



Electronic Commerce for Small to Medium Sized Enterprises

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The Centre for Electronic Commerce, [Monash University](#), is a unique organisation in Australia, providing a nucleus of consulting expertise, research, and education and training services specifically in the business issues and implementation of Electronic Commerce technologies.

Introduction

Australian small and medium enterprises (SMEs) are extremely important to the economy, comprising 96% of all enterprises in the private non agricultural sector. In addition they account for more than 56% of private sector employment and currently are contributing most of the private sector employment growth.

In the State of Queensland, 93 % of enterprises are classified by the Queensland State Statistician as small businesses. The high proportion of small businesses to the total number of businesses is similar to that of other states of Australia as well as overseas.

Use of appropriate electronic commerce technologies by SMEs in Australia and overseas is perceived to be an important factor to facilitate business growth, contribute to their productivity and efficiency, and enable them to access global markets by eliminating the constraints previously imposed by geographic boundaries.

The Centre for Electronic Commerce was commissioned by the Information Industries Board (IIB) of Queensland, Australia to conduct a consultancy to assist Queensland companies to make more informed decisions with regard to electronic commerce technologies and business applications, and to provide an awareness about the major issues involved.

Such an awareness will enable Information Technology and Technology companies to find and develop niche opportunities. Queensland industry may then be in a better position to take advantage of electronic commerce.

The full report titled "Electronic Commerce for Small to Medium Sized Enterprises (SMEs)" can be downloaded via ftp from the [Centre for Electronic Commerce](#) web site.

Background

Electronic Commerce is being promoted by Government and large enterprises as an essential component of a reengineering/restructuring strategy to achieve greater efficiencies through people and processes. For every large business "hub" or significant government agency implementing an EC program, thousands (if not tens of thousands) of SMEs are potentially impacted.

Whereas government and big business can generally count on an immediate return for their investment in technology, many SMEs perceive little if any return in the short term, and longer term results may relate to indirect benefits rather than direct dollar savings.

While these indirect benefits are often more strategic to an organisation, it may be more difficult to convince SMEs to spend money on adopting technologies that offer relatively intangible results.

On the other hand, government and big business simply cannot afford to slow down their EC implementation programs. They can no longer manage operational processes in terms of paper based procedures. The momentum is building to get all trading partners to exchange information electronically.

This requires the support and involvement of an entire trading community (whether defined by industry initiative or geographical area) and involves the creation of electronic commerce programs on a large scale. These large scale EC programs should aim to encourage and facilitate the involvement of SMEs and help remove potential impediments.

The IIB, established in 1992 by the Queensland Government, provides business development assistance to Queensland IT & T companies, attraction of new IT&T businesses to Queensland and the development of major industry and community projects designed to increase access by all Queenslanders to IT & T services.

A strategy of the IIB is to expose Queensland IT & T firms to international markets through industry networking and export assistance, thus enhancing international success within the Queensland IT & T industry.

As part of this strategy, the Monash University Centre for Electronic Commerce (CEC) was commissioned by the IIB to conduct a consultancy to:

- provide an overview of Electronic Commerce (EC) as it relates to SMEs in Australia and overseas
- detail information on the concerns and issues associated with the adoption and implementation of EC by SMEs based on recent research
- survey Queensland businesses to gain an understanding of market requirements in relation to electronic commerce uptake and implementation by SMEs in Queensland,
- make specific recommendations on how business can be assisted to adopt electronic commerce technologies in Queensland, including programs that may be undertaken or fostered by the Information Industries Board.

Methodology

Survey of Queensland SMEs

A survey questionnaire was developed in conjunction with representatives from the Information Industries Board (IIB), Administrative Services Department (ASD), Queensland Communications (Q-Tel), Australian Information Industries Association (AIIA) and the Queensland Chamber of Commerce and Industry (QCCI). The survey was distributed to approximately 500 attendees at the "Meet the Buyer" Fair in Brisbane on August 30-31, 1995.

A total of 285 questionnaires were returned and analysed by the CEC.

Electronic Commerce - Issues and Concerns for SMEs

Issues and concerns of SMEs were summarised following extensive research of quantitative and qualitative data contained in studies, reports, and surveys pertaining to SMEs in Australia and overseas.

Ethnographic research techniques were also used to obtain a detailed understanding about attitudes towards the implementation of EC by SMEs.

Importance of SMEs to the Economy of Queensland

Small to medium enterprises (SMEs) are significant in their contribution to the economy of Queensland.

Of over 100,000 businesses in Queensland (Queensland State Statistician), 93% or 93,880 are classified as small business i.e less than 20 employees, 6% or 5,830 have between twenty and one hundred employees and only 1% or 1,079 have more than one hundred employees.

The establishment of an environment in Queensland in which SMEs are able to grow and prosper in the emerging global business environment is considered critical to the further development and expansion of businesses in Queensland, and the overall State economy.

Identification and encouragement of new business opportunities based on electronic commerce technologies, and stimulation of export opportunities, is an integral part of stimulating the continuing growth of the SME sector.

Electronic Commerce and SMEs

Electronic commerce technologies have traditionally been implemented by SMEs as a reactive measure, in response to requests by larger organisations who may be customers and therefore provide the business imperative for SMEs to become EC-capable. However, these major corporates have access to resources and investment capital which are not generally available to SMEs. SMEs have been slow to adopt electronic commerce technologies in general, particularly the more complex forms of electronic commerce such as EDI, predominantly due to the cost, which may be perceived or real.

The emergence of the Internet as a means of providing a low cost infrastructure now offers new opportunities for SMEs to introduce electronic commerce into their business activities in a low risk environment.

Queensland SME Electronic Commerce Survey

The Queensland SME Electronic Commerce Survey conducted in August, 1995, revealed that, although the majority of SMEs in the survey population were using computers in their business activities (93%), only 52% had modems installed, even though most respondents believed that changing from paper to electronic means was good for business.

The survey also revealed that minimal pressure had been exerted on respondents to convert to electronic trading methods.

Overall there was a generally positive attitude to implementing electronic commerce.

In considering types of electronic commerce, respondents indicated a preference to be able to:

- access tenders electronically
- utilise electronic catalogues and
- receive electronic payments

Other surveys conducted in Australia and overseas seeking information as to why many SMEs have not implemented electronic commerce technologies, cite a number of factors that have impeded its general adoption i.e.

- Inter-organisational and intra-organisational inertia
- Electronic commerce is not a priority
- Lack of economic community co-operation
- Lack of resources and complications associated with change
- Standards
- Fear of domination by large business

A comprehensive review of the available research shows that, to accelerate the adoption of electronic commerce by SMEs, requires:

- Demonstration of a real business need in order that EC receives priority
- Availability of a reliable and cost effective telecommunications infrastructure that will enable EC technologies to be implemented, and
- Availability of EC enabled software that is simple to install, operate and maintain

The Challenge

For the majority of SMEs in Queensland to take advantage of electronic commerce requires a low cost and low risk means of implementation that can be demonstrated to address a recognised business need.

A straightforward and direct means of introducing universal electronic commerce to SMEs is available currently using the Internet for the provision of electronic mail and information services through the WWW, at the same time giving them access to the global market place.

The challenge is to achieve the implementation of electronic mail and access to the WWW by the majority of SMEs in Queensland as a first step in building a universal use of electronic commerce. More complex commerce technologies could be implemented subsequently as business requirements are identified.

In itself, connection of the majority of SMEs to electronic mail and with access to the WWW could create many installation and support business opportunities for SMEs throughout Queensland.

An outstanding example of a dramatic success story for an SME in this area is the case of Steve Outtrim of Sausage Software in Victoria who, in the space of some 12 months, established a software business providing software for the Internet community which generated world-wide annual sales of \$5 million in a space of 12 months and at the same time generated employment opportunities for nearly 100 people.

Recommendations

A number of recommendations are made for the IIB and selected industry partners designed to assist Queensland SMEs to benefit from electronic commerce and understand how electronic commerce can open up new business opportunities for them as follows:

- Determine EC interface standards for application software
- Establish an accreditation process for electronic commerce technology and services to give confidence to that the EC products and services were according to predefined standards.
- Encourage EC software development by Queensland firms
- Facilitate Queensland based WWW services
- Establish and deliver EC awareness programs
- Establish Internet training and assistance services
- Encourage establishment of industry group EC communities in Queensland
- Identify and support individual regional EC initiatives
- Ensure provision of a single face to Government through the provision of a central electronic entry point to Government Agencies and Services
- Establish a Queensland based Internet discussion group
- Develop an EC information pack for distribution throughout Queensland
- Survey Queensland SMEs by region to gain a detailed understanding of any specific regional EC issues that need to be addressed.