

# E-Commerce Training for SMEs

**Yanqing Duan**

*University of Luton, UK*

## INTRODUCTION

E-commerce offers companies tremendous opportunities to improve their business performance in new and innovative ways. However, its potential benefit would only be realised by capable managers who can deal with these emerging technologies and implement them wisely. A skills shortage has been categorised as one of the challenges facing global e-commerce by Bingi and Khamalah (2000). The demand for highly knowledgeable and skilled managers and workloads places enormous pressure upon companies to improve or update their current knowledge and skills. This is particularly important in small and medium enterprises (SMEs),<sup>1</sup> as compared with their larger counterparts, they are often described as “lacking the expertise needed to set up the technologies necessary, despite having a great deal to gain from doing so” (Anonymous, 1998, p. 52). Training is often seen as the most effective way to help SMEs to cope with the increasing demand on improving their skills, while not increasing staffing.

## BACKGROUND

### E-Commerce Challenges for SMEs

E-commerce and e-business affect the whole business process and cover a wide range of business activities. As a result, its success poses a significant challenge to SMEs. The issues related to the e-commerce challenges within these areas can be examined from different perspectives. From the strategic perspective, Laudon and Laudon (1999) summarised them as:

- The strategic business challenge
- The globalisation challenge
- The information architecture challenge
- The information systems investment challenge
- The responsibility and control challenge

From the operational perspective, Bingi and Khamalah (2000) categorised e-commerce challenges along four major dimensions:

1. Economic: cost justification, Internet access, telecom infrastructure, skill shortage.
2. Technical: security, reliability and protocols, bandwidth, integration.
3. Social: privacy/security, cultural diversity, trust, absence of “touch/feel”.
4. Legal: intellectual property right, legal validity of transactions, taxation issues, policing/regulation.

Despite the widespread use of numerous electronic tools, SMEs are described as the slowest sector to embrace e-commerce (Poon & Swatman, 1999). For many small businesses, e-commerce seems like a confusing nightmare. They are not able to react to the rapid changes brought about by this emerging technology, but on the other hand they are scared to be left behind and therefore eager to embrace the technology (Hobson, 2000). The fear of being left behind was also recognised by focus group discussions conducted by Mullins et al. (2000).

Cragg and King (1993) discover that the strongest inhibiting factors for small firms’ implementation of information technologies are lack of IS knowledge, lack of managerial time, poor support and limited financial resources. Corbitt (2000) argues that if management is not made aware of new and enabling technology, then it is not surprising that they are unwilling to adopt e-commerce. Timmers (2000) also concludes that a lack of awareness and understanding is one of the reasons for hesitation among many companies about committing any major effort to e-commerce. Lack of skills is perceived to be the most significant barrier to uptake of information and communication technologies (ICTs) (Auger & Gallagher, 1997; Duan & Kinman, 2000).

### Skills Shortage and Importance of Training

Research by Corbitt (2000) found that there was an obvious concern that electronic commerce was not fully understood and the “I do not know” response was the prevailing view on e-commerce understanding in companies studied. Considering the barriers for e-commerce adoption in SMEs, a number of studies (e.g., Drew, 2003; Jones et al., 2003; Lawson et al., 2003; Matlay & Addis, 2003; Quayle, 2003; Ramsey et al., 2003) have been conducted to address this issue and identified that lack of

skills and knowledge is one of the barriers for the uptake and use of Internet and e-commerce. There is sufficient evidence from literature on skills and knowledge deficiency in SMEs, which is and will continue to be a significant impediment to the uptake of new technology, and will increasingly disadvantage the competitiveness of SMEs. Thus, it is essential to address the issues of improving skills by effective training and support.

“Skills shortage and training: a forgotten dimension in new technology” is a concern raised by Foley and Watts (1994) nearly a decade ago, but the relationship between skills shortage and training in ICTs deserves even more attention presently. Skills and training issues were often forgotten or misjudged during the new technology appraisal process (Foley & Watts, 1994). Poon and Swatman (1998) found out that research on the topic of the Internet and small business points to the importance of training and demonstrated benefits. Education and training can bridge the gap between development and successful implementation of new technology (Singh, 2000). The rate of change in ICTs means that the training of IT staff is a continual challenge (Dench, 1998). It is particularly essential to keep managers educated on what is going on in order to make informed decisions in today’s competitive environment. Although training has been highly regarded as an effective tool for addressing skills shortage, small businesses are particularly reluctant to train (Elbadri, 2001; Johnson & Loader, 2003).

A critical task that all SME managers are facing is how to respond to e-commerce challenges. The initial challenge is to address the current lack of appropriate skills. These can be broadly defined in two areas: technology understanding and ability to facilitate successful technology implementation through appropriate strategic thinking and business planning. Therefore, there is a need for better education and support for SME managers to ensure successful adoption and running of their e-business activities. Although lack of proper training and support is not a specific problem associated with e-commerce adoption in SMEs, it is becoming more prominent for e-commerce success, as managers not only need to become equipped with technical awareness and understanding, but more importantly, with its profound business implications. Evidence from the literature (Drew, 2003; Jones et al., 2003; Lawson et al., 2003; Matlay & Addis, 2003; Quayle, 2003) appears to suggest that there is a gulf between the level of skills and knowledge required for e-commerce success and the current level of skills that managers possess. To reduce the gap, effective training and education is paramount. However, to provide training in the most effective way and at most appropriate level, better understanding of what SME managers really need is deemed critical.

## **SMEs E-COMMERCE TRAINING AND SUPPORT NEEDS**

**E**

To investigate the current training provisions and identify managers’ perceived training needs for adoption and implementation of e-commerce, a study (Duan et al., 2002) was conducted with SMEs across five European counties, including Germany, Poland, Portugal, Slovak Republic and the United Kingdom (UK). In their studies, it shows that SME managers in general would like to receive training in e-commerce. The majority of SMEs indicate their training needs in e-commerce, Internet, EDI, and related business issues. In more detail, on average, 82% would like to have training on e-commerce/business, 83% on Internet, 77% on the strategic and managerial issues on the use of ICTs, 75% on general knowledge of ICTs and their use in SMEs, 72% on business Web page writing and 72% on EDI. As expected, e-commerce is ranked as a top priority for training, which may reflect the SME’s strong willingness to embrace the technology. The least needed areas highlighted are teleworking (55%), video conferencing (60%), mobile communications (57%) and CD-ROM and electronic storage (58%). It seems that some SMEs show lower interest in applying these advanced technologies at the present time. SMEs are not yet convinced that the cost can be justified by the benefits (Spectrum, 1999).

As the implementation of e-commerce will have a profound impact on the overall business process in a company, business issues should always come before the technical issues. Most importantly, “a clear strategy for an e-commerce solution is the key to the door of success” (Cunningham, 1998), as e-commerce takes more than the technology and needs to be treated as a strategic business decision, not just a technology decision (Goldberg & Sifonis, 1998; Turban et al., 2004). This issue is clearly reflected in the managers’ needs for training and support by the survey conducted by Duan et al. (2002). On average the most demanded area for e-commerce training and support is “business strategies for successful e-commerce”, followed by “managing e-commerce operations” and “security”. Compared with traditional IT training, which is mainly concerned with technical aspects of information systems, training in e-commerce needs to address not only technical skills, but more importantly business issues related to performance analysis, strategy development and implementation. It is evident that managers are aware that the appropriate e-commerce strategy and management is vital for any business and should be considered as the most important area for training and support. These findings are also confirmed by focus groups conducted by Mullins et al. (2000) which show that strategic issues are very important for SMEs, but managers are not sure what strategy they should follow

2 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/commerce-training-smes/14368](http://www.igi-global.com/chapter/commerce-training-smes/14368)

## Related Content

---

### E-Libraries and Distance Learning

Merilyn Burke (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 1349-1353).

[www.irma-international.org/chapter/libraries-distance-learning/13751](http://www.irma-international.org/chapter/libraries-distance-learning/13751)

### Challenges in M-Commerce

Pouwan Lei, Chris Chatwinand Rupert Young (2005). *Encyclopedia of Information Science and Technology, First Edition* (pp. 387-391).

[www.irma-international.org/chapter/challenges-commerce/14267](http://www.irma-international.org/chapter/challenges-commerce/14267)

### Agile Software Processes for the 24-Hour Knowledge Factory Environment

Nathan Denny, Igor Crkand Ravi Sheshu (2008). *Journal of Information Technology Research* (pp. 57-71).

[www.irma-international.org/article/agile-software-processes-hour-knowledge/3692](http://www.irma-international.org/article/agile-software-processes-hour-knowledge/3692)

### Effect of Fair Value Based on IFRS 13 on the Qualitative Characteristics of Accounting Information: An Exploratory Study in the Iraqi Environment

Ahmed Jasim Hameed, Anfal S. Shareefand Sameer Imad Shaban (2022). *Journal of Cases on Information Technology* (pp. 1-12).

[www.irma-international.org/article/effect-of-fair-value-based-on-ifs-13-on-the-qualitative-characteristics-of-accounting-information/280351](http://www.irma-international.org/article/effect-of-fair-value-based-on-ifs-13-on-the-qualitative-characteristics-of-accounting-information/280351)

### Survey of Breast Cancer Detection Using Machine Learning Techniques in Big Data

Madhuri Guptaand Bharat Gupta (2019). *Journal of Cases on Information Technology* (pp. 80-92).

[www.irma-international.org/article/survey-of-breast-cancer-detection-using-machine-learning-techniques-in-big-data/227680](http://www.irma-international.org/article/survey-of-breast-cancer-detection-using-machine-learning-techniques-in-big-data/227680)