The impact of initial consumer trust on intentions to transact with a web site: a trust building model

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Abstract

This paper develops and tests a model of consumer trust in an electronic commerce vendor. Building consumer trust is a strategic imperative for web-based vendors because trust strongly influences consumer intentions to transact with unfamiliar vendors via the web. Trust allows consumers to overcome perceptions of risk and uncertainty, and to engage in the following three behaviors that are critical to the realization of a web-based vendor's strategic objectives: following advice offered by the web vendor, sharing personal information with the vendor, and purchasing from the vendor's web site.

Trust in the vendor is defined as a multi-dimensional construct with two inter-related components—*trusting beliefs* (perceptions of the competence, benevolence, and integrity of the vendor), and *trusting intentions—willingness to depend* (that is, a decision to make oneself vulnerable to the vendor). Three factors are proposed for building consumer trust in the vendor: structural assurance (that is, consumer perceptions of the safety of the web environment), perceived web vendor reputation, and perceived web site quality. The model is tested in the context of a hypothetical web site offering legal advice. All three factors significantly influenced consumer trust in the web vendor. That is, these factors, especially web site quality and reputation, are powerful levers that vendors can use to build consumer trust, in order to overcome the negative perceptions people often have about the safety of the web environment. The study also demonstrates that perceived Internet risk negatively affects consumer intentions to transact with a web-based vendor. © 2002 Elsevier Science B.V. All rights reserved.

Keywords: Trust building model; Building consumer trust; Uncertainty

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1. Introduction

"I have already written here about Jonathan Lebed, the 15-year-old boy in the New Jersey suburbs who used the Internet to transform himself into a stock market manipulator… 15-year-old Marcus Arnold… stumbled upon AskMe.com late in the spring of 2000… He noticed that someone had asked a question about the law to which he knew the answer. Then another. A thought occurred: why not answer them himself? To become an official expert, he only needed to fill in a form… By mid-July, he was the No. 3 rated expert in criminal law on AskMe.com. Beneath him in the rankings were 125 licensed attorneys and a wild assortment of ex-cops and ex-cons. The next-youngest person on the board was 31… [Marcus] had no legal training, formal or informal… A lot of what a real lawyer did was hand out simple information in a way that made the client feel served, and this Marcus did well (Lewis, 2001)".

The realization of the remarkable potential of business-to-consumer Internet activity (Wang et al., 1998) is contingent on consumer willingness to employ the web for transacting personal business, such as purchasing or gathering information. There is, however, considerable evidence that users perceive significant risks and uncertainty in interacting with web-based vendors (Friedman et al., 2000; Hoffman et al., 1999; Tan, 1999; Wang et al., 1998). Many reasons for these perceptions exist, such as uncertainty about vendor attributes and behavior. Many web-based vendors are unfamiliar to users, which makes building trust a strategically important issue at the beginning of the B2C relationship (McKnight and Chervany, 2001–2002). It is also more difficult to gauge the trustworthiness of e-vendors than brick-and-mortar vendors (Palmer et al., 2000). The web environment does not allow people to inspect the product, directly observe the vendor (Grazioli and Jarvenpaa, 2000), or look the vendor in the eye (Ba et al., 1999), assurance mechanisms on which humans have depended for ages. Thus, users find it difficult to assess whether a web-based vendor will deliver on its commitments or protect the privacy of personal information shared with the vendor. As Dellarocas (2001) noted, "…the more the two sides of a transaction are separated in time and space, the greater the risks".

In addition, some consumers do not perceive the web environment itself to be secure, fearing unauthorized access to their information by hackers (Tynan, 2000). Compounding the issue, extensive media coverage about privacy, security, and fraud on the Internet, such as the above story of Marcus Arnold, makes users even more sensitive to these possibilities (Green, 2000; Schmitt, 2001).

As a result of lack of trust, many consumers hesitate to engage in the behaviors necessary for the widespread diffusion of electronic commerce, such as sharing personal information with e-vendors and making purchases over the web. That is, lack of consumer trust, both in the attributes of specific web-based vendors and in the overall web environment, has been, and remains, a hindrance to electronic commerce (Aldridge et al., 1997; Hoffman et al., 1999). For e-vendors, it is critical, therefore, to promote trust in order to transform a potential consumer from curious observer to one who is willing to transact over the site. Understanding the nature and antecedents of consumer trust in the web can provide web vendors with a set of manageable, strategic levers to build such trust, which will promote greater acceptance of B2C electronic commerce.

By trust, we mean perceptions about others' attributes and a related willingness to become vulnerable to others (Rousseau et al., 1998; Zand, 1972). Trust helps people make the 'leap of faith' into action because trust embodies feelings of security about the object of trust, such that one can move forward without fear in spite of the risks or uncertainties in a situation (Holmes, 1991; Luhmann, 1979). Thus, trust in an e-commerce vendor helps consumers overcome perceptions of risk in web-based interaction (Luhmann, 1979; Mayer et al., 1995). A steady stream of literature has explored the critical role of trust in consumer adoption of the web (Friedman et al., 2000; Gefen, 2000; Jarvenpaa and Tractinsky, 1999; Keen, 1997; Ratnasingham, 1998; Stewart, 1999). This paper contributes to this body of work by developing and testing a trust building model (TBM) in the context of a legal advice web site. The specific questions the study addresses are: *What factors influence a consumer's initial trust in a web-based vendor, specifically one that offers legal advice? Does trust in the vendor influence a consumer's intention to use a web site that offers legal advice?*

The focus of this paper is *initial* trust, that is, trust in an unfamiliar web vendor, one with whom the consumer has no prior experience. Bigley and Pearce (1998) defined unfamiliar actors as those that do not yet have credible, meaningful information about each other. Interaction over time provides credible, meaningful information. In the context of web-based commerce, we posit that such information is gained only after the trustor (a web user) has engaged in trust-related behaviors (e.g. purchasing) and had the opportunity to assess the trustworthiness of the vendor by observing the consequences of those behaviors. Thus, the period during which a consumer visits and explores a vendor's web site for the first time (the empirical focus of this study) lies within the domain of initial trust.

An initial TBM is employed because the initial time frame is when potential e-consumers make judgments about the vendor that could determine whether or not they will use the site in the future. It is during the initial time frame, while the user is still unfamiliar with the vendor, that users' perceptions of uncertainty and risk about the vendor are particularly salient. Thus, web vendors need to engender sufficient trust at this stage in order to overcome consumers' perceptions of risk and to persuade consumers to transact with them. For this reason, initial trust is particularly critical to the success of a vendor in attracting a user base, which ultimately determines its strategic viability. In the initial relationship, consumers rely on signals or symbols or whatever information they have (Menon et al., 1999; Meyerson et al., 1996), such as site appearance or vendor reputation, to make trust-related inferences about the vendor (McKnight et al., 1998).

The specific domain of the study—a legal advice web site—was chosen for multiple reasons. From the perspective of a consumer, accepting professional advice over the web entails more personal risk than buying a CD online. In purchasing a book or a CD, the consumer's liability (for instance, from the vendor's failure to ship the purchased item) is limited to the price of the product. However, acting on unsound medical or legal advice could jeopardize the user's health, or create a legal liability that could threaten the user's long-term financial security. In addition, advice sites make fraud or incompetence hard to detect (Grazioli and Jarvenpaa, 2000) because it is difficult for users to determine whether e-professionals are bonafide or, like Marcus Arnold, only appear to be credentialed experts. Thus, these sites introduce an element of risk beyond that in typical shopping sites—whether or not the user feels comfortable acting on the advice provided. The greater

the risk, the more important is the role of trust (Luhmann, 1979). Advice sites may also offer advice for sale, or may ask users to convey very personal information, such as details of their financial, legal, or medical lives, which people historically have given orally and face-to-face to a known professional (Moss, 2000), rather than on the web to a little-known vendor.

This study contributes to practice and research in multiple ways. For practice, it not only demonstrates the role of trust in encouraging consumers to take specific actions on the web, but also examines the importance of three specific manageable levers for building consumer trust. The study contributes to research by increasing understanding of how to build consumer trust on the web. First, it simultaneously considers the trust-related implications of both institutional factors (that is, users' perceptions of the general web environment) and vendor-specific trust building levers (reputation and site quality). This is important because the trust literature has noted the significance of both sets of factors in building trust, but has rarely, if ever, assessed them together. The study also explicitly situates the trust building efficacy of these factors within the context of consumer perceptions of Internet risk. In addition, as noted above, by moving away from simple shopping sites to a legal advice web site, the study introduces an additional element of behavioral intentions: willingness to act on information provided by a web site. Finally, the study delineates the distinct, inter-related dimensions of trust—trusting beliefs and trusting intention—willingness to depend. This is consistent with the trust literature, which views trust as a complex, not a unitary, concept (Rousseau et al., 1998). The model in this paper also extends the McKnight et al., 1998; McKnight and Chervany, 2001–2002 models of initial trust building, in that it includes site quality as a trust antecedent and specific consumer behavioral intentions as trust outcomes.

Section 2 develops the Trust Building Model(TBM), drawing on prior literature from multiple theoretical disciplines that have studied trust. The details of data collection and analysis are then presented, and the results discussed. The paper concludes with implications and suggestions for further research.

2. Trust building model

The overall theoretical model (Fig. 1) posits that two sets of antecedents—structural assurance of the web and two vendor-specific factors (perceived site quality and perceived reputation)—influence a user's trusting beliefs in (perceptions of the attributes of a specific web vendor) and trusting intention towards a web-based vendor. Trusting beliefs and trusting intention together constitute what Rousseau et al., 1998; McKnight et al., 1998 called trust. Trusting beliefs, trusting intention, and perceived web risk, in turn, influence consumer intentions to engage in three specific behaviors: follow vendor advice, share information with the vendor, and purchase from the site. While trusting beliefs and trusting intention—willingness to depend form the essence of cognitive-emotional trust in the vendor, the behavioral intentions are outcomes resulting from that trust. Direct links are also posited between trusting beliefs and willingness to depend, as discussed in greater detail below.
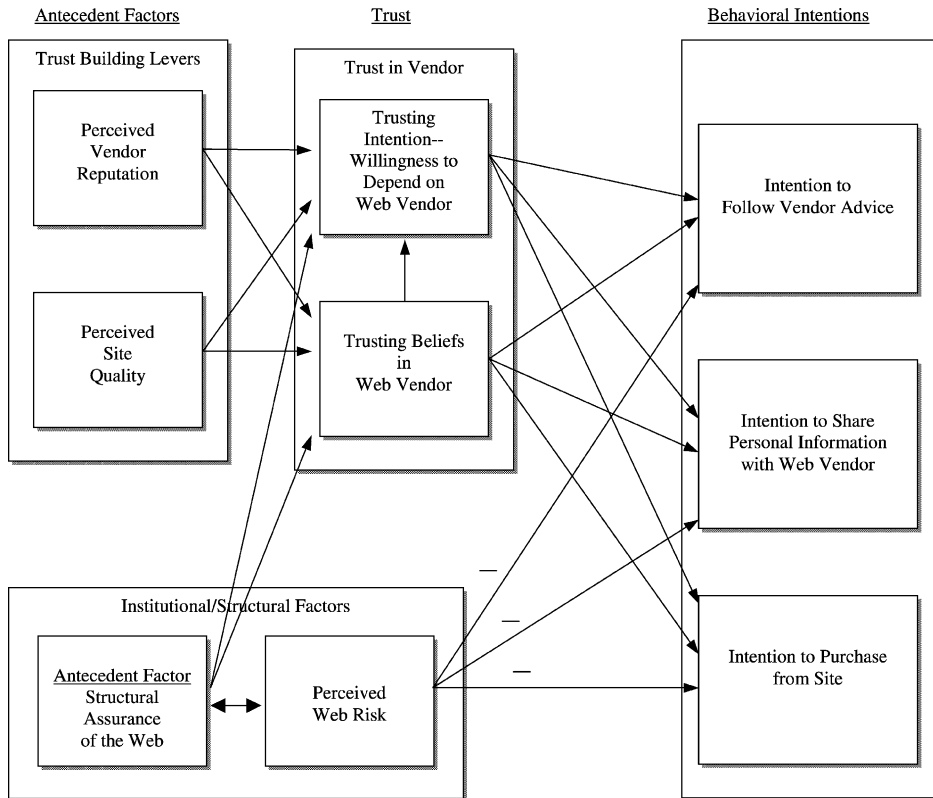
Fig. 1. TBM-Trust building model. The relationships from Perceived Web Risk are proposed to be negative; all others are proposed to be positive.

2.1. Behavioral intentions

The ultimate variable of interest to a web-based vendor is consumers' behavior, specifically their willingness to transact with the vendor through the web. In light of the difficulty of simulating actual behavior in an experimental setting, this study measures behavioral intentions instead. This is not uncommon. Numerous studies of technology acceptance have measured behavioral intentions but not behaviors (Agarwal and Prasad, 1998; Karahanna et al., 1999; Venkatesh, 1999, 2000). Prior research has also confirmed a strong correlation between behavioral intentions and actual behavior (Sheppard et al., 1988; Venkatesh and Davis, 2000).

We define behavioral intentions in terms of consumer intentions to engage in three specific behaviors—(a) follow the advice of the web vendor, (b) share personal information with the vendor, and (c) purchase goods or services from the vendor. Each behavioral intention construct captures an individual's projection or anticipation that she/he will behave in a specified way. Behavioral intentions go beyond willingness to depend on the other; rather, they involve a specific, solid intent, similar to what McKnight and Chervany, 2001–2002 called subjective probability of depending. Thus, one with behavioral intention

volitionally intends to follow the advice, purchase, and/or share information, unless something precludes such action.

For most shopping sites, the primary objective is to persuade the consumer to make a purchase. To purchase, the consumer must be willing to share personal information, such as name, address, and credit card number. Fee-based or subscription sites, such as the *Wall Street Journal*, also require users to share such personal information, as do sites that do not charge a fee but require users to register in order to use the site. In addition, for a medical, legal, or financial advice-giving site, such as the one used in this study, it is important that users feel comfortable accepting and acting upon the advice. Just as consumer web site users may window-shop but not buy, so advice site users may browse but never form a solid intent to act upon the advice of the web vendor. In both cases, the vendor's strategic objective remains unfulfilled—web sites are most effective when people fully employ them—otherwise they are no better than a store in a ghost town.

Each of the three intention constructs relates to a behavior that a user may perceive to be fraught with risk, making it an interesting problem for trust to address. Trust becomes important because risk is present (Rousseau et al., 1998). Following financial advice could place one's money at risk, for example. Sharing personal information makes one potentially vulnerable to loss of privacy (Wang et al., 1998), misuse of the information by the vendor (such as for junk mailing), or even the theft of one's identity. Purchasing puts one at risk of not receiving the services/products bought and then having to resolve a vendor non-performance problem. If the purchase is made with a credit card, it places the credit card information under similar risk as it does personal information. Thus, these three *specific behavioral intentions* are important outcomes of trust. If carried out, these intentions would become trust-related behaviors.

2.2. Willingness to depend

The model proposes that, as a factor of intentions to engage in specific behaviors, an individual forms a general *willingness to depend* on the web vendor. Willingness to depend is a trust construct (McKnight et al., 1998) in that it reflects volitional vulnerability, a concept commonly used to define trust (Mayer et al., 1995). Thus, professing a general willingness to depend on the other means one has made a conscious choice to put aside doubts and to move forward with the relationship instead of holding back (Holmes, 1991). In the web context, this means that a consumer has progressed to a willingness to engage in a positive relationship with the vendor.

It is important to understand the difference between trusting intention—willingness to depend and the three specific behavioral intentions discussed earlier. Willingness to depend is general and non-committal, while the behavioral intentions are specific and inhere risk. An analogy may be helpful. On joining those discussing neighbor John's recent personal disaster, one man heard people say, "I feel very sorry for John." "Me too." The man stepped up and boldly said, "I feel sorry for John to the extent of $50," and putting the money on the table, added, "How sorry do you feel for him?" To have pity for John generally and to put money on the table for him bear different levels of personal risk and commitment. Similarly, it is one thing to say one is willing in general to depend on a web vendor and a different thing to say one is willing to incur specific relationship risks through following vendor advice,

sharing information, and purchasing. McKnight and Chervany (2001–2002) made the same distinction between trusting intention and subjective probability of depending.

Displaying a general willingness to depend is the first step, because it engenders specific behavioral intentions. If one is willing to depend on a web vendor (i.e. willing to accept general vulnerability), one is then more likely to be willing to accept the specific vulnerabilities associated with using the site, such as following vendor advice, sharing information, and purchasing from the site. Empirical evidence in prior trust literature also supports the effects of willingness to depend on the three behavioral intentions. Following advice is similar to being influenced by the other party, which (Zand, 1972) found to be affected by general trust. A number of studies have found general trust to be an antecedent of information sharing (Fulk et al., 1985; Hart and Saunders, 1993; Sherif, 1966). Of course, other factors influence information sharing as well (Wasko and Faraj, 2000). In the marketing literature, general trust has been linked to willingness to transact business (Doney and Cannon, 1997; Morgan and Hunt, 1994). Urban et al. (2000) found trust to be a factor in making purchasing decisions. Thus, it is hypothesized that willingness to depend will impact all three behavioral intentions.

Hypothesis 1a. Willingness to depend on the web vendor will be positively related to intention to follow vendor advice.

Hypothesis 1b. Willingness to depend on the web vendor will be positively related to intention to share personal information.

Hypothesis 1c. Willingness to depend on the web vendor will be positively related to intention to purchase.

Trusting intention—willingness to depend is, in turn, influenced by trusting beliefs, as discussed in Section 2.3.

2.3. Trusting beliefs

Trusting beliefs are perceptions of the trustworthiness of the object of trust. Trusting beliefs are the trustor perception that the trustee possesses characteristics that would benefit the trustor (Mayer et al., 1995; McKnight and Chervany, 2001–2002; Mishra, 1996). Trusting beliefs comes from a long history of research that considered the essence of trust to be perceptions about the ethical character (Ring and Van de Ven, 1994), ability (Gabarro, 1978), or predictability (Rempel et al., 1985) of the other party, or combinations of such attributes (Giffin, 1967). Over time, researchers have migrated towards three or four such beliefs—integrity (trustee honesty and promise keeping), benevolence (trustee caring and motivation to act in the trustor's interests), competence (ability of the trustee to do what the trustor needs), and predictability (consistency of trustee behavior)[1] (McKnight et al., 1998)—because most other trusting beliefs cluster conceptually with these.

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[1] In this paper, we do not include items for predictability in our measure of trusting beliefs because the focus here is on initial trust, whereas predictability would be more relevant to a model of trust in ongoing interactions between a user and vendor.

As Mayer et al. (1995) argued, a trustee who possesses these traits is very desirable as an exchange partner, because he/she will behave ethically, kindly, skillfully, and consistently in the exchange. For example, a web vendor who is honest would fulfill agreements with the consumer. A benevolent web vendor would not intentionally harm the consumer. A competent vendor would do a good job filling consumer orders with fine products. Thus, having high trusting beliefs should lead the consumer to be willing to depend on the vendor.

Hypothesis 2a. Trusting beliefs in the web vendor will be positively related to trusting intention—willingness to depend on the web vendor.

We also posit a direct effect of trusting beliefs on specific behavioral intentions (that is, not all of the impact of trusting beliefs on behavioral intentions will be mediated through willingness to depend). For instance, a belief that the vendor is competent should lead one to be willing to follow the advice of the vendor because a competent and benevolent vendor will provide good advice. Similarly, a consumer will believe that a vendor with high benevolence and integrity will offer honest advice, in the consumer's best interest, thereby increasing motivation to follow the advice. Belief in the benevolence and integrity of the vendor will positively affect willingness to share personal information (Culnan and Armstrong, 1999; Krackhardt and Stern, 1988; Nelson and Cooprider, 1996) because these beliefs embody assurance that the vendor will not abuse the information. Trusting belief—competence should assure one that the vendor has the technical acumen to protect personal information from hackers. Trusting beliefs will also positively affect willingness to purchase because they assure the consumer that the vendor is both able (because of competence) and willing (due to benevolence and integrity) to deliver the goods/services purchased. Previous research has shown that trusting perceptions directly or indirectly influence e-consumer intentions to purchase (Grazioli and Jarvenpaa, 2000; Jarvenpaa and Tractinsky, 1999).

Hypothesis 2b. Trusting beliefs in the web vendor will be positively related to intention to follow vendor advice.

Hypothesis 2c. Trusting beliefs in the web vendor will be positively related to intention to share personal information.

Hypothesis 2d. Trusting beliefs in the web vendor will be positively related to intention to purchase.

2.4. Structural assurance of the web

Structural assurance is an institution-based trust construct, and comes from the sociological tradition (Shapiro, 1987; Zucker, 1986). Sociologists found that trust in people is supported by the institutional (i.e. legal, governmental, contractual, regulatory) structures that create an environment that feels safe and secure to participants. At the Internet level, structural assurance, therefore, means the belief that the web has protective legal or

technological structures (e.g. encryption or SSL—Borenstein, 1996) that assure that web business can be conducted in a safe and secure manner. The slow arrival on the Internet of protective legal, technological, and economic/social systems (Ba et al., 2000, 1999) is one reason for the concern expressed by consumers on the security of the web environment for conducting personal business.

McKnight and Chervany (2001–2002) argued that structural assurance relates to trusting beliefs and willingness to depend because a person is more likely to trust those operating in a safe and secure environment. That is, perceptions about the goodness of an environment are likely to color perceptions of individuals or groups associated with that environment (McKnight et al., 1998). Culnan and Armstrong (1999) found that procedural fairness (an organizational construct similar to structural assurance) helps build general trust. Thus, structural assurance should relate to trusting beliefs about unfamiliar web vendors because one is likely to judge an unknown vendor based on general feelings about the vendor's environment. Structural assurance of the web should affect willingness to depend on the web vendor because a high level of structural assurance means the consumer has been able to overcome fears of the Internet such that she/he is comfortable dealing with it. Grazioli and Jarvenpaa (2000) found that attitude toward the web (very similar to structural assurance) was significantly related to willingness to buy. Therefore, it is posited that:

Hypothesis 3a. Structural assurance in the web will be positively related to trusting beliefs in a web vendor.

Hypothesis 3b. Structural assurance in the web will be positively related to willingness to depend on a web vendor.

2.5. Perceived web risk

As observed earlier, the importance of trust in the vendor stems from its role in helping consumers overcome perceptions of risk. Thus, we explicitly incorporate in the model the role of user perceptions of the risk involved in transacting over the web. For many people, web browsing feels safe, but transacting on the Internet is a vast landmine inviting them to disaster.

Risk, in general, means the perceived probability of loss or harm (Rousseau et al., 1998). Perceived web risk means the extent to which a user believes it is unsafe to use the web or that negative consequences are possible (Grazioli and Jarvenpaa, 2000). For example, identity theft has risen greatly over the past few years (O'brien, 2000), causing alarm or fear or insecurity about the web. High perceptions of web risk will adversely affect consumer willingness to share personal information, follow vendor advice, and, ultimately, purchase (i.e. through a credit card). Marketing researchers have posited that perceived risk affects purchasing behavior (Tarpey and Peter, 1975). A number of researchers have dealt with the effects of perceived web risk on e-business (Aldridge et al., 1997; Hoffman et al., 1999). For instance, Grazioli and Jarvenpaa (2000) found that perceived store-level risk significantly affected willingness to purchase through its negative effect on attitude towards the store.

The perceived risk of getting advice from a phony expert will probably decrease the intention to follow vendor advice.

Hypothesis 4a. Perceived web risk will be negatively related to intention to follow vendor advice.

Hypothesis 4b. Perceived web risk will be negatively related to intention to share personal information.

Hypothesis 4c. Perceived web risk will be negatively related to intention to purchase.

Note that although we expect the two institutional factors, structural assurance and web risk, to be correlated,[2] unlike structural assurance, we do not expect perceived web risk to affect trusting beliefs or general willingness to depend. This is because web risk is akin to distrust in the web. Researchers now believe that distrust is not just a lower level of trust, but its opposite (Lewicki et al., 1998). Distrust is a distinct construct that is based on different emotions than trust (McKnight and Chervany, 2001), probably because distrust reflects human desires for survival and for protection from harm. Thus, distrust is more likely to directly affect choices and behaviors perceived to be high risk. In the web context, therefore, we expect that perceived web risk will relate directly to a consumer's intention to engage in specific behaviors perceived to be high risk, such as sharing information, following advice, and purchasing. Making general statements of positive beliefs and forming a general willingness to depend do not entail the same level of specific high-risk commitments as the specific behavioral intentions do. We posit, therefore, that perceived web risk will not be a direct antecedent of trusting beliefs and willingness to depend—rather, as stated in the hypotheses above, we posit that perceived web risk would influence behavioral intentions directly.

Hypothesis 4d. Perceived web risk will not be significantly related to trusting beliefs or willingness to depend.

Next, we discuss the two vendor-specific antecedents of trust—reputation and site quality.

2.6. Perceived vendor reputation

Reputation means that one assigns attributes to a person based on second-hand information about them (McKnight et al., 1998). Reputation can be an important trust building factor for web vendors (Fung and Lee, 1999), particularly in the initial trust phase. Since consumers do not have personal experience with a vendor, word of mouth reputation can be key to attracting customers. Hearing from someone else that interacting with a vendor was a positive experience can help alleviate users' perceptions of risk and insecurity in interacting with the vendor. It can help boost users' beliefs about vendor competence,

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[2] This expected correlation is shown on Fig. 1 but is not listed as an explicit hypothesis because our focus in this paper is on causal relationships.

benevolence, and integrity. It can engender in users a willingness to depend on the vendor. For example, the reputation of Amazon.com has helped to boost its sales (Barnes and Vidgen, 2000). Jarvenpaa and Tractinsky (1999) found that perceived reputation positively affected trust in a web store. Grazioli and Jarvenpaa (2000) found reputation to be among the factors positively influencing trust in an e-vendor. Similarly, in the broader trust literature, reputation has long been seen as a trust builder (Dasgupta, 1988), particularly for professionals (Barber, 1983) or those engaged in commerce (Doney and Cannon, 1997). Thus, we propose:

Hypothesis 5a. Perceived vendor reputation will be positively related to trusting beliefs in a web vendor.

Hypothesis 5b. Perceived vendor reputation will be positively related to willingness to depend on a web vendor.

2.7. Perceived site quality

In the initial phase of trust development, the basis of trusting beliefs/attitude cannot be personal experience with the other party, because the parties have no relationship history. Rather, initial trust forms quickly based on 'whatever information is available' (Meyerson et al., 1996, p. 170). The information available often comes in the form of small signals or cues (Menon et al., 1999), such as the trustee's voice (Baldwin, 1992, p. 462) or physical appearance (Riker, 1971). For example, Dion et al. (1972) found in prospective dating experiments that subjects more often placed the physically attractive person into the 'good' person category than they did one who was not attractive. Translated into trust terms, this means that subjects had higher trusting belief–benevolence in the attractive person than in the unattractive one. Dion and co-workers called this the 'what is beautiful is good' stereotype.

On the Internet, the vendor is faceless, so the interface becomes the 'online storefront' upon which first impressions are formed. It stands to reason that if the consumer perceives a vendor's web site to be of high quality, the consumer will more likely have high trusting beliefs about the vendor's competence, integrity, and benevolence; and will develop a willingness to depend on the vendor. Fung and Lee (1999) stated that site information quality and a good interface design enhance the formation of consumer trust. This is like going into a bank that has an impressive, prosperous physical appearance and being willing to depend on the bank to offer good service, not because one knows the people who run the bank to be trustworthy, but because outward appearances imply that it is solid and well-managed.

Hypothesis 6a. Perceived site quality will be positively related to trusting beliefs in a web vendor.

Hypothesis 6b. Perceived site quality will be positively related to willingness to depend on a web vendor.

3. Method

The data were collected within the context of an experiment that used a hypothetical legal advice web site constructed for the purpose. We measured the variables using questionnaires, and analyzed the resulting data using LISREL 8.3 structural equation modeling (SEM) techniques.

3.1. Data collection

The study was conducted in three stages. First, subjects responded to a pretest questionnaire that included items designed to measure their structural assurance and perceived web risk. The subjects were then given a scenario. They were told that they were tenants in an apartment whose air conditioning unit had become inoperable during a period of intense heat. Repeated requests to the landlord to fix the unit went unheeded. A friend suggested that legal recourse was warranted. Subjects were to investigate their legal rights in the situation by visiting a legal advice web site for which they had seen an ad in the local newspaper. To create measurable variance in perceived vendor reputation, some of the subjects were told that the ad mentioned that the web site was run by a law firm rated among the top fifty in the nation by *American Lawyer* magazine. The others were not told anything about vendor reputation.

Subjects were then taken to a custom-created web site designed to provide visitors with advice on legal matters. The hypothetical vendor was named LegalAdvice.com. A three-panel, frames-based approach was used to structure the information display (Fig. 2). Upon entering the web site, the subject was able to pursue two paths to address the air conditioning legal problem: (a) enter the Topics section and use point-and-click navigation to drill-down to the information relevant to the problem, or (b) enter the Search section and enter one or more keywords related to the problem (e.g. landlord, tenant, air conditioning) to perform a search for the information needed. The text of the response was provided courtesy of FreeAdvice.com®. After this interaction with the site, the subject was taken to a questionnaire including items designed to measure their trusting beliefs, willingness to depend, and other study constructs.

The subjects were 1729 students (primarily undergraduates) from three large universities who were enrolled in either a technical course in their major or a university-wide computer literacy course required for non-technical majors. After discarding cases with incomplete and/or rushed responses, 1403 cases (81%) were usable. The incentive for participating in the study was extra credit amounting to 1–2% of the course grade (see Table 1 demographics).

While the use of student subjects is sometimes challenged, there are multiple reasons it does not significantly threaten validity in this case. This study does not require an imagined organizational context (e.g. as a corporate CEO), because consumer electronic commerce is an individual decision. Second, the respondents were familiar with the web, averaging almost 4 years of web experience, so they did not respond to a completely unfamiliar situation, such as acquiring a company. Online consumers are generally younger and more highly educated than conventional consumers, which makes student samples closer to the online consumer population (OECD, 1998). Third, the problem presented to the subjects

Fig. 2. Main page of study website.

(landlord/tenant dispute) was specifically designed for a student population. Most students can identify with the issue of landlord/tenant responsibility for repairs. Fourth, to ensure that the students took the experiment seriously, the subjects were informed that software would be used to 'grade' responses to determine if they had taken the study seriously (the survey included items asking students about the content of the advice they had read). They were told that the percentage of extra credit they were awarded would be based on the number of correct responses on these questions. The pilots indicated that approximately 25–35 min would be needed to complete the study. Results from the internal system clock indicated an average response time of 31 min, affirming that the subjects took the task seriously. In addition, we tested whether the subject had skipped any aspect of the study or had essentially circled the same number. Cases that failed on these points were discarded. The length and quality of responses to several qualitative questions also enhanced researcher confidence that the respondents were serious about the study.

Table 1
Sample demographics

Total responses	1403	
Gender (%)	Female: 55.5	Male: 44.5
Age	Mean: 20.7	Std. Dev.: 3.7
Years of college	Mean: 2.5	Std. Dev.: 1.1
Years of web experience	Mean: 3.6	Std. Dev.: 0.8

3.2. Measures

Measures are shown in Appendix A. The trusting beliefs scales were adapted from various items in studies analyzed by Wrightsman (1991), and the willingness to depend scale was adapted from Dobing (1993). The scales for structural assurance, perceived reputation, and intentions—follow vendor advice, provide personal information, and purchase—were created for the study. Site quality items were based on Cheskin (1999). Perceived web risk items were based on items from Georgia Institute of Technology's Graphics, Visualization, and Usability (GVU) surveys (www.cc.gatech.edu/gvu/user_surveys/). All items were measured on a 7-point Likert scale with anchors of Strongly Disagree (1) to Strongly Agree (7).

Note that the site itself was designed as a free advice-giving site. Thus, it did not directly support sharing information and purchasing. Subjects were therefore asked whether they would be willing to share information with the vendor if this was necessary to obtain more personalized advice from a LegalAdvice.com lawyer. Similarly, they were asked if they would be willing to pay for the advice offered on the site if access was not free.

The measures were first validated through two pilot studies involving over seventy respondents each. Pilot data was analyzed for convergent and discriminant validity using exploratory factor analysis and internal consistency reliability (Cronbach's alpha). We found that the items converged and that almost all of the variables had high alphas (e.g. structural assurance—alpha = 0.94) and were discriminant from other variables. However, because of Cronbach's alphas below 0.70, a third item was added to both the intention to the purchase and share information constructs, resulting in the scales shown in Appendix A.

4. Results

4.1. Convergent and discriminant validity

Confirmatory factor analysis (CFA) with LISREL 8.3 was used to test the measurement model and establish convergent and discriminant validity of the constructs. Convergent validity means the extent to which the measures for a variable act as if they are measuring the underlying theoretical construct because they share variance (Schwab, 1980). Internal consistency reliability is generally considered a necessary but not sufficient condition for convergent validity (Schwab, 1980). The reliabilities of all constructs exceeded the minimum acceptable Cronbach's alpha level of 0.70, indicating internal consistency. Most scales had Cronbach's alphas above 0.90. Convergent validity was assessed using two criteria—a significant (0.05 level) t-statistic for each item level path, and each path loading greater than twice its standard error (Anderson and Gerbing, 1988). Each model construct passed these two convergent validity tests. The t-statistics were all significant at $p < 0.001$. The individual item loadings are reported in Appendix A.

Discriminant validity means the degree to which measures of two constructs are empirically distinct (Bagozzi et al., 1991; Davis, 1989). A discriminant validity test was performed using a constrained analysis method (Anderson and Gerbing, 1988; Sharma,

2000). This involves setting the correlation between one pair of variables to unity (1.0) and running the model again to see if the pair are really one variable. A chi-square difference test is used to compare the results of the constrained and original models (Anderson and Gerbing, 1988). Discriminant validity is evidenced if the chi-square difference is significant (supporting the original model). For example, we did three tests to see if a model combining willingness to depend with one of the three behavioral intentions gave a better fit. We found that in each case, combining willingness to depend with an intention variable gave a fit that was significantly worse ($p < 0.001$). Overall, we ran thirty-six alternate models to cover each possible pairing among the nine constructs in our model—in every case, the original, hypothesized model was significantly better at the $p < 0.001$ level. Overall, then, these analyses demonstrate that the study constructs possess convergent and discriminant validity.

4.2. Hypothesis testing results

LISREL 8.3 was also used for hypothesis testing. Browne and Cudeck (1992) specified that a model whose root mean square error approximation (RMSEA) is less than 0.05 has a close fit; an RMSEA of less than 0.08 has a good fit. Chin and Todd (1995) suggest that the GFI and NFI should be above 0.90 and the AGFI above 0.80 for a good fit. The CFI should also be above 0.90 (Bentler, 1990). A significant chi-square for a model typically means a poor fit. However, given the large sample size, a significant chi-square is likely; thus, we did not use chi-square as a criterion for determining goodness of fit.

The LISREL models used a covariance matrix as input. Results are shown in Fig. 3. The R^2 numbers represent the percentage of variance in the dependent variable that all the proposed independent variables (significant or not) explain. Model fit statistics indicate that the overall TBM was supported, with CFI, NFI, GFI, and AGFI figures above the good fit criteria and a good fit RMSEA of 0.054. All the hypothesized paths were significant except one, with only two paths significant at less than the $p < 0.001$ level.

Overall, all the path coefficient-related hypotheses were supported except Hypothesis 4a. Perceived web risk did not predict willingness to follow advice, possibly because following the vendor's advice did not represent the same kind of risk as that involved in perceived web risk. The items for perceived web risk related to risks associated with electronically transmitting credit card, social security, and other personal information, whereas the risk involved in following vendor advice has more to do with legal outcomes, based on the correctness of the advice given.

The trust building factors (perceived vendor reputation, perceived site quality and structural assurance of the web) explained about two thirds of the variance in trust in the vendor ($R^2 = 0.66$ and 0.68 for willingness to depend and trusting beliefs). Trust in the vendor and perceived risk together explained about two thirds of the variance in intention to follow advice ($R^2 = 0.67$). Trust in the vendor, along with perceived web risk, also predicted intention to share personal information ($R^2 = 0.35$) and to purchase ($R^2 = 0.23$).

The model posited that trust in the vendor fully mediates the effects of the antecedent factors (structural assurance, reputation, and site quality) on behavioral intentions. It also proposed that web risk affects behavioral intentions directly and not through the two trust constructs. These assumptions were tested by running another model that included direct
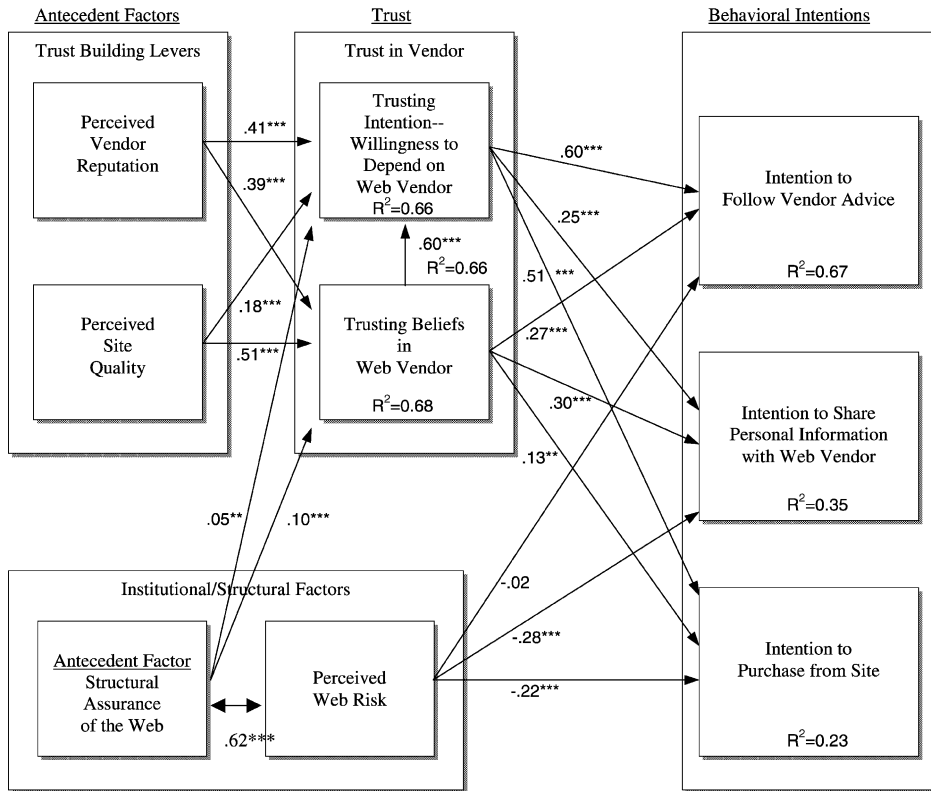
RMSEA = 0.054, CFI=.99, GFI=.99, AGFI=.96, NFI=.99, Chi-squared =55.60

RMSEA (Root Mean Square Error of Approximation)
CFI (Comparative Fit Index)
GFI (Goodness of Fit Index)
AGFI (Adjusted Goodness of Fit Index)
NFI (Normed Fit Index)

Fig. 3. TBM-Trust building model results.

links between the antecedent factors and behavioral intentions, and two links from web risk to trust in the vendor. In this model, web risk had no significant impact on either trusting beliefs or willingness to depend (coefficients for both links were 0.00, with *t*-values of 0.06 and 0.14), supporting Hypothesis 4d. However, the following links were significant, indicating that the effect of the antecedents on behavioral intentions is not completely mediated by trust in the vendor: structural assurance to willingness to purchase (coefficient = 0.09*); vendor reputation to willingness to purchase (coefficient = 0.10*); site quality to willingness to purchase (coefficient = 0.20***); site quality to willingness to share information (coefficient = 0.15**); site quality to willingness to follow advice

(coefficient $= 0.12$***). However, though significant, these links only increased the variance explained (R^2) by one percentage point for willingness to follow advice and by two percentage points each for willingness to share information and to purchase. Further, the fit of the unmediated model was not good, with an RMSEA of 0.158. That is, the more parsimonious, fully mediated model was almost as predictive as the unmediated model and provided a much better fit. These results suggest that although certain additional links may help marginally, the parsimonious TBM model in Fig. 1 predicts the dependent variables well. Thus, trust plays an important role in mediating the effects of the antecedent factors on intentions to employ the site.

5. Discussion

The results provide strong support for the proposed TBM. Trusting beliefs and willingness to depend both strongly affect specific behavioral intentions, and mediate almost all of the effects of the antecedent factors on willingness to follow advice, share information, and purchase. This indicates trust has a strong influence on three key consumer intentions with respect to employing a legal web site. Note that trusting beliefs and willingness to depend have little to do with perceived usefulness (Davis, 1989) of the web site (the technology) itself. Rather, trusting beliefs reflect perceptions about the vendor (competence, benevolence, integrity), while willingness to depend reflects a general attitude to move the relationship with the vendor forward by willing to become vulnerable to the vendor. Thus, the TBM is less techno-centric than models that have previously been used to explain technology acceptance, such as TAM. Because e-commerce often engenders consumer perceptions of significant risk and offers no face-to-face assurance to overcome the risks, trust in the vendor is a significant predictor of key consumer intentions to interact with web-based vendors. Thus, this study contributes by highlighting the predictive power of the two people-related trust variables within a technical/consumer setting.

In addition, this study contributes by modeling a combination of manageable factors that build trust in the vendor. The relatively high R^2 figures for trusting beliefs and willingness to depend indicate that the combination of site quality, reputation, and structural assurance strongly influence initial trust in the vendor. Note that these factors are not all from the same domain, and therefore represent a diverse set of trust building mechanisms. Reputation is directly about the vendor, so its predictive power makes intuitive sense. Reputation, posited as a predictor of trust historically (Barber, 1983) and recently (Jarvenpaa and Tractinsky, 1999), works well in e-commerce because, especially in the initial phase, one often has to learn to trust the vendor on the basis of second-hand information rather than by one's own experience with the vendor, By contrast, site quality reflects initial perceptions about the web site, not the vendor. Yet site quality, as proposed, is a strong predictor of trust in the vendor. In fact, it was the strongest of the three predictors of trusting beliefs. This indicates that consumers interacting with a web site for the first time make strong inferences about the attributes of the vendor from what they first experience on the site. As theorized, the signals or cues the consumer experienced on seeing the site boosted trust in the vendor to a degree that

belies the indirect nature of the information. Thus, first impressions of the site are a key to trust building.

Further, as initial trust theory predicts, even structural assurance, reflecting environmental and structural perceptions about the web, though clearly differing from perceptions of an individual vendor, impacted trusting beliefs and attitudes about the web vendor. Structural assurance is not about the vendor or the site, but about the general web environment. Yet, this variable significantly helped predict both trusting beliefs and willingness to depend on a specific vendor. Perceptions of low structural security of the Internet act as a barrier to trust in an unknown web-based vendor, while high perceptions cast an aura of trustworthiness (correct or not) upon individual vendors.

Evaluating the relative size of the coefficients for the links to follow advice and purchase from trusting beliefs (0.27, 0.13) versus corresponding links from willingness to depend (0.60, 0.51) shows that willingness to depend is a more critical variable for intentions to follow advice and to purchase. That is, while beliefs about the specific attributes of the vendor are important, the user must still develop a willingness to take the 'leap of faith' with respect to the vendor in order to form specific intentions to follow vendor advice and purchase from the site. On the other hand, trusting beliefs (coefficient = 0.30) had a somewhat stronger relationship to sharing information than did willingness to depend (coefficient = 0.25). Perhaps users do not view sharing information as being as risk-laden as following advice or purchasing, so there is a lesser (though not insignificant) imperative to develop a willingness to depend. Merely believing that the vendor is competent, benevolent, and honest may go a long way towards persuading a user to share information. Alternatively, it may be that consumers need to form specific beliefs about ethical vendor attributes in order to share information with them, while this is not as vital for purchasing or following advice.

The study results also suggest that reputation and site quality perceptions are more important trust builders than structural assurance. This is not surprising because structural assurance is operationalized here as perceptions about the general environment, while the other two addresses the specific site/vendor. Site quality had the greatest impact on trusting beliefs, indicating that seeing something concrete like a web site allows one to draw stronger trustworthiness inferences about the vendor than even the reputation of the vendor. Reputation was the strongest predictor of willingness to depend, suggesting that even second-hand notions regarding the vendor powerfully affect willingness to be vulnerable to the vendor. The relative importance of these two variables deserves further investigation. Finally, trusting beliefs had an even higher coefficient (0.60) in predicting willingness to depend than did reputation (0.41), indicating that direct personal beliefs about the web vendor's characteristics have a stronger impact than do second-hand reputation perceptions.

As an additional contribution, the proposed TBM included perceived web risk, a factor that takes into account negative perceptions of the web institution. The study proposed and found that perceived web risk not only separated cleanly from structural assurance, but had a significant, unmediated effect on intentions to share personal information and to purchase, the two intentions involving risk of fiscal loss or misuse of personal information. The study also found that, even in the presence of perceived web risk, trust in the vendor predicted the

three behavioral intentions. This finding positions trust in the vendor in the context of risk and risk taking (Mayer et al., 1995). That is, trust in the vendor enables one to decide to take risks, as Mayer et al. proposed; however, perceived web risk also influenced the intention to take those risks, which goes beyond what Mayer and associates proposed.

The web risk findings also contribute by positioning web risk conceptually among trust concepts. Web risk had a significant direct impact on intentions to share information and to purchase (coefficients = 0.28, 0.22), even though structural assurance did not (0.00, 0.09). This is even more remarkable when one considers that web risk and structural assurance were correlated at 0.62. Web risk, conceptually and operationally, is much like the opposite of structural assurance. Structural assurance is a positive institution-based trust concept, per McKnight et al. (1998). Web risk perceptions might be termed an institutional *dis*trust variable, which reflects deep negative emotions (McKnight and Chervany, 2001). Thus, the negative side of the consumer's web environment perceptions (perceived web risk) impacted the sharing and purchasing intentions while the positive side (structural assurance) did not (not directly). This is probably because web risk reflects an emotion-based fear of harm on the web that is not reflected in structural assurance, which inheres optimism about the web. It also suggests that future research on the subject should explicitly incorporate constructs for both risk and trust simultaneously and explore further the relationship between these two related, but distinct, variables.

Finally, we conducted some post-hoc analyses on the individual influence of the three trusting beliefs mentioned earlier: competence, benevolence, and integrity. We did not have any ex-ante theoretical rationale to expect that these beliefs would differentially influence the behavioral intentions. Thus, we included these beliefs within a single construct for purposes of running the model. However, to explore the possibility of differential impacts of the three beliefs, we ran Pearson correlations among the three trusting beliefs and the behavioral intentions. The three beliefs were correlated with intention-follow advice at about the same level (0.61–0.64), indicating that their influence on willingness to follow vendor advice was about the same. However, correlations with the other two variables revealed differences. In relation to intention to share personal information, the integrity belief had the highest correlation (0.41), followed by benevolence (0.38) and then competence (0.34), indicating that the ethics-based (Hosmer, 1995) characteristics of integrity and benevolence had a greater impact on willingness to share information than did competence. For purchasing, benevolence and integrity both correlated at 0.25, while competence was much lower at 0.17. Again, consumers cared more about integrity and benevolence than about competence when it came to purchasing, where vendor malfeasance risk is a concern. Hence, vendors should take careful steps to communicate their integrity/ honesty and benevolence to prospective consumers in order to entice them to share personal information and make purchases.

6. Implications for research

The study results indicate several fruitful avenues for future research. First, the nature of trust building should be fleshed out in other relationship timeframes. The fact that this study was done within the context of the initial trust timeframe (McKnight et al., 1998) highlights

both the uniqueness of the model and a boundary condition for its use. Over time and interaction with the vendor, the trust building factors of this model may become less salient compared to the effects of the experience one has with the vendor. This is, of course, a question requiring empirical investigation. Second, while this article highlights reputation and site quality as important factors, the cognitive/affective mechanisms behind these trust building factors should be explored. Third, scholars should research other factors important to the web adoption decision, such as disposition to trust (Gefen, 2000), social categorization (Stewart, 1999), third party privacy endorsements (Benassi, 1999), and web experience. Fourth, researchers should see if, over time and experience with the web site, the three trusting beliefs (competence, benevolence, integrity) become more differentiable constructs than in the initial period, as Lewicki et al. (1998) proposed. Fifth, given the study's interesting results for perceived web risk, the role of distrust constructs in trust building should also be explored.

6.1. Study limitations

Some of the current study's limitations also represent opportunities for future research. First, our results were based on the use of legal advice sites by college age, educated individuals. Other subjects should be sought. The dynamics of trust building may also work differently in other research settings, such as consumer product sites. Second, causality among model constructs was not proven, because the data collected was cross-sectional instead of longitudinal. Plausible alternatives to this model and its configuration should be tested in order to clarify the causal relationships of TBM. Third, this study measures behavioral intention instead of actual consumer behavior. Additional research should be done to address this shortcoming.

7. Implications for practice

Web practitioners trying to uncover how people make the risky decisions to share information, purchase, and follow advice should be aware of the strong impact of trust and the factors that build consumer trust. Trust appears to provide consumers a level of assurance that their personal information will be safe, that it is satisfactory to act on or purchase from a web-based vendor and, in the case of a legal advice vendor such as the one used in this study, that it is safe to act upon the advice provided by the vendor. Reputation builds initial trust in the vendor because a new user with no experience in the site can rely on the experience of others as reflected in reputation. Thus, developing and communicating reputation is a vital way to build initial consumer trust in a web site. Web site quality perceptions build initial trust because consumers tend to judge the goodness of the vendor behind the site based on how good the site looks to them. As noted earlier, this is akin to the 'what is beautiful is good' finding of Dion et al. (1972), in which those who were shown attractive potential dating partners ascribed virtuous characteristics to them. This implies, first, that vendors should devote attention to how they design and build the site, since consumers will largely form their opinion of the vendor from their first impressions of

the site. Second, consumer caution is advised. Because people draw such strong inferences from their first use of the site, it would be easy for unscrupulous vendors to deceive people (Grazioli and Jarvenpaa, 2000) into thinking the site is acceptable to use, simply by making it appear to be a quality site to the user. Again, this emphasizes the distinct roles of trust and distrust on the Internet.

The fact that structural assurance and vendor-specific factors both had an impact on trust suggests that vendors may need to use a portfolio of mechanisms to build consumer trust. Thus, endorsements from such entities as Verisign, or even promotional efforts by trade associations, may be used to enhance consumer beliefs in the structural assurance of the web. In addition, mechanisms such as transference and endorsements from third parties such as Trust-E or BBB Online, may be appropriate to enhance trusting beliefs in the specific vendor.

8. Conclusion

Trust has been called vital or key to e-commerce (Keen et al., 2000). If trust is vital, then building trust is even more essential. Yet, as Keen et al. observed, both trust and its antecedents are elusive. By delineating the roles of trust, this paper focuses on the significance of each aspect of trust in the domain of e-commerce, particularly in the initial phase of a relationship when the user does not have direct experience with a vendor. Two key trust-in-the-web-vendor concepts—trusting beliefs and willingness to depend—have been shown by this study to have a critical influence on key behavioral intentions of web consumers—intentions to purchase from the site, to share personal information, and to follow web site vendor advice. These are three intentions that represent an effective transactional vendor–consumer partnership. Three key trust building levers that can be managed by web vendors (reputation, site quality, and structural assurance) have been tested and shown to be effective in building initial trust in the web vendor. Finally, the TBM successfully incorporates the concept of perceived web risk, illuminating the interactive roles of trust and risk in the web environment.

Appendix A. Study measures

See Table A1.

Table A1

Construct	*t*-value	Loading	Item
Trusting beliefs ($\alpha = 0.96$)	37.94	0.83	1. I believe that LegalAdvice.com would act in my best interest
	38.32	0.84	2. If I required help, LegalAdvice.com would do its best to help me
	39.59	0.86	3. LegalAdvice.com is interested in my well being, not just its own
	39.39	0.85	4. LegalAdvice.com is truthful in its dealings with me
	39.24	0.85	5. I would characterize LegalAdvice.com as honest
	38.29	0.84	6. LegalAdvice.com would keep its commitments
	36.26	0.81	7. LegalAdvice.com is sincere and genuine
	38.21	0.84	8. LegalAdvice.com is competent and effective in providing legal advice
	37.59	0.83	9. LegalAdvice.com performs its role of giving legal advice very well
	35.56	0.80	10. Overall, LegalAdvice.com is a capable and proficient Internet legal advice provider
	35.12	0.79	11. In general, LegalAdvice.com is very knowledge-able about the law
Trusting intention ($\alpha = 0.92$)	37.61	0.83	1. When an important legal issue or problem arises, I would feel comfortable depending on the information provided by LegalAdvice.com
	38.91	0.85	2. I can always rely on LegalAdvice.com in a tough legal situation
	38.29	0.84	3. I feel that I could count on LegalAdvice.com to help with a crucial legal problem
	41.29	0.88	4. Faced with a difficult legal situation that required me to hire a lawyer *(for a fee)*, I would use the firm backing LegalAdvice.com
	31.09	0.73	5. If I had a challenging legal problem, I would want to use LegalAdvice.com again
Intention to share personal information ($\alpha = 0.71$)			Suppose you wanted more specific information about landlord/tenant relationships and you could consult (one time only) by telephone with one of the LegalAdvice.com lawyers for 15–30 min (*free of charge*). For this service, please answer the following
	33.93	0.88	1. I would be willing to provide information like my name, address, and phone number to LegalAdvice.com
	20.03	0.55	2. I would be willing to provide my social security number to LegalAdvice.com
	24.44	0.66	3. I would be willing to share the specifics of my legal issue with LegalAdvice.com
Intention to purchase from site ($\alpha = 0.84$)			Suppose the LegalAdvice.com site was *not* free but charged to access information on the site. Answer the following questions
	35.49	0.84	1. Faced with a difficult legal situation, I would be willing to pay to access information on the LegalAdvice.com web site

Table A1 (*continued*)

Construct	*t*-value	Loading	Item
	30.62	0.75	2. I would be willing to provide credit card information on the LegalAdvice.com web site
	33.16	0.80	3. Given a tough legal issue, I would be willing to pay for a 30 min phone consultation with a LegalAdvice.com lawyer
Intention to follow vendor advice ($\alpha = 0.92$)	40.90	0.87	1. I would feel comfortable acting upon the landlord/tenant information given to me by LegalAdvice.com
	41.41	0.88	2. I would not hesitate to use the landlord/tenant information LegalAdvice.com supplied me
	45.65	0.93	3. I would confidently act on the legal advice I was given by LegalAdvice.com
	46.28	0.94	4. I would feel secure in using the landlord/tenant information from LegalAdvice.com
	24.25	0.60	5. Based on the advice I just read, I would serve notice, wait, go ahead and get the repair done, and then deduct the cost of the repair from my rent
Structural assurance of the web ($\alpha = 0.95$)	42.56	0.90	1. The Internet has enough safeguards to make me feel comfortable using it to transact personal business
	43.95	0.91	2. I feel assured that legal and technological structures adequately protect me from problems on the Internet
	45.99	0.94	3. I feel confident that encryption and other technological advances on the Internet make it safe for me to do business there
	40.63	0.87	4. In general, the Internet is now a robust and safe environment in which to transact business
Perceived vendor reputation ($\alpha = 0.89$)	33.72	0.78	1. LegalAdvice.com is well respected by the profession
	37.21	0.83	2. LegalAdvice.com is a reputable firm
Perceived site quality ($\alpha = 0.86$)	35.39	0.80	1. Overall, this site worked very well technically
	20.75	0.53	2. Visually, this site resembled other sites I think highly of
	42.35	0.90	3. This site was simple to navigate
	41.93	0.90	4. On this site, it was easy to find the information I wanted
	24.44	0.61	5. This site clearly showed how I could contact or communicate with LegalAdvice.com
Perceived web risk ($\alpha = 0.90$)	38.48	0.85	1. Entering credit card information over the Web is unsafe
	41.12	0.88	2. I think it is risky to provide one's credit card information to web-based vendors
	39.63	0.86	3. I hesitate to enter my credit card information on the web
	35.81	0.81	4. Entering personal information over the web is unsafe
	22.51	0.57	5. I think it is risky to provide one's social security number to web-based vendors
	25.58	0.63	6. I would hesitate to enter personal information like my name, address and phone number on the web

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