



Chapter VII

Factors Influencing Electronic Commerce Adoption in Small and Medium Businesses: An Empirical Study in Thailand

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Abstract

This study examines the factors influencing the variations of e-commerce adoption decisions in small and medium businesses in Thailand. Based on the literature review, three groups of factors are identified, including organizational, technology, and environmental factors. Firms are classified into three main groups based on the extent to which an organization is relatively earlier to adopt e-commerce than others, namely adopters, prospectors, and laggards. Data was collected through a national survey in

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several provinces in Thailand. The statistical analysis results strongly support the hypotheses. The results are interpreted and the implications of this study are subsequently discussed.

Introduction

The adoption and use of IT innovation in an organization have been studied extensively for many years (Chau & Tam, 1997; Fichman & Kemerer, 1997; Grover & Goslar, 1993; Iacovou, Benbasat, & Dexter, 1995; Ravichandran, 2000). Grover and Goslar (1993), for example, studied the adoption and diffusion of telecommunications technologies in U.S. organizations. Chau and Tam (1997) examined the factors affecting the adoption of open systems. Iacovou et al. (1995) examined the adoption of Electronic Data Interchange (EDI) in small organizations. Though a large number of studies have explored various types of IT-related innovation adoption, few have studied specifically the adoption of an emerging IT-driven innovation, electronic commerce (e-commerce).

E-commerce is “the sharing of business information, maintaining business relationships, and conducting business transactions by means of telecommunication network” (Zwass, 1996). Currently, e-commerce pervasively and dramatically affects the ways firms think, operate, and compete in the market. Many innovative business models such as supply chain management, customer relationship management, and enterprise resource planning are also enabled by e-commerce. The adoption of e-commerce has brought new opportunities and challenges to business organizations.

The main purpose of this chapter is to examine the factors that influence the variations of e-commerce adoption behaviors of small and medium businesses in Thailand. Prior studies found that small businesses are slow in adopting technological innovations (Yap, Thong, & Raman, 1994). Since small and medium businesses constitute almost 90% of all businesses in many economies, the slowing rate of innovation adoption is a critical issue needed to be examined. Moreover, small and medium businesses are different from large businesses in many aspects. Organizational theories that are applicable to large businesses may not fit in small and medium business environments (Wesh & White, 1981). There is a need to examine whether models of IT innovation tested on the large organization context can be similarly applied to small and medium business environments.

While most prior studies in IT innovation have focused on traditional dichotomous variables (for example, use/non-use, adopt/non-adopt), they were criticized for inadequacy in completely capturing a complexity of the innovation and adoption behaviors (Ravichandran, 2000). In addition, most of them emphasized firms that already adopted an innovation. Few studies distinguished firms intending to adopt innovation in the near future from non-adopter firms. In response to this gap, we classify firms into three main groups based on the extent of e-commerce innovativeness (Roger, 1983), the extent to which an organization is relatively earlier to adopt e-commerce than others, namely *adopters*, *prospectors*, and *laggards*. First, adopters are firms that have already imple-

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