



## **Chapter VI**

# **Unique Challenges for Small Business Adoption of Information Technology: The Case of the Nova Scotia Ten**

M. Gordon Hunter  
University of Lethbridge, Canada

Monica Diochon, David Pugsley and Barry Wright  
St. Francis Xavier University, Canada

## **INTRODUCTION**

The global nature of product and service markets, technology and competition has increased business requirements for flexibility, quality, cost-effectiveness and timeliness. As a key resource for meeting these requirements, information technology (IT) has been revolutionizing business practice. While there has been considerable research into the way in which large businesses use this technology, there has been far less attention paid to the adoption of information technology among small businesses. This is surprising considering that the innovative capacity of a nation's economy to meet changing demands in the global economy has been linked to the flexibility and responsiveness of small businesses.

According to Berman (1997), improvements in both IT and communication equipment have been a major contributor to the growth of small businesses. Indeed, the small business sector represents an important component in the Canadian

economy. For example, there are over 2.3 million small businesses with fewer than 100 employees, accounting for over 50% of the private sector employment and for 43% of total economic output (Industry Canada, 1997). In viewing the small business sector as a catalyst to faster economic growth (Balderson, 2000), governments have been attempting to offer financial and nonfinancial programs to assist small businesses (Smith, 1984). Yet, without a better understanding of the use of IT among small businesses, there will be little basis for developing effective programs.

If research is to contribute to a better understanding of this issue, it is important to recognize the differences in business practice between small and large firms. Evidence suggests that some of these key differences often get overlooked when it comes to IT research. For example, Cragg and King (1993) note that much of the research into the use of IT among small firms aims to confirm findings from studies set in large firms. Arguably, if the IT needs of small businesses are to be better understood and served, it is important to explore how the unique aspects of small business practice might impact on this sector's use of IT.

This issue is important to several stakeholders. First, it is important to small businesses themselves that aim to use IT to gain a competitive advantage. Second, it is important to IT consultants whose aim it is to help small businesses add value through the use of IT. Third, it is important to vendors who aim to target this burgeoning market by being better able to service its needs. Finally, it is important to government policymakers in their effort to support the growth of the small business sector through the use of IT.

The objective of the research reported here is to document and explore the unique issues faced by small businesses regarding the adoption of information technology. Generally, the term small business is used to describe an economic reality (Kao, 1989). However, there is considerable variation in the criteria used to define this reality. For example, ACOA (1996) uses the number of employees, Statistics Canada uses annual revenue, while other federal departments (Government of Canada, 1985) define a small business by the size of investment. For the purposes of our investigation, a small business is defined as an owner-managed independent firm with less than 100 employees. Indeed this criterion is the one most widely used (Longnecker, Moore & Petty, 1997).

The chapter begins with a discussion of how small businesses and large businesses differ. This section will indicate those factors that make small business practice unique and contribute to the distinct way small businesses consider information technology adoption. The following section will report on the currently available literature regarding research into small business

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