

E-Commerce and Small Business in Regional Australia

Wayne Pease

University of Southern Queensland, Australia

Michelle Rowe

Edith Cowan University, Australia

INTRODUCTION

E-commerce is considered to provide substantial benefits to business, particularly small business. It enables new ways of working to emerge and facilitates an organization's reengineering. Benefits from e-commerce can be argued to be greater for SMEs (small and medium enterprises) since traditionally they have operated in an uncertain and dynamic environment (Murphy & Daley, 1999; Nooteboom, 1994). Despite this, SMEs generally and especially those in regional areas in Australia, are lagging behind in their adoption of technology, including e-commerce.

A majority of Australian SMEs are unaware of the opportunities presented by online business as well as the associated risks. SMEs especially tend to be ill-prepared for entry into global markets. The following table (Table 1) shows the use of information technology by Australian businesses.

Table 1. Australian businesses using information technology (Source: Australian Bureau of Statistics 2003, Measures of a knowledge-based economy and society, Australia Information and Communications Technology Indicators - Proportion of businesses with computers, Web sites and Internet access by business size)

	Businesses using computers	Businesses with Internet access	Businesses with a web presence
Business size	%	%	%
No. of employees			
0-4	79	65	15
5-19	91	80	34
20-99	98	93	55
100 or more	100	99	81
Total income			
Less than \$100,000	75	60	11
\$100,000-\$999,999	84	71	22
\$1m-\$4.9m	96	88	45
\$5m or more	100	96	69
Total	84	72	24

Examination of the data in Table 1 shows that a relationship exists between the size of a business and the likelihood that the business is using information technology. As employment and income size increase, so does the proportion of Australian businesses making use of information technology. In June 2002, virtually all large businesses (those employing 100 or more persons) used computers (100%) and had access to the Internet (99%), while 81% had a Web presence. In contrast, very small businesses (those employing fewer than five persons) had a lower level of IT adoption: 79% used computers, 65% had access to the Internet and only 15% had a Web presence. According to Korchak and Rodman (2001), it is probable that only about one-third of Web-enabled SMEs had any form of Web strategy, with sites predominantly a means to share information rather than enabling online ordering, procurement and other aspects of e-commerce.

This article focuses on the issues concerning the uptake of e-commerce by a particular small and medium enterprise (SME), located in Hervey Bay, Queensland, Australia. The case study SME has identified a strategic opportunity to serve a niche market that is largely international in nature. This direction has enabled the business to improve its performance as it changes to meet the needs of the marketplace. Before this study can be fully understood however, a review of diffusion of innovation is required.

DIFFUSION OF INNOVATION

Diffusion is defined as the process by which an innovation is communicated through certain channels over time among the members of a social system, in this case SMEs (Kendall, Tung, Chua, Ng & Tan, 2001; Knol & Stroeken, 2001). It is considered that there is a lower level of awareness and a different message "shared" via the social system in which regional SMEs are immersed which affects diffusion.

The process of adopting and implementing innovative products such as Internet technology and electronic commerce can be considered in terms of a number of diffusion of innovation models described by Rogers (1995), Burgelman and Sayles (1986), Rothwell (1992) and others. Rogers argued (1995) that the adoption of a new product/technology is a decision process that moves through stages from awareness to adoption. Emergent models however argue diffusion is unstructured rather than being a step-like rational process (Baskerville & Pries-Heje, 2001; Van de Ven, Angle & Poole, 1989), and is precipitated by a "shock," that is internal or external to the organization.

According to Rogers (1995), for adoption of an innovation to occur, "adoptees" need to see the advantages arising from such adoption. The innovation needs to be observed and trialled, and must be compatible with "custom and practice." Local initiatives in the Hervey Bay area have attempted to embody these factors (Pease, Rowe & Wright, 2003). Certainly the case study organization has found these bodies to be helpful.

Griffiths, Ronald, Ellen and Pat (1986) argue that organizations must possess certain characteristics for innovation to have a greater chance of success. These cover issues such as resources, including skill, expertise and experience, management support, approach to risk, leadership, motivation and participation. It can be argued that the lack of these characteristics partly explains the slower rate of e-commerce adoption. The case study organization demonstrates the importance of some of these factors in adopting e-commerce successfully, although the full functionality of e-commerce is not utilised.

Innovation Adoption Triggers

The drivers underpinning e-commerce adoption are essentially motivators based on expected benefits from such adoption. Poon and Swatman (1997) identified five criteria that helped to understand e-commerce adoption:

1. New ways of marketing;
2. Stronger relationships with other businesses/partners;
3. Increased ability to reach new customers;
4. Improved customer service; and
5. Reduced communication costs.

Engsbo, Saarinen, Salmi, and Scupola (2001) identified five innovation adoption triggers that can result in the initiation of the adoption process of electronic commerce in SMEs:

1. Strategic opportunity-improve the business performance in the market place;
2. Strategic necessity-developers of the technology pushing/maximising the flow of diffusion (Rothwell, 1992);
3. Forced decision-the use of electronic commerce is required in order to conduct business;
4. Reactive adoption-the electronic commerce technology can solve an immediate problem for the SME; and
5. Just-by-chance-SMEs without any rational process adopt the technology (e.g., government intervention or pilot research projects) (Scupola, 2002).

Of the adoption triggers identified above, just-by-chance was identified as the main reason underlying the take-up of electronic commerce by SMEs generally. Scupola (2002) identified that in the case of the family-driven business, the adoption of electronic commerce is completely casual. It can be argued, that SMEs in regional Australia at least, do not recognize the importance of the emerging economy in their future success and that often the business planning process is ad hoc and does not embrace the "new economy."

Scupola (2002) identified several key factors that inhibit the adoption of electronic commerce by SMEs in Europe and these were broadly categorised into three groupings as shown in Table 2.

Many of these factors indicate ignorance and "fear," and perpetuate the myths of e-commerce. These beliefs and attitudes are posited to be more entrenched in regional areas as awareness of, and exposure to e-commerce, is less than it is in urban areas.

These prevailing attitudes, business practices, and myths cannot be said to apply to the case study organization, the study of which is a useful learning tool to observe a business that goes against entrenched ways of operating that prevail in its local business environment.

Table 2. Key factors that inhibit the diffusion of electronic commerce in SMEs

Perceived Costs
Financial investment
Administrative changes
Timeline for implementation
Organisational Readiness
Lack of education, information and knowledge
Lack of familiarity with using the Internet in an effective and efficient manner
Fear of loss of competitiveness in the market place by the disclosure of product information on the Internet
External Environment
Poor consultation between the IS consultants and the SMEs
Lack of critical mass for the adoption

4 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-small-business-regional-australia/11382

Related Content

Municipal Websites: Linking Democratic Theory and Citizen Participation

Lamar Vernon Bennett and Aroon Manoharan (2014). *International Journal of E-Planning Research* (pp. 40-56). www.irma-international.org/article/municipal-websites/122427

Tools for Sustainable Change: How Spatial Decision-Support Tools Support Transformative Urban Regeneration

Rita De Jesus Dionisio, Mirjam Schindler and Simon Kingham (2020). *International Journal of E-Planning Research* (pp. 21-42). www.irma-international.org/article/tools-for-sustainable-change/250322

Smart Home Environment: Artificial Intelligence-Enabled IoT Framework for Smart Living and Smart Health

Geetha V., Sowmya S. Kamath and Sanket Sarang Salvi (2021). *AI-Based Services for Smart Cities and Urban Infrastructure* (pp. 310-325). www.irma-international.org/chapter/smart-home-environment/264787

Social Media Data Analysis in Urban E-Planning

Pilvi Nummi (2019). *Smart Cities and Smart Spaces: Concepts, Methodologies, Tools, and Applications* (pp. 636-651). www.irma-international.org/chapter/social-media-data-analysis-in-urban-e-planning/211312

Reflecting on the Success of Open Data: How Municipal Government Evaluates their Open Data Programs

Peter A. Johnson (2016). *International Journal of E-Planning Research* (pp. 1-12). www.irma-international.org/article/reflecting-on-the-success-of-open-data/158034