

# Chapter 61

## Information and Communication Technology Adoption in SMEs in Sri Lanka: Current level of ICT Usage and Perceived Barriers

**Jayani Chamarika Athapaththu**

*University of Colombo, Sri Lanka*

**Busige Nishantha**

*University of Colombo, Sri Lanka*

### ABSTRACT

*Information communication technology (ICT), considered as one of the major impacts of organizational performance and small and medium enterprises (SMEs), plays a significant role in the Sri Lankan economy as a strategic partner. Thus, the article examines current levels of ICT usage and perceived barriers to ICT adoption in SMEs in Sri Lanka. The findings revealed that despite the majority of respondents using IT for essential functions, they lacked proper internal IT infrastructures, personal motivation, had internet connection issues, trust issues, and lack of knowledge. These factors were identified as the perceived barriers to ICT adoption in SMEs in Sri Lanka. Data was collected from 67 SME owners from Sri Lanka, except the North province, in November 2016. The findings offer valuable insights to policy makers in general and to the SME owners. The methodology, implications, and suggestions are also discussed.*

### INTRODUCTION

Information and communication technologies (ICT) have influenced almost all sectors including education, health, bank and entertainment to name a few. Business organizations are rapidly investing in ICT because, there so many advantages attached to it. Many researchers have proven that there is a significant impact on ICT and business performance (Hajli & Sims, 2015; Melville, Kraemer & Gurbaxani, 2004; Halachmi, 1988).

DOI: 10.4018/978-1-7998-1760-4.ch061

Small and medium enterprises (SMEs) play a major role in any economy. They generate employment, introduce new business methods and products, reduce poverty, inflation and income inequality and solve the balance of payment problem (Prasad, Tata & Guo, 2012; Zeinalnezhad, Mukhtar and Sahran, 2011; Singh, Garg and Deshmukh, 2010; Tambunan, 2008, as cited in Priyanath & Premarathne, 2014).

ICT helps particularly in SMEs to create business opportunities and to compete profitably. According to Parida et al. (2010) Information technology (IT) helps to eliminate cost by improving internal processes, providing faster communication with SMEs' customers and better promoting and distributing their products via online. The value chain concept developed by Michel Porter views the firm as a series, or a network which consists of basic and secondary activities and particularly basic activities that add value to its products and services and ultimately leads to achieve competitive advantages (Porter & Michael, 2001). Hence this framework provides an image of a company to achieve competitive advantage by implementing competitive strategies through the value chain. According to Obrian and Marakas (2010) implementing IT through the value chain adds value to a company's products and services consequently enhance the overall business value of the company.

Many SMEs implementing IT for their business and enjoy many benefits attached to it. Enhancing productivity and effectiveness of certain activities or functions, assist in the adoption of new organizational, strategic and managerial models that enable access to new environments, as well as the generation of new markets and business model (Brady et al., 2002; Kahn, 1996, 2001; Javalgi & Ramsey, 2001; Corbitt, 2000; Johnston & Lawrence, 1998 as cited in Barba-Sánchez, 2007).

SMEs play a major role in the Sri Lankan economy. The SME sector in Sri Lanka has been identified as an important strategic partner and growing partner of social development (Small and Medium Enterprise Sector Development Programme, 2002). SMEs cover broad areas of economic activities including agriculture, mining, manufacturing, construction and service sector industries in Sri Lanka.

Even though SMEs play a major role in Sri Lankan economy, they are facing greater challenges in the modern business world due to intense competition, rapidly changing new technologies and globalization of products and services (Kanagasingam, 2012). Further, according to the Action Plan for 2016, the National Policy Framework for SME development has identified "Access to Technology" as a key factor in sustainable SME development. Furthermore, it has been identified that SMEs account for more than 90% of the total enterprises in Sri Lanka and for 45% of employment. Thus, it is considered the backbone of the economy. Even though an interesting and growing number of research studies have focused on the barriers to implementing ICT in SMEs (Parida et al., 2010; Tan et al., 2009; Barba-Sánchez et al., 2007), owing to the above mentioned unique characteristics, Sri Lanka is different from other developing countries and it is worthwhile identifying the barriers to ICT adoption and the current level of ICT usage in SMEs in Sri Lanka. Furthermore, rapid socio-economic and cultural changers may render the previously identified factors obsolete. Therefore, it is important to explore factors inherent in the current society in order to achieve the aforesaid sustainable development. Thus, this paper aims to fill this gap by understanding the level of ICT adoption and identify the factors that hinder the implementation of ICT in Sri Lankan SMEs.

The paper is divided into five parts. After the introductory section on the background of SMEs in Sri Lanka, the relevant literature is reviewed and barriers to adopting ICT in SMEs are discussed in the second section. Section 3 presents the methodology while Section 4 presents the analysis and findings of the study. The final section presents the theoretical and practical implications, limitations of the study and recommendations for future research.

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/information-and-communication-technology-adoption-in-smes-in-sri-lanka/245504](http://www.igi-global.com/chapter/information-and-communication-technology-adoption-in-smes-in-sri-lanka/245504)

## Related Content

---

### Investigating the Information Perception Value (IPV) Model in Maintaining the Information Security: Bruneian Perspective

Sharul Tajuddin, Afzaal H. Seyal, Norfarrah Binti Muhamad Masdiand Nor Zainah H. Siau (2020).

*Handbook of Research on Social and Organizational Dynamics in the Digital Era* (pp. 499-524).

[www.irma-international.org/chapter/investigating-the-information-perception-value-ipv-model-in-maintaining-the-information-security/234556](http://www.irma-international.org/chapter/investigating-the-information-perception-value-ipv-model-in-maintaining-the-information-security/234556)

### E-Novation and Start-Up Companies

Suresh Sood (2013). *Small and Medium Enterprises: Concepts, Methodologies, Tools, and Applications* (pp. 1860-1872).

[www.irma-international.org/chapter/novation-start-companies/76048](http://www.irma-international.org/chapter/novation-start-companies/76048)

### Investigation of Organizational Culture in Family Firms: Review of Existing Evidence and Application of the New Vox Organizations Model in Family Firms

Ana Tomovska Misoska, Miodraga Stefanovska-Petkovska, Marjan Bojadjevand Ivona Mileva (2021).

*Designing and Implementing HR Management Systems in Family Businesses* (pp. 101-120).

[www.irma-international.org/chapter/investigation-of-organizational-culture-in-family-firms/268974](http://www.irma-international.org/chapter/investigation-of-organizational-culture-in-family-firms/268974)

### Adoption and Use of Human Information System Digital Technology for Organizational Competitiveness: An Exploratory Study in the Context of Nepal

Alamuri Surya Narayanaand Roshee Lamichhane Bhusal (2020). *Handbook of Research on Social and Organizational Dynamics in the Digital Era* (pp. 250-275).

[www.irma-international.org/chapter/adoption-and-use-of-human-information-system-digital-technology-for-organizational-competitiveness/234544](http://www.irma-international.org/chapter/adoption-and-use-of-human-information-system-digital-technology-for-organizational-competitiveness/234544)

### Elevating Performance and Navigating Success Through Innovative Performance Management in SMEs

George Kassar (2024). *Innovative Human Resource Management for SMEs* (pp. 102-116).

[www.irma-international.org/chapter/elevating-performance-and-navigating-success-through-innovative-performance-management-in-smes/337910](http://www.irma-international.org/chapter/elevating-performance-and-navigating-success-through-innovative-performance-management-in-smes/337910)