

## Chapter 5.25

# Obstacles to SMEs for E-Adoption in the Asia Pacific Region

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### INTRODUCTION

The e-commerce revolution has affected all organizations. Of particular interest is its effect on small and medium-sized enterprises (SMEs), because we can observe an interesting duality, where these companies are most likely to benefit from the opportunities afforded by e-commerce (because through e-commerce, it is possible to level the playing field), and yet they appear to be slowest in embracing many of these e-commerce possibilities. On several social and economic grounds, SMEs are of overwhelming importance in most of the Asia Pacific/Pacific region. In fact, they comprise well over 90% of all enterprises in this region and provide employment for over half of the region's workforce (Wattanapruttipaisan, 2002; APEC, 2001). Typically, the SME sector accounts for upwards of 90% of all firms outside

the agricultural sector of East and Southeast Asia, and of Japan as well (Alphonso, 2001; Regnier, 2000; Tambunan, 2000; Wattanapruttipaisan, 2002; A Report Prepared for Asia Pacific Foundation, 2002).

Given the importance of SMEs to this region, it becomes crucial to understand the obstacles they are facing. First, we must understand why e-commerce adoption has been slow, if it occurs at all, for these SMEs, and then suggest changes to policy that may enable the alleviation of such obstacles, and hence, the successful embracing of e-commerce for these SMEs. What follows is a brief synopsis that serves to outline the key factors hindering SMEs' participation in e-commerce and the obstacles to SMEs for e-adoption in the Asia Pacific region.

## **BACKGROUND**

Electronic commerce (e-commerce) succinctly stated refers to any transaction completed over a computer-mediated network that involves the transfer of ownership or rights to use goods or services (Tambunan, 2000); i.e., e-commerce can be defined as the conduct of buying, selling, and financially transacting by electronic means. E-commerce has been around for many years, particularly in the form of electronic data interchange (EDI). However, it is the Internet that is bringing it to the fore (Afuah & Tucci, 2000). The key aspect of e-commerce today is doing business over the Internet. E-commerce levels the playing field and lets small organizations compete with large organizations. The concept of e-commerce is about using the Internet to do business better and faster as well as shrinking traditional barriers of distance and time (Afuah & Tucci, 2000). Despite the downturn in the Internet economy represented by the crash of many dot-com companies, several forecasts continue to predict huge potential in global e-commerce over the next several years (Turpin et al., 1998). With an estimated 188 million users at year-end 2002, the Asia Pacific/Pacific region constitutes the world's second largest Internet market, ahead of North America (eMarketer Inc., 2002). South Korea, China, India, Singapore, Malaysia, and Indonesia are leading in ICT proliferation and e-commerce offerings as compared to other countries (Hill, 1998). ICT use is related to general economic indicators, such as gross domestic product (GDP), yet it is also affected by a wide range of other factors, including government policies, telecommunications costs, and social aspects (Beal, 2001; A Study Report on Thailand, 2001). Despite a sluggish economy in the Asia Pacific region, consumer demand for devices such as computers, mobile phones, and personal digital assistants (PDAs) has remained consistent throughout the region, and Internet usage is rising<sup>1,2</sup> (Debroy, 2002; UNCTAD, 2002; PricewaterhouseCoopers,

1999), yet the adoption of e-commerce by SMEs has been notably slow.

As the usage of the Internet is growing, the e-commerce and e-business initiatives in Asia Pacific are growing at a very fast rate. eMarketer projects that business-to-business (B2B) e-commerce revenues will grow to exceed \$300 billion in the Asia Pacific/Pacific region by 2004 (eMarketer, 2002, [www.emarketer.com](http://www.emarketer.com)). Despite such a high growth of e-commerce in Asia Pacific/Pacific and other Asia Pacific countries, the percentage of revenues generated through business-to-consumer (B2C) e-commerce transactions are still very low as compared to developed countries (Beal, 2001).

## **SMEs and E-Commerce**

The adoption of e-commerce technologies is important for the ongoing survival of SMEs. The most significant business benefits for SMEs from the use of e-commerce are described below (Arunachalam, 1995; Sengenberger et al., 1990, Sharma et al., 2003, Afuah & Tucci, 2000):

- Better service quality—E-commerce can improve the quality of the marketing, sales, support, and procurement processes of SMEs by delivering more accurate, timelier, and more complete information to the point of sale, point of decision, or point of support. Service can also be delivered over a broader geographic and temporal base worldwide or anytime, anywhere.
- Reduced service costs—The self-service Internet-based e-commerce model is characterized by relatively low variable transaction costs, with increasing cost-effectiveness as the scale of activity increases. At higher volumes of activity, Internet commerce channels for sales and support services are likely to be low-cost channels.
- Increased revenue—Extended geographic sales channels and improved service quality

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