An Extrinsic and Intrinsic Motivation-Based Model for Measuring Consumer Shopping Oriented Web Site Success

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ABSTRACT

This article develops a new model of Web IS success that takes into account both intrinsic and extrinsic motivating factors. The proposed model begins with the Garrity and Sanders (1998) model of technologic acceptance and develops an extended nomological network of success factors that draws on motivation and flow theory.

Keywords: e-commerce measurement; Internet trust; IS evaluation; measuring IS success; partial least squares; technology acceptance model

INTRODUCTION

The technology acceptance model (TAM) has been the dominant framework for explaining the acceptance and use of IT for nearly 20 years (Keil, Beranek, & Konsynski, 1995). In particular, research has found that perceived usefulness and perceived ease of use are important predictors of the acceptance of IS technologies (Adams, Nelson, & Todd, 1992; Davis, 1989; Doll, Hendrickson, & Deng, 1998).

The difficulty comes in applying the TAM model to the Web shopping experience. Unlike traditional organizational IS, Web systems are used for a variety of activities including both work and pleasure. This leads to a disconnect in terms of applying the perceived usefulness and perceived ease of use constructs to the shopping experience because they are typically not the only driving forces behind Web use (Moon & Kim, 2001).
Recent research has extended the TAM model to the Web environment by including intrinsic motivating factors to take into account a wider and more realistic assessment of users’ goals (Hackbarth, Grover, & Yi, 2003; Koufaris, 2002; Moon & Kim, 2001; Venkatesh, 2000).

For example, Koufaris (2002) examined the dual role of the consumer in using a Web-based system environment, where an individual can be viewed as both a computer user and a consumer. When viewed as a consumer, Koufaris argues that perceived shopping enjoyment (an intrinsic motivator) is important for online shopping since it can have an impact on attitudes and usage intentions. His rationale was based on the findings of Jarvenpaa and Todd (1997a, 1997b). The Koufaris (2002) study found that enjoyment was critically important for online shopping.

However, their model did not adequately explain perceived usefulness and ease of use and their nomological net did not integrate TAM with their intrinsic motivation factor, perceived shopping enjoyment.

This article uses the Garrity and Sanders (1998) model as a vehicle to integrate the individual as a consumer perspective, wherein shopping enjoyment is used as an intrinsic motivator, and the individual is also viewed as a computer user, wherein perceived usefulness is used as an extrinsic motivator and is implemented using task support satisfaction. Our approach treats shopping enjoyment as a state variable that emerges from the interaction between the user and the IS. This perspective is consistent with flow theory (Ghani & Deshpande, 1994; Trevino & Webster, 1992), motivation theory (Deci, 1971; Scott, Farh, & Podaskoff, 1988) as well as environmental psychology (Mehrabian & Russel, 1974).

This article contributes to the literature in three ways. Firstly, the proposed model provides a nomological network of success factors that provides a better understanding of how intrinsic and extrinsic motivation factors impact the use of systems in general and Web sites in particular. Secondly, this paper incorporates two dimensions, decision support satisfaction and interface satisfaction, as antecedent variables to expand our understanding of perceived usefulness (implemented as task support satisfaction). Thirdly, decision support satisfaction not only provides for enhanced explanatory power in the model, but it can also offer important insights into the decision support provided by consumer shopping-oriented Web IS (Garrity, Glassberg, Kim, Sanders, & Shin, 2005). This is especially important because consumer shopping-oriented Web IS differ from conventional decision support systems (DSS) in a number of ways, including and, most notably, that consumers have an extensive and different decision-making process from managers (O’Keefe & McEachern, 1988).

**LITERATURE REVIEW**

Garrity and Sanders Model of IS Success and the GSIISS Model

Garrity and Sanders (1998) adapted the DeLone and McLean (1992) model and proposed an alternative model in the context of organizational systems and socio-technical systems. They developed a user satisfaction inventory comprised of questions from six well-developed instruments. Garrity and Sanders expand on the DeLone and McLean model by identifying four major factors they assert are the basic underlying constructs that make up existing success measures in the IS field (Figure 1). They validate these constructs using a modified Delphi technique whereby IS research experts mapped existing measurement items into one of the four factors.

The four factors they identify are task support satisfaction, decision support satisfaction, interface satisfaction, and quality of work life satisfaction.

In order to better understand the underlying dimensions, Kim, Garrity, Sanders, and Sherman (2004) developed and tested a revised model, which arranges the IS success dimensions into a nomological net in order to further understand IS success and to test the construct validity of their dimensions. The revised or detailed model, called goal satisfaction-based satisfaction.