

## Chapter 1.6

# Antecedents of Online Privacy Protection Behavior: Towards an Integrative Model

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### ABSTRACT

*Individuals are generally concerned about their privacy and may withhold from disclosing their personal information while interacting with online vendors. Withholding personal information can prevent online vendors from developing profiles to match needs and wants. Through a literature review of research on online privacy, we develop an integrative framework of online privacy protection.*

### INTRODUCTION

The latest report on e-commerce by the U.S. Census Bureau (2007) shows that although there has been an increase in online purchasing by individuals, the portion of consumer e-commerce or “online” to total retail sales is far less than the portion of electronic business-to-business sales to the total business-to-business sales. One of the factors that may be influencing this online consumer behavior is the privacy concerns that

consumers have regarding the personal data collection procedures used by online companies. An individual’s trust in online companies and their data collection procedures has been the major factor hindering the growth of electronic commerce (Belanger, Hiller, & Smith, 2002; Liu, Marchewka, Lu, & Yu, 2004).

Companies use the consumer data to study consumer preferences so that they can build effective strategies to expand their customer base. Emergent technologies and organizational practices in gathering data raise privacy concerns. Such technologies include the use of cookies,

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authentication programs, spyware, and adware. The growth of technologies to collect information about consumers may only lead to fueling the consumer's privacy concerns. Companies have realized that protecting consumers' private information is an essential component in winning the trust of the consumers and is a must in facilitating business transactions (Belanger et al., 2002; McKnight & Chervany, 2001). Privacy policies that inform the consumer about how the collected information will be used are usually posted on the websites. However, there is not enough evidence to prove whether or not these policies are effective in alleviating the consumers' privacy concerns. In the absence of any strong mechanisms, technologies or policies that ensure information privacy, the consumer adopts different strategies for their privacy protection. Such strategies may include, for instance, abstaining from purchasing, falsifying information, and adjusting security and privacy settings in the Web browsers (Chen & Rea, 2004).

In this chapter, we review the existing literature and analyze the existing online privacy theories, frameworks, and models. Through the analysis of the literature, we aim to understand existing privacy frameworks and variables that are used in the context of online privacy protection. Finally, based on the review, we develop an integrative framework to encapsulate the antecedents to online privacy protection behavior.

The motivation for this study is to understand the factors that are related to online privacy protection. Although this topic has been studied in other disciplines, such as marketing, (e.g., Sheehan, & Hoy, 1999), the literature review shows that research on privacy is fragmented. The proposed integrative framework aims to integrate these fragmented yet related constructs under one overarching concept. This will help us in expanding our understanding of the various issues involved in online privacy. Specifically, we focus on what has been done in privacy protection and how future studies in this area can proceed forward.

## **BACKGROUND**

Research has shown that privacy concerns act as a hindrance to the growth of electronic commerce (Hoffman, Novak, & Peralta, 1999; Miyazaki & Fernandez, 2001). In countering privacy concerns, the Federal Trade Commission has primarily relied upon fair information practices to guide privacy regulation in the United States (Milne, 2000). Fair information practices include the following: notice of the firm's information practices regarding what personal information will be collected and how the collected information will be used; choice or consent regarding the secondary use of the information; accessibility of users to view their own data collected by companies; security of the collected data; and enforcement to ensure that companies comply with fair information practices.

Research shows that fair information practices have not been effective in alleviating the privacy concerns of consumers (Culnan, 2000). In the absence of stricter laws to ensure privacy, consumers adopt differing strategies to protect their identity online, for instance, falsification, passive reaction, and identity modification (e.g., Sheehan & Hoy, 1999). For the purpose of this chapter, the strategies adopted by consumers to protect their identity are defined under the general term of "privacy protection behavior" in an online environment.

## **REVIEW OF FINDINGS**

The methodology followed for this chapter was a literature review. In this conceptual study, the existing privacy and related literature was analyzed to identify existing frameworks and variables related to online privacy. In the review of the literature, we retained the studies where privacy was in the context of "online," and the unit of analysis was either individual and/or online consumers. The results of the literature review are presented in Table 1. The research articles that were considered for the

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