Examining Online Purchase Intentions in B2C E-Commerce: Testing an Integrated Model

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ABSTRACT

Research on online shopping has taken three broad and divergent approaches viz, human-computer interaction, behavioral, and consumerist approaches to examine online consumer behavior. Assimilating these three approaches, this study proposes an integrated model of online shopping behavior, with four major antecedents influencing online purchase intent: Web site quality, customer concerns in online shopping, self-efficacy, and past online shopping experience. These antecedents were modeled as second-order constructs with subsuming first-order constituent factors. The model was tested using data from a questionnaire survey of 214 online shoppers. Statistical analyses using structural equation modeling was used to validate the model, and identify the relative importance of the key antecedents to online purchase intent. Past online shopping experience was found to have the strongest association with online purchase intent, followed by customer concerns, Web site quality, and computer self efficacy. The findings and their implications are discussed.

Keywords: B2C e-commerce; electronic commerce trust; online shopping intention; past online shopping experience; self-efficacy; Web site content; Web site design

INTRODUCTION

Internet and Web technologies have fundamentally changed the way businesses interacted, transacted and communicated with consumers. As a business medium, the Internet is unique in permitting firms to create interactive online environments that allow consumers to gather and evaluate information, assess purchase options, and directly buy products at their own convenience. Web-based retailing has become a global phenomenon with steady increase in online sales across the globe. The growth in online shopping has been motivated by several reasons—convenience, ease, pricing, comparative analysis, wider selection of products and services, and so forth.

Although online shopping has been on the rise, the challenges associated with Web-based retailing have also increased. First, the growing numbers of traditional merchants and
pureplay Internet firms have greatly intensified online competition. With blurring geographical boundaries and reduced barriers to entry, the digital marketplace has become crowded with a large number of players. Second, while the online customer acquisition costs have increased significantly, the switching costs of online consumers have diminished exponentially. Third, despite the growing popularity of online shopping, several factors such as fear of fraud, security concerns, lack of trust have dissuaded consumers to purchase online (Gefen, Karahanna, & Straub, 2003; Kiely, 1997). Several studies have documented the problems associated with attracting and retaining online consumers. For instance, Vatanasombut, Stylianou, and Igbaria (2004) deliberated on the difficulty of retaining online customers and proffered strategies to keep novice and sophisticated users happy and loyal. Chen and Hitt (2002) suggested developing strategies to raise customer switching costs in order to deter them from moving to other Web sites.

Rise in online shopping has generated a growing body of research on online consumer behavior. This research can be grouped into those adopting a technological perspective and others with a marketing perspective. Scholars embracing a technological perspective have focused on technical elements such as Web-site navigation and design (Everard & Galletta, 2005; Liu & Arnett, 2000; Spiller & Lohse, 1997), software tools and technological aids (Heijden, Verhagen, & Creemers, 2003; Salaun & Flores, 2001; Wan, 2000). Researchers adopting a marketing perspective have focused their attention on the decision making process (Gefen, 2000; McKnight, Choudhury, & Kacmar, 2002a), and the marketing elements such as pricing, promotion, branding, reputation and customer attitude (Bart, Shankar, Sultan, & Urban, 2005; Chu, Choi, & Song, 2005; Iwaarden, Wiele, Ball, & Millen, 2004; Urban, Sultan, & Qualls, 2000). These research developments notwithstanding, several significant gaps still remain unaddressed. First, these divergent approaches seem to portray only a partial, yet unclear picture of online consumer behavior. While prior studies have helped identify key issues, lack of an integrated focus has marred the broader applicability of the findings. Second, while past research has identified several technological, behavioral and individual factors as important in influencing online consumer behavior, it is not clear if these factors have a differential impact (i.e., a more clear understanding is required if any of the factors explain or predict online shopping behavior more than the others). Third, a large number of studies have used student samples (Gefen, 2000; Mauldin & Arunachalam, 2002; McKnight, Choudhury, & Kacmar, 2002a, 2002b; Pavlou, 2003), thus raising questions on the generalizability of the findings to a large online consumer community.

In this article, we seek to extend our current knowledge on online shopping behavior in the following ways. Our primary research objective is to combine the key technological, behavioral, and consumer-related constructs identified in prior literature and propose an integrated model of online consumer behavior. Our study directly responds to the research calls to provide an integrated perspective on online consumer behavior (Bart et al., 2005; Heijden, 2003). Further, we test our integrated model using a sample of actual online consumers with prior experience in purchasing goods and services online. We pool together the key technological and behavioral factors and empirically examine the relative importance of these constructs in predicting online purchase intention of consumers.

**LITERATURE REVIEW**

An analysis of extant literature on online shopping reveals three distinct orientations underlying these studies; viz, Human–Computer Interaction (HCI), behavioral, and consumerist orientations. These three streams have also been identified by Chang, Cheung, and Lai (2005), who reviewed over 45 empirical studies of online consumer behavior. We summarize the essence of these approaches and propose an integrated model that encompasses key elements from all the three streams of research.