Consumer Trust towards an Unfamiliar Web Merchant

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CONSUMER TRUST TOWARDS AN UNFAMILIAR WEB MERCHANT

Abstract

Our research intends to provide a general better understanding of consumer on-line purchasing behaviour. This paper examines consumers’ perception of a web merchant trustworthiness within the framework of signaling theory. Although consumer researchers were interested in a numerous economic theories (transaction cost theory, agency theory,…), little attention has been given to the signaling theory (Boulding and Kirmani, 1993). Signaling mechanisms could be, however, relevant to predict consumer behaviour under conditions of information asymmetry. The focus of this study is consumers’ response to three types of potential signals: word of mouth, trust seals and testimonies of satisfied past-buyers.

Key words : consumer trust , signaling theory, web merchant.

PROPOSITION D’UN MODÈLE CONCEPTUEL DE LA CONFIANCE DU CONSOMMATEUR VIS-À-VIS D’UN MARCHAND ÉLECTRONIQUE : UNE APPROCHE PAR LE RÔLE DES TIERS

Résumé

Ce travail s’inscrit dans le cadre général d’une meilleure compréhension du comportement du consommateur sur Internet. Il propose d’étudier certains facteurs influençant la perception de la confiance du consommateur vis-à-vis d’un marchand électronique avec lequel il n’est pas familier. Pour ce faire, des travaux sur la théorie du signal ont été mobilisés. En effet, nous postulons que l’étude des signaux émis par des tiers (amis, organismes experts, …) peut apporter un éclairage nouveau à la compréhension des mécanismes sous-tendant la génération de la confiance. Plus précisément, nous nous focalisons sur l’étude de quatre types de signaux : le bouche à oreille, les labels de confiance, les témoignages d’anciens acheteurs et les sites partenaires.

Mots clés : confiance du consommateur, théorie du signal, marchand électronique.
Introduction

Lack of trust has been identified as the major barrier to the growth of electronic commerce (Jarvenpaa and Tractinsky, 1999; Hoffman and Novak, 1999; Gefen, 2000; Lee and Turban, 2001; Luo, 2002; Mcknight and al., 2002; Yoon, 2002, Stewart, 2003, Pavlou, 2003). Therefore, if trust is a *sine qua non* condition of e-commerce development, then understanding its determinants should be a primary concern for web merchants. Building trust is essential for the success of electronic vendors especially less known ones.

Our research intends to provide a better understanding of trust determinants within the context of business to consumer e-commerce. More specifically, it will focus on the role of the third parties in trust building. Indeed, while the majority of recent researches were interested in the role of web merchant characteristics (e.g., company awareness (Yoon, 2002)) and web site characteristics (e.g., site quality (Mcknight and al., 2002)), little attention has been given to the role of third parties (i.e., friends, expert organisms, past buyers). These actors could play, however, a key role in trust development mainly when the consumer is not familiar with the web merchant. Fundamental to our analysis is the use of the signaling theory. For Kirmani and Rao (2000), signaling could be an effective strategy under the condition of incomplete information. A marketing literature review shows that no research has studied trust from a signaling perspective. We argue, however, that the signaling theory could be relevant to enhance our understanding of trust building mechanisms. Indeed, when pre-purchase information is relatively scarce, consumers look for signals to make inferences about the vendors’ credibility.

Different signals provided by third parties could enhance consumer trust. As shown in table 1, in this research, we will focus particularly on three potential signals of the web merchant trustworthiness: word of mouth (interpersonal communications), trust seals (awarded by a third party organisation) and satisfied past buyers testimonies (selected by the web merchant and affixed on the web site).

<table>
<thead>
<tr>
<th>Signals</th>
<th>Information source</th>
<th>Nature of the information source</th>
</tr>
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<tbody>
<tr>
<td>Word of mouth</td>
<td>Friends, Family</td>
<td>Interpersonal</td>
</tr>
<tr>
<td>Trust seal</td>
<td>Third party organisations</td>
<td>Institutional</td>
</tr>
<tr>
<td>Past buyers’ testimonies reported by the vendor on the web site</td>
<td>Past shoppers</td>
<td>Commercial</td>
</tr>
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</table>

Table 1: Potential signals of a web merchant trustworthiness

Precisely, through this research we intend to answer the following key research questions: Do signaling mechanisms have an effective role in building consumer trust towards an unfamiliar web merchant? Which individual variables could moderate this role? Does the consumer’s trust have a significant effect on behavioural intentions (the intention to purchase from the web site and the intention to recommend the web site)?

Hence, the aim of this paper is to develop a theoretical model that examines consumers’ perceptions of trust when interacting with an unfamiliar web merchant. It is particularly focused on the effect of “signals” as mechanisms conveying web vendor trustworthiness.
The remainder of this paper is divided into three sections. Section 1 proposes, first, a short literature overview of the trust conceptualisation in marketing. Next, it depicts the theoretical foundations of the research. Section 2 provides the conceptual development and the underlying propositions. Section 3 depicts succinctly the research methodology.

I. Theoretical background

I.1. Trust conceptualisation in marketing

I.1.1. Literature overview

In marketing literature, trust has been defined in many different ways: as a presumption, an expectation, a belief, a willingness (a behavioural intention) and as a behaviour. With such a diversity of definitions, it becomes important to clarify the conceptualisation of trust. One suggestion is to identify a definitions’ taxonomy. Previous researches have identified two main approaches of trust: “trust as a cognitive expectation or an affective sentiment and trust as a risk taking behaviour or a willingness to engage in such a behaviour” (Smith and Barclay, 1997, p.5). Based on this statement, we propose a definitions’ taxonomy contrasting trust as a psychological state (expectation, presumption, belief) preceding the behavioural components with trust as an intention or as a behaviour.

Trust as a psychological state

This stream of researches regards trust as a psychological state that precedes behavioural intentions and behaviours. Such a state can be a presumption (e.g., Gurviez and Korchia, 2002; Bidault and Jarillo, 1995), an expectation (e.g., Sirdeshmukh, Singh and Sabol, 2002; Perrien Graf, Ricard and Landry, 1999) or a belief (e.g., Anderson and Narus, 1990; Ganesan,1994). In this class of definitions, conative dimensions are disregarded. Indeed, according to Morgan and Hunt (1994), the trust concept should not encompass behavioural intentions (and behaviours). For these authors, intentions and behaviours are considered as trust consequences, they must be then evacuated from trust conceptualisation. Furthermore, an examination of these definitions shows an implicit or explicit reference to the notion of expectations. Even when it is not regarded as an expectation, trust is defined as a presumption or a belief in reference to expectations about the exchange partner (e.g., Gurviez, 2000; Frisou, 2000).

Trust as a behavioural intention or a behaviour

In this second class of definitions, a conative conception of trust is advocated. Thus, trust was defined as an action (Deutsch, 1962), a willingness to be vulnerable (Mayer, Davis and Schoorman, 1995) or as a willingness to rely on the exchange partner (e.g., Moorman, Deshpande and Zaltman, 1992 ; Chaudhuri and Holbrook, 2001). Most of these researches have underlined the importance of the vulnerability notion. For instance, according to Moorman, Deshpande and Zaltman (1992, p.82), “without vulnerability, trust is unnecessary”. Since it implies an exposure to a potential harm (Bigley and Pearce, 1998), vulnerability becomes stronger in high risky contexts.

In a nutshell, the examination of trust definitions highlights the importance of expectations and vulnerability as crucial components in trust conceptualisation.
I.1.2. Proposition of a trust definition within an electronic commerce context

Following the research stream which specified trust as a psychological state preceding the behavioural components, we define trust as an expectation. Indeed, in accordance with Morgan and Hunt (1994), we consider that behavioural intentions and behaviours are a result and not a part of the trust definition. So, we propose to define trust towards an e-vendor as the expectancy that the web merchant will not exploit the consumer vulnerability and will fulfill engagements promised on the web site. Because purchasing on-line is still considered as a high risky decision, consumers tend to be more vulnerable and need more assurance. Moreover and in line with previous researches, the proposed definition highlights the importance of expectations and vulnerability.

I.2. Theoretical foundation : A signaling approach

Researches on economics of information are based on the well recognized assumption of information asymmetry between transacting parties (Akerlof, 1970). The signaling approach, proposed by Spence (1973, 1974), is one solution to overcome this problem. When adopting a signaling strategy, actors can communicate unobservable elements (e.g., product/service quality, vendor trustworthiness) by providing observable ones: signals. We adopt this perspective in our research.

As highlighted earlier, the primary objective of our study is to examine the impact of a number of signals on the consumer trust within the context of on-line transactions. Specifically, we will focus on trust in an unfamiliar web merchant (i.e., a merchant with whom the consumer has no prior interaction). In such a situation, the information asymmetry between the buyer (the consumer) and the seller (the web vendor) is important. Indeed, without previous experiences with the vendor, assessment of the web merchant trustworthiness seems to be difficult. Signals are proposed to be a potential solution to resolve the problem of taking a decision under the condition of incomplete information (Boulding and Kirmani, 1993). Within the context of product quality research, a signal was identified as “an action that the seller can take to convey information credibly about an unobservable product quality to the buyer” (Rao, Qu and Ruekert, 1999, p. 259). Hence, signals could be perceived as actions taken to reveal information regarding an unobservable state (such as the product quality or the web vendor credibility). According to Kirmani and Rao (2000), signaling is appropriated and particularly effective when the consumer is not familiar with the product or with the firm. Given that consumers lack information, they use cognitive shortcuts to make inferences about the vendor (Kirmani and Rao, 2000). These inferences are made from the information provided by the seller. Under these conditions, it is in the interest of the merchant to send pre-purchase signals about his trustworthiness.

II. Conceptual development

This paper develops a cognitive model of trust building arguing that trust can be inferred from signals provided by third parties. In this research, we will focus on three types of signals: word of mouth, third party trust seals and testimonies of past buyers.
II.1. Antecedents and consequences of consumer trust

Word of mouth

In marketing literature word of mouth (WOM) was identified as a powerful communication tool (Katz and Lazarsfeld, 1955). Indeed, consumers tend to rely on personal sources when making purchase decision (Bansal and Voyer, 2000). Because of its high level of credibility, WOM (compared to commercial sources) is “highly persuasive and extremely effective” (Bristor, 1990). WOM is especially influential in a high risk purchase situation (Still, Barnes and Kooyman, 1987). It has been identified by Roselius (1971) as one of the risk relievers. When a purchase decision is associated with a high perceived risk, consumers try to cope with uncertainty by seeking information from an experienced source (Bansal and Voyer, 2000). Since purchasing on-line is perceived as a risky decision, we assume that positive WOM regarding an unfamiliar web merchant will be an effective signal of its trustworthiness.

Proposition 1: Positive WOM will have a positive impact on consumer trust towards an unfamiliar web merchant.

Furthermore, despite a wide literature dealing with the WOM concept, little attention has been given to its impact on consumer trust. Researchers have rather focused on the direct effect of WOM on the purchase decision (e.g., Dianne, Cermak and Prince, 1994). In this research, we postulate however that such an effect will be mediated by trust. Finally, because consumers both rely on WOM and could provide it, it is relevant to examine WOM not only as an input but also as an output (Dianne, Cermak and Prince, 1994). On the one hand, consumers who received positive WOM feel more confident about the vendor (WOM as an input). On the other, consumers who trust a web merchant are more likely to recommend the site to others (WOM as an output).

Proposition 2: Consumer trust towards an unfamiliar web merchant will have positive impact on the intention to recommend the web site.

Third party trust seals

Marketing researchers have been showing interest in third party endorsement seals for over 40 years (e.g., Taylor, 1958). A literature overview shows that empirical findings are controversial regarding seals effectiveness (Beltramini and Stafford, 1993; Lala, Arnold, Sutton and Guan, 2002). Most authors support, however, the assertion of a positive impact of third party seals on consumer behaviour (i.e., product choice, purchase intention). Because they are delivered by experts and independent institutions, seals of approval may be very effective in communications (Parkinson, 1975). In advertising literature, Dean and Biswas (2001) found that third party organisation endorsements outperform celebrity endorsements for expensive and utilitarian products. Consistent with Friedman and Friedman’s research (1979), the authors demonstrate that third party organisation endorsements are especially useful for products with high financial risk. Hence, in a risky context, third party seals can provide assurance for potential buyers.

Within an Internet context, when a web merchant is awarded an assurance seal, it implies that the web site follows a number of principles and recommendations stipulated by the third party having delivered the seal (Gobert and Salaun, 1999). These principles can cover a variety of applications such as: transaction payment security, privacy protection and vendor
authentication. Trust seals connote a certain level of credibility that may influence consumers’ trust (Endeshaw, 2001). Thus, when a third party seal is affixed on a web site, consumers are more likely to trust the Internet store. According to Palmer, Bailey and Faraj (2000), the use of trusted third parties increases consumers’ trust. In line with this suggestion, we postulate that third party trust seals enhance the consumer’s trust towards a web vendor.

**Proposition 3 : The presence of a third party trust seal has a positive impact on consumer’s trust towards an unfamiliar web merchant.**

**Past buyers’ testimonies affixed on the web site**

In marketing, testimonials were mainly studied within the framework of endorsement literature. Friedman and Friedman (1979) have identified three basic types of endorsers: celebrities, experts and typical consumers. A typical consumer endorser was defined as “an ordinary person who is expected to have no special knowledge of the product class endorsed except that acquired by normal use of the product” (Friedman and Friedman, 1979, p.63). He may exert an influence on consumers through the identification process (perceived similarity) and through the expertise dimension (previous experience with the product). At the theoretical level, consumers’ testimonies selected by the web merchant and affixed on the web site appear to be closely related to endorsement of typical consumers.

Hence, through this research, we will investigate the effectiveness of satisfied consumers’ testimonies as a signal of the web merchant trustworthiness. We assume that testimonies of past buyers will increase consumer trust towards an unfamiliar web vendor. However, a number of consumers may do not believe them since they could be manipulated by the web merchant. So, in order to assess the real effectiveness of the use of the “testimonial approach” as a promotional tool, we propose to test the following assertion:

**Proposition 4 : Testimonies of satisfied past buyers have a positive impact on consumer’s trust towards an unfamiliar web merchant.**

**Online purchase intention**

Although a large number of researches have investigated the relation between satisfaction and consumer’s purchase intention, few studies have examined the effect of trust on the buying intention within the context of consumer markets (Yoon, 2002). Conversely to Jarvenpaa and Tractinsky (1999), we postulate that consumer trust has a direct influence on purchase intention. For these authors, however, this effect is mediated by the risk perception and the attitude towards the Internet store. Consistent with a number of previous works (e.g., Yoon, 2002; Mcknight and al., 2002; Stewart, 2003, Pavlou, 2003), we assume that trust towards an Internet vendor will have a direct significant positive effect on the consumer purchase likelihood.

**Proposition 5 : Consumer trust towards an unfamiliar web merchant have positive impact on the online purchase intention from the web site.**
II.2. Moderators

Perceived risk

Conceptualized as the probability of negative consequences associated with a purchase decision, the concept of risk has been widely studied in marketing literature (e.g., Bauer, 1960; Roselius, 1971; Jacoboy and Kaplan, 1972; Mitchell, 1999; Cases, 2003). Because risk is a subjective personal belief (Pavlou, 2003), the level of uncertainty inherent to a particular transaction is variable from one individual to another. Consumers are reluctant to purchase from an Internet store because the web merchant can behave in an opportunistic manner. Such a situation could occur namely when the consumer is transacting with an unknown vendor. Under these circumstances, risk relievers will have a key role. The importance of trust signals stems from their role in helping consumer to cope with risk perceptions.

Furthermore, despite recognizing the lack of clarity in the trust-risk relationship, few researches have focused on such an issue. According to Mayer, Davis and Schoorman’s theoretical framework (1995), perceived risk moderates the effect of trust on behaviour and decisions. In this research, it is proposed that perceived risk moderates not only the impact of consumer’s trust on behavioural intentions, but also the effect of trust antecedents on consumer trust. Indeed, the higher the level of perceived risk, the higher the need of trust signs will be (word of mouth, trust seals, testimonies of other consumers).

Proposition 6 : Perceived risk moderates the effect of consumer trust on the intention to purchase from the web site.
Proposition 7 : Perceived risk moderates the effect of trust antecedents on consumer trust.

Familiarity

According to Luhmann (1979)\(^1\), familiarity is a “pre-condition of trust”. Indeed, when trust is considered as a future expectation, familiarity provides a background for such expectations (Gefen, 2000). Familiarity was defined as the number of experiences accumulated by the consumer (Alba and Hutchinson, 1987). Within the context of e-commerce, it is interesting to study the familiarity not in a holistic way, but rather as a concept composed of a three sub-constructs: the familiarity with the web site category, the familiarity with Internet and the familiarity with online buying.

Proposition 8 : Familiarity (with the web site category/Internet/online buying) moderates the effect of consumer’s trust on the intention to purchase from the web site.
Proposition 9 : Familiarity (with the web site category/Internet/online buying) moderates the effect of trust antecedents on consumer’s trust.

Drawn from marketing and e-commerce literature, the conceptual model could be presented as the following:

**Fig.1. A model of consumer trust towards an unfamiliar web merchant**

### III. Research methodology

Regarding the methodology, an experiment using a $2 \times 2 \times 2$ factorial design will be set up to test the conceptual model. Different versions of a fictive travel web site will be presented to a student sample. We have chosen this web site category because of its adequacy to the sample profile. Subjects will be confronted to a stimulus (a fictive web site) and will be asked to conduct a transaction. Thereafter, they will be invited to fill in a questionnaire. Three variables will be manipulated: third party seals (absence/presence), past buyers’ testimonies (absence/presence) and word of mouth (negative/positive). Regarding word of mouth, a scenario manipulation will be probably used.

**Key References**


