaikaiset nettisivut multimedioineen ja muine ominaisuuksineen eivät enää toimi Jaakkoa tyydyttävällä tavalla. Tästä johtuen hän aikoo ostaa uuden tietokoneen.

Jaakko tietää jonkin verran tietokoneista, omasta mielestään hän on keskinkertainen tietokoneen käyttäjä. Lisäksi hänellä on kokemusta tietotekniikasta siinä määrin, että hän tietää tietokoneita myytävän perinteisten kauppojen lisäksi myös Internetissä. Tosin Jaakko on lukenut lehdistä juttuja, että Internetistä ostaessa voi joutua huijatuksi ja siksi nettiostamiseen kannattaa suhtautua varauksella, erityisesti itselleen tuntemattomien kauppojen ollessa kyseessä. Toisaalta Jaakko on ostanut aikaisemmin cd-levyjä Internetin välityksellä, joten Internet ostoskanavana on hänelle entuudestaan tuttu.

Etsiessään uutta tietokonetta Jaakko käyttää hyväkseen Internetissä toimivaa hakukonetta, jolla voi etsiä tietokoneita myyviä sähköisiä kauppoja. Tutkittuaan aikansa tarjontaa hän päätyy Oy Tietokoneliike Ab:n kotisivuille. Koska hän ei ole aikaisemmin asioinut Oy Tietokoneliike Ab:n kanssa, hän haluaa tutustua liikkeen kotisivuihin ja tarjontaan tarkemmin ennen kuin edes suostuu harkitsemaan tilaamista.

Jaakko aloittaa liikkeeseen tutustumisen tutkimalla millaisia tietokoneita Oy Tietokoneliike Ab:lla on tarjolla. Liikkeen tarjonta vaikuttaa Jaakon mielestä suppealta; tarjolla on vain kahden Jaakolle tuntemattoman valmistajan tuotteita.

Liikkeen hinnatkaan eivät ole Jaakon mielestä kovin kilpailukykyisiä verrattuna esimerkiksi erään suuren kodinkoneketjun mainostamiin tietokoneisiin.

Tietokoneen hinta ja yrityksen suppea valikoima eivät tehneet Jaakkoon vaikutusta. Hän kuitenkin haluaa tutustua yritykseen vielä hieman tarkemmin. Yht'äkkiä hän muistaa parin viikon takaiset Kymmenen uutiset. Uutisissa tietotekniikan ammattimies, jonkin sortin professori, varoitti kuluttajia sähköisen kaupankäynnin vaaroista ja huijatuksi tulemisesta. Vaikka professorit ovatkin Jaakon mielestä hieman omalaatuisia, hän ei usko varoitusten olevan tuulesta temmattuja. Tästä johtuen hän haluaa tutustua Oy Tietokoneliike Ab:hen hieman tarkemmin.

Jaakko aloittaa tutustumisen tutkimalla yrityksen yhteystietoja. Yhteystiedot ovat löydettävissä linkistä, joka on yrityksen etusivulla. Painettuaan linkkiä hän huomaa yrityksen olevan vain pelkkä verkkokauppa ilman fyysistä liiketilaa. Jaakon hämmästykseksi yhteystietosivulla ei mainita yrityksen osoitteen lisäksi muuta kuin sähköpostiosoite, johon voi ottaa yhteyttä. Yritys ei muun muassa kerro puhelinnumeroaan eikä Y-tunnusta. Myös yrityksen henkilöstön nimiä, kuvista puhumattakaan, ei löydy yhteystietosivulta. Yhteystietojen perusteella Jaakolle tulee myös selväksi, että suomenkielisistä kotisivuista huolimatta yritys on ulkomaalainen. "Hmm..", Jaakko miettii, "Onpa outoa ettei yritys kerro itsestään tämän enempää ja se on vielä ulkomaalainenkin..."

Yrityksen tietoja tutkittuaan Jaakko tutustuu seuraavaksi kokeilumielessä tietokoneen tilausprosessiin. Aluksi hän yrittää siirtää tietokoneen liikkeen sivustolla olevaan ostoskoriin. Tämä ei kuitenkaan onnistu, koska palvelu vaatii Jaakkoa rekisteröitymään ennen kuin tilaaminen, tai edes palvelun testaaminen, on mahdollista. Jaakkoa harmittaa, koska hän joutuu taas luomaan yhden uuden käyttäjätunnuksen ja salasanan, jotka hän kuitenkin unohtaisi muutamassa viikossa. Painettuaan "rekisteröidy" -nappia sivustolle aukeaa lomake, johon Jaakkoa pyydetään kirjoittamaan oma nimi, osoite, puhelinnumero ja sähköpostiosoite. Hän ei mielellään anna omia tietoja tuntemattomille palveluntarjoajille, varsinkaan ulkomaisille, joten hän pysähtyy miettimään hetkeksi ja tutkii hieman tarkemmin rekisteröinti-sivua. Jaakko muistaa lukeneensa Osuuspankin sivuilla olleen asiakastiedotteen, jonka mukaan selaimen alalaidassa oleva keltainen lukon symboli ilmaisee yhteyden hänen ja liikkeen välillä olevan salattu. Vaikka kuinka etsisi, hän ei löydä keltaista lukkoa yrityksen sivuilta. Jaakko ei myöskään löydä mistään Verified by Visa-merkintää, joka yleensä on aika monen sähköisen kaupan sivulla. "Hmmm..", Jaakko miettii, "Onkohan tässä nyt jollain mahdollisuus päästä käsiksi henkilökohtaisiin tietoihini, jos päätän tilata tietokoneen tästä liikkeestä..?"

Ennen mahdollisen ostopäätöksen tekoa Jaakko haluaa myös tutustua tietokoneen toimitus- ja maksutapoihin. Hän huomaa sivun vasemmassa reunassa linkin "toimitus- ja maksuehdot". Painettuaan linkkiä esiin tulee sivu, jossa yritys esittelee tuotteiden toimitus- ja maksutapoja. Jaakko huomaa yrityksen tarjoavan vain yhden toimitustavan, toimituksen lähimpään postiin. Jaakko kiinnittää huomiota myös maksutapojen suppeuteen. Tilatut tuotteet voi maksaa vain luottokortilla ja ennen tavaran vastaanottamista suoritettavalla tilisiirrolla. Jaakon suosimaa postiennakkoa ei maksutapojen joukosta löydy.

Toimitus- ja maksutapoihin tutustuttuaan Jaakko etsii tietoa miten tietokoneen tilaus käytännössä etenee. Erityisesti häntä kiinnostaa vahvistaako Oy Tietokoneliike Ab asiakkaan tilauksen jollain tavalla sekä miten mahdollisissa ongelmatapauksissa pitäisi toimia. Tietoa etsiessään Jaakko huomaa sivun oikeassa alakulmassa "tilausehdot" -linkin ja painaa sitä. Sen sijaan, että "tilausehdot" sivu avautuisi, avautuu vain valkoinen sivu, jossa lukee "Internal server error" ja jotain numeroita sen perässä. "Mitä ihmettä nyt? Pitääkö tämän tekniikan aina reistailla?", Jaakko manaa mielessään ja painaa selaimen "päivitä"-nappia. Muutaman "päivitä"-napin painamisen jälkeen sivu lopulta avautuu. Sivulla kuitenkin lähinnä painotetaan tilauksen maksamisen tärkeyttä, eikä mitään Jaakon etsimää tietoa esimerkiksi siitä miten tilaukseen liittyvissä ongelmatilanteissa pitää toimia löydy.

Jaakko on myös kiinnostunut tietokoneen takuusta, toimitusajasta sekä palautusoikeudesta. Sitkeistä etsinnöistä huolimatta hän ei löydä tarkkoja tietoja edellä mainituista asioista. Takuun ja palautusoikeuden suhteen sivustolta ei löydy mitään tietoja. Tietokoneiden toimitusajaksi liike mainitsee neljä viikkoa. "Hmm..", Jaakko ajattelee. "Onkohan tietokoneella nyt sitten mitään takuuta ja miten sen toimituskin voi kestää neljä viikkoa.."

Edellisten seikkojen lisäksi Jaakko huomaa, ettei yrityksen sivulla oteta millään tavalla kantaa siihen voiko asiakas muuttaa tilausta vielä tavaran toimituksen jälkeen. "Hmph!" Jaakko ei ole järin tyytyväinen, koska hän muistaa viisi vuotta sitten tapahtuneen episodin näytönohjaimen sekavien mallimerkintöjen kanssa hänen hankkiessaan nykyistä tietokonettaan. Vieläkin hän kiroaa mielessään typerät markkinamiehet, jotka keksivät niin vaikeita ja sekavia nimiä tuotteille, ettei tavallinen kuluttaja erota niitä helposti toisistaan. "XDSUPERGIGA5000, TURBOPOWER2000GTI", Jaakko manaa. "Mitä tuollaiset edes tarkoittavat, huijausta sanon minä!" Hänen verenpainettaan kohottaa vieläkin tietokoneen myyneen liikkeen kieltäytyminen muuttaa tilausta. Liikkeen toiminnasta johtuen hän oli joutunut ostamaan erikseen uuden näytönohjaimen. "Hmph.. Käyköhän minulle nyt samalla tavalla tämänkin koneen kanssa.. joku osa ei kuitenkaan ole

sitä mitä tarkoitin ja liike ei suostu vaihtamaan osaa ilmaiseksi..” „Jaakko pohtii, ”No ei auta, nyt on tehtävä päätös ostaako vai ei..”

SIIRRY NYT VASTAAMAAN SINULLE ESITETTYIHIN KYSYMYK- SIIN. VOIT PALATA LUKEMAAN TARINAA VASTATESSASI, MIKÄLI HALUAT PALAUTTAA JOTAIN MIELEESI. MUISTATHAN MYÖS MERKITÄ LUKEMASI TARINAN NUMERON KYSYMYSLOMAK- KEESEEN!

Appendix 2. Questionnaire used in the Vignette-study.

Kysymyslomake

Merkitse tähän lukemasi tarinan numero:____

ELÄYDY NYT JAAKON ROOLIIN JA VASTAA SEURAAVIIN KYSYMYKSIIN!

OY TIETOKONELIIKE AB:N ARVIOINTI

Arvioi Jaakon roolissa tarinassa kuvattua Oy Tietokoneliike Ab:ta seuraavien väittämien mukaisesti. Käytä arvioidessasi seuraavaa asteikkoa, 1=täysin eri mieltä, 7=täysin samaa mieltä.

Jos olisin Jaakko...

1) niin uskoisin Oy Tietokoneliike Ab:n pitävän lupauksensa   1 2 3 4 5 6 7

2) niin uskoisin Oy Tietokoneliike Ab:n toimittavan tilaamani tuotteet lupaamassaan ajassa
                                                                   1 2 3 4 5 6 7

3) niin uskoisin Oy Tietokoneliike Ab:n aikomusten olevan hyväntahtoisia
                                                                   1 2 3 4 5 6 7

4) niin uskoisin voivani luottaa siihen, että Oy Tietokoneliike Ab tietää miten sen toimet vaikuttavat minuun   1 2 3 4 5 6 7

5) niin uskoisin Oy Tietokoneliike Ab:n tietävän millaista ensiluokkainen palvelu on
                                                                   1   2 3 4 5 6 7

6) niin en epäilisi Oy Tietokoneliike Ab:n rehellisyyttä   1 2 3 4 5 6 7

7) niin uskoisin Oy Tietokoneliike Ab:n ajattelevan parastani   1 2 3 4 5 6 7

8) niin uskoisin Oy Tietokoneliike Ab:n lupausten olevan luotettavia 1 2 3 4 5 6 7

9) niin uskoisin Oy Tietokoneliike Ab:n olevan toiminnassaan kyvykäs

1 2 3 4 5 6 7

10) niin uskoisin Oy Tietokoneliike Ab:lla olevan toimintoja, joiden on tarkoitus olla minun hyväksi   1 2 3 4 5 6 7

11) niin uskoisin Oy Tietokoneliike Ab:n tuntevan toimialansa hyvin   1 2 3 4 5 6 7

12) niin uskoisin Oy Tietokoneliike Ab:n kunnioittavan asiakkaitaan   1 2 3 4 5 6 7

TEKNOLOGIAN JA TOIMINTAYMPÄRISTÖN ARVIOINTI

Arvioi Jaakon roolissa tarinassa kuvattua teknologiaa seuraavien väittämien mukaisesti. Käytä arvioidessasi seuraavaa asteikkoa, 1=täysin eri mieltä, 7=täysin samaa mieltä.

Jos olisin Jaakko...

13) niin uskoisin tarinassa kuvatun teknologian olevan tarpeeksi turvallista, jotta uskallan ostaa tietokoneen Oy Tietokoneliike Ab:lta   1 2 3 4 5 6 7

14) niin olisin vakuuttunut siitä, että lait suojaavat minua riittävästi Oy Tietokoneliike Ab:hen mahdollisesti liittyviltä ongelmilta   1 2 3 4 5 6 7

15) niin luottaisin siihen, että salausteknologia ja muu kehittynyt teknologia mahdollistaa

turvallisen tietokoneen oston Oy Tietokoneliike Ab:lta   1 2 3 4 5 6 7

16) niin uskoisin tarinan perusteella Internetin olevan turvallinen ympäristö tehdä ostoksia

1 2 3 4 5 6 7

17) niin uskoisin tarinan perusteella Oy Tietokoneliike Ab:n toimintapojen suojaavan etujani

1 2 3 4 5 6 7

18) niin uskoisin ettei henkilökohtaisia tietojani joudu ulkopuolisten käsiin asioidessani

Oy Tietokoneliike Ab:n kanssa   1 2 3 4 5 6 7

LOPULLISEN OSTOPÄÄTÖKSEN TEKEMISEEN VAIKUTTAVAT ASIAT

Arvioi Jaakon roolissa tietokoneen lopulliseen ostopäätökseen liittyviä väittämiä. Käytä arvioidessasi seuraavaa asteikkoa, 1=täysin eri mieltä, 7=täysin samaa mieltä.

Jos olisin Jaakko...

19) niin haluaisin etsiä Oy Tietokoneliike Ab:hen liittyvää tietoa Internetin keskustelupalstoilta ennen lopullisen ostopäätöksen tekoa   1 2 3 4 5 6 7

20) niin haluaisin testata Oy Tietokoneliike Ab:n palvelua vielä tarkemmin ennen lopullisen ostopäätöksen tekemistä   1 2 3 4 5 6 7

21) niin Oy Tietokoneliike Ab:n tuotevalikoima tyydyttäisi minua   1 2 3 4 5 6 7

22) niin haluaisin etsiä tarinassa kuvattuun teknologiaan liittyvää tietoa Internetistä (esim. hakukone) ennen lopullisen ostopäätöksen tekoa   1 2 3 4 5 6 7

23) niin haluaisin kysyä lisätietoja ystäviltäni Oy Tietokoneliike Ab:sta ennen lopullisen ostopäätöksen tekemistä   1 2 3 4 5 6 7

24) niin mielestäni olisi tärkeää selvittää ennen lopullista ostopäätöstä suojaako kuluttajansuojalaki Oy Tietokoneliike Ab:n asiakkaita   1 2 3 4 5 6 7

25) niin mahdollisuuden tarjoutuessa haluaisin kuulla alan ammatilaisen mielipiteen Oy Tietokoneliike Ab:sta ennen lopullisen ostopäätöksen tekoa   1 2 3 4 5 6 7

26) niin mielestäni olisi tärkeää ottaa selvää Oy Tietokoneliike Ab:n tarjoamista takuista ennen lopullisen ostopäätöksen tekoa   1 2 3 4 5 6 7

27) niin Oy Tietokoneliike Ab:n tarjoamien tietokoneiden hinnoilla olisi positiivinen vaikutus ostopäätökseeni   1 2 3 4 5 6 7

28) niin mielestäni olisi tärkeää selvittää ennen lopullista ostopäätöstä suositteleeko joku kolmas osapuoli Oy Tietokoneliike Ab:n palveluiden käyttöä   1 2 3 4 5 6 7

29) niin haluaisin etsiä tarinassa kuvattuun teknologiaan liittyvää tietoa lehdistä ennen lopullisen ostopäätöksen tekoa   1 2 3 4 5 6 7

30) niin haluaisin etsiä Oy Tietokoneliike Ab:hen liittyvää tietoa lehdistä ennen lopullisen ostopäätöksen tekoa   1 2 3 4 5 6 7

31) niin haluaisin tutustua Oy Tietokoneliike AB:n käyttämään teknologian vielä tarkemmin ennen lopullisen ostopäätöksen tekemistä   1 2 3 4 5 6 7

32) niin Oy Tietokoneliike Ab:n tunnettuus vaikuttaisi lopulliseen ostopäätökseeni

<div align="right">1 2 3 4 5 6 7</div>

33) niin haluaisin kysyä neuvoja ystäviltäni tarinassa kuvattuun teknologiaan liittyen ennen lopullisen ostopäätöksen tekoa   1 2 3 4 5 6 7

34) niin mahdollisuuden tarjoutuessa haluaisin kuulla alan ammatilaisen mielipiteen tarinassa kuvattuun teknologiaan liittyen ennen lopullisen ostopäätöksen tekoa   1 2 3 4 5 6 7

UNOHDA NYT JAAKON ROOLI JA VASTAA SEURAAVIIN KYSYMYKSIIN OMANA ITSENÄSI!

Taustatiedot (merkitse oikea vaihtoehto)

35) Sukupuoli   ❑ Mies   ❑ Nainen

36) Ikä   ❑ 18–20   ❑ 41–45

                       ❑ 21–25   ❑ 46–50

                       ❑ 26–30   ❑ 51–55

                       ❑ 31-35   ❑ 56–

                       ❑ 36–40

37) Koulutus   ❑ perus- tai kansakoulu
                       ❑ ylioppilas
                       ❑ ammattikoulu
                       ❑ ammattikorkeakoulututkinto
                       ❑ opistotason tutkinto
                       ❑ akateeminen loppututkinto

38) Vuositulot   ❑ alle 10000 euroa
                       ❑ 10000–20000 euroa
                       ❑ 20001–30000 euroa
                       ❑ 30001–40000 euroa
                       ❑ 40001–50000 euroa
                       ❑ yli 50000 euroa

Internetin käyttökokemus (merkitse oikea vaihtoehto)

39) Olen käyttänyt Internetiä   ❑ alle vuoden   ❑   1–2   vuotta

                                                      ❑ 2–3 vuotta   ❑   3–5   vuotta

                                                      ❑ enemmän kuin 5 vuotta

40) Käytän Internetiä viikossa   ❑ alle tunnin   ❑   1–3   tuntia

                                                      ❑ 3–10 tuntia   ❑   10–20   tuntia

                                                      ❑ yli 20 tuntia

41) Mielestäni olen kokenut Internetin käyttäjä   (1=täysin eri mieltä, 7=täysin samaa mieltä)

                                                     1 2 3 4 5 6 7

Ostaminen Internetin välityksellä (merkitse oikea vaihtoehto)

42) Olen ostanut jotain Internetin välityksellä   ❑ en ollenkaan

                                                      ❑ kerran

                                                      ❑ 2–3 kertaa

                                                      ❑ 4–5 kertaa

                                                      ❑ yli 5 kertaa

43) Kaikkien ostoksieni yhteisarvo on noin   ❑ alle 10 euroa

                                                      ❑ 10–100 euroa

                                                      ❑ 100–500 euroa

                                                      ❑ 500–1000 euro

                                                      ❑ yli 1000 euroa

44) Uskon ostosteni kahden vuoden kuluessa

                           (1=vähenevän huomattavasti, 7=kasvavan huomattavasti)

                                                            1 2 3 4 5 6 7

Luottamus

                                     1=täysin eri mieltä, 7=täysin samaa mieltä

45) Minun on helppo luottaa ihmisiin ja asioihin   1 2 3 4 5 6 7

46) Luotan yleensä ihmisiin ja asioihin   1 2 3 4 5 6 7

47) Luotan ihmisiin tai asioihin, vaikka en tunne niitä kunnolla   1 2 3 4 5 6 7

48) Toiseen ihmiseen tai asiaan luottaminen ei ole vaikeaa   1 2 3 4 5 6 7

49) Mielestäni ihmiset ovat yleisesti ottaen reiluja   1 2 3 4 5 6 7

50) Mielestäni ihmiset ovat yleisesti ottaen luotettavia   1 2 3 4 5 6 7

51) Luotan yleensä ihmisiin, elleivät he anna syytä olla luottamatta   1 2 3 4 5 6 7

Arvot

Alla on lista asioista, joita ihmiset arvostavat tai haluavat elämästä. Tutki lista tarkasti ja arvioi, kuinka tärkeä kukin asia on **sinulle** elämässä. 1=ei ollenkaan tärkeä, 9=erittäin tärkeä.

	Ei ollenkaan tärkeää	**Erittäin tärkeää**
52. Yhteenkuuluvuuden tunne	1–2–3–4–5–6–7–8–9	
53. Jännityshakuisuus	1–2–3–4–5–6–7–8–9	
54. Hyvät ihmissuhteet	1–2–3–4–5–6–7–8–9	
55. Itsensä toteuttaminen	1–2–3–4–5–6–7–8–9	
56. Arvostuksen saaminen	1–2–3–4–5–6–7–8–9	
57. Elämästä nauttiminen	1–2–3–4–5–6–7–8–9	
58. Turvallisuus	1–2–3–4–5–6–7–8–9	
59. Itsekunnioitus	1–2–3–4–5–6–7–8–9	
60. Aikaansaaminen	1–2–3–4–5–6–7–8–9	

Nyt lue lista uudestaan ja ympyröi sinulle päivittäisessä elämässä *kaikkein tärkein* asia.

KIITOS OSALLISTUMISESTASI TUTKIMUKSEEN!

Halutessasi voit kirjoittaa palautetta tutkimuksesta alla olevaan tilaan:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Appendix 3. Interview framework for the summer 2003 interviews.

Haastattelurunko

Perustiedot haastateltavasta:

Nimi?

Ikä?

Sukupuoli?

Onko töissä ja mitä tekee töikseen vai opiskeleeko jne.?

Missä asuu?

Sähköisten palveluiden käyttökokemukset:

Millaisia palveluita käyttää? (huom. tähän kategoriaan kuuluu myös ostos-tv, telkkarichatit, puhelimella tehtävät ostokset jne.)

Kuinka paljon kokemusta käytöstä?

Millaisia kokemuksia sähköisistä palveluista? Miksi juuri sellaisia kokemuksia?

Kokeeko jonkinlaisia vaaroja liittyen sähköisiin palveluihin? Entä, kun lapset käyttää?

Mitä negatiivista kokee sähköisiin palveluihin liittyvän? Miksi? (Omien kokemusten kautta tulleita kokemuksia vai kuulopuheiden perusteella vai mistä kokemukset ovat peräisin?)

Jos on käyttänyt jotain palvelua ja ei ole pitänyt siitä niin mitä sitten?

Mitä pelkää sähköisiä palveluita käyttäessään?

Miksi ei käytä jotain tiettyjä palveluita?

Joutuuko vastailemaan muiden kysymyksiin jostain sähköisistä palveluista?

Strategiat selviytyä negatiivisista kokemuksista:

Mitä on tehnyt, kun on kokenut jotain negatiivista sähköisissä palveluissa?

Ennen palvelun käyttöönottoa tapahtuvat välttämisstrategiat:

Onko päättänyt hylätä palvelun käytön?

On ottanut palvelun käyttöön, muttei käytä sitä nyt. Aikooko joskus käyttää palvelua tulevaisuudessa?

Ennen palvelun käyttöönottoa tapahtuvat "hyökkäysstrategiat":

Onko testannut palvelua ennen sen käyttöönottoa? Onko kysellyt joltain tutulta palvelusta?

Onko ottanut käyttöön vain tunnetun palveluntarjoajan palveluita?

Onko selvittänyt eri palveluntarjoajien samanlaisten palvelujen eroja ja ottanut jonkin tietyn palvelun tämän perusteella käyttöönsä?

Kulutuksen välttämisstrategiat:

Onko osoittanut hetkellistä välinpitämättömyyttä jotain sähköistä palvelua kohtaan?

Onko lopettanut palvelun käyttämisen jonkin hankaluuden takia?

Onko luonut itselleen sääntöjä palvelun käytöstä?

Kulutusta uhmaavat strategiat:

Onko vaihtanut palvelua jonkin ongelman takia?

Onko opetellut käyttämään jotain palvelua niin hyvin, että on tehnyt itsestään mestarin sen käytössä ja tällä tavalla vältää palvelun käyttöön liittyvät riskit?

Appendix 4. Interview framework for the summer 2004 interviews.

Haastattelurunko/sähköinen päivittäistavarakauppa

Perustiedot:

Nimi?

Ikä?

Onko lapsia?

Koulutus?

Asuinpaikka?

Kuinka usein tilaa ruokaa netin välityksellä? Mitä sähköisiä elintarvikekauppoja käyttää?

Käykö perinteisessä ruokakaupassa vai ostaako kaiken netin välityksellä? Missä suhteessa ostaa netistä verrattuna perinteiseen ruokakauppaan?

Kuluttaja

Mitä ymmärrät sähköisillä palveluilla? Kuinka usein käytät sähköisiä palveluita?

Mitä sähköisiä palveluita käytät? Miksi?

Mitä ruokatarvikkeita tilaa netin välityksellä? Miksi tilaa jotain, miksi ei tilaa jotain? (esim. tilaako hedelmiä/vihanneksia tai jäisiä tuotteita?).

Miten ylipäänsä suhtautuu Internetiin? Kokeeko kuluttaja käyttävänsä nettiä vai tilaavansa tuotteita palveluntarjoajalta? Mikä on kuluttajan mielestä Internet, onko kaikki samaa puuroa vai erottaako netissä eri toimijoita?

Mitä epämiellyttävää netissä ylipäänsä on?

Palveluntarjoajan sivusto

Minkälaisen vaikutelman nämä sivut antavat sinulle? Mitä mieltä olet fonteista ja väreistä? Sopiiko hyvin sähköiselle ruokakaupalle? Onko sivusto luottamusta herättävä? Mikä sivustoissa on huonoa ja mikä hyvää?

Millaista asiointi on tässä sähköisessä palvelussa? Toimiiko sivusto selkeästi ja loogisesti? Millaisia kokemuksia palveluntarjoajan sivustosta kuluttajalla on?

Onko sivustoilla riittävästi tietoa palveluntarjoajasta? Jos ei ole mitä pitäisi olla lisää?

Sosiaalinen ympäristö

Kuka? Ketkä? Mitä?

Tiedätkö mitä sähköisiä palveluita ystävät/ perhe/ työkaverit käyttävät?

Käyttääkö joku ystäväsi sähköistä elintarvikekauppaa? Jos käyttää niin onko sama kauppa kuin haastateltavalla?

Millainen vaikutus ystävillä tai muulla sosiaalisella ympäristöllä on kuluttajan tekemisiin?

Miten muiden kokemukset jostain tietystä palvelusta vaikuttavat tekemisiin?

Palveluntarjoaja

Oletko antanut palautetta sähköisistä palveluista? Miksi? Mitä?

Mikä vaikutti tämän sähköisen palvelun palveluntarjoajan valitsemiseen?

Joustaako palveluntarjoaja tilattujen ruokien toimittamisen suhteen vai pitääkö olla kotona vastaanottamassa tarvikkeita palveluntarjoajan määrittämänä aikana?

Miten tilatut tuotteet toimitetaan kotiin? Tuodaanko tuotteet ovelle asti vai pitääkö ne noutaa jostain? (esim. boksi tai kaupan toimipiste?)

Millaisia kokemuksia on sähköisestä elintarvikekaupasta ylipäänsä?

Millainen ruoan toimittaja on?

Ovatko tilatut ruoat tulleet aina ajallaan?

Millainen on palveluntarjoajan hintapolitiikka? Miten tilatut ruoat maksetaan? Onko palveluntarjoaja hoitanut laskutuksen kuluttajan mielestä hyvin vai onko siinä ollut ongelmia? Jos on ollut ongelmia niin millaisia? Miten ne ovat vaikuttaneet kuluttajan ja palveluntarjoajan suhteeseen?

Onko tarvetta tarkistaa maksukuitti tilauksen jälkeen?

Tarjoaako palveluntarjoaja riittävästi erilaisia mahdollisuuksia maksaa tilatut tuotteet?

Millaisiin ehtoihin on rekisteröityessään palveluun joutunut suostumaan? Ovatko ehdot selkeät? Tietääkö kuluttaja mihin on sitoutunut? Oliko ehdoissa jotain epäselvää tai sellaista mitä ei heti ymmärtänyt?

Onko jotain ennalta odottamatonta tapahtunut palveluntarjoajan suunnalta?

Onko kuluttaja esittänyt kysymyksiä palveluntarjoajalle? Onko niihin reagoitu? Miten on reagoitu?

Mitä toivomuksia kuluttajalla on sähköiselle palveluntarjoajalle?

Miten löysi juuri tämän palveluntarjoajan? Etsikö palveluntarjoajaa vai kuuliko siitä joltain?

Miten palveluntarjoajan erilaiset ominaisuudet vaikuttavat palvelun käyttöön ottamiseen?

Palvelu/tuote

Millaisia kokemuksia sinulla on sähköisten palvelujen käytöstä?

Kertoisitko esimerkein/tarkemmin?

Mitä tuotteita palveluntarjoaja tarjoaa? Ovatko jotain merkkituotteita vai palveluntarjoajan omaa tuotesarjaa? Minkä maalaisia?

Mitä tietoa tuotteista on saatavilla? Onko tuotteista ollut riittävästi tietoa saatavilla? Ovatko tiedot loppujen lopuksi vastanneet todellisuutta?

Millaisia kokemuksia kuluttajalla on palveluntarjoajan toimittamista tuotteista? Ovatko tuotteet olleet odotuksien mukaisia?

Tarjoaako palveluntarjoaja mahdollisuutta oman ostoslistan tallentamiseen palveluun? Mitä tapahtuu, jos jotain listalla olevaa tuotetta ei ole saatavilla? Mitä ylipäänsä tapahtuu, jos jotain haluttua tuotetta ei ole saatavilla?

Varmistetaanko tilauksen perille meno jollain tavalla?

Onko tilaus mahdollista peruuttaa? Jos on, mitä siitä seuraa?

Voiko tilauksen toimittamisajankohtaa muuttaa? Entä toimituspaikkaa?

Oletko jonkun SP:n rekisteröitynyt käyttäjä? Mitä mieltä olet rekisteröitymistä vaativista sähköisistä palveluista?

Mitä yleensä teet, jos koet jotain negatiivista käyttäessäsi jotain sähköistä palvelua?

Kuinka todennäköisenä näet mahdollisuuden, että sinulle tapahtuu jotain negatiivista sähköisiä palveluita käytettäessä?

Trust and New Technologies

Marketing and Management on the Internet and Mobile Media

Edited by

Teemu Kautonen

University of Vaasa, Finland

Heikki Karjaluoto

University of Jyväskylä, Finland

7. Consumers' views on trust, risk, privacy and security in e-commerce: a qualitative analysis

Kyösti Pennanen, Minna-Kristiina Paakki and Taina Kaapu

INTRODUCTION

E-commerce has gained popularity among consumers since the 1990s. The domain area is studied in many alternative ways and by multiple disciplines. One of the concepts emphasized in the literature is consumer e-trust (consumer trust in e-commerce). The lack of consumer e-trust is seen to be one of the main reasons inhibiting e-commerce adoption as a part of consumers' everyday life (see for example Jarvenpaa and Tractinsky, 1999; Lee and Turban, 2001; McKnight et al., 2002; Merrilees and Frye, 2003).

Alongside e-trust, several other concepts have emerged in the literature. For example, the concept of perceived risk is associated with trust and some attempts to understand the relationship between the two concepts have been conducted (for example Mayer et al., 1995; Gefen et al., 2003b). Furthermore, the concepts of privacy and security are seen to have a link with the concept of e-trust. For example, Cheung and Lee (2006) stress that Internet merchants should emphasize perceived privacy and security control in order to reassure consumers about their trustworthiness. However, problems exist with the current research. Firstly, some technologically driven concepts related to e-trust, such as privacy and security, are strongly emphasized in the literature. Indeed, privacy and security are important for consumers, but one could raise the question as to why literature emphasizes these concepts so strongly? Are they considered to be so important in explaining e-trust-related phenomena that their considerable position in e-trust research is justified? If so, we argue that a situation like that generates a risk that e-trust research will become too narrow-minded due to missing some other possible aspects, such as consumer-specific issues.

Secondly, although many researchers claim to be interested in consumer e-trust they still focus more on some given features of technology, or on an e-vendor, and then ask consumers' opinions about the trustworthiness of the features, instead of approaching consumers without presumptions. The lack of a consumers' viewpoint may result in too technology- or e-vendor-oriented research, although there is some prior evidence that consumer-related issues such as consumers' personal values (Pennanen et al., 2007) and personality (Tan and Sutherland, 2004) influence consumer e-trust. Thus, we argue that understanding consumer views on e-trust, risk, privacy and security would be beneficial for e-trust research in order to understand the phenomena more broadly.

The aim of our study is to generate an understanding of what meanings consumers give to the concepts of trust, risk, privacy and security and the relationship between the concepts. The aim will be reached through three goals. The first goal is to perform a literature review concerning the four concepts. The second goal is to investigate empirically what meanings consumers give to the four concepts. The third goal is to provide implications for further research based on the integration of our empirical findings and current literature. Achieving these three goals will result in an advanced understanding of the four concepts, which will provide researchers with opportunities for further research.

The chapter is structured as follows. Firstly, the concepts of trust, risk, privacy and security are discussed. Secondly, data collection, methodology, and the analytical approach are introduced. Thirdly, the findings of our study are presented. The chapter concludes with a theoretical discussion and indications for further research.

CONCEPTS OF TRUST, RISK, PRIVACY AND SECURITY

In this chapter a literature review related to the concepts of trust, risk, privacy and security is conducted. Starting with the concept of trust, the four concepts are defined and then discussed in terms of how they are treated in current e-commerce research.

Trust

The concept of trust has been heterogeneously defined by many authors in the fields of economics, social psychology, sociology, management, marketing and information systems (Blomqvist, 1997; Garbarino and Lee, 2003). Perhaps the most widely accepted definition of trust is stated as follows:

> 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 (Mayer et al., 1995, p. 712).

Literature concerning consumer e-trust treats trust as a multi-dimensional construct including three elements: 1) institutional; 2) inter-personal; and 3) dispositional trust (Tan and Sutherland, 2004). Institutional trust refers to an individual's trust in institutions, like the laws in a society or in the case of e-commerce, the technology itself (McKnight et al., 2002). Interpersonal trust refers to an individual's trust in another specific party like an e-vendor or in some third party such as a friend who gives recommendations about an e-vendor (Lee and Turban, 2001; Tan and Sutherland, 2004; Tan and Thoen, 2000–2001). The concept of disposi-tional trust is based on the research in the area of psychology (Rotter, 1971). Dispositional trust means an individual's ability to trust in general, and is based on an individual's belief that other people are well meaning and reliable (Gefen et al., 2003a; Tan and Sutherland, 2004). The disposi-tion to trust is usually considered to be a personality-driven feature of an individual. That is, an individual's personality determines his/her propen-sity to trust in general. Furthermore, an individual's disposition to trust may be endogenous or it may develop during life experiences (McKnight and Chervany, 2001–2002).

Consumer Perceived Risks

Consumer perceived risk is defined as a consumer's subjective experience of an uncertain consequence regarding an action the consumer took (Dowling and Staelin, 1994). The concept of risk is multi-dimensional. Traditionally the dimensions of risk include social-, time-, financial- and performance risk (Cox and Rich, 1964). Later, psychological and technological dimen-sions have been added to the concept (for example Liebermann and Stashevsky, 2002).

The definition of trust starts with the notion that trust is 'the willingness of a party to be vulnerable to the actions of another party' (Mayer et al., 1995, p. 712). This willingness to be vulnerable means willingness to engage in a relationship that includes an element of uncertainty, that is, to take a risk. That willingness ties the two concepts closely together.

According to the literature, trust and risk have three different relation-ships; 1) a mediating relationship; 2) a moderating relationship; and 3) a threshold model (Gefen et al., 2003b). The mediating relationship means, 'the existence of trust reduces the perception of risk'. On the other hand

the moderating relationship means, 'trust on behaviour is different when the level of risk is low versus when the level of risk is high' (Gefen et al., 2003b, p. 6). More specifically, when the risk is high, trust is relevant. Conversely, when the risk is low, trust is not relevant. The threshold model stresses that 'if the level of trust surpasses the threshold of perceived risks, then the trustor will engage in a risky relationship' (Gefen et al., 2003b, p. 6). This approach is based on the model of Mayer et al. (1995) and implies that when the level of trust surpasses the level of perceived risks then the trustor can engage in a risky relationship.

The main difference between the three approaches is that the first two, the mediating and the moderating relationship, indicate that the relationship between trustor and trustee is already developed and the level of trust and risk varies during the relationship. In contrast, the threshold model indicates that the relationship does not yet exist and the trustor has to exceed the threshold of perceived risk in order to trust. Thus, a threshold model is suitable in terms of initial trust, where the other two explain the variation of risk and trust in developing or mature relationships.

Privacy

The literature includes several definitions of privacy. Privacy can be understood as a legal concept and as the right to be left alone (Warren and Brandeis 1890). Privacy can also mean:

> The claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others' (Westin, 1967, p. 83).

Literature offers four basic categories of privacy: information privacy, bodily privacy, communications privacy, and territorial privacy (Davies, 1996). Internet privacy is mostly information privacy. Information privacy means the ability of the individual to control information about themself. Invasions of privacy occur when individuals cannot maintain a substantial degree of control over their personal information and its use. Privacy protection literature distinguishes two different extremes, which do not appear as such in reality. The first view is to see personal information registers as risks, and the aim is to limit the use of the personal information (Muttilainen, 2006). This approach is the prevailing one at the moment, the threat being higher profile when handling personal information (for example Graeff and Harmon, 2002; Liu et al., 2005) and consumers' continuous online surveillance (for example Kruck et al., 2002; McRobb and Rogerson, 2004; Smith, 2004). The second view is to regard the collection of personal

information in a positive way, the aim being to develop the use of personal information (Muttilainen, 2006). For example, the freedom of movement of information and its benefits to the general public has been emphasized (for example Bergkamp, 2002; Rubin and Lenard, 2002). From the viewpoint of consumer e-trust, privacy can be viewed as the consumer's expectation that an e-vendor will treat the consumer's information fairly (Shankar et al., 2002).

Security

Different threats in e-commerce, like data transaction attacks and misuse of financial and personal information, generate security threats (Cheung and Lee, 2006). Thus, security is protection against such threats (Belanger et al., 2002). Information security consists of three main parts: confidentiality, integrity and availability (CIA) (Parker, 1998). Confidentiality refers to limitations of information access and disclosure to authorized users and preventing access by or disclosure to unauthorized users (ISO/IEC, 2004; Parker, 1998). In other words, confidentiality is an assurance that information is shared only among authorized persons or organizations.

The concept of integrity relates to the trustworthiness of information resources. It is used to ensure that information is sufficiently accurate for its purposes (Parker, 1998). For example, forwarding copies of sensitive email threatens both the confidentiality and integrity of the information, and the idea of security is to secure the information. Availability refers to the availability of information resources. The system is responsible for delivering, processing and storing information that is accessible when needed, by those who need it. An information system that is not available when needed is at least as bad as no system at all. It may be much worse if the system is the only way to take care of a certain matter. Thus, the property has to be accessible and usable upon demand by an authorized entity (ISO/IEC, 2004).

METHOD, DATA COLLECTION AND ANALYTICAL APPROACH

The aim of our empirical study is to investigate what meanings consumers give to the concepts of e-trust, risk, privacy and security. We will especially concentrate on risk, privacy and security from the viewpoint of e-trust. In other words, we will not concentrate on describing how different elements of e-trust manifest themselves in consumers' thoughts but rather how risk, privacy and security express themselves in terms of e-trust.

We decided to adopt a qualitative method, namely a semi-structured theme interview to reach the aim. Furthermore, our decision to adopt a qualitative method is supported by the fact that a qualitative method is useful in a situation where a rich amount of data is needed to generate possibilities to understand the phenomenon as broadly as possible, and to generate new insights (Denzin and Lincoln, 1994; Tuomi and Sarajärvi, 2002). Since electronic commerce includes many different contexts, we decided to conduct the interviews in three different contexts: electronic grocery shopping, electronic health care services and electronic media. The reason for choosing these contexts was that we expected that e-trust, risk, privacy and security would attain different meanings in different contexts. For example, electronic health care services can be assumed to be services where consumers' privacy and data security concerns could emerge more than in the context of electronic media. By conducting the interviews in different contexts, we wanted to gain a wider point of view concerning the four concepts than would be possible by only interviewing consumers in one context.

The data for the analysis was collected during the summer of 2004. Three interview sets altogether included 30 informants. Eighteen of the informants were women and twelve were men. Six were under 30 years old, 20 were between 30–50 years and four were over 50. All of the informants were actual users of the e-service the interviews dealt with; that is, all of the informants in the context of electronic grocery shopping had experience of using an electronic grocery shop. Interviews were held in Finland and the informants were Finnish. All of the informants were ordinary consumers with greater or lesser degrees of experience with ICT.

The informants were recruited by advertising on the websites of a newspaper and an electronic grocery shop, through the mailing list of a local health care district and in one seminar. The duration of the interviews varied from 30 minutes to two hours. The interviews were conducted in the interviewees' workplaces, homes and public places such as cafeterias. The interviews started from a general discussion about the interviewee's background as an e-commerce consumer and continued to a discussion about e-services in the specific area (grocery, health, media). All the interviews were tape recorded and fully transcribed.

The analysis of the empirical material was conducted as follows. First, the transcriptions were read several times. Secondly, the empirical material was sorted according to the themes (concepts of e-trust, risk, privacy and security). Thirdly, in order to clarify the concepts from a consumer viewpoint, we compared the literature and our findings from the interviews. Fourthly, the quotations and our analysis were sent to the informants in order to confirm that we had interpreted their thoughts correctly (see for example Miles and Huberman, 1984).

FINDINGS

In this section the findings of our study are introduced. Starting with consumer perceived risks in e-commerce, we will discuss what meanings consumers gave to the theoretical concepts in terms of e-trust.

Consumer Perceived Risk

In the theoretical part of this chapter, risk was seen as antecedent to e-trust. Next, informants' views on risk in e-commerce are discussed. Also the relationship with e-trust will be discussed. The following quotation illustrates a high risk in e-commerce in general excepting the informant's trust in banks as institution.

> Researcher: 'Have you any experience in using e-commerce? Have you ordered or paid for anything via the Net?'
> Informant: 'I have not ordered anything . . . paid mostly via the e-bank . . . well, of course it is not the same as ordering products . . .' (female, 43)

As seen in the quotation, the informant has only used bank services via electronic channels. As familiar institutions, banks are perceived as being trustworthy among consumers. It seems that the informant perceives high risks related to e-commerce in general because she has not used any other e-services. Thus, the quotation illustrates the threshold of perceived risks; in the case of a bank, the threshold is exceeded which is not the case in the rest of e-commerce.

Compared to the preceding informant, who used only e-services offered by a trustworthy institution, the next quotation from another informant offers a quite different point of view in terms of risk perception and e-trust.

> Researcher: 'Mmm . . . well . . . What is your opinion about e-services that gather your information?'
> Informant: 'I do not know. . . I do not really care. It does not stress me, you know . . . If someone knows what I use and has my information.' (male, 30)

What is interesting in the informant's view is that he is not interested in the possible risks included in e-services. The informant is not stressed if his information is available to someone. One possible explanation for the informant's opinion could be high dispositional trust. In other words, the informant does not perceive the risk related to e-service as strongly as some other informants, due to his personality. Furthermore, the informant said that he is 'not stressed' if someone knows what e-services he uses, which refers to a low perception of social risk. More specifically, the informant

does not perceive as risk what other people might think if they knew what e-services he uses.

The next quotation illustrates how one informant perceives risks associated with registration. The informant does not understand why some e-services demand registration. It is interesting that, although she understands that registration is not a bad thing, there still remain some thoughts that something harmful could happen if she registers with the e-service. This could be interpreted as psychological risk, because the informant displays some inexplicable and perhaps irrational fears concerning registration. She mentions that even a domestic e-vendor with a strong brand (Keltainen Pörssi) does not convince her about the trustworthiness of the e-vendor.

> Informant: 'I do not generally, I do not know . . . if a service demands registration. In such cases I do not understand why, but I just do not want to register, even if it is the Yellow Pages or Keltainen Pörssi or something like that . . . Then I feel that in some way I am noticed . . . and even though it would not be so horrible if they notice me . . . but somehow I just feel that if I register, then I am attached to that service in some way. And I feel much more comfortable if I can just check the service without joining it . . . And in some services I do not understand what the registration means . . .' (female, 27)

This informant's view is quite interesting from the viewpoint of e-trust. She perceives some risks she cannot explain. In terms of e-trust (and especially e-trust research) this kind of risk perception has been neglected. It seems that the risks of losing money or personal information are not the only worries consumers might perceive in e-commerce, but that other worries exist, such as the one in the previous quotation.

The next quotation illustrates financial risk from one informant's point of view. Due to the risk of losing money, the informant does not want to give her credit card number to foreign companies.

> Informant: 'No, I do not want to give my credit card number to foreign companies in any case. It is never a good thing. From a customer's point of view it is always better to charge with an invoice . . . you know, then you can pay it later . . . but I don't know what is the companies' attitude towards the matter . . .' (female, 39)

Furthermore, the informant's thoughts reveal the relationship between institutional trust and perceived risks. It is logical to interpret her unwillingness to use foreign e-services as a perception of high risks (for example, the financial risk as in the quotation) related to foreign e-services. In other words, the informant is not willing to engage in a risky relationship with a foreign e-vendor, that is, the threshold of perceived risk is not exceeded. The next quotation serves as evidence of technological risk.

> Informant: 'But I am concerned about how it functions (the e-service) in practice. Is it just like that, you check a box and then the bill comes home or . . .? Then you have to give your personal information . . . addresses and everything . . . You could also put someone else's address . . . That concerns me. . . you know, how it really works in practice. And how trustworthy it is . . . but if I want to buy something, then of course you have to believe that the product will come home in some way . . . you know . . . And when you get the product, then you pay. That is a fair deal.' (female, 27)

The informant perceives risk related to technology. She is not convinced that the ordering system will function properly and she is concerned that someone else could use the technology in some harmful way, such as ordering products using someone else's address. Furthermore, the quotation illustrates the relationship between institutional trust and risk; the informant perceives many risks related to the technology and for that reason she is not willing to use technology to order products.

In terms of time-loss risk, one informant found that she does not have energy to fill in complicated registration forms.

> Informant: 'There are many forms for registration: fill in this area, fill in this area, fill in this area, then I don't. I think, let it be. However, I don't have the energy to write my whole curriculum vitae in some registration.' (female, 29)

The previous quotation illustrates the informant's frustration related to the e-vendor's incompetence regarding offering a practical registration form. Her thoughts reveal not only the risk of losing time but also manifest a psychological risk in the form of frustration. In terms of e-trust continuous frustration related to the technology may result in lower institutional trust and interpersonal trust.

Privacy

The third theoretical concept we discussed earlier was privacy. In this chapter, informants' views on privacy are discussed. Furthermore, the relationship between privacy and e-trust is addressed.

Our findings indicate that informants feel strongly about protecting their privacy and are afraid of having it invaded. The invasion of privacy seems to be a serious and frightening concept for many. The following quotation illustrates a common privacy concern: e-mail addresses and personal information can be used for marketing or other purposes without the informant's permission.

> Researcher: 'What did you think about this kind of registration?'
> Informant: 'Of course, there are always risks . . . Those ads come after that, but few . . .' (male, 42)

In general, the informants are reluctant to give their information and they are afraid that their personal information may be used if they do not know the e-vendor beforehand. Nevertheless, the informants also see benefits when they can have more personalized offers from the e-vendors. The next quotation illustrates informants' feelings on the right to be left alone.

> Informant: 'Well, I really do not like to visit these sites . . . sometimes, when this kind of mail comes that I have not ordered, I just delete them without opening . . .' (female, 51)

The informant said she does not open email that she has not ordered. Although the informant does not explain why, one could interpret her response as indicating that she perceives some risks related to the unwanted emails. This raises a question; what is the relationship between privacy and risk? For example, if a consumer were to open an unwanted email it could possibly result in a technological risk (virus), a time-loss risk (time is wasted due to the email), a psychological risk (frustration, hurt feelings due to the content of the email), a social risk (due to the socially uncomfortable content of email) or a financial risk (money lost due to some unwanted program in the computer). According to the former examples, privacy could be seen as an antecedent of perceived risk. That is, the lack of privacy may lead to different perceived risks.

The informants were concerned about giving personal information to e-vendors and almost all of them said they sometimes gave incorrect personal information. The following quotation represents one way to ensure privacy.

> Researcher: 'Do you give your personal information?'
> Informant: 'I cheat.'
> Researcher: 'Ok, can you tell me more?'
> Informant: 'Well, I write wrong dates of birth and so on. I do not know how long they allow that . . . I have that Hotmail, I use . . .' (female, 45)

The previous quotation is quite interesting. The informant said that she consciously does something to ensure privacy (or to avoid risks). From the viewpoint of e-trust this means that, not only e-vendors, but also consumers may do something to build e-trust. The next quotation also serves as evidence of consumers' actions to build e-trust.

> Informant: 'I take this somehow very carefully, for example this bank matter. By the way, I looked at that . . . yeah, it was on the Finnish Broadcasting Network's (YLE) pages. I looked at a kind of manuscript of a program where they tell you precisely about the cheating on the Internet, from everything I have read, so I have understood that you cannot very easily give your personal information out just anywhere.' (female, 57)

The informant's thoughts reveal that she has extended her knowledge related to privacy hazards related to e-commerce by searching for knowledge from YLE's homepage. Thus, one could interpret that the privacy concerns led this informant to do something to alleviate the concerns and build trust in e-commerce. As discussed earlier, e-trust research misses the consumers' viewpoint of the issue, and concentrates more on technologies and e-vendors' features that may increase consumers' perceptions of trustworthiness. However, our findings indicate that consumers also do something to evaluate the trustworthiness of e-commerce, which makes the one-sided view on e-trust questionable.

Security

In the theoretical part of this chapter the concept of security was divided into confidentiality, integrity and availability. In the interviews, confidentiality is mainly a problem when the consumer is afraid of using a credit card due to the risk of intercepting the credit card number. The next quotation illustrates how one informant relies on a familiar brand and her banking systems (not a credit card) in her homeland.

> Researcher: 'In this Anttila's (Finnish e-shop for clothes and home goods) order, how does this (payment) happen?'
> Informant: 'Well, there is a link to bank services and you can pay it there'
> Researcher: 'What do you think about it?'
> Informant: 'It is really convenient . . . I like this. However, Finnish services are secure. I would not go to really strange foreign shops. Of course, there are also known shops but . . . everyone cannot give there all of their personal information . . .' (female, 29)

According to the informant, domestic shops handle security more efficiently than foreign ones, which allows the informant to trust domestic vendors. This reveals the relationship between security and e-trust. Security is one way to build e-trust and alleviate risks. What is interesting is that the informant does not consider the security as a strictly technological issue but rather as a concept including emotions (domestic vs. foreign). This raises questions about the real nature of security for consumers. As seen in the literature review, security is obviously considered as a technological construct. But is that the case with consumers? Do they evaluate the security of e-vendor by technology or are their evaluations based on something else? Do they even know about the existence of different standards behind the security systems? As an example, we can consider two e-vendors: one is domestic and does not advertise how they guarantee security. The other is foreign and promotes superior technology related to security. In this kind of situation the

consumer has to make a decision on which e-vendor is the more trustworthy. According to the previous quotation, the emotion related to an e-vendor's nationality seems to be the basis for the informant's decision about security. In terms of e-trust research this contradicts the purely technological view on the relationship between consumer e-trust and security. Although security is related to technology, consumers' emotions, not only the technological constructs to ensure security, may play a role in the perception of security.

According to the informants, viruses generate integrity problems with e-services. The next quotation presents one opinion about information leaking to suspicious third parties.

> Informant: 'For some reason, I got e-mail from somebody I have never met, but that happens. There is this risk when there are these viruses and . . . they can come and when many of them are classified documents . . . it is somehow risky . . .' (female, 51)

The informant's thoughts can be interpreted as a manifestation of the relationship between security and perceived risks. More specifically, the informant is not sure about the security of her system in a situation where a virus attacks on her computer. This illustrates a similar situation as discussed earlier. The security aspect is important for consumers but they do not understand it as a purely technological concept. It seems that different emotions are closely tied to consumers' perceptions of security. Security (or perhaps the lack of it) is something that may generate some undefined risks, as seen in the previous quotation, or it could be source of frustration, as our next quotation related to availability illustrates.

> Informant: 'I have not been very frustrated with these, but I know many others who are. For example, when you cannot submit some registration or if there is something wrong with the server or your own computer. And the second is: when that Messenger has an update, you cannot go on the net for some time. And when a Windows Update comes to these controls, there are many days when it doesn't work . . .' (female, 45)

The preceding quotations in this chapter illustrated different ways to perceive security. We found that security can be one way to build e-trust and alleviate risks. What is more interesting is that consumers do not seem to perceive the concept of security solely as a technological construct but a concept including different emotions.

CONCLUSION

The above sections have presented consumers' views on concepts of risk, privacy and security in terms of e-trust. The literature considers trust and

risk as human-related concepts, but security and privacy mainly as technical concepts (Furnell, 2004; Siponen and Oinas-Kukkonen, 2007). However, our findings indicate that from the consumer's viewpoint, all these concepts are, at least to some extent, human-related concepts.

In terms of risk, we found several risks that consumers perceived in e-commerce. For example, social, psychological and time-loss risks emerged in our interviews. Although the research conducted in the field of consumer research offers several dimensions of risk (Cox and Rich, 1964; Dekimpe et al., 2000; Loudon and Della Bitta, 1988; Sjöberg, 2002), current e-trust literature does not take these risks into account; the risks related to e-commerce are mainly considered to be a financial risk such as losing one's credit card number or technological risks like viruses. Thus, our findings expand the understanding related to perceived risks and e-trust. Further research could take into account the role of, for example, psychological risk in e-trust.

In terms of privacy, we found that privacy is close to the concept of perceived risk. Our findings indicate that consumers do not perceive privacy as, for example, the right to be left alone but rather as some undefined risk. Thus, we argue that privacy can be antecedent to several risks. For example, giving personal information to some e-vendor may result in losing money or hurt feelings. Some literature from fields other than e-trust indicates similar results. For example, Forsythe and Shi (2003) consider privacy as a dimension of psychological risk.

The fourth concept in this chapter is security. Our findings indicate that consumers do not consider security as a solely technological concept. For example, one informant considered that domestic e-vendors are more secure than foreign ones. Thus the perception of security originated emotionally without technological grounds. Security (or the lack of it) was also perceived as a source of some undefined risk. Thus, it should be understood that consumers' perceptions of security could be the result of emotions, not just the technology or the e-vendor. In terms of e-trust, this means that consumer-related security issues should also be studied more broadly.

Although the aim of our chapter was not to explore consumers' e-trust-related behaviour, our findings indicate that consumers also build e-trust. Some informants reported that they consciously do something to reduce risks and build e-trust, This means that consumers also build e-trust, which makes e-trust a two-sided issue. Previous research reveals some attempts to approach the issue (Pennanen, 2006) but we argue that more interest should be concentrated on the consumers' side of the issue.

At the beginning of this chapter we criticized the position of privacy and security in e-trust research. At this moment it is obvious that security and privacy in e-commerce are important for consumers and that they contribute

to consumer e-trust. What is not obvious is how consumers' perceptions of these concepts are developed (the case with emotions and security) and what kind of consequences the perceptions of these concepts have (the case with privacy and perceived risks). In a nutshell, our findings indicate that there are many more issues that influence consumer e-trust than just security or privacy as understood in the current literature. Furthermore, we found several different risks that consumers perceive in e-commerce. These risks also contribute to e-trust. Thus further e-trust research should widen the focus from technological issues into these human-related concepts.

At the beginning of the chapter, we also raised the criticism that e-trust research is too technology- and e-vendor-specific. Although the aim of our paper was not to explore consumers' e-trust-related behaviour, our findings suggest that consumers also build e-trust. They may consciously evaluate the trustworthiness of an e-vendor or reduce risks they associate with e-commerce in order to trust. Thus, further research should treat consumer e-trust as a two-sided issue; both consumers and e-vendors may build trust.

More qualitative research is needed. At this moment in time, most of the e-trust research is quantitative or conceptual in nature. At the current stage of e-trust research, qualitative research could be used to elicit more issues related to the phenomenon of consumer e-trust. Qualitative research methods may help researchers to understand the variety of concepts related to e-trust. When the nature is understood, the outcomes of future quantitative studies may also be divergent. In addition, qualitative research has particular value when used to investigate complex and sensitive issues. For example, our study indicates that e-trust is not a homogeneous context to consumers. Instead, to reach the concepts which are connected to consumers' everyday practices, e-trust needs to be discussed with concrete practical cases in restricted contexts – such as e-banking, e-transactions with a long-standing vendor, and casual internet purchasing.

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A qualitative exploration of a consumer's value-based e-trust building process

A framework development

Kyösti Pennanen

Department of Marketing, University of Vaasa/Epanet, Vaasa, Finland

Tarja Tiainen

Department of Computer Sciences, University of Tampere, Tampere, Finland, and

Harri T. Luomala

Department of Marketing, University of Vaasa/Epanet, Vaasa, Finland

Abstract

Purpose – The purpose of this paper is to develop a value-based framework for the consumer e-trust building process.

Design/methodology/approach – The data collection procedure consisted of two steps. The first was a brief questionnaire measuring potential informants' personal values. From this pool of potential informants, 30 were recruited for the interviews: five security- and five excitement-minded consumers from three fields of electronic commerce; electronic newspapers, electronic grocery shopping, and electronic healthcare services.

Findings – The findings of the study reveal two value-based external factors in e-trust building that consumers perceive as risks in e-commerce, and three value-based behavioral patterns in e-trust building that informants adopt to reduce perceived risks and build trust in e-commerce. Furthermore, findings of the current study suggest that e-trust building process is different based on individuals' personal values.

Research limitations/implications – This study takes into account only two consumers' personal values, security and excitement, and ignores others. However, it identifies the role of the consumers' personal values in e-trust building, and thus opens new perspectives for further e-trust research. The study also identifies different strategies that consumers can use to build trust in e-commerce.

Originality/value – This study opens new perspectives in e-trust research by exploring the role of consumers' personal values in e-trust building process. The study also provides new insights for other researchers to develop understanding on mechanisms that consumers use to build e-trust.

Keywords Risk management, Trust, Quality concepts

Paper type Research paper

Introduction

The expectation that e-commerce would quickly become a part of the consumer's everyday life has not been completely fulfilled in practice. One of the reasons for this failure is said to be the consumer trust, or rather the lack of it (Merrilees and Frye, 2003). As trust has been identified as an important issue from the time of the very first e-commerce studies (Ratnasingham, 1998), consumer e-trust (consumer trust in e-commerce) has been widely studied in both IS (Gefen *et al.*, 2003; McKnight *et al.*, 2002)

and consumer behavior research fields (Garbarino and Lee, 2003). Unfortunately, the concept of consumer e-trust has been quite narrowly treated in past research. For instance, the ways how consumers build trust have gained only little, if any, attention (Blomqvist, 1997; Grabner-Kräuter and Kaluscha, 2003). Also the role of consumer characteristics, such as personal values, age, gender, psychographics or personality, has not been considered from the viewpoint of consumer e-trust. Instead, most of the attention has been directed at describing the different elements of trust. Although it has been shown that consumers' personal values affect consumer behavior (Kahle and Kennedy, 1988) only a few studies have linked personal values with e-commerce (Jayawardhena, 2004; Schiffman *et al.*, 2003) and none have linked those with the concept of consumer e-trust. Our study opens an academic discussion in this under researched area by providing theoretical building blocks for conceptual elaboration.

Three goals are set for the paper. The first goal is to review the current literature relating to e-trust and consumer personal values. The second goal is to explore qualitatively how consumers with contrasting values build trust in three different e-services: electronic grocery shopping, electronic healthcare, and electronic newspapers. The third goal is to develop a framework for understanding consumers' value-based e-trust building process based on the dialogue between the conceptual understanding and empirical insights.

In the following section, we review the literature relating to consumer e-trust and consumers' personal values. The paper continues by presenting the methodological choices and describing the collection of data. The subsequent section introduces our findings concerning values and e-trust building. We conclude with the framework development, theoretical discussion, and managerial implications.

Defining consumer e-trust and personal values

The concept of trust has been heterogeneously defined in the fields of economics, social psychology, sociology, management, marketing and information science (Blomqvist, 1997; Garbarino and Lee, 2003). Garbarino and Lee (2003) argue that the definition of trust proposed by Mayer *et al.* (1995, p. 712) is the most widely-accepted. It runs as follows:

> . . . 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.

When trust is mentioned in this paper, we mean it in the sense defined by Mayer *et al.* (1995).

Many authors, especially in the fields of IS and marketing, have theorised consumer trust in e-commerce (Tan and Thoen, 2001; Lee and Turban, 2001; McKnight *et al.*, 2002; Tan and Sutherland, 2004). According to these theorisations, three major elements of consumer e-trust can be identified. These are institutional, interpersonal, and dispositional trust (Tan and Sutherland, 2004). Institutional trust refers to an individual's trust in institutions such as a society's laws, or, in the case of e-commerce, the internet itself. (McKnight *et al.*, 2002). More specifically, institutional trust means consumers' perceptions about the internet environment, such as safety and security (McKnight *et al.*, 2002), legal and technical protection (Tan and Sutherland, 2004) or some trusted third party like Visa or bank (Cheung and Lee, 2006). As a concrete

example, we can consider a consumer who would like to buy products via the internet, but perceives the security of the channel as weak and for that reason does not buy the product. This kind of situation manifests itself as a consumer institutional (dis)trust.

On the other hand, interpersonal trust means individual's trust in another specific party that one trusts (McKnight and Chervany, 2002). In a context of e-commerce, a manifestation of interpersonal trust is a consumer trusting in some specific e-vendor (Tan and Sutherland, 2004). For example, consumer can consider some e-vendor trustworthier than the other based on the e-vendor's brand (Ha, 2004) or the vendor's familiarity to consumer.

The concept of dispositional trust is based on the research in the field of psychology (Rotter, 1971). Dispositional trust means individual's ability to show trust in general, and is based on that individual's belief that other people are well-meaning and reliable. (Tan and Sutherland, 2004). Usually a disposition to trust is considered to be a personality-driven feature of an individual. Thus, individuals' personality determines their propensity to trust in general. Dispositional trust may be endogenous, or it may be developed as a result of life experience (McKnight and Chervany, 2002). Tan and Sutherland (2004) mention that an individual's upbringing and culture have an influence on dispositional trust. Dispositional trust is especially important in novel situations such as using electronic commerce (Gefen *et al.*, 2003).

Studies of consumer e-trust usually focus on describing different elements of e-trust instead of concentrating on issues such as the role of consumers' personal values in e-trust building. This paper focuses on this particular issue in order to stimulate and advance e-trust research. One definition of personal value states that value is:

> ... an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence (Rokeach, 1973, p. 5).

Previous research into the consumer's personal values argues that values strongly guide an individual's actions either consciously or unconsciously. There is also evidence that individuals' personal values have an important role in their behavior (Kahle and Kennedy, 1988). Moreover, some studies of e-commerce indicate that personal values have an influence on consumer behavior. For example, Jayawardhena (2004) found that personal values affected attitudes toward e-commerce. There is also some evidence that personal values influence consumer behavior in novel situations. For example, Daghfous *et al.* (1999) found that personal values have a significant effect on the adoption of new products. This result is similar to the idea that a disposition to trust is significant in novel situations, and serves as evidence that the consumers' personal values might have affect on consumer e-trust.

Method, data collection, and analytical approach
To gain understanding of the role of the consumer's values in building e-trust, a qualitative approach was deemed as an appropriate methodological choice. To maximize the likelihood that value influences on the consumer's e-trust building would emerge, informants with contrasting values (security and excitement) were sought for personal interviews. In consumer behavior literature, there are alternative ways of measuring consumer values. The two most prominent approaches are Kahle and Kennedy's (1988) and Schwartz's (1994). In this study, the value instrument is only

needed for screening purposes. Kahle and Kennedy's approach was applied as it is easier to use than Schwarz's and as it has been found reliable and successful in discriminating between consumers according to their value base (Schiffman *et al.*, 2003; Daghfous *et al.*, 1999). Kahle and Kennedy's value instrument reveals how important people consider the values of:

- self-respect;
- security;
- warm relationships with others;
- a sense of accomplishment;
- self-fulfillment;
- being well-respected;
- a sense of belonging;
- fun and enjoyment in life; and
- excitement (Kahle and Kennedy, 1988).

In this paper, consumers' e-trust building in three different fields of e-commerce is investigated; electronic newspapers, electronic grocery shopping, and electronic healthcare services. The selection was made, because we assumed that consumer's e-trust building might take on different meanings in different contexts of e-commerce. Furthermore, we wanted to explore whether different personal values in different contexts would affect the e-trust building behavior between consumers. The current literature supports our selection. For example, there is prior evidence that consumer trust has its own role in electronic grocery shopping (Morganosky and Cude, 2000). Because of its need for discretion, electronic healthcare services supported our selection. As many researchers have shown, privacy and security issues in e-commerce are important for consumers (Liebermann and Stashevsky, 2002; Miyazaki and Fernandez, 2001). It can be assumed that consumers who use electronic healthcare services value strict privacy and confidentiality. Finally, electronic newspapers were selected in our study because they are widely used by consumers.

The data collection procedure consisted of two steps. The first was a brief questionnaire measuring potential informants' values according to Kahle and Kennedy's (1988) approach. It was inserted into the web sites of a local newspaper and an electronic grocery shop. The questionnaire was also sent to the personnel mailing list of a local healthcare district. From this pool of potential informants, 30 were recruited for the interviews: five security- and five excitement-minded consumers from each of the three fields (electronic newspapers, the electronic grocery shop, and electronic health services). Security and excitement were regarded as opposite values (Schwartz, 1994) and the expectation was that they would manifest themselves in different ways in the consumers' e-trust building patterns.

In a context of electronic grocery shopping some problems appeared in recruiting the informants with suitable value background. Therefore, we decided to offer a gift-token worth of 20 euros for all the informants selected to the actual interviews. Eventually, we managed to get contact and recruit informants with suitable personal values. In other contexts incentives were not offered, because problems with the recruiting did not appear.

From 30 informants, 18 were women and 12 men. More specific demographic profile of the informants is presented in Table I.

All of the informants had experience in using the e-service that the interviews dealt with; for example, all of the informants in a context of electronic healthcare had used electronic health care services. Interviews were held in Finland and the informants were Finnish. Interviews concerning the electronic grocery shop were held in the metropolitan area of Helsinki, because the electronic grocery shop we collaborated with conducted business only in that specific area. Other interviews were held in western Finland (electronic newspapers) and in middle- and eastern Finland (electronic health care services). All of the informants were common consumers.

The second step comprised the interview itself. A semi-structured approach to interviewing was applied. This meant that, with every informant, certain themes related to the three elements of consumer e-trust were covered. The main advantage of theme interviews is that they are able to capture an informant's personal idiosyncratic experiences (ensuring rich description) while still retaining some degree of systematic control (Patton, 1990). The interviews were conducted after two test interviews (resulting in a few modifications to the procedure) in the summer of 2004. The interviews lasted from 30 to 90 minutes and were tape-recorded and fully transcribed.

The interview data were analyzed as follows: first, the transcripts were read through several times to form an overall picture of the issues that were related to e-trust building. Because consumers are not normally aware of how their values affect their memory functions, thinking activities, and behavior, and may give unrealistic accounts of the role of values in their lives when asked directly (Verplanken and Holland, 2002), it is necessary to reveal how different values manifest themselves in the consumer's e-trust-related verbal expressions and patterns of behavior with respect to electronic services.

The second step in the analytical process was to identify interpretively those trust building aspects of e-service consumption that were of different significance to security- and excitement-minded consumers. In identifying the key differences between these trust building aspects of e-service consumption, two main interpretive processes were used, iteration and contrasting (Thompson, 1997; Thompson and Troester, 2002). Iteration involves a continuous movement between individual transcripts and the emerging understanding of the entire set of textual data. Provisional understandings are formed, challenged, revised and further developed through an ongoing iterative process. Contrasting, on the other hand, comprises comparing different interviews to discover similarities and differences. In the present research, the interview data of security-minded informants was contrasted with the data of excitement-minded informants.

The result was that, through the iterative and contrastive interpretive processes, two main categories with two and three subcategories were identified from the

	Women	Men	Age under 30	Age 30-50	Age over 50
e-newspapers	7	3	–	7	3
e-grocery	5	5	1	8	1
e-health	6	4	5	5	–
Total	18	12	6	20	4

Table I.
Demographics of the informants

interview data. In other words, these categories were developed on a data-driven basis, taking into account existing pronounced value-related differences in e-trust building (as interpreted by the authors). These categories will structure the report of the study findings that follows.

Findings

On the basis of the interviews with electronic newspaper consumers, electronic healthcare service consumers, and electronic grocery shoppers, two different main categories were identified which express the role of consumer values in e-trust building. These are:

(1) external factors in e-trust building; and

(2) behavioral patterns in e-trust building.

These categories break down into two and three subcategories, respectively. A key finding was that security- and excitement-minded informants revealed differences in these categories. We will also discuss why these two categories are important in terms of consumer e-trust building and report how external factors and behavioral patterns in e-trust building manifested themselves in three different contexts of e-commerce.

External factors in e-trust building

Two external factors were identified in our material. By "external factors in e-trust building" we mean factors that consumers cannot influence by their own behavior. In other words, some other agents, such as the e-vendor, technology or other users of the internet, represent these external factors. They can be considered as risks in e-commerce that informants encounter. Two different classes of external factor emerged from our interviews, threats on the internet and the price of products.

Generally, our findings indicate that security-minded informants perceived more risk regarding to e-commerce than excitement-minded. In terms of e-trust building, perceived risks have an important role, because the need for trust arises only in a risky situation. More specifically, risks generate a need for consumers to surpass the threshold of perceived risks in order to trust (Mayer *et al.*, 1995). Our findings indicate that excitement-minded consumers perceived less risk than security-minded. For that reason, we argue that the e-trust building process is different based on individuals' personal values.

Threats on the internet. One threat on the internet that emerged from our interview material was the misuse of personal data by an unspecified or unknown agent. For example, some informants suspected that their credit card number was accessible to some hostile third party when a transaction between the consumer and the e-service provider occurred. Furthermore, informants felt insecure over the use of personal information such as their name or address. Based on our interviews, threats on the internet revealed value-based differences in e-trust building among informants. Security-minded informants were more concerned about their personal information that they gave via the internet than the excitement-minded. For example, one security-minded informant disliked the availability of her personal medical information on the internet, which can be considered as a manifestation of a threat on the internet:

Well, you always think whether your own medical information is on the net.. In the first place, it does not sound like a good thing at all … you know? (Leena, 42, female).

Furthermore, some security-minded informants did not understand why some e-services demanded registration or why they should give their credit card information to e-vendors. These requirements generated suspicion that the service provider could use their information in some harmful way. Next, a quote from one security-minded informant illustrates the issue. The informant disliked the idea to give her credit card information to foreign companies, because she felt some unspecified concerns regarding to it. This kind of threat on the internet appeared more often among the security-minded informants than the excitement-minded:

Well … I do not want to give my credit card information to foreign companies via the Internet … that is never a good thing … In my opinion, the best way would be charge by bill and then you can pay it later … (Anja, 39, female).

In contrast, most of the excitement-minded informants were not as concerned on giving their personal information via the internet as security-minded. For example, one excitement-minded informant told us that he did not mind if his personal information was available on the internet. His thoughts concerning the threats on the internet are quite different compared to those of security-minded informants. He said that he does not actually care if someone is collecting his personal information, which is quite opposite to security-minded informants:

What do you think about service providers collecting users' information? (Researcher).

I do not know … I do not actually care. I am not usually interested in whether someone knows, which services I use and things like that (Jaakko, 29, male).

Another excitement-minded informant told that he did not consider the risk of someone stealing his medical information as very high. His thoughts concerning the security of his medical information reveals the difference compared to the security-minded informants. This informant considers the electronic health care services as risky as traditional ones and is not as interested in those as the security-minded informants:

I see those services (electronic health care services) quite reliable … I do not consider those privacy-issues as an important, because there is an equal risk that someone steal your medical information from the health center … (Ville, 25, male).

Thus, our findings indicate that security- and excitement-minded informants experience threats on the internet differently. This finding can be explained by different personal values that affect the attitude toward security and privacy.

Price of products. Security-minded informants considered the price of products offered electronically high. In particular, the delivery fee was considered high. For that reason, they would rather buy products from traditional stores. Some security-minded also thought that the prices of products were higher than in traditional stores. The following quotation illustrates one informant's concerns about delivery fees:

Could you tell me some unpleasant features of the Internet? (Researcher).

Well, I do not like the delivery fees … they might rise quite high if you compare them to the price of the product … and there might also be some extra fees … (Julia, 36, female).

Contrary, excitement-minded informants were not so interested in the prices of products. In some cases, informants could not even tell exactly how much some product that they had ordered via the internet costs:

> OK, what if you compare the prices with traditional grocery shop? (Researcher).

> I can't say that there are such . . . such big differences . . . I do not see it as very important if the difference is 10 cents . . . Actually, I can't even say exactly how much, for example, a litre of milk costs . . . I think it is between 70 cents and one euro . . . (Seija, 38, female).

The preceding quotation expresses the difference between security- and excitement-minded informants. The informant did not know how much a litre of milk cost and were not interested in the differences in prices between electronic and traditional grocery shops. This situation is quite opposite to the security-minded informants, who were worried about the delivery fees and prices in general. This finding suggests that there are differences between security- and excitement-minded informants in how they perceive the pricing of products.

Behavioral patterns in e-trust building
This subsection introduces three behavioral patterns related to e-trust building that emerged from the interviews. These concern friends' e-service usage, pretesting e-services, and ordering via the Internet. The behavioral nature of these three categories became evident in the concrete actions the informants took or did not take.

Mayer *et al.*'s (1995, p. 712) definition of trust 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 . . ." We argue that consumers use the above mentioned behavioral patterns in e-trust building to evaluate the trustworthiness of e-commerce and to form the expectation that the other will perform an action important for them.

Our findings indicate, that security-minded informants in particular adopted behavioral patterns as strategies to evaluate the trustworthiness of e-commerce. On the other hand, excitement-minded informants did not use these strategies to the same extent as the security-minded. Thus, it seems that security-minded informants wanted to evaluate the trustworthiness of e-commerce by using various e-trust building patterns to a larger extent than excitement-minded, which serves as an evidence about the effect of personal values in e-trust building.

Friends' e-service usage. One interesting difference between the security- and excitement-minded informants was the extent to which they knew about friends' e-service usage. The security-minded informants were quite well aware of the electronic services their friends used, which was not the case with the excitement-minded. For example, some security-minded informants told that they share links and exchange hints about the good websites they have used. The security-minded also shared articles they had found on the internet and participated in different discussion boards with their friends. The following quotation illustrates one aspect of the issue. An informant said that he often talks with his friends about discussion boards regards to health care. These discussions alleviate his fears concerning the information provided in discussion boards, which allows him to trust more in the information:

We have often discussed with my friends about using these discussion boards on medicine . . . you know? Where people can ask questions and somebody answers.. I have also used them . . . (Riku, 26, male).

Our findings indicate that the excitement-minded informants did not find their friends' e-service as relevant as the security-minded. In contrast, they said that they are not well aware what kind of electronic services their friends used. Next quotation illustrates the issue from one informant's perspective:

I would like to know if you discuss these (medical) services with your friends or family or . . .? (Researcher).

Well, I have heard something, but we do not discuss things like that very much . . . (Johanna, 32, female).

In general, our findings suggest that the security-minded were more interested in their friends' e-service usage than the excitement-minded, which could be interpreted as a manifestation of value-based difference in e-trust building. More specifically, the security-minded informants perceived more risks in e-commerce and used their friends' knowledge concerning the e-service usage to surpass risks and build e-trust to a greater extent than the excitement-minded.

Pretesting e-services. Another behavioral pattern in e-trust building, which revealed differences between the two value-groups, was pretesting e-services. Among the reasons for pretesting, the security-minded informants mentioned the need to see what the ordering process was like, or how the electronic service was functioning. One security-minded informant said that pretesting is very important for her, because in that case she can see how the e-service operates. This kind of behavior can be interpreted as an alleviation of risks and an evaluation of e-service's trustworthiness, that is, e-trust building.

How important is it to you that you can test these services before you really use them? (Researcher).

In my opinion, it is very important.. it is a good feature of an e-service if you can see how it operates . . . (Marja, 55, female).

In contrast, the excitement-minded informants did not consider pretesting e-services as useful as the security-minded. For instance, one excitement-minded informant told that she believed that the e-service was functioning properly, because it was in the internet. For that reason, she did not perceive a need to test it:

OK, do you normally test e-shops before you use them? You know, before the actual use? (Researcher).

Well, no . . . I believe they operate correctly if someone has put them on the net. (Seija, 38, female).

These examples about pretesting e-services reveal differences in value-based attitudes in e-trust building among the security- and excitement-minded informants. Especially, the security-minded used pretesting to build e-trust while the excitement-minded were not so interested in it.

Ordering via the internet. Differences between the security- and excitement-minded informants were identified in ordering products via the internet too. Our findings

indicate that ordering products electronically was not as usual among the security-minded as among the excitement-minded informants:

> OK . . . have you ever ordered something from the Internet? (Researcher).

> No . . . no I have not . . . well, I have made reservations on the web-site of some computer shops . . . but then I have picked them up from a traditional store (Riku, 26, male).

The preceding quotation illustrates one security-minded informant's thoughts about ordering products via the internet. He has reserved some products via the internet but has always picked them up from a traditional store. His behavior could be interpreted as a manifestation of reducing risks associated with e-commerce by buying the products only from a traditional store.

While the security-minded informants considered ordering via the internet somewhat risky, the excitement-minded informants had more positive attitudes toward ordering products electronically. The excitement-minded informants had ordered products such as CDs, DVDs, digital cameras and clothes. The following quotation serves as an example about one excitement-minded informant's thoughts:

> Have you ordered or paid for something via the internet? (Researcher).

> Yes, I have ordered . . . some records and DVDs and so on . . . and clothes too . . . (Veijo, 24, male).

Our findings reflect the difference in informants' personal values and its effect on e-trust building. It could be argued that the excitement-minded informants' propensity to trust in e-services was higher in general, because they seemed to have the courage to order products via the internet. Contrary, the security-minded informants disliked the idea of ordering products via the internet. One interesting finding was that the security-minded informants did not have any clear explanation for why they did not want to order products from e-stores. One possible explanation is their value-based view of the trustworthiness of e-services in general.

Value contrasts in e-trust building in three different context of e-commerce
In this subsection, we discuss the differences between the security- and excitement-minded informants' e-trust building in connection with different e-services. According to our interpretations, differences caused by informants' personal values were found in the contexts of electronic healthcare and electronic grocery shopping. In contrast, no differences could be interpreted to exist between the value-groups in the context of electronic newspapers. This finding may be explained by the nature of the different e-services. Electronic healthcare and electronic grocery shopping are services that require transactions and interaction between the consumer and service provider, while electronic newspapers are usually free of charge. Furthermore, newspapers are typically considered trustworthy and reliable institutions; this may explain why the differences between the security- and excitement-minded informants were not found. On the other hand, electronic healthcare and grocery shopping are sensitive e-services, because they are usually used when consumer's body is in an unbalanced condition, needing energy (in the form of food) or medical attention.

Our findings reveal that, out of five e-trust building-value linkages, two were found in the case of both electronic healthcare and electronic grocery shopping (Table II).

Three of the linkages emerge either in electronic healthcare or electronic grocery shopping.

It is interesting that some linkages were not found in the context of electronic healthcare or electronic grocery shopping at all. As regards to the external factors in e-trust building, threats on the internet were found both in electronic healthcare and electronic grocery shopping. On the other hand, the price of products emerged as significant only in electronic grocery shopping. One explanation for this might be that electronic grocery shopping includes different fees like delivery charges. Among the security-minded informants, the prices of the products offered by electronic grocery shops were also perceived to be higher than the prices in traditional stores. In the case of electronic healthcare services, some of the services that informants had used were free of charge, which might explain why informants did not consider the prices of products important. Furthermore, it could be assumed that it would be more difficult to compare the price of electronic healthcare services with traditional services than was the case with grocery shopping. That could also partly explain why the price of products was emphasized in the case of electronic grocery shopping.

As regards to the behavioral patterns in e-trust building, informants used the pretesting of e-services only in the context of electronic grocery shopping. The reason for this could be that trust in the electronic healthcare service has to be very high before interviewees begin to use it. Thus, pretesting how electronic healthcare services function would not be enough to convince informants about their trustworthiness. On the other hand, pretesting electronic grocery shop could be a relevant strategy for informants to build trust, because the service's functionality would tell something about the service provider and its trustworthiness. There were also other linkages that did not appear in all contexts. Ordering via the internet did not appear in the context of electronic grocery shopping. This could be explained on the basis of the informants' experience in ordering products. Almost all the informants had ordered some products from an electronic grocery shop, and perhaps as a result they did not consider ordering via the Internet as risky as the users with less experience in using e-services.

Our findings indicate that the nature of e-service affects informants' adoption of different e-trust building patterns and also the role of external factors in e-trust building. On that basis, we suggest that the context of e-service has a role in consumer e-trust building. Our argument is supported by the fact that informants did not adopt any e-trust building patterns to reduce risks and evaluate trustworthiness when accessing electronic newspapers. No external factors emerged in the context of

	Electronic healthcare	Electronic grocery shopping	Electronic newspapers
External factors in e-trust building			
Threats on the internet	X	X	–
Price of products	–	X	–
Behavioral patterns in e-trust building			
Friends' e-service usage	X	X	–
Pretesting e-services	–	X	–
Ordering via the internet	X	–	–

Table II.
Trust-value linkage in the consumption of different electronic services

electronic newspapers either, which indicates that informants did not consider the use of electronic newspapers to be as risky as the use of electronic healthcare services or electronic grocery shopping. On other words, there is no need for consumers to build trust in electronic newspapers, because it is not perceived as involving high risk. The e-trust building-value linkage in the consumption of different electronic services is founded on the security-minded informants' adoption of different e-trust building patterns and on their perception of external factors in e-trust building (differing from that of the excitement-minded informants).

Theoretical implications: towards a framework for consumers' value-based e-trust building process
Figure 1 shows a framework for understanding consumers' value-based e-trust building process. It is based on the integration of the existing literature with our empirical findings, and consists of five components:
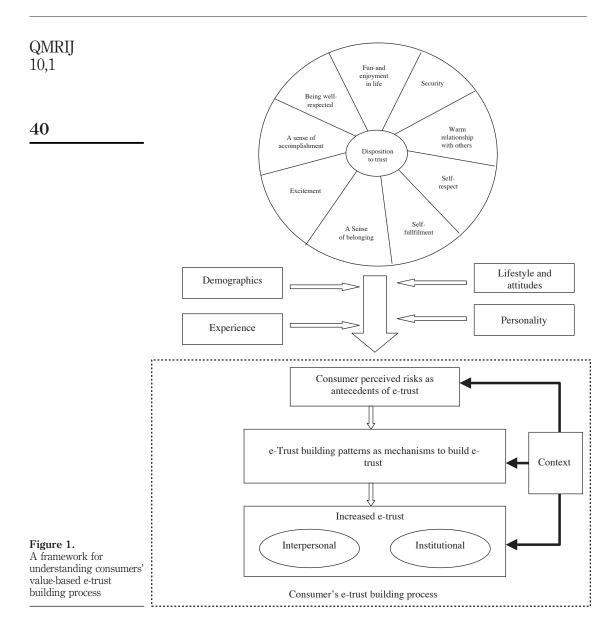
(1) perceived risks as antecedents of e-trust;

(2) e-trust building patterns as mechanisms to build e-trust;

(3) personal values as determinants of dispositional trust;

(4) the role of consumer characteristics as moderators in e-trust building; and

(5) the consumer e-trust as a context-specific phenomenon.

Mayer *et al.*'s (1995) definition of trust includes the notion that a party is willing to be vulnerable to the actions of another party. In other words, this notion means that someone is willing to place him/herself in a risky situation, where some negative consequences could occur. Following this, the component "perceived risks as antecedents of e-trust" is included in our model. Furthermore, Mayer *et al.*'s (1995) definition 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. In our model, the component "e-trust building patterns as mechanisms to build e-trust" handles how consumers form that expectation.

The last three components of our model are based on the integration of existing literature and our findings. The third component, "personal values as determinants of dispositional trust" is included in the model, because our findings indicate that personal values partially determine the level of risk consumers perceive and therefore, the disposition to trust. The last two components of our model are included, because consumer characteristics are seen to affect the level of perceived risks. Thus, they can affect the overall e-trust building process. Furthermore, our findings suggest that the context of e-commerce has influence on the amount of perceived risks and the usage of behavioral pattern in e-trust building. For that reason, "the consumer e-trust as a context-specific phenomenon" is included in our model. Next, all five components are discussed in details.

Perceived risks as antecedents of e-trust
Consumer perceived risks are seen to be a requisite to trust. According to Mayer *et al.* (1995) a need for trust arises only in a risky situation. Mayer *et al.* (1995) argue that when consumer trust develops and exceeds the perception of risk, then consumer is willing to take part in a risky relationship. More specifically, if a consumer perceives

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Figure 1.
A framework for
understanding consumers'
value-based e-trust
building process

risks, then a need to evaluate the trustworthiness of the object might appear if consumer is willing to surpass the threshold of perceived risks. This links the concepts of perceived risks and consumer e-trust building together. Thus, the concept of perceived risks has to be included in a model that relates to the trust issues, as the e-trust building process in a case of the current paper.

The external factors in e-trust building we found in our empirical research have similarities with the literature on consumer perceived risks. For example, consumers perceive financial risk if they are not convinced that the price of the product is suitable and fear that they may lose money by purchasing it (Ho and Ng, 1994). Thus, the concept of financial risk is similar to our finding that the price of products caused concerns to the security-minded informants. Threats on the internet can be identified in the literature on consumer perceived risks too. For instance, So and Sculli (2002) found that consumers are concerned about their security and privacy in e-commerce. This relates to our findings that indicate worries over threats on the internet among the security-minded informants. Thus, based on our findings and the existing literature, it could be argued that consumers' with different personal values build e-trust differently, because the amount and nature of perceived risks are different. We also argue that the perceived risks force consumers to evaluate the trustworthiness of e-commerce, that is, to build trust in it.

e-Trust building patterns as mechanisms to build e-trust
By evaluating the trustworthiness of e-commerce a consumer can form an expectation that the other party will perform an action that consumer want. Based on this expectation consumers can decide whether to trust or distrust. Therefore, we argue that in order to evaluate the trustworthiness, consumers use different e-trust building patterns.

Our findings revealed three e-trust building patterns:

(1) friends' e-service usage;

(2) pretesting e-services; and

(3) ordering via the internet.

Our interpretation is that informants adopted these e-trust building patterns as strategies to evaluate the trustworthiness of e-commerce and to overcome the threshold of perceived risks. The current literature concerning consumers' risk reduction strategies offers support to our argument. For example, Mick and Fournier (1998) found that consumers adopt different strategies to cope with the technology. One of the strategies, pretesting, appears in our study. Furthermore, friends' e-service usage is similar to the results of earlier studies on reducing consumer risk (Mitchell and Boustani, 1994; Roselius, 1971). Also the third e-trust building pattern we found, ordering via the internet, can be identified from the literature. It is related to the abandonment strategy identified by Mick and Fournier (1998). Abandonment means that consumers decline or discontinue the use of the technology (Mick and Fournier, 1998). The concept of abandonment is similar to our finding that the security-minded informants declined the use of e-services.

Based on our findings we argue that, besides using different strategies to reduce perceived risks, consumers use these strategies to evaluate the trustworthiness e-commerce and the result of these evaluations would be increased/decreased interpersonal or institutional trust. For example, friends' e-service usage and pretesting e-services could be considered as the evaluation of the trustworthiness of the e-vendor. More specifically, consumers build interpersonal trust by asking advices from their friends or by pretesting the e-service before the actual usage. As mentioned earlier, interpersonal trust reflects consumer trust in some specific third party, in a context of e-commerce, the e-vendor (Tan and Sutherland, 2004).

In the case of ordering via the internet, the link between it and the concept of e-trust is fuzzy. However, we suggest that consumers use ordering via the internet to build both interpersonal and institutional trust. The reason for this is that the strategy could be interpreted as being used in evaluating the trustworthiness of either the e-vendor or the technology. If consumer perceives too many risks associated with the e-vendor, it could lead to declining to purchase. This kind of situation can be considered as a manifestation of interpersonal trust. On the other hand, the consumer may perceive too many risks associated with technology that places the strategy in the institutional element of trust.

Our findings indicate that differences in the usage of e-trust building patterns emerged between the security- and excitement-minded informants. It seems that the excitement-minded consumers do not adopt as many strategies to reduce risks and build e-trust as the security-minded. Based on that, we argue that the e-trust building process varies according to the consumer's personal values.

Personal values as determinants of dispositional trust
In addition to the institutional and interpersonal trust, the concept of e-trust includes dispositional trust (Tan and Sutherland, 2004). Unlike the others, the dispositional element of trust did not manifest itself directly in our empirical study. This could be explained as a result of the psychological and endogenous nature of dispositional trust (McKnight and Chervany, 2002). Therefore, it could be assumed that a disposition to trust is present before any risk perceptions and it should be separated from the other elements of e-trust and located among consumer characteristics.

When contrasting the concept of dispositional trust with the concept of personal values, it seems that they have something in common. For example, our findings indicate that the security-minded informants perceived risks related to e-commerce stronger than the excitement-minded and thus, have a weaker disposition to trust. This leads to an interesting question: what is the connection between the personal values and dispositional trust? The concept of dispositional trust stresses that the disposition to trust determines an individual's propensity to trust in general. On the other hand, our findings indicate that consumer personal values determine, at least to some extent, the level of perceived risk, and thereby also the level of dispositional trust. So, what is the role of personal values in dispositional trust? Literature suggests that, for instance, personality affects consumers' disposition to trust (Tan and Sutherland, 2004) According to our findings, also personal values could be argued to affect the dispositional trust. This generates a question how the overall disposition to trust is formed and what different factors affect it. In any case, on the basis of our results it seems that the excitement-minded consumers have a stronger disposition to trust than the security-minded ones, and that makes the e-trust building process different in these two groups.

The role of consumer characteristics as moderators in e-trust building
Earlier research suggests several other consumer characteristics that affect risk perception. Firstly, Liebermann and Stashevsky (2002) argue that demographics (age, sex, marital status) have a significant influence on consumer risk perception in e-commerce. For example, older consumers are seen to perceive more risks than the younger ones (Grable and Joo, 1999). Therefore, it could be assumed that the e-trust

building process is different between older and younger consumers. Older people might use more strategies to evaluate the trustworthiness of e-commerce in order to form the expectation whether the other party is trustworthy or untrustworthy, because they simply perceive more risks in e-commerce than the younger ones. Secondly, the experience in using e-commerce (Miyazaki and Fernandez, 2001) is seen to affect the level of risk that the consumer perceives in e-commerce. Thirdly, the literature on consumer research suggests different factors (such as lifestyle or personality) that might have an effect on the consumer's risk perception (Loudon and Della Bitta, 1988). For that reason, we argue that different consumers perceive risks differently; a factor that also has an influence on their e-trust building.

Consumer e-trust as a context-specific phenomenon
According to our findings, the context where e-commerce occurs might have an influence on consumer risk perception and the use of e-trust building patterns. Our findings indicate that different e-trust building patterns and external factors were identified in the contexts of electronic grocery shopping and electronic healthcare. In contrast, neither e-trust building patterns nor external factors emerged in the context of electronic newspapers. On the basis of this finding, it could be argued that consumers see some e-services as more risky than others and use e-trust building patterns differently based on the context. This again leads to the conclusion that the consumer e-trust building process is different depending on the context where the process occurs.

Conclusions and limitations
The main purpose of our study was to explore how consumers with contrasting values build trust in e-commerce. According to our findings, the excitement- and security-minded consumers perceived different levels of risk (excitement-minded less and security-minded more). Also the use of e-trust building patterns as a method to build e-trust was different between the excitement- and the security-minded. Our findings suggest that the excitement-minded consumers are not as interested in building e-trust as the security-minded as they simply do not perceive the need to evaluate the trustworthiness of e-commerce as much as the latter. Thus, current study suggests that, at least to some extent, consumer personal values affect the e-trust building process.

The major contribution of our paper was the development of a framework that links the concepts of consumer values, consumer perceived risks, e-trust building patterns and consumer e-trust. Compared to other models and conceptualizations (Lee and Turban, 2001; McKnight *et al.*, 2002; Tan and Sutherland, 2004), our framework takes the consumer into account as an active trust builder by bringing up different methods that consumers can use to build e-trust. According to few exhaustive literature reviews concerning trust issues (Blomqvist, 1997; Grabner-Kräuter and Kaluscha, 2003), there exist only few, if any, studies that deal with mechanisms that consumers use to build trust. As a first step in exploring this issue, our study treated the link between e-trust building patterns and the concept of trust. A further contribution is the introduction of consumer characteristics (values) to the trust literature.

Current study has also some limitations. Firstly, our framework is quite simplified and does not take into account, for example, the negative outcomes of using e-trust building patterns (evaluations about the trustworthiness of the e-commerce can be negative and trust might decrease). Secondly, current study concentrated only on

two values and excluded others. Thirdly, current study concentrated only on consumer e-trust, thus the e-vendor's side is missing. Logically, also e-vendors can form trust, although the e-vendor's side of the issue is not broadly discussed in this paper. However, the current paper offers ways of approaching the issue by providing theoretical building blocks for further research.

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Implications for further research
In order to elaborate and validate our model, both qualitative and quantitative research is needed. Owing to the exploratory nature of the current study, only few mechanisms that consumers used to build e-trust are described. Therefore, qualitative research could be conducted to find more mechanisms in order to expand current understanding about consumers' e-trust building process. For example, literature concerning consumers' risk-reduction strategies could provide a starting-point to conduct further research concerning consumers' e-trust building. More specifically, literature concerning consumer risk-reduction strategies offers many different strategies that consumers might use not only to reduce risks but also to build e-trust too. For that reason, qualitative research could be useful to investigate whether those strategies are also suitable for consumers' e-trust building.

Quantitative research is needed to validate our model. Quantitative methods offer a possibility to test and verify whether consumers use different mechanisms to build trust in e-commerce. For instance, do consumers use pretesting to evaluate the trustworthiness of an e-vendor or do consumers ask their friends' advices regarding to some e-vendor or technology in order to build interpersonal or institutional trust. Furthermore, our study treated only two consumer personal values. By quantitative means the other personal values and their impact on consumers' e-trust building process, and especially to dispositional trust could be approached. Quantitative methods could also be used to study the role of different consumer characteristics in e-trust building process. For example, quantitative methods enable to study how consumers' demographics, experience in using e-commerce or personality affect the e-trust building process.

Managerial implications
Trust is an important issue in every relationship between consumers and companies. In a case of e-commerce, trust is even more emphasized due to the newness of the channel and the lack of face-to-face interaction between consumer and e-vendor. This paper provides some insights into the mechanisms that consumers use to build trust in e-commerce and how consumer personal values affect it. Although our model is concentrated in consumer, also e-vendors can benefit by learning how consumers build trust. More specifically, e-vendors can, for instance, satisfy consumers' need to evaluate the trustworthiness of their service by offering tools for consumers to evaluate the trustworthiness of the service. As a concrete example, e-vendors can provide consumers possibilities to test their service before purchasing and registration, offer possibilities for consumers to discuss with each other regarding the e-vendor and products or services it offers, or provide links in some objective, third party reviews concerning their services. This kind of behavior might highlight e-vendor's integrity and benevolence and make a deeper relationship with consumer possible, but also make consumer more loyal to e-vendor when the trust is established.

By recognizing the consumers' e-trust building process, e-vendors can gain some other benefits too. For example, e-vendors can identify their customers' "trust-profiles" by gathering information about their customers' characteristics like demographics, values, personality, and lifestyle. Our model argues that consumer characteristics partly determine how consumers build trust in e-commerce. Based on consumer characteristics, e-vendors can segment their customers and recognize how important trust is for different segments. When this information is available for e-vendors, they can decide how many and what kind of trust-increasing features they add in their service. As a concrete example, we can consider a service that is aimed for the excitement-minded consumers. As discussed earlier, we argue that the excitement-minded consumers were not as interested in trust-issues than security-minded. Because of that, the excitement-minded consumers do not need so many trust-related features in the service than it would be in a case of service aimed for the security-minded. This means, e-vendors can concentrate more on other value-adding features in their service when trust-related issues does not need so much attention.

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About the authors

Kyösti Pennanen is a PhD candidate of marketing in the Department of Marketing at the University of Vaasa, Finland. His research interests focus on consumer trust in e-commerce, consumer perceived risk in e-commerce, and consumer trust building process in e-commerce. Kyösti Pennanen is the corresponding author and can be contacted at: kyosti.pennanen@uwasa.fi

Tarja Tiainen is a Research Professor of e-business in the Department of Computer Sciences, University of Tampere, Finland. Her research is primarily based in e-commerce, ICT expertise, and in gender and technology studies. E-mail: tarja@cs.uta.fi

Harri T. Luomala is a Research Professor of consumer behavior in the Department of Marketing at the University of Vaasa, Finland. His main research interests focus on the interrelations of values, emotions, motives and taste perceptions in food consumption, on consumer-oriented product development, on consumer perceptions of products and consumption environments, and on cross-cultural aspects of consumption. E-mail: harri.luomala@uwasa.fi

ADVANCES IN CONSUMER RESEARCH

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How Consumers Build Trust in e-Commerce: Towards a Trust Formation Model

Kyösti Pennanen, University of Vaasa/Epanet, Finland

ABSTRACT

Although consumer trust in e-commerce has aroused much interest among researchers in the fields of consumer behaviour and information systems, little research has been devoted to investigating the methods consumers use to build trust in e-commerce. This article partially fills the gap in the current literature by presenting different methods that consumers use in order to form trust in e-commerce. The article concludes by introducing a framework for consumer's trust formation process in e-commerce.

INTRODUCTION

In the late 1990's e-commerce was anticipated to expand rapidly and become a normal part of consumers' everyday lives. Nowadays some Internet-related services such as electronic newspapers and information search are widely used by consumers, but there are only a few commercially successful fields of e-commerce. One of the reasons for the failure of expectations is claimed to be consumer trust, or more likely the lack of trust (Merrilees and Frye 2003).

The phenomenon of e-trust (consumer trust in e-commerce) is widely discussed and many conceptualisations have been presented modelling consumer trust in e-commerce (Gefen, Karahanna, and Straub 2003a; Kim et al. 2005; Lee and Turban 2001; McKnight, Choudhury, and Kacmar 2002; Tan and Sutherland 2004; Tan and Thoen 2000–2001). The problem with the current literature concerning consumer e-trust is that the conceptualisations do not take into consideration how consumers form e-trust, but rather concentrate on describing different elements of it. More specifically, different mechanisms that consumers use to build e-trust have not attracted much, if any, attention among researchers.

This article contributes by expanding the current knowledge about consumer e-trust by developing a model that presents how consumers form trust in e-commerce. The first objective of this study is to review the literature addressing consumer trust, consumer perceived risks, risk reduction strategies, and the relationship between these concepts. The second objective is to empirically explore how consumers use different risk reduction strategies to generate trust in e-commerce. The third objective is to present a model based on the literature and empirical findings that illustrates consumer's trust formation process in e-commerce.

In the following section we review the literature on consumer e-trust and present three major elements of trust. Furthermore, we argue that the current knowledge about consumer e-trust is not adequate and there is a need to take into account different mechanisms that consumers can use to form trust in order to understand consumer's e-trust formation process. The article continues by introducing the data collection process and methodological choices. The subsequent section presents our findings. The article concludes with model development and theoretical discussion.

THREE ELEMENTS OF CONSUMER TRUST IN E-COMMERCE

The concept of trust has been heterogeneously defined by many authors in the fields of economics, social psychology, sociology, management, marketing, and information systems (Blomqvist 1997; Garbarino and Lee 2003). Garbarino and Lee (2003) argue that the most widely accepted definition of trust is proposed by Mayer, Davis and Schoorman (1995, 712): "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."

Many alternative conceptualisations of consumer e-trust exist in the fields of information systems and marketing (e.g., Gefen et al. 2003a; Lee and Turban 2001; McKnight et al. 2002; Tan and Sutherland 2004; Tan and Thoen 2000–2001). According to these conceptualisations, three major elements of consumer trust can be identified. These are institutional trust, interpersonal trust, and dispositional trust (Tan and Sutherland 2004). *Institutional trust* refers to an individual's trust in institutions, like the laws in a society or in the case of e-commerce the technology itself. (McKnight et al. 2002). On the other hand, *interpersonal trust* refers to an individual's trust in another specific party or the trustworthiness of the third party (Tan and Sutherland 2004). In the context of e-commerce, this specific party may be an e-vendor, some third party like a local newspaper that publishes an article about some e-vendor or the consumer's friend who makes recommendations about some e-vendor (Lee and Turban 2001; Tan and Thoen 2000–2001). The concept of *dispositional trust* is based on the research in the area of psychology (Rotter 1971). Dispositional trust means an individual's ability to trust in general and is based on an individual's belief that other people are well-meaning and reliable (Gefen et al. 2003a; Tan and Sutherland 2004). Usually disposition to trust is considered to be a personality-driven feature of an individual. That is, an individual's personality determines his/her propensity to trust in general. Furthermore, an individual's disposition to trust may be endogenous or it may be developed during the life experiences (McKnight and Chervany 2001–2002). Disposition to trust is especially important in novel situations, such as using e-commerce (Gefen et al. 2003a).

The problem with the current literature on consumer e-trust is that the different conceptualisations only describe different elements of trust and, thus, they do not take into consideration the consumer as a builder of trust in e-commerce. Therefore there exists a gap in understanding of how a consumer forms e-trust. According to the definition of trust proposed by Mayer et al. (1995) someone is willing to be vulnerable to the actions of others based on expectations that others will perform a particular action important to the trustor. Thus, the definition of trust assumes that the trustor is expecting that others will perform a particular action important to the trustor. This assumption generates a need to form the expectation, but recent conceptualizations do not provide opportunities to understand how a trustor develops it. More specifically, we argue that consumer trust in e-commerce is an outcome of a process that consumers go through and, at least to our knowledge, that process has gained only little, if any, attention among researchers. In this article we will propose a model that includes the three elements of e-trust but also takes into account different methods that consumers can employ to form the expectation that the other party will be trustworthy. In order to do so we will use the theory of perceived risks and the concept of consumer's coping strategies introduced by Mick and Fournier (1998) in their research on technological paradoxes.

CONSUMER PERCEIVED RISKS AND RISK REDUCTION STRATEGIES

The relationship between consumer trust and consumer perceived risks needs to be elaborated upon, because risk has been seen

to be a prerequisite to trust. For instance, Mayer et al. (1995) stress that a need for trust arises only in risky situations. However, the relationship has confused researchers; for example, Mayer et al. (1995) speculate whether risk is an antecedent to trust or an outcome of trust. On the other hand, Gefen, Rao, and Tractinsky (2003b) note that the literature offers three models that explain the relationship between risk and trust. Firstly, risk mediates the relationship between trust and behaviour. Secondly, risk moderates the relationship between trust and behaviour. Thirdly, the threshold model explains the relationship between trust and risk. All of these models assume that trust exists before risk and risk either mediates or moderates the effect of trust in behaviour or that they both operate independently. The assumption that trust occurs before risk meets some difficulties, because the vast body of literature on consumers' risk reduction strategies (Akaah and Korgaonkar 1988; Mick and Fournier 1998; Roselius 1971; Van den Poel and Leunis 1996) indicates that consumers are doing something to cope with the perceived risks. Thus, why would consumers use different strategies to reduce risks if trust already exists? The answer could be the difference between the concepts of dispositional trust and interpersonal and institutional trust. As mentioned earlier, disposition to trust is a personality-driven feature of an individual and therefore it is always present and certainly exists before any risk perceptions regarding some other party. This can also explain why different models assume that trust occurs before risk. Therefore, we argue that only the disposition to trust appears before risk perceptions and trust in some other party (interpersonal) and trust in institutions (institutional) develop after the risk perception. More specifically, consumers can evaluate these two elements of trust by using different mechanisms.

Because mechanisms that consumers can use to form e-trust have attracted only little, if any, attention among researchers there exists no readymade method to address the issue. Therefore we adopted some mechanisms from the literature on consumers' risk reduction strategies. More specifically, we adopted the concept of consumers' coping strategies by Mick and Fournier (1998). In Mick and Fournier's (1998) model there are four categories of coping strategies, all of which contain different mechanisms that consumers use to cope with technological issues. These four categories are 1) pre-acquisition avoidance strategies, 2) pre-acquisition confrontative strategies, 3) consumption avoidance strategies and 4) consumption confrontative strategies. From these four categories, we decided to take pre-acquisition confrontative strategies for more detailed examination, because these strategies also appear in other studies addressing consumer's risk reduction strategies in the context of e-commerce (Tan 1999). Pre-acquisition confrontative strategies contain different variants. These are 1) pretest, 2) buying heuristics, 3) extended decision-making and 4) extended maintenance and warranty contract (Mick and Fournier 1998). Next, all these variants are discussed in detail.

Pretest means that the consumer is using some else's product temporarily or purchases some product but is not sure if (s)he is going to own the product after the return policy or warranty expires (Mick and Fournier 1998). The reason for a consumer to use pretest is to reduce the risks (s)he perceives. Some studies argue that pretest is widely used among consumers as a method for risk reduction (McDonald 1998; Mitchell and Boustani 1994). Furthermore, there is evidence that links pretesting to e-commerce. For instance, Tan (1999) and So and Sculli (2002) found that consumers use pretesting as a strategy for reducing risks in e-commerce.

Buying heuristics refers to consumer's use of different buying rules in order to solve problems or make decisions (Statt 1997). From the viewpoint of coping strategies, Mick and Fournier (1998) argue that consumers buy the latest model, less sophisticated

model, an expensive model, a widely known brand or a reliable brand. Furthermore, So and Sculli (2002) propose that consumers' perceived risks diminish if the quality of a product or a service is high. In the context of e-commerce, Ha (2004) found that web stores' names are positively correlated with the perceived level of brand trust.

Consumers use different methods to increase their knowledge about the product they purchase. This kind of behaviour is called *extended decision-making*. Mick and Fournier (1998) define extended decision-making as searching diligently for detailed product/brand information and then purchasing the most appropriate alternative in a careful, calculative manner. Other methods that consumers can use to increase their knowledge and reduce risks are also identified. For instance, consumers may ask advice from their friends concerning some product (Mitchell and Boustani 1994; Roselius 1971). In the context of e-commerce consumers are seen to increase their knowledge by using different discussion boards in order to obtain information about the products they are interested in purchasing (Grönroos et al. 2000).

The last coping strategy discussed in this article is *extended maintenance and warranty contract*. Several researchers argue that consumers use different warranties to reduce risks (Akaah and Korgaonkar 1988; Mick and Fournier 1998; Roselius 1971). Altogether three different categories of warranties can be identified in the literature. These are extended warranty, extended maintenance contract, and money-back guarantee (Akaah and Korgaonkar 1988; Mick and Fournier 1988). According to Mick and Fournier (1998), extended warranty and maintenance contract seem to reduce the risks perceived by their informants. Moreover, a money-back guarantee has been shown to be an important risk reduction strategy for consumers (Akaah and Korgaonkar 1988; Tan 1999; Van den Poel and Leunis 1996). There is also evidence that consumers use extended maintenance and warranty contract in the context of e-commerce. For example, Tan (1999) found that consumers reduce risks in e-commerce by using money-back guarantee.

DATA COLLECTION AND ANALYSIS

The empirical task of our study is to explore different mechanisms that consumers use to form trust in e-commerce. Due to the newness of the issue, a qualitative method was deemed to be the most appropriate in data collection. Empirical material was collected during the summers of 2003 and 2004. The method used in gathering empirical material was semi-structured theme interview. The theme interview was selected as a data collection method because it is seen as suitable approach when the study deals with issues that are not discussed by people on a daily basis (Hirsjärvi and Hurme 1991). Altogether 10 interviews were conducted during the summer of 2003. To recruit informants we first contacted certain persons who were known to be actively involved with Internet and who knew potential informants. Secondly, we approached possible informants and asked them to participate in our research. In selecting those 10 we used two criteria. Firstly, all the informants had to be 18 or older. Secondly, all of them had to have experience of using e-commerce. The themes covered in the interviews were the various risk reduction strategies presented earlier in this article. The interviews were conducted after two test interviews. A few interviews took place at informants' homes and some in public places like cafeterias. The interviews lasted from 30 min. to 90 min. and were recorded and fully transcribed.

The second research phase took place during the summer of 2004 and the number of informants was 10, increasing the total number of informants to 20. To get into contact with informants we co-operated with an electronic grocery shop that put an advertisement for our study in their web site. We also offered a gift token

worth 20 euros to all the respondents selected for the actual interviews. At the end, 156 respondents contacted us. From these we selected 10 informants who had some experience in using the electronic grocery shop. Themes in the interviews consisted of three elements of e-trust and risk reduction strategies. The idea in choosing these themes was to explore the possible link between the two concepts. The interviews were conducted after two test interviews. Some of the interviews were held at informants' workplaces and some in public places such as cafeterias or restaurants. The interviews lasted from 30 min. to 90 min. and were recorded and fully transcribed.

The analysis of the empirical material was conducted as follows. Firstly, the material was read several times. Secondly, transcriptions were sorted according to the themes of the interviews. Thirdly, issues arising from the interviews based on our analysis were written in memos and read again to make sure that informants' ideas had been captured. Fourthly, the dialogues concerning the different themes were sent via e-mail to informants in order to confirm that we had interpreted their thoughts correctly.

FINDINGS

In this section, the findings of our empirical study are presented. Starting with the pretest, we will present and discuss various strategies used by informants to reduce perceived risks. The role of every risk reduction strategy is moreover discussed from the viewpoint of trust formation.

Pretest

According to our findings informants used pretest as a method for reducing perceived risks in e-commerce. Pretest seemed to be effective, especially when informants felt that e-service was a somewhat vague and they perceived some risks concerning the service. Thus testing the service reduced risks they perceived.

"Yes, I've tested e-services. I guess I also tested ruoka.net about a year ago.. And I also tested Viking Line's service because we are going to cruise when the holidays begin.. so I went through different options and prices and so on.. And also made a reservation.." (Janne, 37, male)

Janne's account illustrates the way the pretest was used in order to reduce risks. Janne perceived some risk and wanted to test the e-service offered by Viking Line (a local passenger ferry company). After browsing and testing the service he finally made a reservation. From the viewpoint of trust formation, it seems that Janne evaluated Viking Line's trustworthiness. More specifically, Janne evaluated how competent Viking Line is to set prices for their services. The result of this evaluation seems to be trust, because he made a reservation and thus was willing to engage in a risky relationship with Viking Line. This finding provides evidence that pretest is used by informants as a method of forming interpersonal trust, because Viking Line is a vendor and therefore the relationship between Janne and Viking Line is a manifestation of interpersonal trust.

Buying Heuristics

Earlier, five different buying heuristics were introduced as a method for reducing risks in e-commerce. Of those five, widely known brand and reliable brand were identified in our material. Buying the latest model, a less sophisticated model, and an expensive model did not exist in our material. This can be explained by the fact that the present study concentrates on consumers' e-trust formation. Because of that, informants talked about the different e-services they use rather than specific products to which buying the

latest model, a less sophisticated model and an expensive model refer.

A widely known brand and a reliable brand were used as a risk reduction strategy among informants.

"Well, of course if you say Anttila's e-services then of course it would have an affect.. It is familiar and secure because they also have those traditional stores.. And I also like Amazon.com.. I've got to know their web-site and it seems quite trustworthy and if I could speak and read English better I would order books there.. It felt quite secure because I knew it already.." (Kalle, 59, male)

Kalle's opinion illustrates the use of a widely known brand as a risk reduction strategy. Kalle mentions that he uses Anttila's e-services (a widely known brand in Finland). Thus, Anttila's brand convinced Kalle about Anttila's trustworthiness and furthermore made him willing to engage in a relationship with Anttila. Kalle would also use the Amazon.com's e-service if he could only speak and read English properly. As the reason for his willingness to use Amazon.com Kalle mentions that it is widely known and that makes it feel secure and trustworthy.

The next quotation illustrates Jaana's opinion about banks as a reliable brand.

"Of course I try to trust that banks have the latest knowledge about hazards.. that they update their services all the time and they take care that there are no security-risks.." (Jaana, 33, female)

According to Jaana, banks are reliable and Jaana expects that they have the latest knowledge about risks and other hazards that exist in e-commerce. This reduced the risks Jaana perceived and convinced her about the trustworthiness of the banks' e-services.

Earlier examples illustrate that informants used two out of five buying heuristics in order to reduce the risks they perceive in e-commerce. In terms of trust formation, both of these strategies refer to the interpersonal element of trust. The reason for this is that both of the strategies are based on the brand of an e-vendor. Thus, by evaluating e-vendors' brand, informants were convinced about the e-vendors' trustworthiness, which allowed them to engage in a risky relationship.

Extended Decision-Making

According to our findings, informants used extended decision-making as a risk reduction strategy. Friends' experiences and advices were especially important for informants. In some cases informants used e-mail to ask their friends' opinions about the e-services they wanted to use. Furthermore, some informants reported that they use only e-services that their friends recommend. Thus, informants used extended decision-making to evaluate e-vendors' trustworthiness in order to decide whether to use their services or not. The following quotation illustrates some of the aspects of extended decision making.

"My friends have the same hobbies as I and because of that we send e-mails to each other concerning some test results or something. And ask others' opinions about some products and so on.." (Ilpo, 23, male)

According to our findings, informants used extended decision-making as a method to evaluate the trustworthiness of an e-vendor, thus, form interpersonal trust. Furthermore, our findings indicate that informants used extended decision-making as a method

to build institutional trust. More specifically, informants reported that they had difficulties in using the computer and they had to ask advice from their friends in order to cope with the technology. This kind of behaviour refers to informants' need to reduce risks they perceived toward technology and to form trust in it.

Extended Maintenance and Warranty Contract

Earlier in this article we presented three different extended maintenance and warranty contract-related strategies that emerged from the literature. Those were extended warranty, extended maintenance contract, and money-back guarantee. Our findings indicate that only money-back guarantee was used among our informants. The reason for this may be that Finnish e-vendors rarely offer consumers extended warranty and extended maintenance contracts. In any case, money-back guarantee was quite widely used by informants. The following quotation illustrates the issue.

"Researcher: You said that you have bought some clothes.. so did you have any problems with them..?"

"Minna: No, actually not.. And if they send, for example, the wrong size then you can always send it back and change for free." (Minna, 28, female)

Although informants used the money-back guarantee, there were also some restrictions to it. Some informants reported that when ordering products from abroad they did not use money-back guarantee as a risk reduction method, because they felt that foreign companies are not as trustworthy as domestic ones. In the informants' opinion, there were no assurances that foreign companies would really give them their money back in the event of problems. Furthermore, one warranty-related issue that informants emphasized was the role of laws in society. Because of the legislation on consumer protection, informants felt that companies would give them their money back in a problematic situation.

From the viewpoint of trust formation, the warranty-strategy is linked to both interpersonal and institutional trust. Informants' use of money-back guarantees links it to interpersonal trust, because the e-vendor is the one that offers the guarantee. More specifically, informants used e-vendors that offered a money-back guarantee because they were perceived to be more trustworthy than e-vendors not making such offers. The link between institutional trust and money-back guarantee is that informants reported that they had more trust in e-services provided by the domestic service providers than the foreign ones. The reason was the role of laws in society that protect consumers and allow them to return products and get their money back. Next, a model for consumer's trust formation process in e-commerce is developed and some theoretical discussion is provided.

THEORETICAL DISCUSSION

Figure 1 presents a model for consumer's trust formation process in e-commerce. The model is based on the literature and the empirical findings of the present study. According to our findings, there are indeed links between risk reduction strategies and interpersonal and institutional elements of e-trust. An interesting issue that emerged from our findings was that no obvious links were found between consumers' risk reduction strategies and the dispositional element of trust. The reason for this could be the fact that consumer's disposition to trust is a personality-driven feature of an individual. Because of this, if in order to illustrate the link between disposition to trust and risk reduction strategies we should compare different consumers and try to find out, for example, if some consumers use different amounts of strategies in order to

reduce risks and form trust. Although the role of dispositional trust could not be clearly identified in our empirical material we argue that it has its own role in consumer's trust formation process because every individual has some disposition to trust (Gefen et al. 2003a; Tan and Sutherland 2004), a fact that could not be ignored. In our opinion, the disposition to trust affects consumer risk perception before the overall trust is formed as discussed in the theoretical part of this article. Furthermore, other consumer characteristics cannot be ignored. For instance, there is evidence that consumer's age and gender have an affect on consumer's risk perception (Liebermann and Stashevsky 2002; Mitchell 1998). One can also ask how consumers' personal values and cultural background affect trust formation in e-commerce.

As figure 1 shows, there are links between interpersonal trust, institutional trust, and perceived risks, because we see consumer trust as a dynamic phenomenon, which can change over time and depending on the situation where it occurs. An illustrative example is a situation where a consumer has earlier bought something from an e-vendor and encountered some problems. It could be assumed that in the next purchase situation consumer e-trust will not be that high, that it could lead to purchasing direct from the same e-vendor. More likely the consumer perceives more risks and is forced to use different mechanisms in order to rebuild trust. Thus, it could be argued that consumers are always actively forming trust and that the level of overall trust changes over time and depends on the situation where trust occurs.

Our model suggests that consumers can use different mechanisms to form trust in e-commerce. Compared with other models and conceptualizations (Gefen et al. 2003a; Kim et al. 2005; Lee and Turban 2001; McKnight et al. 2002; Tan and Sutherland 2004; Tan and Thoen 2000–2001) our model takes the consumer into account as a generator of trust instead of only describing different elements of trust. In spite of this, there is still a need for further studies before consumer's trust formation process in e-commerce could be satisfactorily understood. This article provides some paths to approach the issue by exploring the strategies that consumers use to form e-trust and by introducing different consumer characteristics which may have a role in consumer's trust formation process.

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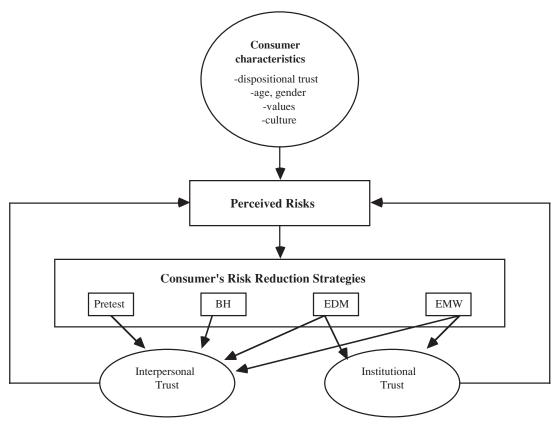
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FIGURE 1

A Model for the Consumer Trust Formation Process in e-Commerce

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Is Interpersonal and institutional e-trustworthiness equally important in consumer e-trust development?
Implications for consumers' e-trust building behaviours

Kyösti Pennanen
University of Vaasa, Finland

Abstract

Trust is a widely studied phenomenon across numerous disciplines. E-trust researchers have conducted a vast number of studies, but despite extensive interest in the issue, there are only few studies that concentrate on how consumers build e-trust. Furthermore, consumer e-trust is seen to be a function of both interpersonal and institutional e-trustworthiness, but only limited number of attempts have been conducted to study the relative importance of interpersonal and institutional e-trustworthiness in consumer e-trust development process. The present article seeks to improve this situation by studying how consumers' perceived interpersonal and institutional e-trustworthiness influences their intention to build e-trust. The results of the study suggest that consumers build e-trust actively, and the development of e-trust is not only based on trustees' behaviour. Moreover, the results indicate that interpersonal e-trustworthiness is more important than institutional e-trustworthiness in consumers' e-trust building.

Keywords: e-Trust, e-Trust Building, e-Trustworthiness, Consumer, e-Commerce

Introduction

The phenomenon of consumer e-trust (consumer trust in e-commerce) is widely discussed, and many conceptualisations of e-trust have been evinced (e.g. McKnight et al., 2002; Tan and Sutherland, 2004). For example, McKnight et al. (2002) discuss the relationships between consumer dispositional trust, institutional e-trust, interpersonal e-trust and their influence on consumers' trusting intentions. Tan and Sutherland (2004) are in line with McKnight et al. (2002) while suggesting that consumers' perception regarding the trustworthiness of humanity in general (dispositional aspect), an e-vendor (interpersonal aspect) or Internet infrastructure (institutional aspect) contribute to consumers' intentions to make online purchases (at this point, it is important to emphasise the difference between the concept of trust and trustworthiness; trust is a trustor-specific concept which refers to trustor's psychological state of mind while trustworthiness refers to trustees' characteristics). In summary, what is common in literature is that consumer e-trust is seen as a result of trustworthiness perception regarding the different actors in e-commerce. However, two problems with the current research can still be identified.

Firstly, there exists a lack of knowledge on how consumers' e-trust develops. Literature suggests that trustee's behaviour which emphasizes its characteristics, such as e-vendor's reputation and size (Jarvenpaa et al., 2000), legal and technical environment (Tan and Sutherland, 2004) or dynamic pricing (Garbarino and Lee, 2003) affect consumer e-trust development. However, it would be somewhat obscure to consider that consumers' role in the e-trust development would just be a weak-willed objective for trustee's actions. Naturally, e-vendors may advertise, for example, their security and privacy control procedures or build a brand to convince consumers about their trustworthiness, but there is a danger that approaching consumer e-trust development from such one-sided angle could lead to a constricted understanding of the phenomenon. In contrast, considering consumer e-trust development as a two-directional process, including both trustees' and consumers' behaviour, would provide possibilities for both academians and practitioners. From academians' perspective, approaching the consumers' side of the phenomenon would help us to understand consumer e-trust more holistically. From practitioners' perspective, considering consumer as an active e-trust builder would provide new insights into e-service development. For example, if the e-service user is an active e-trust builder, then the e-vendor could provide him/her possibilities to get familiar with its e-service (e.g. to test the service functionality prior to registration or purchase).

Unfortunately, the knowledge regarding the consumers' side of the issue is limited although the literature reveals that some efforts to approach consumers' side have been conducted. For example, Yang et al. (2006) studied consumer e-trust building from the elaboration likelihood model perspective and found that consumers use both central and peripheral decision-making routes to asses trustworthiness of e-commerce. Also some qualitative attempts at exploring the phenomenon have emerged. Pennanen et al. (2007) studied how consumers' personal values affect their trust building and risk perception in e-commerce. Their findings suggest that consumers use three different patterns to build e-trust. Nevertheless, further research is still needed in order to gain a deeper understanding of the phenomenon.

Secondly, as we discussed above, the current e-trust literature treats consumer e-trust as an outcome of consumers' trustworthiness perception regarding different actors in e-commerce. The problem in the literature is that it adopts an assumption that both interpersonal (e-vendor's trustworthiness) and institutional (trustworthiness of the Internet infrastructure in general) e-trustworthiness are equal contributors to consumer e-trust (e.g. McKnight et al., 2002; Tan and Sutherland, 2004). Because e-trust is found to be a complex phenomenon, which varies, for example, based on context and situation (e.g. Gefen and Straub, 2004;

Pennanen et al., 2007), the prevalent view can be considered as somewhat questionable which generates a need to approach it empirically.

Based on the previous discussion, two objectives are set to this study. The first objective is to introduce and describe the concepts of trust, e-trust, e-trustworthiness and consumer e-trust building and the relationships between the concepts. The second objective is to empirically explore how consumer e-trust building behaviour changes in situations where the level of perceived interpersonal and institutional e-trustworthiness varies. By meeting these two objectives, this paper aims to contribute to current e-trust research by fostering the knowledge on 1) consumers' side of e-trust building and 2) on the relative importance of interpersonal and institutional trustworthiness in consumer e-trust building.

The rest of the paper is structured as follows. Next, the literature concerning the concepts of trust, consumer e-trust, perceived e-trustworthiness and consumer e-trust building mechanisms is reviewed. This is followed by a discussion of the methodological issues and a presentation of the study results. The article concludes with the comparison of the results with current e-trust literature and with a discussion of the limitations of the study and the implications for further research and management.

Concepts of trust, e-trust, e-trustworthiness and consumer e-trust building

The concept of trust

Trust is a widely studied phenomenon across numerous disciplines. Traditionally, researchers in the fields of psychology, sociology, social psychology, economics, management and marketing have been interested in trust as an important factor affecting relationships between different actors. For example, sociologists have been interested in trust between different agents or groups (e.g. Gambetta, 1988), social psychologists have studied trust as a phenomenon which allows close relationships between individuals (e.g. Cook and Wall, 1980) and psychologists have been interested in studying how individuals' willingness to trust develops (e.g. Rotter, 1967). In marketing literature, trust is approached from several perspectives. One branch of research emphasises trust in the context of distribution channels (e.g. Anderson and Narus, 1990; Young and Wilkinson, 1989). These studies stress the role of power and conflict in the channel relationships, and the role of trust in those relationships (Young and Wilkinson, 1989). Also relationship marketing researchers have studied trust in a light of relationships between buyer and seller (e.g. Dwyer et al, 1987; Ganesan, 1994; Morgan and Hunt, 1994). A fundamental argument made by these studies stresses

that trust is one of the most important foundations for future collaboration between firms (Ganesan, 1994; Morgan and Hunt, 1994).

The vast interest in trust across disciplines has led to a dozens of different views of trust which has generated problems in understanding what trust actually is. For example, Hosmer (1995: 380) states that there exists "a widespread lack of agreement on a suitable definition of the concept." As an example, some sociologists treat trust as behaviour (e.g. Lewis and Weigert, 1985). This means that the behaviour which is based on trust (e.g. purchases) is labelled as trust. Contrary, several researchers have treated trust differently. Trust is defined to be trustor's positive expectation regarding trustee (Mayer et al., 1995), trustor's belief that trustee will behave positively (Anderson and Narus, 1990) or a psychological state based upon positive expectations of the trustee's intentions (Rousseau et al., 1998). What is common in all of the previous definitions is that they refer trust as trustor's psychological state of mind regarding the trustee.

In terms of defining trust in the scope of the present study, we are in line with the definitions of trust which treat trust as trustor's psychological state of mind. We consider that trust should not be defined as behaviour. Instead, behaviour should be understood as a consequence of trust. Thus, we adopt the definition of trust provided by Mayer et al. (1995: 712):

> "Trust is 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 concepts of e-trust and e-trustworthiness

The rapid development of e-commerce in the late 1990's expanded trust research also in the context of e-commerce. Already in the early stages of the e-trust research researchers found trust very important, especially in the relationships between consumers and e-vendors (e.g. McKnight et al. 2002). Several researchers have been interested in antecedents and consequences of e-trust. As antecedents, researchers have found that some trustee-specific attributes such as e-vendor's reputation (Kim et al., 2004), shared values, communication (Mukherjee and Nath, 2007) or web site usability and appeal (Hampton-Sosa and Koufaris, 2005) affect consumer decision to trust. Also consumer characteristics have been found to have influence on consumer e-trust. For example, consumer disposition to trust (e.g. McKnight et al., 2004) or familiarity with the e-vendor (Bhattacherjee, 2002) are found to be consumer-specific antecedents to e-trust. In terms of consequences of e-trust, researchers have found that consumer e-trust

affects, for example, consumers' intention to use a web site (Hampton-Sosa and Koufaris, 2005) or loyalty and satisfaction (Harris and Goode, 2004).

E-trust researchers have widely adopted the definition of trust provided by Mayer et al. (1995) (see Garbarino and Lee, 2003). Another feature of e-trust research is that in many studies trust is treated as a combination of interpersonal and institutional e-trust (e.g. Lee and Turban, 2001; McKnight et al., 2002). The concept of interpersonal e-trust origins from social psychology and means consumer trust in some specific e-vendor's abilities, skills and expertise (Tan and Sutherland, 2004). In contrast, institutional e-trust means consumer trust in the Internet infrastructure. This approach is based on sociological literature in which the target of trust is seen to be some group of agents. For example, McKnight et al. (2002) argue that the structural characteristics of the Internet influence consumer e-trust.

However, many researchers have confused the concepts of e-trust and e-trustworthiness (Serva et al., 2005). For example, Gefen and Straub (2004) as well as Garbarino and Lee (2003) refer to trustworthiness as a dimension of trust, while McKnight et al. (2002) consider the concept as consumer's trusting beliefs. The distinction between trust and trustworthiness is that the concept of trustworthiness refers to the trustee. More specifically, trustworthiness is a characteristic of the trustee (e.g. e-vendor's ability to deliver products) (Corritore et al., 2003; Mayer et al., 1995) while trust is a trustor's psychological state of mind regarding the trustee. The link between the concepts is that the trustor's perception of trustee's trustworthiness contributes to trustor's decision to trust (e.g. Morgan and Hunt, 1994; Mukherjee and Nath, 2007). As discussed earlier, in the e-commerce context the trustee can be an e-vendor or the Internet infrastructure in general which means that the concept of e-trustworthiness can be divided into interpersonal and institutional e-trustworthiness.

The conventional trust literature sees trustworthiness as a multidimensional construct. For instance, Mayer et al. (1995) describe three different dimensions of trustworthiness; ability, benevolence and integrity. Several other dimensions of trustworthiness are identified too, such as consistency and openness (Hosmer, 1995). However, the e-trust literature emphasises the importance of three separate dimensions: 1) competence (trustee's abilities, skills and expertise), 2) benevolence (trustee's acts to meet trustor's interests), and 3) integrity (trustee's interest to act honestly) (McKnight et al., 2002; Tan and Sutherland, 2004).

Consumer e-trust building

Conventional trust literature suggests that trustor can build trust through cognitions (e.g. Doney and Cannon, 1997; Lewis and Weigert, 1985). Lewis and Weigert (1985: 970), define the phenomenon as "a cognitive process that discriminates among persons and institutions that are trustworthy, distrusted, and unknown." They argue that the trustor can base the choice to trust on "good rational reasons". In marketing literature, Doney and Cannon (1997) divide cognitive processes which may lead to trust into three types: capability, intentionality and transference process. The 'capability process' refers to a process by which the trustor can determine another party's abilities to meet their obligations. 'Intentionality process' means trustor's interpretations of the trustee's words and behaviours, and subsequent attempts to determine the trustee's intentions in a relationship. The 'transference process' assumes that trust can be transferred from some third party to the trustor. The suggestions and recommendations from the third party serve as proof that the actual trustee is trustworthy.

Some recent studies in the context of e-commerce indicate that consumers cognitively build e-trust (Pennanen, 2006; Pennanen et al., 2007; Yang et al., 2006). For example, Pennanen (2006) presents a model for consumers' e-trust formation process. The model includes the basic idea that consumers can build e-trust by using different mechanisms to evaluate interpersonal and institutional e-trustworthiness (that is, to evaluate e-vendor's or Internet infrastructure's competence, benevolence and integrity). The result of the evaluations will be trust or distrust in e-vendor (interpersonal e-trust) or in the Internet infrastructure in general (institutional e-trust). The model introduces different e-trust building mechanisms, namely 1) pretest, 2) exploration of warranties and 3) extended decision-making.

Pretest refers to the situation in which a consumer is using someone else's product temporarily or purchases some product but is not sure if s/he is going to own the product after the return policy or warranty expires (Mick and Fournier, 1998). In terms of e-trust building, Pennanen (2006) argues that consumers may test an e-vendor's service before any purchasing or transactions occur or test technological solutions before any actual usage. Thus, pretest may be used to evaluate both interpersonal and institutional e-trustworthiness

The second e-trust building strategy is exploration of warranties. Several researchers argue that consumers use different warranties in order to reduce perceived risks (e.g. Akaah and Korgaonkar, 1988; Mick and Fournier, 1998). For example, consumers' can explore vendor's offerings related to extended warranty,

extended maintenance contract, and money-back guarantee (Mick and Fournier, 1998; Van den Poel and Leunis, 1996). Moreover, various trusted third parties' recommendations could have an effect on consumers' evaluations of e-trustworthiness (Cho and Lee, 2006). Consumers are also found to evaluate the trustworthiness of e-commerce by comparing different e-vendors' nationalities. For example, consumers found domestic e-vendors more trustworthy than foreign ones, because they knew that the domestic consumer protection legislation protects them and offers an opportunity for a refund regardless of the e-vendor (Pennanen, 2006).

The third strategy that consumers may use to build e-trust is extended decision-making. Mick and Fournier (1998) define extended decision-making as searching diligently for detailed product/brand information and then purchasing the most appropriate alternative in a careful, calculating manner. In the context of e-commerce, consumers are known to extend their knowledge by asking advice from their friends (Smith et al., 2005) and using the Internet (e.g. different discussion boards) in order to obtain information about the products they are interested in purchasing (Grönroos et al., 2000). Different magazines, newspapers and professionals' opinions are also potential sources of information for consumers.

When the previous mechanisms are compared to the cognitive trust building introduced in the conventional trust literature, it seems that pretest refer to capability process. Consumers can test the e-vendors' services (interpersonal e-trustworthiness) or some institutional aspects (institutional e-trustworthiness) of e-commerce to evaluate competence, benevolence and integrity. Exploration of warranties refers to capability and transference processes. In terms of capability process, some e-vendor's unwillingness to provide warranties could serve as a signal of inability to meet its obligations. In terms of transference process, consumers could use different trusted third parties' recommendations as sources for e-trustworthiness evaluations. Finally, extended decision-making refers to transference process. For example, friends' opinions, newspapers or discussion boards can be used as sources for competence, benevolence or integrity evaluations.

Methodology

Two objectives were set to this paper. Firstly, to study whether consumers use different mechanisms to build e-trust. Secondly, to explore if the perceived interpersonal and institutional e-trustworthiness are equal contributors to consumer overall e-trust. In order to approach those objectives, we decided to conduct a study in which the respondents were divided into four groups. Each

group was exposed to a different "e-trust building situation" in which the level of e-trustworthiness varies. The idea was to elicit possible differences between the groups in regard to e-trust building behaviour. In case some differences would occur, this would serve as evidence of 1) the relevance of e-trust building mechanisms to consumers and 2) the relative role of interpersonal and institutional e-trustworthiness as contributors to consumer e-trust.

Research design

In this study the vignette method is used. The vignette method means the usage of short written scenarios which are supposed to influence on participants' decision-making process (Alexander and Becker, 1978). The vignette method is seen as a useful method to study intentions, beliefs and actions in different settings (Barter and Renold, 2000).

As another option to conduct the study, a laboratory experiment was considered. However, the experimental approach was rejected, because there existed a danger that the graphical and the interface design would be perceived differently among respondents in the same groups. For example, some respondent could perceive the interface design as logical, while some others as illogical. In such a case, the e-trust building behaviour could vary and the results would be distorted. The danger of such a situation would be reduced when the vignette method is used, because the attribute of, for example, "logical interface" in written form may generate different images of the interfaces in respondents' minds, but the result, the perception of a logical interface, would be the same.

Scenarios

The study included four scenarios (length of the stories were about two A4 pages) in which a fictional consumer is buying a new computer from fictional Computer Shop Inc. The scenarios included different e-trustworthiness statements (see, Appendix 1), which were intended to manipulate respondents' perception of interpersonal and institutional e-trustworthiness. After reading the scenario, respondents were asked to identify themselves with the fictional consumer and fill in a questionnaire which measured their intention to build e-trust. All the scenarios had a similar basic structure. The target product, a computer, was selected because it is a common purchase for consumers, but due to its relative high price, it could be assumed that uncertainty would be included in the purchase situation, which makes trust and, logically, e-trust building relevant.

In the first scenario, both interpersonal and institutional e-trustworthiness was described positively. In the second scenario, the perceived interpersonal e-

trustworthiness was described positively, but institutional negatively. In the third scenario, the perceived interpersonal e-trustworthiness was described as negative, while institutional as positive. In the fourth scenario, both the interpersonal and institutional e-trustworthiness were negative. The e-trustworthiness attributes used for manipulation and their sources are presented in Table 1.

Table 1.   e-Trustworthiness attributes used in scenarios.

Scenario 1 (++)	Scenario 2 (+-)
Interpersonal e-trustworthiness attributes: -excellent payment methods (Pennanen and Paakki, 2007) -possibility to change the content of delivery (Pennanen and Paakki, 2007) -competitive price setting (Pennanen and Paakki, 2007) -e-vendor advices how to operate in problematic situations (Garbarino and Lee, 2003) -many methods for delivery (Pennanen and Paakki, 2007) -right to return products, warranties and fast delivery time (Pennanen and Paakki, 2007) -broad range of products (Jarvenpaa et al., 2000) -registration not mandatory (Garbarino and Lee, 2003) -e-vendor gives information on how the ordering process develops (Garbarino and Lee, 2003) -information about the e-vendor (Pennanen and Paakki, 2007) Institutional e-trustworthiness attributes: -no technological faults (Tan and Sutherland, 2004) -third-party recommendations (McKnight et al., 2002) -consumer privacy is protected (Cheung and Lee, 2006) -verified by Visa (Tan and Sutherland, 2004) -domestic e-vendor→ domestic laws are applicable (Pennanen, 2006)	Interpersonal e-trustworthiness attributes: -excellent payment methods (Pennanen and Paakki, 2007) -possibility to change the content of delivery (Pennanen and Paakki, 2007) -competitive price setting (Pennanen and Paakki, 2007) -e-vendor advices how to operate in problematic situations (Garbarino and Lee, 2003) -many methods for delivery (Pennanen and Paakki, 2007) -right to return products, warranties and fast delivery time (Pennanen and Paakki, 2007) -broad range of products (Jarvenpaa et al., 2000) -registration not mandatory (Garbarino and Lee, 2003) -e-vendor gives information on how the ordering process develops (Garbarino and Lee, 2003) -information about the e-vendor (Pennanen and Paakki, 2007) Institutional e-trustworthiness attributes: -privacy in jeopardy (Cheung and Lee, 2006) -technological faults (Tan and Sutherland, 2004) -third party warnings (McKnight et al., 2002) -not verified by Visa (Tan and Sutherland, 2004) -foreign e-vendor→ domestic laws might not be applicable (Pennanen, 2006)
Scenario 3 (-+)	**Scenario 4 (--)**
Interpersonal e-trustworthiness attributes: -vague paying methods (Pennanen and Paakki, 2007) -no possibility to change the content of delivery (Pennanen and Paakki, 2007) -uncompetitive price setting (Pennanen and Paakki, 2007) -e-vendor does not give advices how to operate in problematic situations (Garbarino and Lee, 2003) -vague methods for delivery (Pennanen and Paakki, 2007) -no right to return products, no warranties and slow delivery time (Pennanen and Paakki, 2007) -narrow range of products (Jarvenpaa et al., 2000) -registration mandatory (Garbarino and Lee, 2003) -e-vendor does not give information on how the ordering process develops (Garbarino and Lee, 2003) -no information about the e-vendor (Pennanen and Paakki, 2007) Institutional e-trustworthiness attributes: -no technological faults (Tan and Sutherland, 2004) -third-party recommendations (McKnight et al., 2002) -consumer privacy is protected (Cheung and Lee, 2006) -verified by Visa (Tan and Sutherland, 2004) -domestic e-vendor→ domestic laws are applicable (Pennanen, 2006)	Interpersonal e-trustworthiness attributes: -vague paying methods (Pennanen and Paakki, 2007) -no possibility to change the content of delivery (Pennanen and Paakki, 2007) -uncompetitive price setting (Pennanen and Paakki, 2007) -e-vendor does not give advices how to operate in problematic situations (Garbarino and Lee, 2003) -vague methods for delivery (Pennanen and Paakki, 2007) -no right to return products, no warranties and slow delivery time (Pennanen and Paakki, 2007) -narrow range of products (Jarvenpaa et al., 2000) -registration mandatory (Garbarino and Lee, 2003) -e-vendor does not give information on how the ordering process develops (Garbarino and Lee,2003) -no information about the e-vendor (Pennanen and Paakki, 2007) Institutional e-trustworthiness attributes: -privacy in jeopardy (Cheung and Lee, 2006) -technological faults (Tan and Sutherland, 2004) -third party warnings (McKnight et al., 2002) -not verified by Visa (Tan and Sutherland, 2004) -foreign e-vendor→ domestic laws might not be applicable (Pennanen, 2006)

Data collection, sample and measures

The scenarios and the questionnaire (see, Appendix 2.) were tested before the actual study was conducted. Altogether 20 respondents participated in the test, in which they read the scenarios (five per scenario) and answered the questionnaire. After that, the respondents were asked their opinions about the readability of the scenarios and the logic of the questionnaire. In addition, respondents were asked if they perceived the manipulation attributes manifesting (un)trustworthiness of e-commerce. As a result, the scenarios were slightly modified in order to improve the readability. Also the scale used in the questionnaire was revised, because the respondents considered it as illogical.

The actual study was conducted during the autumn of 2007 among Finnish college students. Respondents participated in the vignette study under observation in classroom conditions in order to minimize any external influence on the results. In addition, respondents were given written instructions to ensure that the study was conducted properly. No incentives were offered to the respondents. All the respondents were randomly assigned to read one of the four scenarios and to answer the questionnaire. All the scenarios and questionnaires were in Finnish.

Altogether 218 respondents took part in the study. After the initial screening of the questionnaires, 13 were rejected due to incomplete answers. The final sample consisted of 205 respondents. Of the total respondents, 81 were male (39,5 %), 43 were between 18–20 years old, 130 between 21–25 and 32 over 26 or older. The respondents were divided into four groups based on the scenario they read. The sample sizes and gender of the respondents are presented in Table 2.

Table 2.   Characteristics of the groups.

Groups	N	Male	Female
Group 1 (G1)	45	19 (42 %)	26 (58 %)
Group 2 (G2)	53	19 (36 %)	34 (64 %)
Group 3 (G3)	58	22 (38 %)	36 (62 %)
Group 4 (G4)	49	21 (43 %)	28 (57 %)

The independent and dependent variables (see Table 3.) were measured using the seven-point Likert scale (1=completely disagree…7=completely agree). The trustworthiness measures were adopted from previous relevant studies. Measures for the e-trust building intentions were developed based on the existing literature.

Table 3.   Measures of independent and dependent variables.

Measures, independent variables	Operationalisation	Number of items	Sources
Interpersonal e-trustworthiness	How trustworthy the interpersonal aspect of e-commerce is perceived?	12	Garbarino and Lee, 2003; Gefen and Heart, 2006; Gefen and Straub, 2004
Institutional e-trustworthiness	How trustworthy the institutional aspect of e-commerce is perceived?	6	Cheung and Lee, 2006; McKnight et al., 2002;
Measures, dependent variables	**Operationalisation**	**Number of items**	**Sources**
Pretest	Respondents' intention to use pretest in e-trust building.	2	Mick and Fournier, 1998; Pennanen, 2006
Exploration of warranties	Respondent's intention to explore warranties in e-trust building.	3	Mick and Fournier, 1998; Pennanen, 2006; Van den Poel and Leunis, 1996
Extended decision-making	Respondent's intention to use extended decision-making in e-trust building.	7	Cho and Lee, 2006; Mick and Fournier, 1998; Pennanen, 2006; Smith et al., 2005

Reliability and manipulation check

The constructs' reliability was measured using Cronbach's alpha. The Cronbach's alpha for the interpersonal e-trustworthiness was 0.971, for the institutional e-trustworthiness 0.942, for the pretest 0.704, for the exploration of warranties 0.778 and for the extended decision-making 0.845. All alphas indicated acceptable construct reliability (Nunnally and Bernstein, 1994).

Measuring respondents' perception of e-trustworthiness after reading the scenario checked manipulation's success. The means were the following, G1 (Minterp.=5,4385, Minstit.=5,0778), G2 (Minterp.=4,4643, Minstit.=3,8491), G3 (Minterp.=2,5595, Minstit.=2,6609) and G4 (Minterp.=1,8641, Minstit.=1,6803). The differences between the groups are statistically significant; interpersonal e-trustworthiness $F_{(1,037)}=120,835$, $p<.001$ and institutional e-trustworthiness $F_{(1,125)}=91,895$, $p<.001$. Overall, the result of the manipulation check indicates the success of manipulation.

Results

Starting with the pretest, the results of our study related to the consumers' intention to use individual mechanisms to build e-trust are presented in this chapter. One-way ANOVA was applied to analyse the data in order to explore the differences between the groups.

Pretest. The means for the respondents' intention to pretest were G1 (M=4,4444), G2 (M=4,8019), G3 (M=5,5603) and G4 (M=5,7143). The results of the analysis confirmed that there exists a significant difference between the groups, $F_{(1,800)}=10,034$, $p<.001$.

Tukey HSD post hoc-test was used to analyse the differences between single groups. Results show that there exist significant differences between G1-G3, G1-G4, G2-G3 and G2-G4. However, no significant differences were found between G1-G2 and G3-G4 (see Table 4.).

Table 4.   Differences between the groups in intention to pretest.

Group	Mean, intention to pretest	Group	Mean, intention to pretest	sig.
G1 (++)	4,4444	G2 (+-)	4,8019	p=0.555
G1 (++)	4,4444	G3 (-+)	5,5603	**p<0.001**
G1 (++)	4,4444	G4 (--)	5,7143	**p<0.001**
G2 (+-)	4,8019	G3 (-+)	5,5603	**p=0.017**
G2 (+-)	4,8019	G4 (--)	5,7143	**p=0.004**
G3 (-+)	5,5603	G4 (--)	5,7143	p=0.935

The results suggest that respondents' intention to pretest decreases when interpersonal e-trustworthiness is perceived positively and increases when interpersonal e-trustworthiness is perceived negatively. Institutional e-trustworthiness does not have a similar effect. No significant difference is found even between G3-G4, although in G4 both interpersonal and institutional e-trustworthiness was perceived negatively, while in G3 institutional e-trustworthiness was perceived positively. Moreover, institutional e-trustworthiness does not have a significant effect on respondents' intention to pretest between G1-G2 either, which indicates that the perceived institutional e-trustworthiness does not have significant effect on consumers' intention to pretest.

Exploration of warranties. The means for respondents' intention to explore warranties were G1 (M=5,3778), G2 (M=5,6538), G3 (M=6,0119) and G4 (M=6,1111). The results of the analysis confirmed that there exists a significant differences between the groups, $F_{(0,965)}=5,626$, $p=0.001$.

The Tukey HSD post hoc-test shows that significant differences exist between G1-G3 and G1-G4. Weak significance was found between G2-G4 (see Table 5.).

Table 5.   Differences between the groups in intention to explore warranties.

Group	Mean, intention to explore warranties	Group	Mean, intention to explore warranties	sig.
G1 (++)	5,3778	G2 (+-)	5,6538	p=0.513
G1 (++)	5,3778	G3 (-+)	6,0119	**p=0.008**
G1 (++)	5,3778	G4 (--)	6,1111	**p=0.002**
G2 (+-)	5,6538	G3 (-+)	6,0119	p=0.235
G2 (+-)	5,6538	G4 (--)	6,1111	***p=0.096***
G3 (-+)	6,0119	G4 (--)	6,1111	p=0.956

Respondents' intentions to explore warranties are partially in line with the pretesting. The perceived institutional e-trustworthiness does not have as strong an effect on respondents' e-trust building behaviour as the perceived interpersonal e-trustworthiness does. A significant difference exists only between G1-G3 and G1-G4. However, between G2-G4 there is a weak significance, which indicates an interpersonal e-trustworthiness bias. Between G1-G2 and G3-G4 the results are in line with pretesting.

Extended decision-making. The means for respondents' intentions to extended their decision-making were the following: G1 (M=4,6190), G2 (M=5,1317), G3 (M=5,2180) and G4 (M=5,4643). The results of the variance analysis confirmed that there were significant differences between the groups, $F(1,167)=5,008$, p=.002.

Tukey HSD post hoc-test was used to analyse the differences between the individual groups. Results showed that significant differences exist between G1-G3 and G1-G4. Weak significance was found between G1-G2 (see Table 6.).

Table 6.   Differences between the groups in intention to extend decision-making.

Group	Mean, intention to extend decision-making	Group	Mean, intention to extend decision-making	sig.
G1 (++)	4,6190	G2 (+-)	5,1317	***p=0.097***
G1 (++)	4,6190	G3 (-+)	5,5603	**p=0.030**
G1 (++)	4,6190	G4 (--)	5,4643	**p=0.001**
G2 (+-)	5,1317	G3 (-+)	5,2180	p=0.976
G2 (+-)	5,1317	G4 (--)	5,4643	p=0.421
G3 (-+)	5,2180	G4 (--)	5,4643	p=0.651

Table 6 shows that respondents' intention to use extended decision-making to build e-trust cautiously indicates that the perceived institutional e-trustworthiness does not have as strong effect on consumer e-trust building behaviour as the perceived interpersonal e-trustworthiness does. However, the results are not in line with the previous two mechanisms. It seems that the effect of perceived interpersonal e-trustworthiness is not as strong as was the case with pretesting and exploration of warranties. This may mean that, in terms of e-trust building, extended decision-making is not as relevant for respondents as pretesting and exploring of warranties.

Overall, the above results indicate the importance of perceived interpersonal e-trustworthiness and that the pretesting is considered as the most important e-trust building mechanism among the respondents, since its usage generated statistically significant differences among several groups. Especially pretesting was considered as important when interpersonal e-trustworthiness was perceived negatively. In the case of the other mechanisms, similar effects seemed to exist but they were not as strong.

In terms of the dominance of interpersonal e-trustworthiness in consumer e-trust building, we decided to achieve a more general view on the issue by combining all the three individual e-trust building mechanisms in one item to measure respondents' overall intention to build e-trust. More specifically, we summed the scores of pretest, exploration of warranties and extended decision-making in every group to reveal if there exists any statistically significant differences between the groups.

The means for the overall intention to build e-trust were: G1 (M=4,8138), G2 (M=5,1946), G3 (M=5,6026) and G4 (M=5,7761). The result of the analysis confirmed that there exist significant differences between the groups, $F_{(1,063)}=8,222$, $p<.001$.

Tukey HSD post-hoc test was used to analyse the differences between the individual groups. The results of the analysis reveal statistically significant differences between G1-G3, G1-G4 and G2-G4. More specific results are presented in Table 7.

Table 7.   Differences between the groups in overall intention to build e-
               trust.

Group	Mean, overall intention to build e-trust	Group	Mean, overall intention to build e-trust	sig.
G1 (++)	4,8138	G2 (+-)	5,1946	p=0.278
G1 (++)	4,8138	G3 (-+)	5,6026	**p=0.001**
G1 (++)	4,8138	G4 (--)	5,7761	**p<0.001**
G2 (+-)	5,1946	G3 (-+)	5,6026	p=0.179
G2 (+-)	5,1946	G4 (--)	5,7761	**p=0.031**
G3 (-+)	5,6026	G4 (--)	5,7761	p=0.830

The results indicate that positively perceived interpersonal e-trustworthiness
reduces consumers need to build e-trust. In contrast, no significant effect in
consumer overall intention to build e-trust was found between G3-G4 and G1-G2,
which indicates that the institutional e-trustworthiness does not decrease or
increase consumers' intention to build e-trust. Thus, the results support the idea
that the perceived institutional e-trustworthiness is not as significant for
consumers as the perceived interpersonal e-trustworthiness.

Conclusion and limitations

In the beginning of this article, two major problems related to current e-trust
research were pointed out. This study fosters the current understanding on how
consumer e-trust develops and also suggests that the relative role of interpersonal
and institutional e-trustworthiness as equal contributors to consumer overall e-
trust should be reconsidered.

Three major results of the study can be highlighted. Firstly, the respondents'
usage of three different e-trust building mechanisms to evaluate the
trustworthiness of e-commerce varied significantly. Thus, the results provide
support for the findings of the previous, mainly qualitative, studies done in the e-
commerce context (e.g. Pennanen, 2006; Pennanen et al., 2007; Yang et al., 2006)
and support also conventional trust studies (e.g. Doney and Cannon, 1997; Lewis
and Weigert, 1985) which emphasise cognitive trust building, indicating that the
development of consumer e-trust is not only based on the signals the trustee
sends, but also on consumers' active e-trust building efforts. When these results
are compared with the existing e-trust literature where consumer e-trust is
explained as a result of trustee's characteristics (e.g. Gefen et al, 2003; Jarvenpaa
et al., 2000; McKnight et al. 2002; Tan and Sutherland, 2004), it can be seen that
the results of the study produce new insights concerning consumers' e-trust
development. Thus, in future research, the overall development of consumer e-

trust should be understood as a function of both consumer's and trustee's behaviour.

Secondly, the prevalent view on consumer e-trust development acknowledges interpersonal and institutional e-trustworthiness as equal contributors to consumer e-trust (Gefen et al., 2003; McKnight et al., 2002; Tan and Sutherland, 2004). Results of the current study indicate that the situation may not be this simple. According to the present results, the perceived interpersonal e-trustworthiness seemed to predominate over the perceived institutional e-trustworthiness. More specifically, positively perceived interpersonal e-trustworthiness decreased and negatively perceived interpersonal e-trustworthiness increased consumers' intention to build e-trust. This effect was not found in terms of institutional e-trustworthiness. One way to explain the results is to argue that the consumers are aware of the technological hazards related to the Internet (e.g. viruses) and that the risk of becoming a victim of some technological flaw is mainly present while using the e-services provided by suspicious e-vendors. In a case of a trustworthy e-vendor, consumers might assume that the technology works sufficiently due to the e-vendor, even if there exist signs that could generate some doubts (as was the case in scenario 2). This implies that the perception of institutional e-trustworthiness is important to consumers but it might also be dependent on the perception of interpersonal e-trustworthiness. Thus, these issues deserve more attention in future studies in order to verify the ideas.

Thirdly, in terms of consumers' intentions to use individual e-trust building mechanisms, the results show that the intention to use pretesting varied significantly in four out of six different relationships between the groups. The intention to extend decision-making and explore warranties varied significantly only in two out of six relationships, although the means revealed some differences. This indicates that consumers could favour capability process over transference process in e-commerce. This result is in conflict with some previous studies that emphasize the importance of third party testimonials for consumers to make e-trusting decisions (e.g. Cho and Lee, 2006). One explanation for the situation might be that, in overall, trust in such testimonials might be reduced due to their vast amount and because the logos of trusted third parties can be relatively easy included in the web site even if the trusted third party does not co-operate with the e-vendor. Still, what is interesting is that friends' advices, professionals' opinions or articles published in newspapers did not seem to be important for consumers. This raises questions regarding the ideas of transference trust building in e-commerce context and obviously requires more attention in the future studies.

The present study has a few limitations. Firstly, it is noteworthy to mention that the explanations made above regarding the study's results should not be treated as facts based on statistical tests but as interpretations made by the author based on the indications of variance analysis results. Secondly, larger group sample sizes could have produced more statistically significant results. Thirdly, using college students as respondents jeopardises the generalisation of the results, although students are seen to represent the general population well in e-trust studies (Gefen and Straub, 2004). Finally, in this study the strong manipulations were used in order to create an image of extremely positive or negative interpersonal or institutional e-trustworthiness conditions in respondents' minds. For that reason, the results obtained in this study could not be directly transferred to real life situations.

Managerial implications

Trust is an important phenomenon for every individual, but especially for e-vendors. As our results indicate, consumer trust in an e-vendor is of importance for consumers, while their trust in technology or the society in which the e-vendor operates is not as important. Thus, e-vendors should understand that actions, which increase their trustworthiness in consumers' minds are mandatory, as the previous studies related to consumer e-trust have emphasised. However, in order to gain a competitive advantage, e-vendors should understand that also consumers are active e-trust builders. To utilise consumers' e-trust building behaviours, e-vendors should make consumers' evaluations of trustworthiness as easy as possible. In practice, this means, for example, giving a consumer an opportunity to test e-vendors' service prior to any registration. Most of the consumers are strict about their privacy and reluctant to register before they are given an opportunity to familiarise themselves with the e-vendor. Denying this may lead them to use competitors' e-services.

Moreover, e-vendors should emphasize their own trustworthiness. It seems that the third-party recommendations such as "verified by Visa" do not convince consumers about the trustworthiness of an e-vendor. This means, if an e-vendor is not perceived as trustworthy, societal references or other institutional aspects of e-commerce do not convince consumers about an e-vendor's trustworthiness. Thus, e-vendors should always act as a competent, benevolent and honest e-vendor acts. The third-party recommendations from other institutions do not help an untrustworthy e-vendor.

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Appendix 1. Statements used in the scenarios.

Positive statements

Interpersonal e-trustworthiness statements:

Excellent payment methods (Pennanen and Paakki, 2007)

…Jaakko notices the vast amount of different payment methods. The products can be paid via credit card, bank transfer or cash on delivery. Jaakko is glad because he does not like to use credit card online…

Possibility to change the content of delivery (Pennanen and Paakki, 2007)

…Jaakko notices that Computer Shop Inc. allows customer to change the content of delivery…

Competitive price setting (Pennanen and Paakki, 2007)

…Jaakko notices that Computer Shop Inc's prices seem competitive when compared with a well-known household appliance seller…

E-vendor advises how to operate in problematic situations (Garbarino and Lee, 2003)

E-vendor gives information on how the ordering process develops (Garbarino and Lee, 2003)

…After screening the delivery and payment methods, Jaakko clicks "Good to Know when You Order"-link and finds a detailed explanation regarding the delivery. He finds out that, after the order, he receives a confirmation letter in his e-mail which includes the details about the products he has bought, price information, information about the delivery- and payment methods and information about the exact time and place of the delivery. The site also emphasises that if Jaakko

does not receive the order confirmation within 24 hrs he should immediately contact the customer service because it is possible that there has occurred some technical flaws in the delivery system…

Many methods for delivery (Pennanen and Paakki, 2007)

…Jaakko notices that Computer Shop Inc. offers a wide range of delivery methods, for example delivery to Jaakko's home, delivery to the nearest post office or delivery to address which Jaakko finds the most comfortable…

Right to return products, warranties and fast delivery time (Pennanen and Paakki, 2007)

...While scrolling the page, Jaakko notices a link which routes to an explanation regarding warranties and rights to return the products. In a case of computer the warranty is effective for three years and the delivery time seems to be 7 days. He also finds out that he has 2 week time to return the computer if he is not satisfied with it…

Broad range of products (Jarvenpaa et al., 2000)

...Jaakko considers the range of products considerably broad; Computer Shop Inc. provides computers from several well-known manufacturers. They also deliver computers which they assemble individually for every customer...

Registration not mandatory (Garbarino and Lee, 2003)

…Jaakko is positively surprised because he does not have to register to make an order. Based on his prior experiences he anticipated that he should, again, create a new username and password which he would forget in a few weeks…

Information about the e-vendor (Pennanen and Paakki, 2007)

...Jaakko finds the contact information relatively easy; the link to contact information is in a visible place in the Computer Shop Inc's. home page. He finds out that Computer Shop Inc. is Finnish and it has a physical store in Kamppi Shopping Center in the downtown Helsinki. Contact information also include company's phone number, the name and photo of the CEO and his personal cell phone number…

Institutional e-trustworthiness statements:

No technological faults (Tan and Sutherland, 2004)

…Jaakko wonders how well the company's web site operates. "Usually there is some flaws or the site does not load correctly or something else is wrong", he thinks…

Third-party recommendations (McKnight et al., 2002)

Consumer privacy is protected (Cheung and Lee, 2006)

Verified by visa (Tan and Sutherland, 2004)

…After examining the site a bit longer, Jaakko notices a yellow lock in the right down corner of his browser. He remembers that he just read customer information from Osuuspankki (a well-known Finnish bank) which emphasised that the yellow lock means that the connection between the service provider and customer is secured. Jaakko also notices the Verified by Visa-sign in the top right corner of the web site…

Domestic e-vendor➔ domestic laws are applicable (Pennanen, 2006)

…Jaakko finds the contact information relatively easy; the link to contact information is in a visible place in the Computer Shop Inc's. home page. He finds out that Computer Shop Inc. is Finnish and it has a physical store in Kamppi Shopping Center in the downtown Helsinki…

Negative statements

Interpersonal e-trustworthiness statements:

Vague paying methods (Pennanen and Paakki, 2007)

…Jaakko notices that Computer Shop Inc. provides few paying methods. Credit card seems to be the only option…

No possibility to change the content of delivery (Pennanen and Paakki, 2007)

…Jaakko notices that the company does not clearly inform whether he can change the delivery…

Uncompetitive price setting (Pennanen and Paakki, 2007)

…Jaakko considers that the prices of the products are not competitive, especially when he compares them with a well-known household appliance seller…

E-vendor does not give advices how to operate in problematic situations (Garbarino and Lee, 2003)

E-vendor does not give information on how the ordering process develops (Garbarino and Lee, 2003)

…After screening the delivery and payment methods, Jaakko looks for information about the ordering process. He is especially interested to know if the order is confirmed and how he should act if some problems would occur. He finds a "Good to Know when You Order"-link and clicks it.

However, he finds that the company mainly emphasises the importance of paying the products but no other information is provided…

Vague methods for delivery (Pennanen and Paakki, 2007)

…Before making purchase decision, Jaakko is interested to get familiar with the delivery methods. He discovers "Delivery Methods"-link and clicks it. It seems that Computer Shop Inc. provides only one method for delivery; delivery to the nearest post office…

No right to return products, no warranties and slow delivery time (Pennanen and Paakki, 2007)

…Jaakko is also interest in warranty, delivery time and the right to return the products. Regardless his resilient efforts, he does not find any specific information. In terms of warranty and right to return products, he does not find any information. In terms of delivery time, it seems that it will take four weeks to get the computer…

Narrow range of products (Jarvenpaa et al., 2000)

…Jaakko finds Computer Shop Inc's. range of products quite narrow; they only offer computers from two unknown manufacturers…

Registration mandatory (Garbarino and Lee, 2003)

…Jaakko gets familiar with the ordering process. Firstly he tries to add computer in shopping cart. However, it seems impossible because the service requires registration before ordering, or even testing the service, is possible. He is frustrated because he has to make a new username and password which he would forget in a few weeks…

No information about the e-vendor (Pennanen and Paakki, 2007)

…Jaakko looks for the information about the company. He discovers that the contact information can be found behind a link which is located in company's home page. Jaakko is a bit amazed because, in addition to Computer Shop Inc's. address, he can only find an e-mail address. For some reason, the company does not provide phone number or the employees' names…

Institutional e-trustworthiness statements:

Privacy in jeopardy (Cheung and Lee, 2006)

Not verified by visa (Tan and Sutherland, 2004)

…Jaakko is asked to give his personal information such as name, address, phone number and e-mail address. He is a bit concerned about giving his information and he decides to take a closer

look into the web site. He also remembers that he read a customer information from Osuuspankki (a well-known bank in Finland) which emphasised that there should be a yellow lock in the down right corner of the browser which indicates secure connection between the service provider and customer. For some reason, he can't find the yellow lock. He also notices that, although the only option to pay products is credit card, he cannot find "Verfied by Visa"-symbol…

Technological faults (Tan and Sutherland, 2004)

…While searching for information Jaakko clicks the "Good to Know when You Order"-link. However, only a white page with text "Internal Server Error" appears. Jaakko is a bit frustrated and pushes the refresh-button several times and finally the right page opens…

Third party warnings (McKnight et al., 2002)

…Jaakko has read newspaper articles which warn that buying online could be risky, some people have become the victims of different scams. Also credit card numbers have been stolen…

…Suddenly Jaakko remembers Kymmenen Uutiset (evening news in Finland). In the news broadcast an ICT professional, some sort of professor, if Jaakko remembers correctly, warned consumers about the hazards related to online shopping…

Foreign e-vendor→ domestic laws might not be applicable (Pennanen, 2006)

…Based on the contact information Jaakko finds out that, despite the Computer Shop Inc. has Finnish web sites, the company seems to be a foreign one…

Appendix 2. Measures used in the study.

Interpersonal trustworthiness

Competence

1. I expect that deliveries from Computer Shop Inc. are correct and arrive on time

2. I expect that Computer Shop Inc. knows how to provide excellent service

3. I expect that Computer Shop Inc. is competent

4. I expect that Computer Shop Inc. understands the market they work in

Benevolence

1. I expect that Computer Shop inc. intentions are benevolent

2. I expect that I can count on Computer Shop Inc. to consider how its actions affect me

3. I expect that Computer Shop Inc. have good intentions toward me

Integrity

1. I expect that Computer Shop Inc. have practices that favour the customer's best interest

2. I expect that Computer Shop Inc. have practices that indicate respect for the customers

3. I expect that promises made by Computer Shop Inc. are likely to be reliable

4. I do not count the honesty of Computer Shop Inc.

5. I expect that the promises made by Computer Shop Inc. are likely to be reliable

Institutional trustworthiness

1. I feel assured that legal and technological structures adequately protect me from problems on buying on the Internet

2. The existing law is adequate for the protection of my interest

3. I feel confident that encryption and other technological advances on the Internet make it safe for me to do business there

4. In general, the Internet is now a robust and safe environment in which to transact business

5. I expect that the Computer Shop Inc. existing business code of conduct is sufficient for the protection of my interest

6. The Internet has enough safeguards to make me feel comfortable using it to transact personal business

Intention to build e-trust

Pretesting

1. I would like to test Computer Shop Inc. service in detail before making the final buying decision

2. I would like to test Computer Shop Inc. technology in detail before making the final buying decision

Exploration of warranties

1. I would like to explore if consumer protection law protects Consumer Shop Inc. customers before making the final buying decision

2. I would like to explore if Consumer Shop Inc. offers guarantees to its customers before making the final buying decision

3. I would like to hear some trusted third party's recommendation about Computer Shop Inc. before making the final buying decision

Extended decision-making

1. I would like to search information from the Internet related to the technology described in the scenario before making the final buying decision

2. I would like to ask my friends' opinions related to Computer Shop Inc. before making the final buying decision

3. I would like to hear professional's opinion about the Computer Shop Inc. before making the final buying decision

4. I would like to search information from newspapers related to the technology described in the scenario before making the final buying decision

5. I would like to search information from newspapers related to the Computer Shop Inc. before making the final buying decision

6. I would like to ask my friends' opinions related to the technology described in the scenario before making the final buying decision

7. I would like to hear professional's opinion about the technology described in the scenario before making the final buying decision

Consumers' Initial e-Trust Building Process: Development of An Integrative Model and Research Propositions

Kyösti Pennanen

University of Vaasa, Finland

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 Kacmar 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 asses 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).
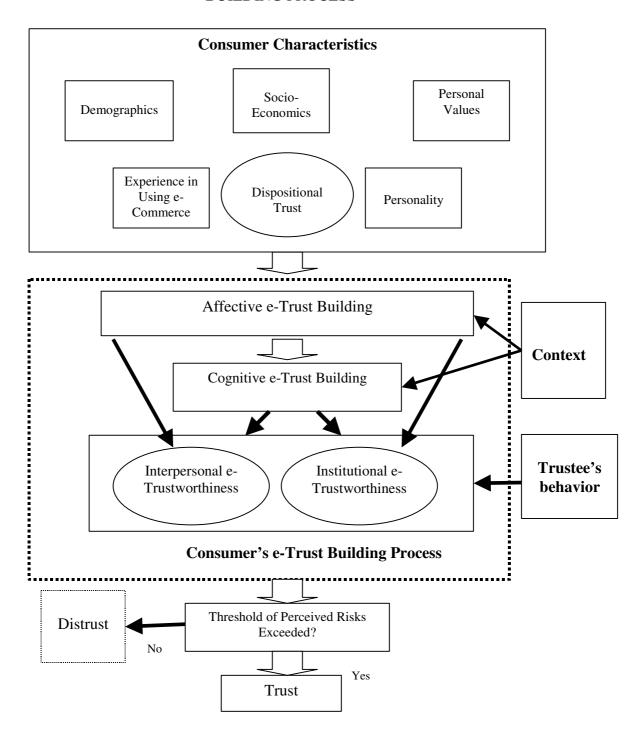
Mayer et al. (1995, 712) argue that trust is "…the willingness of a party to be vulnerable to the actions of another party..." This willingness to be vulnerable means willingness to engage in a relationship including an element of uncertainty. Thus, *perceived risks* could be seen as the antecedents 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*.

FIGURE 1
AN INTEGRATIVE MODEL FOR CONSUMERS' INITIAL E-TRUST
BUILDING PROCESS

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 decision-making (Hoch and Loewenstein 1991). However, numerous studies suggest that also affective processes have influence on consumer decision-making (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 trustworthier than the foreign ones. Following this, we argue that the society in which the e-vendor operates or the language used in 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 s(he) 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 extended maintenance contract (Mick and Fournier 1988). According to Mick and Fournier (1998), extended warranty and maintenance contract 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 trustee'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 decision-making literature emphasizes that consumers' decision-making 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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