Chapter 8

The Perception of Barriers to E–Commerce Adoption by SMEs: A Comparison of Three Countries

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ABSTRACT

Electronic commerce (e-commerce) has been utilised as a vehicle to rapidly transform the world into an information society. Yet despite the proven potential of e-commerce in the small business sector, studies have shown that it is the larger businesses that have reaped the benefits, with small/medium enterprise (SME) adoption remaining relatively low by comparison. This slow growth of e-commerce adoption by SMEs has been attributed to various adoption barriers that are faced by small business owners/managers. While many recent studies have begun examining the relationship between the perceptions of adoption barriers in developed economies, the relationship between the perceptions of these barriers has not been fully examined in developing economies. This chapter firstly presents the authors’ understanding of what defines an SME and then highlights our current understanding of the similarities and differences in barriers to e-commerce adoption by SMEs in developed and developing economies. It then describes and discusses a study which examines differences in the groupings and priorities of barriers to adoption of e-commerce as perceived by SME owner/managers in a developing economy (Indonesia) and two developed economies (Sweden and Australia). The chapter finally describes the implications of these findings for practitioners and researchers.

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INTRODUCTION

The importance of the small to medium enterprise (SME) sector as the cornerstone of most economies is widely recognised (Abdullah and Bakar, 2000; Hall, 2002; NOIE, 2002; Bharati & Chaudhury, 2009). This is not only borne out by the number of SMEs (almost 90% of the total number of businesses across the world), but also by their significant role in creating employment opportunities (Hall, 2002). The role of SMEs is further highlighted in studies by Abdullah and Bakar (2000) and Urata (2000) that suggest that SMEs are vital to the emergence of healthy private sectors, especially in poorer countries. However, research has indicated that the SME contribution to the GDP of many nations has fallen over the past few years (Abernethy, 2002). While the reasons for this decrease are diverse, SMEs are attempting to reverse the trend by turning to global markets. This development has been enabled by the advent of electronic commerce (E-commerce) technology. E-commerce, defined as “the buying and selling of information, products, and services via computer networks” (Kalakota and Whinston, 1997) is radically changing the dynamics of the business environment and the way in which people and organizations are conducting business with one another. For SMEs, e-commerce has the potential to become a source of competitive advantage. E-commerce is a cost effective way of accessing customers globally and competing on par with large businesses. Indeed, Lee (2001) suggests that e-commerce has altered the outlook of businesses from one focused on lean manufacturing (termed as economics of scarcity) to a focus on information which he terms as economics of abundance. SMEs have started to capitalise on these benefits initially by connecting to the Internet. Indeed, according to the American City Business Journals (IEI, 2003), SMEs using the Internet have grown 46% faster than their counterparts who do not use the Internet (Bajaj and Nag, 1999; Khiang and Chye, 2002; Scupola, 2003).

Despite the proven potential of e-commerce and the continued growth of the technology, studies (Riquelme 2002, Magnusson 2001, MacGregor & Vrazalic 2005) have shown that it is the larger businesses that have reaped the benefits, with SME adoption remaining relatively low by comparison (Bharati & Chaudhury, 2009, Kim, 2008). This is particularly the case in many developing economies (Kapurubandara & Lawson 2006). Studies over the past decade have shown that the slower growth of e-commerce adoption in SMEs can been attributed to various adoption barriers that are faced by small business owners/managers. These barriers have been well documented in numerous research studies (Lockett & Brown 2006, MacGregor & Vrazalic 2007, Al Qirim 2007, Quayle 2002, Kim 2008). While most of these studies (see for example Beatty et al. 2001, Mehrtens et al. 2001) have been carried out in developed economies, a number of recent studies (Kapurubandara & Lawson 2006, Kartiwi 2006, Hermana et al. 2006, Kaewkitipong & Brown, 2008) have begun to look at developing economies. The differences between developed and developing economies (such as available infrastructure, social and cultural issues) invariably lead to the conclusion that findings derived from developed economies cannot be generalised to developing economies. Indeed, recent studies (Kaynak et al. 2007, Molla & Heeks 2007) suggest that simply transplanting findings from developed to developing economies results in conclusions that are little more than conceptual models without any rigorous empirical foundations.

The aim of this chapter is twofold: to identify the underlying factors of e-commerce barriers in developed and a developing economies; and to determine whether the underlying factors themselves differ between SMEs in developed and developing economies. The chapter begins by examining the nature of SMEs and identifying features that are unique to SMEs. A discussion of barriers to e-commerce adoption based on previous research is then presented and these barriers