

## Chapter 5.5

# An Exploratory Study of Consumer Adoption of Online Shopping: Mediating Effect of Online Purchase Intention

**Songpol Kulviwat**

*Hofstra University, USA*

**Ramendra Thakur**

*Utah Valley State College, USA*

**Chiquan Guo**

*The University of Texas-Pan American, USA*

### **ABSTRACT**

An exploratory study was conducted to investigate consumer adoption of online purchase using a survey data set. Based upon the theory of innovation and self-efficacy theory, risk aversion, online proficiency, shopping convenience, and product choice variety were proposed to influence consumer intention to shop online, which, in turn,

affects online purchases. Results of regression analyses revealed that all but shopping convenience were significant predictors of consumer intention to purchase online. In addition, consumer intention directly determines consumer purchases online. Finally, consumer intention to purchase online mediates the relationship of risk aversion, shopping convenience, and product choice variety to online shopping. Research and managerial implications of the findings were discussed.

## INTRODUCTION

Internet as a medium of business transaction has gained in importance in spite of the dot-com bubble burst we witnessed at the end of the century. Jupiter forecasts that online retail sales will surge to a new level, reaching \$117 billion in 2008, representing 5% of total retail sales in the U.S. (Gonsalves, 2004). Although the trend of online shopping continues and shows no sign of slowdown, Internet retailing is far from reaching its full potential; only about 3% of Internet users actually make an online purchase (Betts, 2001), a particularly low percentage that must be improved in order to usher in the new era of e-commerce.

The purpose of this study is to explore the factors influencing consumer adoption of innovation in the case of online shopping. The research question is among all Internet users who are likely to make a commercial transaction through the Internet, a topic of importance and yet under-researched. In the past, many Internet firms provided free services or services for a nominal fee, a business model that turned out to be fragile and unsustainable, one of the reasons the dot.com bubble burst (Guo, 2002). As millions of consumers enjoyed the free ride that Internet technology had to offer, the challenge facing online businesses was and always has been to distinguish valuable consumers from those cheap riders who take full advantage of amenities that new technology provides, such as free e-mail and networking, but who are not willing to spend money or symbolically consume in the online community. This task is critical to company success, as e-businesses learned the lesson the hard way that they cannot treat every customer or potential customer the same, simply because not all consumers are created equal.

The organization of this article is as follows: a literature review is conducted to develop research hypotheses that are tested, followed subsequently by methodology and results analysis.

Limitations and implications of the results are also discussed.

## LITERATURE REVIEW

### Theoretical Foundations of Consumer Adoption of Innovation

Consumer adoption of innovation has received considerable attention among consumer researchers and is used most frequently to determine any diffusion of innovations. Classic studies from innovation literature argue that innovation adoption is related to the attributes of the innovation as perceived by potential adopters (Rogers, 1995; Rogers & Rogers, 2003; Rogers & Shoemaker, 1971). Any innovation can be described along the following five characteristics: relative advantage, compatibility, complexity, trialability (costs), and observability (communicability). Moreover, recent studies specifically have integrated technology acceptance model (TAM) with consumer adoption of online shopping (Koufaris, 2002; Gefen, Karahanna, & Straub, 2003). TAM consists of perceived usefulness and ease of use and is a well-known theory of technology acceptance.

Consistent with perceived usefulness in TAM, an innovation's relative advantage is defined as "the degree to which an innovation is perceived as being better than the idea it supersedes" (Rogers, 1995, p. 213). In their meta-analysis, Tornatzky and Klein (1982) found relative advantage to be positively related to adoption. Shopping convenience and product choice variety can be considered as relative advantage and perceived usefulness, as literature suggests that these two are of primary concerns in order for consumers to accept the Internet as a shopping medium (Bellman & Lohse, 1999). Further, the belief related to perceived usefulness influences consumers' intentions to shop online (Gefen, Karahanna, & Straub, 2003).

Rogers (1995) defines compatibility of an innovation as the "degree to which an innova-

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