



# Advice on Electronic Commerce Programs for Small to Medium-sized Enterprises

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The CEC is a national independent consulting, training and research centre for electronic commerce services to assist industry and government, and specifically SMEs (small to medium enterprises).

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The CEC was commissioned by the Australian Department of Industry, Science and Tourism (DIST) to conduct a consultancy to examine and provide advice on electronic commerce programs for small to medium sized enterprises (SMEs).

Small and medium enterprises (SMEs) play a major role in the Australian economy, making up 96% of all enterprises in the private non agricultural sector and account for more than 56% of private sector employment. As a whole they currently contribute most of the private sector employment growth in Australia.

This report combines a summary of recent extensive research already performed by a number of organisations in the last 12 months, together with interviews held with major SME representative bodies, to present an up-to-date picture of SME involvement in Electronic Commerce in Australia. It examines key elements, impediments and initiatives underway, general trends and future scenarios of electronic commerce for SMEs, and extracts essential themes.

Recommendations for a number of specific programs which Government and other agencies and associations may undertake is the specific focus of the report. These programs may assist SMEs in coming to terms with electronic commerce more quickly and accelerate adoption and implementation of relevant electronic commerce technologies for business benefit.

The full report can be viewed at the [Centre for Electronic Commerce](#) web site.

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## Background

The Australian Government Department of Industry, Science and Tourism (DIST) commissioned the Australian Monash University Centre for Electronic Commerce (CEC) to conduct a consultancy to examine and provide advice on an `electronic commerce for small to medium enterprises (SMEs)' program which AusIndustry or other agencies could develop and deliver.

Broadly, the objectives of the program were to: · encourage SMEs to integrate electronic-based technologies in their business activities and · help avoid uncoordinated developments of underlying technologies which could cause incompatibilities and exacerbate SME problems of integration with the global market.

Governments, both Federal and State have been involved in EDI, electronic messaging, telecommunications networks and other EC technologies over recent years and see the exploitation of these tools as a means to develop a more

efficient business environment in Australia and globally.

Governments are the nation's largest buyers of goods and services, and they recognise the importance of creating opportunities for SMEs. They are generally committed to ensuring that SMEs have access to the Government marketplace, recognising the important place SMEs occupy in the economy in generating employment and introducing innovation.

DIST is seeking ways to further assist SMEs to address their business, education and training, and technology awareness needs in the adoption of electronic commerce.

## **Conduct of the Assignment**

The assignment involved a project team of SME and EC Industry experts, Research and Strategic Advisers.

Issues and concerns of SMEs were collated from an examination of studies, reports, and surveys pertaining to SMEs in Australia and overseas, and interviews were conducted with senior representatives of organisations with a specific interest in SME issues. Additionally, a number of organisations considered key in formulating the recommendations included in this report were included in the interview process.

## **EC Awareness**

The term Electronic Commerce or EC is still difficult to conceptualise in a practical sense for the SME sector. Even with extensive media coverage increasingly allocated to the Internet and the Information Superhighway, it is clear that SMEs have only superficial knowledge of the emerging global business communications and information infrastructure. The link to electronic commerce and the implications for their business, is appreciated even less.

Electronic Commerce is not high on the agenda of successful and innovative small businesses in Australia, nor is it considered to be an important contributor to their success, at the present time. "There is a need to identify a real benefit before using Electronic Commerce" (Interview Comment)

Whilst SMEs are aware of increased use of technology for business, they are predominantly concerned with more immediate and fundamental issues like staying in business 'this week', endeavouring to make a profit, coping with regulatory and taxation matters and thwarting competition.

SMEs do not perceive that Electronic Commerce can substantially assist them with these primary concerns past the utilisation of simple fax technology which most consider to be an essential business tool.

The level of appreciation of SMEs today, on the potential for electronic commerce to provide competitive advantage, encourage and support export opportunities, is still relatively low.

## **RECOMMENDATIONS - EC Awareness**

- Electronic Commerce needs to be demystified for the SME sector.
- The apparently confusing terms applied to a multitude of technologies must be clarified through a steady, simple to understand, awareness and education campaign.
- Jargon-free demonstrations, with 'see touch and feel' elements, highlighting familiar and already commonly used forms of electronic commerce, will be important for the demystification process.
- The various forms of Electronic Commerce must meet similar criteria which led to the widespread adoption of the fax machine and mobile phones: relatively low cost; simplicity of installation; and almost universal use, to be accepted by SMEs.
- Government must also embrace Electronic Commerce technologies to stimulate SME participation.

## **SME CONCERNS**

Impediments which deter SMEs integrating EC into their business activities appear to be:

### **Inertia associated with change**

Entrenched business attitudes and resistance to change, together with limited level of dedicated resources to implement and manage the change process, affect the speedy uptake of EC for SMEs.

### **No recognised business need**

SMEs are predominantly focused on economic survival and, unless major trading partners are insisting upon electronic communications, there is limited motivation to introduce technology for its own sake

### **Technology phobia**

Many SME proprietors and staff believe EC may increase the complexity of their business systems rather than facilitate positive change. Decisions relating to selection of hardware and software, for what they perceive to be an immature business process, further exacerbates the delay in widespread adoption of electronic commerce amongst SMEs.

### **Lack of availability of simple to operate, cost effective EC enabled software**

Turnkey solutions are missing. SMEs generally do not have the skills, understanding or resources to investigate the myriad of alternatives for EC.

### **Lack of a critical mass of electronic commerce and communications partners**

Because there does not appear to be a proliferation of electronic trading partners, nor well-publicised case studies in Australia of successful EDI or EC implementations amongst SMEs, there is not yet a 'critical mass' motivation.

### **Immaturity of telecommunications and IT infrastructure.**

SMEs believe that the existing telecommunications and IT infrastructure is not mature or complete as there are constant changes taking place and improvements being made. They are also concerned that current technology will be quickly superseded.

There are no real technical issues perceived by SMEs, relating to simplified forms of EC (such as Email), however there are greater challenges when there is a need to integrate EC technology into existing computer applications (such as standards-based EDI).

SMEs do not necessarily have the in-house expertise for system integration, and many would need to seek outsourced advice and assistance.

Technology transfer is typically a slow and sensitive process which undergoes several phases before penetration and full utilisation of even a mature technology. The process is even more complicated if there is a need to transfer immature technology which SMEs perceive EC to be.

The primary business issues affecting the introduction of EC are related to priorities of the business i.e. whether there is a good business reason to be involved and whether the involvement can be cost/justified in either the short or long term.

The capital cost of a PC and modem is not really an issue for SMEs, nor is the cost of gaining access to the Internet for on-line EC activities including Email, access to information on bulletin boards, WWW pages, etc. This is supported by the data from surveys relating to the current proportion of SMEs currently with computers.

The majority of SMEs currently are using computers in their business with an increasing number installing modems

(the basic configuration required for Internet access).

However the extent of any reengineering of processes required directly affects the capability of SMEs to take full advantage of EC technologies.

## **RECOMMENDATIONS - SME Concerns**

- The simplest and easiest to install electronic commerce technologies need to be promoted first. Electronic mail and access to online business intelligence services being obvious starting points.
- There are too many choices, and sales technocrats' inability to communicate or relate to small business' problems is a deterrent. Packaged solutions are needed to accelerate the uptake of EC.
- Ideally, SMEs should be able to consult multi-disciplinary, supplier independent centres, either privately or publicly supported, which explain, demonstrate, and help implement electronic commerce technologies.
- EC Information and awareness campaigns may thwart technophobia. SMEs predominantly wish to learn in their own time, through sources they trust, eg industry associations.

## **KEY ELEMENTS FOR IMPLEMENTATION**

The key elements for implementation of EC technologies across industry sectors and national boundaries are:

### **IT Infrastructure**

SMEs need cost effective access to an efficient and reliable IT infrastructure free of any bias because of their smaller size when compared to larger organisations.

### **Standards**

Implementation of the various standards utilised for electronic commerce technologies must be consistent across industry groups and national boundaries in the same manner that exists for the telephone network around the world.

The standards setting process needs to be supported by both the Government and private sectors to ensure that, over time, future standards development is appropriate for use across industry sectors and national boundaries.

Government has a role to fulfil in ensuring that global standards are applied consistently in their own implementation of EC technologies.

### **Universal rules for EC implementations**

There needs to be a universal implementation of electronic commerce policy between departments and agencies and between different levels of government in Australia as well as with the private sector.

### **Availability of 'Shrink-wrapped' EC software**

SMEs seek 'plug and play' EC software and associated services which require a minimum of installation, training and maintenance.

Their expectation is that cost effective EC software interfaces will be available to integrate with existing software applications without the need to duplicate effort by first printing out EC communications for attention and action or re-keying data into other computer applications.

These EC software interfaces need to demystify the technical complication that currently exists when attempting to integrate EC into existing applications and ideally provided by software suppliers as part of the standard software upgrade process at minimal cost to the SME.

### **Legislative and legal issues**

Legislative and legal issues associated with electronic commerce need to be addressed by government and where necessary appropriate legislation enacted.

## **RECOMMENDATIONS - Key Elements for Implementation**

- SMEs need access to communications services at favourable rates when compared to larger organisations that are secure, efficient and reliable.
- Implementation of available EC standards (particularly EDI) must be consistent across governments and their agencies and the private sector and cater for the simple functionality of packaged SME software applications.
- A more concerted effort is needed to co-ordinate and standardise the EC implementation of Governments and their agencies and private industry as they affect SMEs.
- Simple to install, operate and maintain 'Shrink Wrapped' EC software that is relevant to each industry group and able to communicate across industry groups and national boundaries is needed for SMEs.
- Any differences in legislative requirements where they exist across national boundaries need to be addressed.

## **IMPACT OF THE INTERNET AND ON-LINE SERVICES FOR SMEs**

The availability of universal and low cost access to the Internet and World Wide Web, using non proprietary technology, is widely seen in Australia and overseas as providing the basis for development of major global business opportunities and enabling the widespread implementation of cost-effective EC for SMEs.

There has been a dramatic growth in the use of the Internet by both Governments and the private sector both in Australia and overseas as a means of providing access to information and transacting business electronically.

This growth is destined to continue, underpinned by the low cost of the Internet when compared to other electronic networks, and its availability 24 hours a day, 7 days a week.

Based on non-proprietary technology, the Internet provides SMEs with the ability to communicate electronically on a global basis with the same ease that larger organisations communicate internally using their internal local area networks. It also enables on-line access by SMEs to information databases and for transacting business with both customers and suppliers without any geographic restriction.

Access to the Internet by SMEs gives Governments the means whereby they may involve SMEs in their electronic initiatives in the most cost effective manner using a communications infrastructure that enables SMEs to pursue global business opportunities.

## **STRATEGIES AND PROGRAM FOCUS**

To be successful, any government-initiated program to accelerate the adoption of electronic commerce for SMEs needs to address the underlying forces contributing both to the perceptions, and the real and practical difficulties and challenges of implementation.

There are a number of influential factors potentially affecting the successful outcome of any program: · the level of understanding of EC by SMEs, which at this time is relatively low, · the perception of business need for EC is a fundamental prerequisite, · key issues, impediments and concerns must not be ignored, · cross-industry and government co-ordination of EC implementation must be encouraged, · the impact of the Internet should not be underestimated in its significance for SMEs and EC.

### **Recommended Strategies**

Strategies for encouraging SMEs to embrace electronic commerce technologies for their business activities in a co-ordinated way, should include:

- selection of suitable communication channels to address the need for information, education and training;
- provision of incentive to be involved (business need);
- a focus on ease of implementation and demystification of the technology;
- leadership roles assumed by both government and private sectors.

EC Programs designed for SMEs should recognise the following:

- difference in size and motivation of SME (SME category);
- difference in electronic commerce technologies and business; application of those technologies;
- the significance of SME business networking;
- need for flexibility of training delivery;
- need for cooperative arrangements between government and private sector centres of expertise.

## **SUGGESTED PROGRAMS**

### **1. Establish an "Electronic Commerce Conversion Board"**

There is scope for a targeted and focused national agenda that transcends both political and competitive boundaries that can raise the importance of the exploitation of Electronic Commerce technologies for SMEs and business generally. Currently in Australia there are many electronic commerce-related activities which are predominantly uncoordinated in both the government and private sectors of the economy. A national focus to transcend both the public and private sector would be best addressed using a process similar to that adopted in Australia when decimal currency and metrication were introduced.

### **2. Appoint Industry Training Partners**

Government should adopt a leadership role in the education process by commissioning an industry development project to develop and distribute the initial educational material content in conjunction with SME representative organisations and existing training and educational institutions.

Industry training partners should then be appointed to include Industry Associations which represent SMEs and other interested professional associations and educational institutions.

### **3. Explore the feasibility of establishing "Electronic Commerce Resource Centres"**

SMEs need to be able to consult multi-disciplinary, supplier independent centres, either privately or publicly supported which can provide services at a level of cost that can be justified.

### **4. Initiate a World-Wide competition for an EC logo that could be used to identify EC technologies that meet global specifications and identify accredited providers of EC advice and services**

SMEs need to be confident that EC technology hardware and software is suitable and reliable and that providers of associated products and services are qualified to provide those products and services. The best method to achieve this is to establish an accreditation process which can be identified by reference to a specific logo or registered mark issued by an appropriate authorising body.

The Government's role in this process would be to act as an independent arbitrator in assessing the accreditation criteria for a private organisation to manage and control.

### **5. Encourage "Prepackaged EC Technology Solutions"**

One of the simplest and cheapest form of electronic commerce for SMEs to implement, apart from simply installing a fax machine, is Email over the Internet.

The Internet also provides access to the WWW where SMEs can cost effectively market their goods and services and

access information relevant to their business.

Government could stimulate the early adoption of EC by SMEs by determining a recommended software/hardware package configuration that would be suitable for use by SMEs to be part of electronic commerce initiatives of Government as well as provide general access to the Internet and WWW.

## **6. Provide assistance funding to projects that would encourage SMEs to be involved in "consumer electronic commerce on the Internet".**

The Internet provides universal and global connectivity and also provides new opportunities for SMEs to market themselves on a world-wide basis, sell goods and services to consumers (including other SMEs) and as such provides a cost effective introduction to electronic commerce.

## **7. Use Rotary as a vehicle for Information Dissemination**

Rotary International can deliver an organisation with 42,000 members in Australia of which 60% are SMEs.

Rotary has a world-wide membership of 1.3 million business people and is considered to be an ideal organisation to assist in disseminating the electronic commerce message to SMEs in a non threatening environment in a manner that could assist to raise funds for Rotary and assist them to pursue their charitable objectives.

## **8. Establish Annual Australian EC Awards**

The establishment of Australian Annual EC Awards would provide the opportunity to:

- publicise innovative and successful applications of EC in a newsworthy manner to reach SMEs using established communication channels such as radio, television and feature articles in magazines and newspapers;
- introduce a competitive environment amongst SMEs to implement EC and also create a demand for educational and training opportunities;
- provide an opportunity for the private sector to sponsor EC awards in various categories;
- foster implementation of specific EC technologies to complement Government EC initiatives.

## **9. Use Accountants as SME EC Channels**

Accountants are significantly involved currently with SMEs providing accounting and other advice.

The Accounting professional bodies have already included in their organisational structure a specific interest in SMEs issues as many of their own members are SMEs in their own right.

With the experience gained over recent years by Accountants in electronic commerce with the Australian Tax Office for the electronic lodgement of taxation returns, and with their professional reputation as trusted advisers, Accountants would be an appropriate channel to encourage the adoption and implementation of Electronic Commerce by SMEs.

## **10. Other Suggested Initiatives**

It would be helpful if government initiatives could be introduced to:

- Allow business a price surcharge to offset costs of installation of integrated EC technologies;
- Ensure payment policy on EC transactions is superior to normal trading;
- Adopt and implement international common item numbering;
- Ensure that the different areas of Government employ EC technologies in a consistent manner;
- Provide taxation incentives for installing EC technologies;
- Progressively withdraw non-EC methods of doing business with Government;
- Arrange for outposting of Government staff into the private sector to work with Industry to establish model EC programs;

- Review application of FID and BAD taxes in relation to EDI/EFT (State Governments);
- Work with Tradegate and other agencies to implement EC technologies.

## **CONCLUSION**

There is a great deal of enthusiasm in the private sector amongst industry associations and others to be involved in any programs that Government may initiate to stimulate the implementation of electronic commerce technologies for the benefit of SMEs in Australia.

Using the Internet for electronic commerce will perhaps have the greatest impact for SMEs because of its low cost, universal access on a global basis and the fact that it is based on non proprietary standards.

The time is now ripe for the exploitation of electronic commerce for SMEs, particularly following the selection of the strategic partner for the Commonwealth Electronic Commerce Service (CECS).

In the first instance SMEs need to be introduced to electronic commerce with simple Email and access to the WWW for business information and the marketing of their goods and services, supported with appropriate education and training.

Other forms of electronic commerce (including EDI) could be implemented over the Internet according to the justified business needs of both the Government and private sectors.

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