Chapter 5.3
Conceptualizing Competences in E–Services Adoption and Assimilation in SMES

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ABSTRACT

This article investigates the competences deemed necessary both at top managerial and individual levels for the successful adoption and assimilation of business-to-business e-services in small and medium size enterprises. To this end, an in-depth case study of a business-to-business e-service system, a Web-based travel reservation system, was conducted. The results show that three main competences, namely vision, value and control, are important at top management level for the primary adoption of e-services. For secondary adoption and assimilation, three categories of competences were identified as being important either to have or to develop at the individual level, namely technical, interpersonal and conceptual skills.

INTRODUCTION

The aim of this study is to explore the competencies that are needed by small and medium size corporations (SMEs) in order to successfully adopt and assimilate e-services. SMEs are defined here as firms with up to 250 employees (OECD, 2000). An extensive body of literature has argued and investigated the importance of e-commerce technologies and e-services for the competitive advantage of the small and medium size firms (e.g., Grandon & Pearson, 2003; OECD, 2000). In addition, many studies have investigated the barriers to the adoption and diffusion of the Internet, e-commerce and e-business in small and medium size firms, as well as factors affecting the adoption and diffusion of these technologies in this type of firm (e.g., Mirchandani & Motwani , 2001; Scupola, 2003). Some of these studies have

focused on competencies as it is thought that they might positively influence the firm's strategic commitment to the adoption and assimilation of technologies such as e-commerce or e-services (Chaston & Mangles, 2002; Eikebrokk & Olsen, 2002; McGowan, Durkin, Allen, Dougan, & Nixon, 2001; Wainwright, Green, Mitchell, & Yarrow, 2005).

In this article, e-services are defined as services that are provided or consumed through the use of Internet-based systems. The consumption or the provision of a service requires the interaction between the service provider and the user. Traditionally, this has been based on personal interactions, most often face-to-face interactions. In e-services, the consumption and the provision take place through the intermediation of an Internet-based system and therefore are separated in time and space (Fuglsang & Sundbo, 2006). E-services can involve a number of different relations: business to consumer, business to business, government services offered on the Internet or e-government. E-services also include the selling of physical goods on the Internet such as an airline ticket that is purchased online, but delivered by surface mail. There are three main characteristics of e-services:

- The service is accessible via the Internet or other electronic networks,
- The service is consumed by a person via the Internet or other electronic networks, and
- There might be a fee that the consumer pays the provider for using the e-service, but that might not always be the case. For example, some e-services offered by the government are free (Scupola, 2008). The purpose of this article is to investigate the competences required for the successful adoption and assimilation of business-to-business e-services in small and medium size enterprises. The basic research question tackled here is: What are the competences required both at the top managerial and individual levels for the successful adoption

and assimilation of business-to-business e-services in small and medium size corporations? To answer the research question, a theoretical model of e-service competencies is developed and a case study of an e-service system is conducted. The results show that three main competences, namely vision, value and control, are important at top management level, while a number of competences are important at the individual level.

The article is structured as follows. This section has presented the main purpose and motivation of the study. The next section discusses adoption and assimilation. This is followed by a literature review relating to the concepts of competence, IT competence, and the development of a model to investigate e-services competencies. It also discusses the methodology employed. The remaining part of the article presents the analysis, the discussion and the conclusions.

Adoption and Assimilation of E-Services

For the purpose of this study, adoption is defined as "the decision to make full use of an innovation as the best course of action available" (Rogers, 1995, p. 21). According to Zaltman, Duncan, and Holbeck (1973) innovation adoption within organizations often occurs in two stages. The first is a firm-level decision to adopt the innovation also called primary adoption; the second is the actual implementation or individual adoption by users also called secondary adoption. At the first level, managers identify objectives to change some aspect of their business and look for innovations that fit their objectives. Then they make the primary adoption decision (Gallivan, 2001). Once the primary adoption decision has been made, the implementation and use of the innovation at the individual level takes place. According to Gallivan (2001), management may proceed by taking three fundamentally different

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