

Issues and Challenges for IT in Small Business

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INTRODUCTION

This article examines the main issues and challenges facing small business owners and managers in the manner in which they use information technology and Internet technologies within their businesses. The first part of the article concentrates upon the issues. The “Challenges” section examines some of the areas that small business researchers are targeting in their recommendations for how the use of IT in small businesses can be improved. These are areas that small businesses often neglect or, even worse, know nothing about.

BACKGROUND

Issues

This section looks at some of the issues facing researchers as they attempt to investigate the use of IT in small businesses. It starts off by looking at some of the various definitions of small business that are being used. Then barriers to successful use of IT by small businesses are examined, leading into the factors that lead to its successful use.

What is Small?

When studying the use of IT in small business, the range of definitions used to describe “small business” is interesting to say the least. This range can make it extremely difficult for researchers to “match up” different small business studies. A 2003 study by worldwide members of the Information Resources Management Association Special Research Cluster on Small Business and Information Technology¹ found that:

- Definitions of “small business” ranged from less than 20 (Australasia), 50 (Europe) and 100 (North America) employees (with some definitions including requirements for annual turnover and asset levels).
- Definitions of “micro business” ranged from less than 5 to less than 10 employees.
- Definitions of “medium” business ranged up to 200, 250 and 500 employees!

A common acronym used to represent small and medium sized businesses is “SME”. There was quite a deal of argument as to whether the term was of any use at all – given the vast differences between small and medium sized businesses. Still, half of the responding members felt there was still a use for the term.

Pollard and Hayne (1998) have identified a number of studies that set the upper limit of employees for a business to be classified as small as 50, 100, 200, 250 or 500!

Business Size is Important!

Why is it so important to consider the size of the business? A number of studies suggest that there is a relationship between the size of a business and its level of adoption of IT (McDonagh & Prothero, 2000). There is also a relationship between the size of a business and the different characteristics it will have that can lead to the successful use of IT (Igbaria et al., 1997; Pollard & Hayne, 1998). As such, research findings based upon traditional “MIS” in larger businesses are not necessarily directly applicable to small businesses.

Barriers and Success Factors

The literature around the area of small business and information technology is rife with what is now a fairly accepted list of “barriers” to the successful implementation of IT in small businesses. These barriers typically include (Igbaria et al., 1997; Management Services, 1997; McDonagh & Prothero, 2000; Pollard & Hayne, 1998):

The cost of IT

- Lack of time to devote to the implementation and maintenance of IT
- A lack of IT knowledge combined with difficulty in finding useful, impartial advice
- Lack of use of external consultants and vendors
- Short-range management perspectives
- A lack of understanding of the benefits that IT can provide, and how to measure those benefits
- A lack of formal planning or control procedures

One advantage that small businesses (especially innovative ones) have is that they are flexible. They are able to preserve labour relationships, bring a “personal touch”

to operations, cater to niche markets and they have small capital requirements. The fact that they are under constant pressure can also spur them to be inventive and innovative in their business operations (International Trade Forum, 1999).

Having identified some of the barriers to the successful use of IT, there is also a fairly common list of factors that are listed in the literature that appear to indicate a greater chance of successful implementation of IT in small businesses.

Some of these factors are (Naylor & Williams, 1994; Swartz & Walsh, 1996; Yap & Thong, 1997; Zinatelli et al., 1996):

- The involvement of owner/managers in the implementation of IT
- The involvement of users (employees) in development and installation
- The training of users
- The selection of applications chosen for computerisation
- The use of disciplined planning methodologies in setting up applications
- The number of analytical/strategic (versus transactional) applications being run
- The level of IT expertise within the organisation
- The role of the external environment (especially consultants and vendors)

The idea behind introducing this list (and the barriers listed earlier) is that you will see these points raised again and again in the following sections as some of these and other issues are discussed.

Role of Owner/Managers

One of the key factors leading to successful use of IT in small businesses identified in the previous section was the involvement of small business owner/managers in the IT implementation.

There is some evidence to indicate that managers in small businesses are less likely to know how to use IT effectively or to keep up with the latest trends in IT than their counterparts in larger businesses (Pollard & Hayne, 1988). Igbaria et al. (1997) cite a number of references to support the view that management support can promote the acceptance of IT. They found that the support of management positively affected the perceived ease of use and the perceived usefulness of IT within the small business.

Applications

These days, the vast majority of small businesses in most countries have computers. Small businesses that use computers mainly use them for administrative and operational purposes (such as accounting, budgeting, payroll, inventory control and the like) (Bridge & Peel, 1999; El Louadi, 1998; Pollard & Hayne, 1998). Much of the software that is used by small businesses is purchased “off the shelf” (McDonagh & Prothero, 2000), although there is some evidence to suggest that small businesses with particular (specialised) needs are prepared to invest in customised software (Burgess, 1997).

The literature also suggests that some small businesses are beginning to realise that IT can be used to gain competitive advantage (Pollard & Hayne, 1998).

Location

Why is location important when considering the use of IT in small business? The major answer to this is a combination of resources and distance. The further you are away from resources, the longer it takes and the more it costs to get them. This can particularly be the case with hardware and software purchases, training and support.

Another reason for examining location is **culture**. Some countries, and even different regions within countries, have their own traditions and their own established ways of doing things. This can influence the behaviour of small businesses and the manner in which they use IT.

Developing Countries

Small businesses make up a major portion of businesses in developing countries (in some countries the percentage is higher than in developed countries). One of the major barriers faced by small businesses in developing countries is access to information, especially information used in decision making. Another problem is the lack of data sources from which to obtain the type of information required. Problems with the technological infrastructure of developing countries only exacerbate this (Sawyer et al., 2000).

Today, the cost of installing a national telecommunications structure has fallen. When combined with reduced costs of international transport it is easier for small businesses in many developing countries to gain access to international markets (International Trade Forum, 1999). Uptake of the Internet in developing countries has been on the increase since 1996, the level of growth (again)

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