



## Examining the impact of privacy, trust and risk perceptions beyond monetary transactions: An integrated model

Chechen Liao<sup>a,1</sup>, Chuang-Chun Liu<sup>a,2</sup>, Kuanchin Chen<sup>b,\*</sup>

<sup>a</sup> Department of Information Management, National Chung Cheng University, Ming-Hsiung, Chia-Yi 62102, Taiwan

<sup>b</sup> Department of Business Information Systems, Western Michigan University, 3344 Schneider Hall, Kalamazoo, MI 49008-5412, United States

### ARTICLE INFO

#### Article history:

Received 24 February 2010

Received in revised form 2 July 2011

Accepted 2 July 2011

Available online 8 July 2011

#### Keywords:

E-commerce

Privacy concerns

Privileged information search

Risk

Internet literacy

Social awareness

Disposition to trust

### ABSTRACT

Much interest in privacy and trust studies is about shopping, but privacy research in other forms of online activities is beginning to emerge. This study examined the antecedents of privacy, trust and risk as well as their joint effect on two similar but fundamentally different activities: online transactions and retrieval of privileged information. Both activities involve the delivery of private user information, but the latter gives some leeway for users to control (or even falsify) their true identity. User shopping experience in the present study moderated the relationships and strengths of constructs. The effect of Internet literacy, social awareness and disposition to trust on privacy concern and trust was weaker for experienced shoppers. Privacy concern, trust and risk assessment played a lesser role on the two activity variables for those who were more experienced. Perceived privacy risk stood out as a strong antecedent for respondents in both experience groups, but the effect of Internet literacy, social awareness and disposition on trust was statistically insignificant for the same group. Further practical and managerial implications are provided.

© 2011 Elsevier B.V. All rights reserved.

### 1. Introduction

Sixty-two percent of Internet users are concerned about their online privacy (Han and Maclaurin 2002). Studies (Gefen et al. 2003a, Hoffman et al. 1999, Pavlou and Gefen 2004) have shown that trust and privacy concerns continue to be two main components for the decision to disclose personal information on the Internet. Both trust (Chau et al. 2007, Corbitt et al. 2003, Eastlick et al. 2006, Slyke et al. 2006) and privacy concerns (Dyke et al. 2007, Eastlick et al. 2006, Kim 2008, Liu et al. 2005, Malhotra et al., 2004) are also frequently cited in the literature as the main reasons for an individual's lack of interest to establish an online relationship with merchants.

Privacy and trust have received much attention in the literature for their relationships with online transactions, but today's privacy and trust issues are not limited to only activities relating to online transactions. Many activities on the Internet (games, information sharing, insurance quotes, surfing, etc.) also have an effect on one's privacy. In this study, we focus on the consumer's intention to engage in two types of activities (online transactions and online

privileged information searching) that require some form of personal identifiable information.

Intention to transact refers to the willingness to be engaged in monetary transactions, which many times involve the exchange of accurate personal or private information. Today, many online non-monetary activities also involve the exchange of personal or private information. For example, using web sites that provide personalized stock quotes, insurance rates, loan comparisons, availability of services and credit reports all require certain personal or private information, but such activities do not necessarily require a direct monetary exchange with the web site. Some may lead to future purchases, but some may just be for personal reasons. These activities provide privileged information to the recipients, that involves the kind of information or advantage available to certain groups of people who willfully opt for the services by entering into a membership, subscription, affiliation or any sort of non-obligated service engagement. These activities are frequently associated with comparison shopping, pre-purchase information gathering and post-purchase service quotes. Thus, we propose the intention to retrieve privileged information as a variable that refers to an individual's willingness to provide personal or private information in exchange for certain privileged or customized information from the Internet. Similar to willingness to transact online, this variable involves the exchange of personal and private information, thus several constructs (e.g., privacy, trust, and perceived risk) relating to intention to transact may also

\* Corresponding author. Tel.: +1 269 387 5795.

E-mail addresses: [ccliao@mis.ccu.edu.tw](mailto:ccliao@mis.ccu.edu.tw) (C. Liao), [ccliu0406@mis.ccu.edu.tw](mailto:ccliu0406@mis.ccu.edu.tw) (C.-C. Liu), [kc.chen@wmich.edu](mailto:kc.chen@wmich.edu) (K. Chen).

<sup>1</sup> Tel.: +886 52720411x34610.

<sup>2</sup> Tel.: +886 937551885.

apply. This is because the risk involved in such exchange of private information is not just limited to a possible economic loss (as Dinev and Hart 2006a, and others have pointed out), but it may also be in the form of loss of private information or even identity. As Culnan and Armstrong (1999) noted, individuals surrender a certain degree of privacy when they disclose personal information. Privacy concerns are heightened and trust is lowered when consumers find it difficult to control their own private information from misuse or unauthorized distribution once it leaves their own computers. This perception of uncertainty causes hesitation for a consumer to disclose his or her personal information.

Numerous e-commerce studies have focused on monetary transactions (Gefen et al. 2003a, Gupta and Kim 2007, Lee and Turban 2001). Yet, very few studies have examined the impact of behavior and privacy uncertainty (privacy concerns, privacy risk and trust) for activities other than monetary transactions. Surprisingly, even fewer studies have focused on the role of privacy and trust on information searching, especially the type of information that require personal information. Since privileged information searching does not always include the delivery of goods to an individual's physical residence or require precise contact information, accuracy of user information is not always strictly required or even validated. This offers consumers opportunities to control or fake their personal information before it is sent to the web site (Chen and Rea 2004). Little is known for the inter-twined effect of trust, privacy concerns and perceived risk on intentions to transact and retrieve privileged information online when both these latter activities are considered together. As such, a model that integrates variables relating to these two activities warrants further examination.

This study is designed to build an integrated model derived from existing theories to examine the two forms of activities (transactions and retrieval of privileged information). This serves two objectives. First, the study aims to distinguish two popular online activities that bear different requirements of private information. The result is expected to shed light on the effects of antecedent variables on the two activities when both activities are taken into consideration. Second, a series of verification including model comparison with and without moderation measures lends itself both theoretical and practical contributions. Among the salient factors studied in this research are Internet literacy, social awareness and perceived risk, privacy concerns, and trust.

## 2. Literature

### 2.1. Privacy concerns

Westin (1967) defined information privacy as the ability to control how an individual's personal information is acquired and used. Several researchers have tailored the definition toward the informational aspect of privacy rather than its physical, spatial, and behavioral aspects, and refer to privacy as an individual's ability to personally control information about oneself (Awad and Krishnan 2006, Dinev and Hart 2006b). There is a growing concern about how much individuals are able to protect their personal information. As a result, privacy has continued to attract attention in the literature, especially in e-commerce related research. Dinev et al. (2006) define privacy concerns as concerns about possible loss of privacy as a result of a voluntary or surreptitious information disclosure to a web site. Privacy concerns result from three processes: (1) interaction with information technology (IT), which requires some level of technology literacy, (2) a social process of communication and transaction with sometimes anonymous or little known social entities in the Internet environment (Dinev and Hart 2006b), and (3) an uncertainty reduction mechanism in the realm of e-commerce.

Privacy issues include unauthorized sharing of personal information, spam from the online retailer, and disclosure of the patterns of online customer shopping behavior (Miyazaki and Fernandez 2001). In online shopping, while sellers take advantage of personal information to gain an edge, buyers often view this as an invasion of privacy (Culnan and Armstrong 1999). Table 1 summarizes two popular types of measures for privacy concerns: general versus specific. General privacy concerns refer to the privacy concerns in general, while specific privacy concerns apply to specific situations or entities (Li et al. 2010).

Malhotra et al. (2004) found that the second-order Internet users' information privacy concerns (IUIPC) factor, which consists of three first-order dimensions (collection, control, and awareness), exhibited desirable psychometric properties in the context of online privacy. In addition, Chen and Rea (2004) tested Internet users' ability to control their private information and the relationship of privacy controls with two types of privacy concerns: unauthorized secondary use and concerns about giving out private information. Furthermore, Slyke et al. (2006), Dyke et al. (2007), Korzaan and Boswell (2008) and Xu and Gupta (2009) examined the role of consumers' concerns for information privacy (CFIP) on their behavioral intention to engage in online transactions. In summary, privacy is a major concern when online customers make a transaction (Udo 2001).

### 2.2. Trust

Mayer et al. (1995) defined 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 truster, irrespective of the ability to monitor or control that other party". Trust is crucial in many transactional relationships, especially those containing an element of risk, such as online transactions (Reichheld and Scheffer 2000).

In the relationship marketing, trust is generally viewed as an essential ingredient for a successful relationship (Moorman et al. 1993, Morgan and Hunt 1994). Trust is seen as a form of confidence on a partner as a whole (Moorman et al. 1993) and the partner's reliability and integrity (Morgan and Hunt 1994). Previous studies have also shown that trust is the most critical factor in explaining the success of e-commerce (Jarvenpaa et al. 2000, Kim et al. 2010, McKnight et al. 2002).

In the context of consumer trust in e-commerce, McKnight et al. (2002) defined trust as "one believes in, and is willing to depend on, another party." Trust is driven by past experience, long-term orientation, positive trusting stance, and feeling of control (Jarvenpaa and Tractinsky 1999). Jarvenpaa et al. (1998) found that trust consists of three distinct factors: ability, integrity and benevolence. These three beliefs affect the members of virtual team's trusting behavioral intentions, meaning their willingness to depend on other team members. Jarvenpaa et al. (2000) noted that trust is an important factor in any relationship in which the truster does not have direct control over the actions of a trustee (e.g., e-vendor). In addition, Gefen (2002) defined trust as a single dimensional construct dealing with a consumer's assessment that the e-vendor is trustworthy. Gefen et al. (2003a) pointed out that trust consists of four distinct dimensions: integrity, benevolence, ability, and predictability. In recent years, most of studies measured trust by all or parts of these four dimensions (Chow and Angie 2006, Kim and Ahn 2006, Slyke et al. 2006). A summary of findings is in Table 2.

### 2.3. Intention to retrieve privileged information

A popular focus of privacy and trust studies is how the two concepts relate to online transactions (Gefen et al. 2003a, Pavlou and

Download English Version:

<https://daneshyari.com/en/article/379807>

Download Persian Version:

<https://daneshyari.com/article/379807>

[Daneshyari.com](https://daneshyari.com)