Chapter 1.14

The Evolving Web Presence of SMEs:
An Empirical Approach to E-Business

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ABSTRACT

This chapter reviews current approaches to the study of the progression of small- and medium-sized enterprises (SMEs) in their use of Internet technologies. It is argued that a research framework that combines three different dimensions of organisational change (process, content, and drivers) offers an alternative approach to e-commerce stage models in understanding the evolution of SMEs Web sites over time. Furthermore, a study of 192 Web sites and their evolution over ten moths is described to demonstrate the relevance and applicability of the dimensions of the framework. The study describes the different approaches (monitoring, content analysis, and telephone interviews) and the characteristics of changes on these Web sites. The proposed framework is argued to be useful to academics, providing multiple perspectives enabling more insightful study of SMEs e-business adoption and progression, and avoiding breakdown, a priori theory, for example, stage models. The framework is also argued to be useful for SME managers seeking to make the most of their limited resources in this context.

INTRODUCTION

The majority of SMEs in the UK have already established a Web presence (DTI, 2003). Firms have numerous reasons for establishing a Web presence, and these reasons influence the design

and implementation of their Web sites. Carrying out online sales and other business transactions is seldom the main reason for establishing a site, which can be used to achieve a variety of purposes (McNaughton, 2001). For example, SMEs are finding a presence on the Web to be important for enhancing their corporate image, increasing brand/product awareness, providing customer service, discovering new business opportunities, and information gathering (Chau, 2003; Gribbins & King, 2004; Levy & Powell, 2003). Commercial Web sites influence potential customers' impressions of firms' legitimacy, innovation and caring (Winter, Saunders, & Hart, 2003). Thus, customers may have different views of a firm depending on the Web features or content available (e.g., design, business policies, security) that might determine whether a customer visits the site again or makes a transaction (Teo & Pian, 2004). Given the growing importance of Web sites in relations between companies and consumers, businesses are ever more aware of the need to improve their offerings. Therefore, a Web site is likely to be a dynamic entity, demanding continual maintenance, investments, skill acquisition, and management commitment.

The evolution of Web sites is not yet clearly understood and there is little research evidence to explain why and how organisations continually evolve their Web presence. For example, it has been suggested that SMEs adoption of Internet technologies follows a sequence of stages. These stage models imply that businesses move in broad phases from basic use of the Internet (as an e-mail or marketing tool) to more sophisticated usage that redesigns business processes and integrates business systems (e.g., Daniel, Wilson, & Myers, 2002; Rao, Metts, & Mora Monge, 2003).

In recent years, governmental programs of the UK, European Union and other governments have used these kind of "one-size-fits-all" stage models to encourage SME e-business adoption (e.g., DTI, 2002; Industry Canada, 1999; NOEI, 2000; SIBIS and European Communities, 2003).

However, despite the efforts of governments and the various support programs, the number of SMEs achieving advanced stages of e-commerce is very low and lags behind larger companies in their use (CBI and KPMG Consulting, 2002; DTI, 2003; EU, 2003). Recent research reveals that e-commerce initiatives in SMEs are mainly still at the initial stages, not progressing much beyond e-mail and simple information-based Web pages (e.g., Brown & Lockett, 2004; Levy & Powell, 2003; Oliver & Damaskopoulos, 2002). Similar findings have been made in other countries and concerns have been raised as to why government-led adoption programmes for SMEs are not more successful (Stockdale & Standing, 2004).

The picture is perhaps even worse because there is evidence that many SME Web sites, that were initiated and developed, have not progressed over time but remain in a "dormant" stage for a period of many months or even years. Indeed, several studies of e-business in the UK have actually reported a decline in the number of SMEs implementing trading online (CBI and KPMG Consulting, 2002; DTI, 2003; EU, 2003) and perhaps surprisingly, the use of Web sites and e-mail has also declined (DTI, 2002, 2003).

The aim of this chapter is threefold. Firstly, it aims to examine different approaches for studying e-business progression, particularly in the context of SMEs. Secondly, it describes a multi-dimensional research framework as an alternative approach. Lastly, it shows the application of such a framework to study how a sample of SMEs' Web sites changes over time. The premise of this study is that examining the evolution of Web sites over time provides insights into the actual evolving strategies and motivations behind Internet investments. This work forms part of a wider research study into the evolution of the Web presence of small business in the UK. The motivation for this research is to characterize and model the evolution of SMEs involvement in e-business in terms of metrics and patterns as opposed to the identification of stages. The objective of the wider study

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