

Chapter 6.1

The Role of Managerial Attitudes in the Adoption of Technological Innovations: An Application to B2C E-Commerce

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ABSTRACT

Managerial attitudes play an important role in facilitating the championship of innovation adoption. However, there are few empirical studies which show the mediating role of managerial attitudes as a link between innovation determinants and adoption. Based on innovation theory (Rogers, 1983), we posit a conceptual model to show how managers evaluate internal (relative advantage and compatibility of adopting an innovation) and external (competitive pressure and partner conflict) determinants that affect the intention to adopt technological innovations. We focus on empirical tests conducted on B2C e-commerce. Data collected from 109 different enterprises indicate that managerial attitudes, through perceived relative advantage and compatibility of adopting

a technological innovation, have indirect effects on the intention to adopt the innovation. In addition, competitive pressure has a direct influence on the adoption of an innovation.

INTRODUCTION

The critical role of management in the adoption of innovations is reflected in diverse branches of the literature. Since most innovations interrupt existing systems and practices, leading to a reluctance to change on the part of organizational members, management plays an important role in facilitating the championship of innovation adoption (Kanter, 2004; Srinivasan, Lilien, & Rangaswamy, 2002). When management shows a favorable attitude towards an innovation, the

whole organization will be more likely to devote resources to, and show willingness towards, making the adoption successful (Srinivasan et al.). Yet, what determinants induce the decision makers to have a positive attitude towards innovation adoption? Further, once the favorable or unfavorable attitudes are held, to what extent do these attitudes affect the likelihood of adopting an innovation in an enterprise? Innovation research has established a strong theoretical and empirical foundation for answering these two separate questions (e.g., Downs & Mohr, 1976; Moore & Benbasat, 1991; Rogers, 1983; Thong, 1999). However, the missing link is that there are lack of empirical studies that provide concrete evidence on how managerial attitudes mediate the abovementioned relation between innovation determinants and innovation adoption. To tackle this research question, we have to first identify the major determinants of innovation adoptions and then investigate how managerial attitudes intervene in the determinant-adoption relations.

In this study, we focus on the innovation typology with regard to online B2C e-commerce retailing. B2C e-commerce has been recognized as one of the major technological innovations altering market channels in this information age. The expansion of online sales is predicted to show continuous long-term growth (Doherty & Ellis-Chadwick, 2003). It is estimated that by 2010, home penetration of online access technologies (e.g., mobile devices or broadband channels) will raise to average 72.4% of all homes in different major regions; and the use of digital subscriber lines (DSL) and cable modems in e-commerce transactions is predicted to rise to about 50% (Hammond, 2001). According to a survey of the *New York Times*, about 42% of major vendors in different industries have attempted online direct-to-customer transactions (Chiang, Chhajed, & Hess, 2002). Yet the growing interest in online transactions has not necessarily meant all companies have joined “the rush” (Doherty & Ellis-Chadwick, 2003). Research highlighting

different impediments in adoption of B2C e-commerce indicates that it is a challenging task for organizations to achieve success with this innovation (Dubelaar, Sohal, & Savic, 2005). Adoption of innovations by enterprises entails strategic managerial concerns. To provide a clear picture of what is involved in the adoption of an innovation is critical.

Based on innovation theory, the objectives of this study are two-fold:

1. To empirically test the effects of some internal determinants (i.e., perceived characteristics of innovation) and external determinants (i.e., perceived characteristics of environment) on adoption of technological innovations. In this study, we focus on B2C e-commerce.
2. To establish a mediation model to see how managerial attitudes towards technological innovation mediate the above relationship between the innovation determinants and adoption.

THEORY AND HYPOTHESES

In the past decade, theories of innovation have been widely used to investigate adoption of technologies. Innovation research provides wide-scope determinants of innovations (e.g., Gatignon & Robertson, 1989; Kimberly & Evanisko, 1981; Rogers, 1983; Tornatzky & Klein, 1982). In much recent research, innovation theories have often been used to study IT such as electronic data interchange (Thong, 1999), enterprise resource planning (ERP), and open systems (Chau & Tam, 1997). Innovation theories have provided a fundamental base for investigating adoption of technological innovations. Today, IT technologies seem the most representative innovations of this information age.

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