Chapter XXVII

E-Commerce Adoption Barriers in Small Businesses and the Differential Effects of Gender

Robert C. MacGregor
University of Wollongong, Australia

Lejla Vrazalic
University of Wollongong, Australia

EXECUTIVE SUMMARY

Over the last decade, the Internet and Internet technologies such as electronic commerce have experienced phenomenal growth. However, research shows that small businesses have been slow to adopt and to implement e-commerce due to a variety of barriers or impediments. Our understanding of these barriers and their importance has been fragmented and incomplete. This article presents an exploratory study of regional small businesses in Sweden that aims to improve our knowledge about e-commerce adoption barriers and to determine if there are any differences in the level of importance assigned to different barriers by males and females. The results of the study suggest that e-commerce adoption barriers fall into one of two distinct groupings: too difficult to implement or unsuitable to the business. The results also show that while males rate the difficulties of implementing e-commerce as more important, females indicate more concern about the unsuitability of e-commerce. The results of the study have significant implications for government organizations engaged in promoting e-commerce adoption, particularly among small businesses in regional areas.

INTRODUCTION

The last 20 years have seen far-ranging social, political, economic, and technological changes in society. Specifically, there has been a shift from a traditional male-dominated manufacturing economy to a retail and service sector-based economy that has seen females taking far greater levels of participation (Cox, 1999; Teltscher, 2002). The advent of affordable technology has given rise to more flexible working arrangements that have
the potential to facilitate global participation and interaction. These changes have led to a greater equality in the makeup of the workforce (Singh, 2001; Teltscher, 2002), in small businesses, in particular. In some areas of the small business sector more than 70% of the workforce is female, with 24% of these small businesses being owned or managed by women (Schmidt & Parker, 2003), while in Asia, women head 35% of small to medium enterprises (Brisco, 2002).

During the same period, the Internet and Internet technologies such as electronic commerce (e-commerce) have experienced a phenomenal growth. Viewed as a potential pot of gold for small business growth and expansion, e-commerce involves the application of Web-based information technologies toward automating business processes, transactions, and workflows, and buying and selling information, products, and services using computer networks (Kalakota & Whinston, 1997). E-commerce technology has the potential to become a major source of competitive advantage to small businesses, because it is a cost-effective way to reach customers globally and to compete on a par with larger counterparts. Governments worldwide have recognized this and have created various funding schemes and initiatives in order to facilitate e-commerce adoption in small businesses. For example, in Sweden, government involvement has included funded studies of e-commerce adoption (Johansson, 2003; Larsson, Hedelin, & Gärling, 2003; Magnusson, 2001; MIEC, 2003) and, more recently, the development of courses in order for small businesses to promote e-commerce adoption.

Yet, despite government support for e-commerce adoption by small businesses, it is mainly larger businesses that have reaped the benefits of this technology (Riquelme, 2002). In contrast, the rate of e-commerce adoption in the small business sector has remained relatively low (Magnusson, 2001; Poon & Swatman, 1998; Van Akkeren & Cavaye, 1999). This sluggish pace of e-commerce diffusion into small businesses has been attributed to various barriers or impediments that are faced by these organizations. A number of different e-commerce adoption barriers have been documented in research studies (Lawrence, 1997; Purao & Campbell, 1998; Quayle, 2002; Riquelme, 2002; Van Akkeren & Cavaye, 1999). However, the results of these studies paint a fragmented and incomplete picture of factors that inhibit e-commerce adoption. Yet, empirical research to develop and consolidate our understanding of e-commerce adoption barriers has been scarce, and subsequently, the effectiveness of strategies to overcome these barriers has been limited.

Despite the increasing levels of participation by females in the small business sector (Cox, 1999; Gebler, 2000; Singh, 2001; Teltscher, 2002), much of the research concerned with gender differences in e-commerce adoption and use has centered on individual use of Web sites and the Internet (Akhter, 2003; Gilbert, Lee-Kelley, & Barton, 2003; Wolin & Korgaonker, 2003). A number of earlier studies (Mazzarol, Volery, Doss, & Thein, 1999; Perez, Carnicer, & Sanchez, 2002; Venkatesh, Morris, & Ackerman, 2000) have shown that gender, among other factors, was associated with the level of information technology (IT) adoption. However, little has been done to examine whether there are any gender differences in the importance assigned to different barriers in the e-commerce adoption decision-making process.

This article presents some of the findings of a larger, ongoing study of small businesses located in regional areas in developed OECD countries (including Sweden, Australia and the USA) that investigated e-commerce adoption barriers, among other things. The research presented here is part of an extended study of e-commerce adoption in regional small businesses located in Sweden only. The results from other locations are reported elsewhere (MacGregor, Vrazalic, Bunker, Carlsson, & Magnusson, 2004; Vrazalic, MacGregor, Carlsson, Bunker, & Magnusson, 2002). Regional small businesses were chosen...