

Chapter 1.9

Engaging SMEs in E-Business: Insights from an Empirical Study

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ABSTRACT

The rapid rise of e-business has brought profound impact on, as well as significant challenges to, businesses of all sizes. The lack of anticipated engagement in e-business by small and medium sized enterprises (SMEs) is still a concern to the UK government. Findings from the literature appear to have revealed a contradictory picture of SMEs' engagement in e-business. There is limited systematic research into how companies, especially small companies, are adopting the Internet technologies. This book chapter reviews current research on SMEs' e-business adoption by following various adoption models. The chapter examines the driv-

ing forces and inhibitors that effect the adoption of e-business technology in SMEs. Through interviews with 40 owner managers in the electronic components industry, the chapter reveals that most of the small firms in this industry are at the lower level of the 'e-adoption ladder' - predominantly using the Internet for searching information and email. SMEs in this industry have not yet widely engaged in online transactions. The current level of adoption is driven by both internal and external factors, including operational benefits, industry common practice and peer pressure. External forces such as a lack of push from suppliers and customers and a lack of strategic vision of using advanced e-business technology for competitive advantages have determinant effects on the level and scale of e-adoption in SME sector.

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INTRODUCTION

Small and Mediums Sized Enterprises (SMEs) play an important role in local, national or even global economy. In the UK, there are 3.7 million firms, employing over 12 million people which generates 55% of UK employment and contributes approximately 51% to the UK Gross Domestic Product with an annual turnover of over one trillion pounds sterling (Dixon, *et al.*, 2002). SMEs are not miniature versions of large firms, they are unique in their own right (Barnett and Mackness, 1983). Certain characteristics make up the SME organisational environment in which it operates, this includes a small management team, strong owner influence, multi-functional management, limited ability to obtain finance and a lack of control over the business environment. SMEs provide an environment in which structures and processes are and must remain simple, flexible and adaptable (Carmichael *et al.*, 2000). In small firms, firm and managerial factors are merged due to the high locus of control exerted by the key decision makers (Boone *et al.*, 2000). Kula and Tatoglu (2003) argue that SMEs have fewer resources than large firms, which lead to weaknesses in planning, training, finance and organization of internal information.

Studying e-business adoption in the SMEs sector is of particular importance. The Internet is described as the SME's gateway to global business and markets (Liikanen, 2001), and e-business technologies are expected to allow SMEs to gain capabilities that were once the preserve of their larger competitors. These new technologies offer the potential for creating entirely new ways of working, giving rise to a new breed of SMEs whose management and employees use a more flexible and more effective way of working. E-business is expected to become a key driver in the way companies across the globe conduct business. However, whether these new technologies are put to efficient use by SMEs and what driving forces that push SMEs up the adoption ladder remains

a question that attracts considerable attention of researchers and policy makers (Parish, *et al.* 2002; Ramsey *et al.* 2003; Fillis, *et al.* 2004).

The unique characteristics of SMEs affect their Internet technologies adoption. Research suggests that there is a correlation between the size of a business and the level of IT adoption (McDonagh and Prothero, 2000). The typical microenterprise exhibits much lower rates of e-business activities than larger firms when excluding smaller high-technology firms (Smyth and Ibbotson 2001). Large organizations are inclined to adopt the click and mortar model by integrating offline and online business or spin-off online operations. In contrast, small and medium-sized firms lack a general pattern on adoption of Internet technologies (Chavez, *et al.* 2000). The extent of adopting Internet technologies may vary widely among small and medium sized enterprises (Kula and Tatoglu, 2003). This creates great demands and challenges to construct a clear picture of the level of e-business adoption in the SME sector.

Research into the level of adoption of e-business technologies in the SMEs sector reported very contradictory results, which exacerbates the current situation of confusion. For example, Smyth and Ibbotson (2001) reported from a multiple industry survey that an extremely low adoption rate was found in Ireland and Northern Ireland. Daniel *et al.* (2002a) found 50 percent of e-business adoption in UK SMEs. The statistics of the European Observatory for SMEs show that most SMEs are not using the Internet and the World Wide Web (WWW) for commercial transactions despite the allure of e-business benefits (Ramsey *et al.* 2003). A multi-industry survey conducted in the North and South of Ireland by Ramsey, *et al.* (2003) revealed that only 33% of the firms had a web site, 10% of the firms used websites to generate online orders, and none of the websites could facilitate online payments. However, in a study of the adoption of e-commerce in the UK electronics industry (Parish, *et al.* 2002), a relative high level of adoption of Internet technologies has

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