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## Chapter V

# Barriers to E-Commerce Adoption: Why are SMEs Staying Away from E-Commerce?

Despite government support and the exponential growth of e-commerce, it is mainly the larger businesses that have reaped the benefits of this technology (Riquelme, 2002). In contrast, the rate of e-commerce adoption in the SME sector has remained relatively low (Ihlström, Magnusson, Scupola, & Tuunainen, 2003; Poon & Swatman, 1999; Van Akkeren & Cavaye, 1999). This sluggish pace of e-commerce diffusion into SMEs has been attributed to various barriers or impediments that are faced by these organisations. A number of different e-commerce adoption barriers have been documented in research studies. Some of these include the high costs associated with e-commerce, lack of technical resources and expertise to implement e-commerce, the complexity of e-commerce technology, and concerns about e-commerce security. Regardless of the type of barriers cited by SME owners as impediments to e-commerce implementation, it is important to develop strategies to overcome these obstacles. The first step in this process involves developing a deeper understanding of the barriers faced by SMEs, which is the main objective of this chapter.

# **Background**

Although many studies have investigated the reasons why SMEs are reluctant to use e-commerce, the key concern that has arisen repeatedly in every study is security. Without a doubt, concern about security is the most commonly cited barrier to e-commerce adoption. SMEs perceive any technology that supports doing business online as being high risk due to the increase in online security breaches and incidents in recent years. A number of early studies in the U.S. and Greece (Hadjimonolis, 1999; Purao & Campbell, 1998) showed that the apparent lack of security of e-commerce was a major stumbling block for many SMEs. More recent studies (Oxley & Yeung, 2001; Reimenschneider & McKinney, 2001; Vrazalic, Stern, MacGregor, Carlsson, & Magnusson, 2003) have shown that security still dominates the e-commerce landscape as an area of concern. The latest Sensis® e-Business report (2006) found that 49% of online businesses in Australia are worried about people being able to hack into their computer systems.

However, although important, security is not the only barrier faced by SMEs. Another key barrier is related to the limited resources available to SMEs. In their study of 27 SME manufacturing firms, Cragg and King (1993) identified the lack of financial and managerial resources, and inadequate levels of technical expertise as the major inhibitors of IT growth. These three factors were also identified by Welsh and White (1981) as being symptomatic of the SME sector. Purao et al. (1998) identified the lack of technical know how, and Ratnasingham (2000) highlighted prohibitive set up costs as strong disincentives to many SME owners/managers. Since SMEs are inherently under-resourced due to their small size, limited expertise, and poor access to funds, it is to be expected that resource limitations would deter SME owners from investing money, time, and effort into implementing a technology that has no proven track record in the SME sector.

Purao et al. (1998), who conducted a series of interviews with SME owners, found that another major barrier was a failure to see any advantages in using e-commerce. This was also reported by Bakos and Brynjolfsson (2000). Abell and Lim (1996), Tambini (1999), and Eid, Trueman, and Ahmed (2002) all found many SME owners felt that e-commerce did not suit either their day-to-day business procedures or the product mix offered by their business. This barrier seemed to transcend borders. In a cross-cultural study of SMEs in Hong Kong and Finland, Farhoomand, Tuunainen, and Yee (2000) found that both cultures reported a failure to see how e-commerce fit the current mode of business practices as a major obstacle to e-commerce adoption. This is an interesting barrier because it implies that SMEs are considering e-commerce in the context of their business strategy, rather than simply as a technology that must be implemented to keep up with competitors. Although security is constantly emphasised as the key barrier, the unsuitability of e-commerce to the organisation is a precluding barrier.

Studies by Bakos et al. (2000), Sawhney and Zabin (2002), and Mehrtens, Cragg, and Mills (2001) showed that there was still a reluctance among SME owners to adjust their businesses to the requirements and demands placed on it by e-commerce participation. Implementing e-commerce is not a simple and straightforward process requiring the installation of hardware and software. Instead, it is a complex and time-consuming activity that may involve a complete re-design of the business strategy and an integration of organisational systems at multiple levels. It is understandable that SMEs are disinclined to embark on (or manager) this type of business transformation.

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