Chapter XI
EU E-Business and Innovation
Policies for SMEs

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INTRODUCTION

This chapter provides an overview of the current UK situation of e-business adoption and implementation, and outlines the primary UK government policies and initiatives that have been introduced since 2000 in order to stimulate e-business adoption and implementation by SMEs. Companies of all sizes that have adopted e-business believe that it contributes to improved performance in four main ways:

- The development of new products and services.
- The generation of new customers and business channels.
- A reduction in costs.
- Improved productivity (HM Treasury, 2001c).

Timmers (2000) and Rayport and Jaworski (2001) have analyzed how the Internet has enabled business models that were not possible previously. E-business adoption has been advocated as a way of reducing transaction costs, gaining market share, streamlining business processes, achieving competitive advantage and improving relationships with business partners (Porter, 2001). E-business can improve the ability of SMEs to compete with larger organizations (Watson, Akelsen, & Leylan, 1998), and enable them to operate on an international scale (OECD, 1998b). Adopting e-business is a cost-effective way for small organizations to market their business, launch new products, improve communications, gather information, and identify potential business partners (Basu, 2001) with few barriers to entry (Chaston & Mangles, 2002). E-business therefore challenges traditional strategic management thinking.

However, the extent to which ICT and Internet usage by SMEs features in the literature is still, relatively, undeveloped (Dixon, Thompson, & McAllister, 2002; JCESB, 1999). The smaller the enterprise, the less statistically likely it is to use technology, let alone operate as an e-business. Cost remains the biggest restraint to new technology uptake (Dixon & Marston, 2002; FSB, 2002a; 2002b). SMEs still tend to use the Internet only to send emails, to transfer files or documents, and/or to gather information. Despite the widely touted benefits of broadband, the UK SME sector lags leaders such as Sweden and Germany in terms of connectivity (BAH, 2002). In a 2001 survey, 25 percent of SMEs did not believe that the Internet
was relevant to their business, and 11 percent felt they lacked the skills or knowledge to go online (SBS, 2002c). Figure 1 illustrates IT usage by UK SMEs.

E-business adoption by SMEs seems to be strongly influenced by the innovativeness of their customers, suppliers and competitors. However, while close contact with key customers, suppliers and competitors is an advantage, SMEs often lack an understanding of how to assess and control the risks associated with managing them (Berthon et al., 1999), and harnessing e-business requires a thorough understanding of technology and its capabilities.

Unlike previous technological initiatives, e-business adoption is a “disruptive” innovation (Evans & Wurster, 1999). Whereas previous technological innovations sought to minimize dependency on other organizations, enabling businesses to dictate matters such as production and marketing, e-business requires organizations to reassess their boundaries and to focus attention inter-organizationally rather than organizationally (Kalakota & Robinson, 1999). In the past, adaptation to technology tended to be predictable, sequential and measurable, but adaptation to e-business is often unpredictable, non-sequential and immeasurable.

In the pre-Internet environment, strategies surrounding the adoption and implementation of ICTs could be planned and controlled, and therefore the (potential) benefits derived from adopting a given technology could be ascertained in light of a cost:benefit equation resulting in direct expected outcomes. The implementation of e-business, however, requires new knowledge and skills. Mathiyalakan (2003) found that e-business skills and expertise affects e-business implementation, but not Internet adoption, as technical and managerial skills are necessary in order to conduct e-business (Grover et al., 1998). And although it is possible to sub-contract or outsource Web site development and maintenance to a third party (for example), in-house e-business knowledge (if not expertise) is necessary for an organization to achieve full implementation (Bode & Burn, 2001). None of these inconsistencies appear to be reconcilable based on the business’ “size” factor alone.

E-business is not only rapidly innovating traditional business processes, but also the very nature of competition, enabling market fragmentation, the ability to treat mass clients as individuals, convergence between products and services, global production networks, and simultaneous co-operation and competition between organizations. As e-business facilitates this radical transformation of both technical and business operations, it is truly innovative.

Innovation is an important engine of long-term competitiveness, growth and employment (Tushman & O’Reilly, 2002). The OECD estimates not only that between 1970-1995, more than half of the total growth in output of the developed world resulted from innovation, but also that this proportion is increasing as economies become more knowledge-intensive (Irwin, 2000). The cross-functional nature of innovation management requires strong leadership in managing through turbulence (Tushman, 2002).

Collective knowledge and activities become embedded within organizations (Hanseth & Braa, 2000) that tend, as a result, to develop stable routines and cultures. Change does not therefore usually take place without the motivation to do so. Such motivation is usually provided when “assumptions, attitudes, or behavioral routines” no longer work or are out of date (Schien, 1999, p. 104-5). This “disconfirmation” is usually brought about by a champion in the organization who is