### Chapter 2.3

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

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#### **ABSTRACT**

This paper develops a new model of web information systems success that takes into account both intrinsic and extrinsic motivating factors. The proposed model begins with the Garrity and Sanders model of technologic acceptance and develops an extended nomological network of success factors that draws on motivation and flow theory.

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#### INTRODUCTION

The Technology Acceptance Model (TAM) has been the dominant framework for explaining the acceptance and use of information technology for nearly twenty 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 information systems technologies (Adam, 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 information systems, 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 on-line shopping since it can have an impact on attitudes and usage intentions. His rationale was based on the findings of Jarvenpaa & Todd (1997a; 1997b). The Koufaris study found that enjoyment was critically important for on-line 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 paper 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 information system. This perspective is consistent

with flow theory (Ghani & Deshpande, 1994; Trevino & Webster, 1992), motivation theory (Deci, 1971; Scott et al., 1988) as well as environmental psychology (Mehrabian & Russel, 1974).

This chapter 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 websites in particular. Secondly, this chapter 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 information systems (Garrity et al., 2005). This is especially important because consumer shopping-oriented web information systems differ from conventional 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 GSISS Model

Garrity and Sanders (1998) adapted the DeLone & 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

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