

# Chapter 13

## An Empirical Study of the Factors Influencing ICT Adoption in SMEs

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### ABSTRACT

*ICT has the potential to radically change the way business is conducted, offering a competitive edge and a gateway to the global marketplace. The explosive growth of ICT has opened a vast arena providing opportunities for businesses, particularly SMEs to sell their products and service to a global audience than they would have been able to afford to reach using the traditional methods. This chapter reports on the empirical study of ICT adoption in small to medium-sized enterprises. The intention of the study is to present evidence on the factors that influence SMEs' decision to adopt ICT in business. The study is chosen because of the strategic importance of SMEs to the economy and their contribution in creating jobs cannot be over emphasized. The study uses in-depth case studies, conceptualized within the grounded theory method to generate thick description to explain the phenomenon. The study uses diffusion theory and the technology acceptance model as a basis for the theoretical framework.*

### INTRODUCTION

Small to Medium-sized Enterprises (SMEs) are extremely important to many countries, in some countries these group of organizations provide the foundation for the entire economy (Mason, 1997), their contribution to the economy cannot be over emphasised. These enterprises serve as drivers of economic growth and innovation. SMEs comprise firms that make up a sizeable proportion of UK industry (Ofitel, 2000). They account for more than 50% of private sector employment in the UK and are currently contributing most of private sector employment growth (DTI, 1998). In most countries, SMEs constitute more than 98% of the total number of businesses (OECD, 2000). However, these categories of enterprises face multiple challenges. To minimise the challenges, several solutions have been suggested including the adoption of ICTs to boost efficiency and competitiveness.

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Technologies are being adopted and incorporated into nearly all organizations, particularly Information communication technologies (ICTs) which have the potential to radically change the way businesses are conducted (Lawrence, 2002). ICTs refer to the wide range of computerised information and communication technologies. These covers all technologies used for the handling and communication of information and their use, specifically in organisation. For example, the Internet, wireless networks, email, mobile telephony, digital recording equipment, tablet, PCs, laptops and other communication mediums, computer networks as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information (Ashrafi & Murtaza, 2008). ICTs provide a great deal of opportunities, as well as challenges for SMEs. In an increasingly global world, both information and information technology are of great significance to organisations of all sizes. The adoption and use of ICT in business is widely seen as critical for the competitiveness of SMEs in the global marketplace (Lawrence, 2013).

The adoption of ICT presents a unique opportunity for SMEs to participate in electronic commerce and extend their capabilities and grow in a global market. The Internet provides more opportunities for businesses, particularly SMEs to sell their products and services to a global audience than they would have been able to afford to reach using the traditional methods. The effective use of ICT can add significant value to an organisation in terms of productivity increase and performance improvements (Lawrence, 2009). The establishment of an environment in which SMEs can grow and prosper in the global market is considered critical to the development and expansion of businesses in the economy.

The purpose of this study is to empirically investigate the factors that influence the adoption of ICT in SMEs business and to generate a grounded theory, not to test a theory that has been determined a priori. Previous studies (Orlikowski, 1993) show that theoretical grounding for understanding and developing clear process of ICT adoption, integration and implementation has been lacking. The present study aims to fill this gap by building on the work done so far by using grounded theory method to develop a model designed to explain and enhance the understanding of the factors that influence SMEs' decision to adopt ICT in business.

## **BACKGROUND**

SME is chosen as the main context of this study because of the strategic importance of this sector to growth and job creation. Businesses in this sector include those which are flexible to new working patterns and who are innovators in the adoption of new business practice. There is no universal definition of SMEs that is widely accepted, the definition varies from country to country but is often based on employment, assets or a combination of the two. The term Small to Medium-sized Enterprises (SMEs) incorporates two primary classifications - small business and medium business. Hence, different definitions are used in different countries. For instance, OECD (2004) defines SMEs as enterprises that have less than 500 employees. while in Australia, SMEs are defined as enterprises that have between five and 199 employees (Kotey & Folker, 2007). In Britain, the Department of Trade and Industry (DTI) defines SMEs as a company employing between 1-249 employees. The current study is based on DTI SME definition of small business thus: independently owned and managed; being closely controlled by owners/managers who also contribute most, if not all, of the operating capital, having the principal

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