Chapter 12
Supporting SMEs Towards E-Business Success: Exploring the Importance of Training, Competence and Stimulation

Tom R. Eikebrokk
University of Agder, Norway

Dag H. Olsen
University of Agder, Norway

ABSTRACT
The low e-Business implementation in small and medium-sized enterprises (SMEs) is an important issue in most countries. This chapter examines the relationship between training, competence and performance of small and medium-sized enterprises (SMEs) and discusses the implications for practice and further research. The study combined data about e-business competences and performance in 339 SMEs with data about training supply from 116 providers of e-business related training in three European countries. The authors find 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 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.

INTRODUCTION
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 such 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).

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. 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, Johannson, & 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).

This chapter 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).

**BACKGROUND**

It is generally acknowledged that SMEs differ from large firms with respect to investing in information systems. Bharati and Chaudhury (2009) review some of the differences. Firstly, SMEs experience dis-economies of scale and limited autonomy, which constrain growth and business activities. Second, SMEs have low risk propensity. Managers are often owners with a stake in the financial success, and are therefore more risk averse than managers of large firms. Third, SMEs are centralized and have low formalism levels. Typically, decisions are taken by owners and a few top managers. Management practices are often ad hoc and informal. Fourth, SMEs experience cultural insularity and have identity-based trust relationships. Because of their small size, are SMEs usually limited to trade with partners in a small geographical area. Strong ties with a local network may close out impulses from other sources.

**E-Business and SMEs**

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. 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). 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,