Training, Competence, and Business Performance: Evidence from E-business in European Small and Medium-Sized Enterprises

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ABSTRACT

This article examines the relationship between training, competence and performance of small and medium-sized enterprises (SMEs) in the context of e-business. Literature review combined with a triangulation of qualitative and quantitative methods were used to investigate these relationships. Data about e-business competences and performance in 339 SMEs in three European countries was combined with data about training supply from 116 providers of e-business related training. The empirical findings document a positive relationship between training, competence and performance and show that training explains variances in e-business competences and performance in terms of efficiency, complementarities, lock-in and novelty. The research has both theoretical and practical implications. It contributes to theoretical development by lending support to the idea that methodological issues are an important reason behind the lack of empirical support frequently reported in the literature. The study has practical implications for public policy makers, training suppliers and SME managers.

Keywords: E-business; E-commerce Evaluation; E-commerce Implementation; Firm Performance; Management Training; Small Firms

INTRODUCTION

This exploratory study investigates the relationships between training supply, e-business competence and e-business performance in SMEs. More specifically, we investigate whether the provision of training lead to more competence, and eventually, to better performance in the context of e-business. This issue has received interest from researchers in the general field of SME research, but few studies have focused on the context of e-business. There is scarce and ambiguous evidence that training leads to better performance in SMEs (Bryan, 2006; Devins & Johanson, 2003; Patton, Marlow, & Hannon, 2000; Westhead & Storey, 1996, 1997). Small and medium sized enterprises (SMEs) generate a substantial share of the
GDP in industrial economies. The more than 20 million SMEs in Europe are an important source of new jobs and entrepreneurial activity (European Commission, 2002a, 2002b). Considerable funding has been granted to research programs targeting the development of SMEs in general and in specific areas as the diffusion of e-business. It is assumed that success with e-business in the SME segment will increase a country’s competitiveness in the long run, and that successful adoption and use of e-business technology is crucial for survival in the new economy (see Debreceny, Putterill, Tung, & Gilbert, 2002 for an overview).

Several studies indicate that development of the SME segment is challenging and that SMEs for the most part are unable to successfully adopt and use e-business technology (Debreceny et al., 2002). A number of studies has emphasized the lack of e-business competence and lack of training (Fillis, Johannsson, & Wagner, 2003; Ihlström & Nilsson, 2003; Ivis, 2001; Johnston, Shi, Dann, & Barcay, 2006; Kinkaide, 2000; Lewis & Cockrill, 2002) as the major cause for this problem. Such competence is seen as important for understanding the implications of e-business for the business domain, and for developing the distinctive capabilities needed to perform well in the e-business era (Grandon & Pearson, 2004). Governments in most industrialized countries have implemented various stimulation programs including training to increase e-business competence. Despite these efforts, there is only scarce knowledge of how training programs influence the creation of competence and e-business performance. SMEs are reluctant to engage in training initiatives despite the existence of incentives (Maton, 1999).

Organizational constraints seem to create barriers to SMEs. Lack of time and financial resources, along with ignorance to the supply of training have been found to represent such barriers (Marlow, 1998; Westhead & Storey, 1997).

With better understanding of the relationship between training, e-business competence and performance in the SME segment, governments would be able to better tailor stimulation programs to target SME competence needs.

THEORY

E-Business and SMEs

We have adopted a relatively broad definition of e-business as the conduct of business generally with the assistance of telecommunication and telecommunications-based tools (Clarke, 2003). E-business and the internet have opened new arenas for competing and collaborating for SMEs, but most of them are in an early stage of their e-business. There is not a common definition of Small and Medium sized organizations. The term Small Business is commonly used in the United States where measures as number of employees, total turnover, and industry are used to define a Small Business. The European Union (EU) uses a uniform definition of SMEs as independent companies with fewer than 250 employees, with either a turnover of less than 40 million € or total assets of less than 27 million € (European Commission, 2004). Independent companies are those that are not owned as to 25% or more of the capital or the voting rights by one enterprise, or jointly by several enterprises. We have adopted the EU definition.

Training and Performance in the Context of E-Business in SMEs

Governments invest substantial resources in stimulating training suppliers to develop competence programs to the SME sector. Such programs are based on the assumption that the provision of training in terms of developing existing or introducing new skills and/or knowledge to SMEs, will increase their business performance. This assumption is general and includes the context of e-business. The demand side is also stimulated. Financial incentives encourage organizations, including SMEs, to develop training programs for their employees. Yet, there is an ongoing debate about whether