

# Chapter V

## E-Commerce Adoption and Appropriation by SMEs in Sri Lanka

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### ABSTRACT

*Acceptance of the Internet has paved the way towards the development of virtual communities that keep increasing in the current information society making it imperative for business, especially the small and medium enterprises (SMEs) which form the backbone of any economy, to keep abreast with e-commerce and remain competitive. To stimulate and facilitate SME participation in business activities through the Internet, it is necessary, therefore, to provide clear guidance and direction with suitable models and frameworks specifically tailored for the purpose. This chapter highlights an attempt to develop a suitable framework for the e-transformation of SMEs in Sri Lanka. In the belief that new models and frameworks can help SMEs to equip themselves to better understand their current stage and identify the main barriers at each stage of the adoption process, this attempt starts with an initial exploratory study of 17 SMEs, followed by a regional survey involving 625 SMEs from various industry sectors, along with interviews with the SME intermediary organizations. The proposed model facilitates establishing the current stage of an SME with regard ICT and e-commerce sophistication using five stage variables. It also assists to determine current position with regard to barriers towards the adoption of e-commerce and helps determine the support necessary to overcome such identified barriers. The research detailed in this chapter establishes that barriers show variance when SMEs proceed to more advanced stages in the adoption process. Likewise, the necessary support required indicates a similar trend. Going further, the chapter proposes a model for adoption of e-commerce for SMEs in Sri Lanka and identifies the essential need for support while acknowledging available support. Finally, it proposes an initial framework to e-transform SMEs in developing countries.*

## INTRODUCTION

The prominent role that information and communication technologies (ICT) plays in the field of commerce and trade nowadays is undisputed. While the developed world forges ahead with e-transformation of businesses, the developing world struggles to keep pace with emerging technologies. In a challenging global society, effective use of e-commerce technologies is critical to the success of business economic growth and increased productivity. This is particularly true for small and medium enterprises (SMEs). Consequently, new technologies are the key to enabling SMEs to establish contacts and participate in the world economy (Rayport & Jawaorski, 2003).

E-commerce technologies contribute significantly towards re-invigorating corporate management, and growing of the national economy (UNDP, 2004). It is also a factor in facilitating organizations to improve their business processes and communications, within the organization and with external trading partners (Chong and Pervan, 2007). E-transformation will also facilitate provision of a more level-playing field, by enabling a growing market share, and providing new opportunities for competitive advantage. Envisaging a shift to a knowledge-based economy, e-transformation is seen as an increasingly important tool for SMEs, necessary to ensure their viability and growth into the future (UNDP, 2004).

Although large organizations accept ICT advances including e-commerce technologies, the same level of adoption is not evident among SMEs (Bode & Burn, 2002; Knol & Stroeken, 2001, Marshall, Sor & McKay, 2000). This is particularly the case of SMEs in developing countries, where they face significant and unique challenges in adopting e-commerce. The reality is that many SMEs have not been successful in exploiting these potential opportunities, despite efforts by governments and donor organizations. Research indicates e-commerce offers viable and practical solutions for organizations to meet chal-

lenges of a predominantly changing environment. However, the few available studies related to SMEs in developing countries reveal a delay or a failure on the part of SMEs in adopting e-commerce technologies. In this connection, research also reveals a number of failed e-commerce ventures in developing countries without viable business models for their regions, despite high potential growth (Laosethakul & Boulton, 2007).

Where governments believe that e-commerce can foster economic development it is necessary to identify the inherent differences in developing countries with diverse economic, political, social and cultural backgrounds to understand the process of technology adoption (Mehrtens, Cragg & Mills, 2001). Governments need to address the problems that impede SMEs from adopting and using e-commerce as indicated in SME studies of e-commerce issues in developed countries with unique and very different issues (Lawson, Alcock, Cooper & Burgess, 2003; Huff & Young, 2000; OECD, 1998; Corbitt, Behrendorf & Brown-Parker, 1997). When moving towards this attempt it is crucial to identify the key determinants (facilitators and barriers for adoption) before launching effective strategies for expanding e-commerce for SMEs (Jean, Han & Lee, 2006). Currently available research has not had enough focus on adoption of e-commerce for SMEs in developing countries, where adoption has now become a necessity. Unfortunately, the absence of sufficient research allows for gaps in our understanding. It also limits the awareness of the barriers and the interplay with the circumstances unique to SMEs in developing countries that have different social, cultural, political, and infrastructure conditions. Hence, it is crucial to investigate relevant issues and examine supporting activities necessary for SMEs to become worthy business partners. Of course, when forging ahead SMEs need to accept the challenges, including the barriers as they strive for successful adoption of the available technologies. Concurrently, they also need to raise their awareness of accessible

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