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Voices of Experience: Developing Export Capability through eCommerce in Australian SMEs

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Abstract

This paper reports an exploratory study of 19 Australian SMEs which had successfully used eCommerce develop to or enhance their export capability. The purpose of the study was to identify both successful adoption processes and impediments to using eCommerce for export. Few companies had adopted a strategic and planned approach to managing this adoption. The lack of easily accessed and trustworthy information and advice was partly responsible. The study identified a number of other obstacles to eCommerce export development, including infrastructure and technical deficiencies, lack of awareness and expertise, problems with banking and finance and problems with physical links into export destinations. The developments that would most enable Australian companies to use eCommerce for export are identified as: improvements in the infrastructure on which eCommerce depends; the provision of consolidated, impartial information and advice about the use of eCommerce for export; and training and skills development to facilitate the implementation of eCommerce for export.

1. Introduction

Electronic commerce has an unprecedented potential to promote export activities by giving businesses access to international markets and facilitating cross-border trade. This capability is particularly valuable for countries located far from their trading partners (Australia is a prime example). It is therefore important for businesses in these countries to have access to good support as they develop their eCommerce-for-export (EC4Ex) systems. Many governments provide information and assistance to companies, especially targeted for small and medium enterprises (SMEs) and a variety of private operators offer technical and business services for enterprises wanting to develop their eCommerce capability and their export activities (Castleman and Cavill, 2000).

To provide assistance and support more effectively it is important to understand the issues that confront SMEs which are interested in developing eCommerce and seek to use it to improve their export capability. How do they undertake this process? What obstacles do they face and how do they overcome them? What suggestions do they have for improving the support structures to help other SMEs develop EC4Ex? What role do they see for governments and private providers in supporting the EC4Ex initiatives of SMEs?

eCommerce adoption by SMEs has been studied by a number of researchers (Golden and Griffin, 1998; Poon and Swatman, 1999; APEC, 1999; Corbitt and Kong, 2000). A range of research confirms that companies in this sector experience particular difficulties in establishing eCommerce (Osborne and Arnold, 1999).

It is challenging enough for many SMEs to develop eCommerce capability but using it to extend or develop export activities presents additional difficulties. Little research attention has been devoted to understanding how EC4Ex is developed in SMEs. A European study used questionnaire survey to identify issues perceived as important among SMEs in the uptake of technology, but did not explore experiences of the respondents or look at adoption processes (DEIS, 2000). A study of SMEs in APEC countries found that *'using e-commerce to reach international markets is important to many participating SMEs, particularly in lower-GNP economies'* (APEC, 1999:15) but whereas many of the respondent firms said they were using e-commerce strategically for export, no further information on this issue was gleaned from that study. In their recommendations for further research, the authors suggest that *'...opportunities and impediments for international trade among SMEs would help economies develop their e-commerce trade policies and programs'* (APEC, 1999:36).

This paper provides some insight into the experiences of SMEs using EC4Ex and the issues they face. The respondents' view was an optimistic one, since all the respondents were exporting successfully, but it is not an uncritical view and the information gained from these 'voices of experience' should be useful to SMEs, governments and private providers all over the world.

2. Study Method

The research was an exploratory study of 19 SMEs in Australia which have been successful in developing their EC4Ex activities. The larger study on which this paper is based was conducted for Austrade (the federal government's export and investment facilitation agency) in 1999. The survey targeted successful adopters of eCommerce for export. Twelve of the nineteen companies were selected from participants in an earlier study conducted during 1998 for the Department of Foreign Affairs and Trade (DFAT, 1999). The others were selected from a wide range of sources, including media reports, web searches and personal referrals. The businesses ranged in size from micro (≤ 6 employees) to large (≥ 500 employees) and included manufacturers, software developers and service providers, service industries and consultancy services. The sample was indicative of the kinds of Australian companies which use eCommerce for export and spanned a broad range of sizes, metropolitan locations and industry sectors as well as including companies with varied histories of and pathways to eCommerce.

The data collection method consisted of semi-structured interviews with senior representatives of the companies which were located primarily in metropolitan areas. All participants were interviewed via telephone for between 40 minutes to 70 minutes. The interview schedule included questions about the firm's development of EC4Ex, including sources of information, implementation strategy, training and skills development, obstacles encountered, support needs and suggestions for government activities. The semi-structured nature of the interview schedule encouraged the interviewees to raise additional issues that they thought were relevant.

Because the research was exploratory and designed to elicit the experiences and opinions of a group of people who had active involvement in EC4Ex in Australia, we do not claim this gives a comprehensive picture of eCommerce usage among Australian exporters. Our purpose is to identify major issues facing Australian companies wanting to export using eCommerce and, as such, points to directions for further research.

3. Results

The Process of Adopting e-Commerce for Export

Each respondent was asked how their company had introduced EC4Ex. Three broad approaches were identified: (1) ad hoc, often gradual adoption (2) reliance on outside professionals and (3) strategic in-company management of eCommerce. Each approach had strengths and drawbacks.

Ad-Hoc Gradualism

The most common approach had been to adopt eCommerce in a gradual, often ad hoc manner. Nearly half of the sample, and over half of the companies whose strategy could be categorised, used this approach. A number of advantages were cited for this approach:

- It can help build in-house eCommerce skills by involving a range of people;
- It allows the company time to adapt to the pace of change because it is flexible;
- A gradual process can be responsive to changing needs;
- In some cases, an ad hoc approach helped the company implement their eCommerce initiatives quickly.

On the other hand, a number of drawbacks to the ad hoc approach were mentioned:

- It may result in a lack of focus or agreed strategy for the development and implementation of eCommerce;
- Many companies were not aware of the skill gaps they needed to fill or ramifications for other business processes until after they had implemented eCommerce;
- In contrast to the companies where an ad hoc approach aided rapid implementation, others found that this approach slowed the implementation.

Reliance on Outside Professionals

About a quarter of the companies used the services of outside professionals as their *primary* technique to develop their eCommerce capability. This usually involved web development and technical services.

This approach was reported to have several benefits:

- Buying a professionally designed product made it relatively easy for the company to implement the system;
- The implementation was relatively quick;
- Using the services of a skilled professional had given the company an eCommerce system which worked.

However, several respondents warned that not all outside professionals deliver a high quality product. Only if the vendors could supply a good quality service was this approach successful.

Managed Strategic Approach

Only a small number of companies had developed a strategic approach for managing the introduction of eCommerce, using a high level of involvement of company personnel. This approach included getting senior management

commitment to the process, then pursuing a staged development of eCommerce linked to other company activities.

Two major advantages of the strategic approach were reported:

- Strategic introduction of eCommerce means that it was targeted to the company's overall business needs;
- The strategic processes raised commitment and awareness within the company about eCommerce and the associated business objectives.

Although it seems to be common sense that a managed approach was superior, there were some problems associated with it. It was often time consuming and the necessary skills and knowledge were not always available within the organisation.

When asked how the problems encountered in eCommerce development could have been avoided, the interviewees had few suggestions. However, some suggested a number of positive measures:

- It would be useful to work with a business partner in the planning stage;
- It is important to ensure that the infrastructure used by trading partners is adequate, especially in overseas locations;
- Participation in trials or demonstration projects is a good way to test the waters before embarking on full-scale eCommerce;
- One should beware the claims of web developers or other eCommerce experts and ensure that they are competent before depending on them for the company's eCommerce initiatives;
- Concrete cost-benefit information on the introduction of eCommerce is essential for making decisions about eCommerce introduction;
- Engaging an eCommerce specialist in-house can provide the necessary expertise; however, it is preferable to use experts in the sector rather than relying on inadequate in-house expertise;
- More eCommerce education and training could be done in the company, for example through specific EC4Ex in-house seminars delivered by an expert;
- It is useful to get advice from people doing eCommerce for export in similar sectors and businesses.

In sum, the companies had used a variety of techniques to introduce eCommerce for export. A gradual, fairly ad-hoc approach is common but while there are some advantages, the respondents believed a strategic and planned implementation would be more beneficial. A major reason for not developing EC4Ex in a strategic, planned fashion was the lack of information and support necessary to do so.

Obstacles to e-Commerce for Export

A key goal of the research was to find out what obstacles the participating companies had encountered in developing EC4Ex and how they had dealt with these obstacles. Several issues emerged, including poor infrastructure, inadequate banking facilities, lack of eCommerce information and awareness, lack of expertise in using eCommerce for export, technical difficulties with eCommerce systems and the need for a physical presence in export countries as well as an on-line presence.

Infrastructure Problems

Several companies reported that high cost and poor Internet speeds in Australia were a significant obstacle to effective EC4Ex. This was especially problematic for overseas customers attempting to access Australian websites and download information from them. Doing business over a slow Internet is a serious problem for many, especially when U.S. websites are approximately one-fifth the cost of those in Australia, which puts Australian companies at a disadvantage. While these issues have often been discussed in Australia as matters of access and convenience, the impact on international competitiveness has been less newsworthy.

One of the ramifications of this problem is that several of the companies interviewed had moved their host site to the United States. A US **.com** address was also perceived to help the companies in getting listed on search engines. Two of the companies have moved their main business offices to the U.S. because of the dominance of that economy in the eCommerce arena and the support infrastructure available there. As one participant commented:

Inadequate eCommerce support infrastructure proved to be a most significant obstacle in operating our export operation from Australia. This ranged from problems in finding the right service provider with the capacity and range of features required to host our web site, to very costly telecommunications charges for inadequate bandwidth, expensive bank charges and inadequate capacity and ability to process large numbers of foreign credit card transactions, difficulties with US customers in converting \$A to \$US, and general government charges and taxes in running a business in Australia compared to the USA.

Other infrastructure factors with negative consequences for eCommerce export included inadequately developed freight systems to deal with eCommerce, e.g. lack of inexpensive re-mailing services for printed matter anywhere in world. Reasonable transportation charges for delivering high volume, low cost items like books or CDs is essential, especially to customers in some of the more unusual destinations (e.g., Estonia, Israel, Peru, Taiwan, Cyprus). Respondents wanted access to advice on how to overcome such distribution problems and information on actual businesses which could deliver distribution services cost effectively from Australia.

A related problem is inadequate procedures for handling customer returns. One respondent stated the problem as follows:

One real problem we have is when a customer has to ship something back as a return to us either because they don't like the product or if they need a change of size. We offer, as all mail order companies should, the right to return anything they don't like and we are running into a problem in having to clear these goods through customs. That becomes a very costly exercise if you have to lodge a formal entry. In fact we have had a couple of situations where we have got through them each time but each one has been time consuming and it has cost us money in most situations just to get the item back. That procedure really needs some streamlining.

Several respondents highlighted the obstacles to effective EC4Ex posed by poor Internet infrastructure at overseas destination points. Countries in the Pacific Rim such as PNG, Fiji, India, Vietnam and China were named. Some companies had to educate their overseas customers at company expense before they could use eCommerce in their export activities. Some of these customers had never previously accessed the Internet or used email.

Several companies cited the different standards of service available in different countries as a significant obstacle in getting eCommerce for export functioning well. For example, many service providers put restrictions on the size of email attachments. In some countries it is quite liberal, but in some countries it can be as low as 200Kb, totally inadequate for sending schematic drawings. Some companies pointed out that it made little sense to use EC4Ex if the customers in the destination countries did not have the basic required infrastructure to make such an initiative viable.

Several companies were looking for support in their export activities through either a regionally based network or through trade associations. Many of the smaller organisations couldn't provide all the necessary support infrastructure (such as a secure server and secure payment options, freight forwarding services, access to overseas market intelligence) unless they banded together with other organisations with similar support infrastructure needs. However, they were often uncertain how to go about building strategic alliances within their sector or region, and were looking at Government to take on a facilitator role.

Inadequate Banking and Financial Services

Problems associated with financial aspects of eCommerce, in particular the inability of banks in Australia to process credit card transactions electronically at that time put them at a disadvantage compared with their competitors.

Batch files of charges are not accepted electronically by any of the major card agencies. The only way to get charges through on direct mail commerce is to fax the data to Amex, or enter card numbers one by one into a terminal for Mastercard and VISA. By having an office in the USA we can submit hundreds of credit card transactions by modem in one batch

to their processor. They deposit the funds to our bank in three days by direct transfer. As of six months ago this simply could not be done in Australia. Only one bank mentioned they might be getting it but the software would cost A\$10,000. The company's software in the USA cost US\$600!"

Related problems included expensive bank charges, especially in comparison to US and the inability to bill customers in the local currency (which is difficult to do unless the company has a local bank account). The respondents voiced doubts about the security of international credit card transactions and the inability to identify and deal with credit card fraud.

Information relating to managing financial transactions for eCommerce and export is an area where there appears to be considerable confusion and companies are looking for information and guidance.

Lack of e-Commerce for Export Information and Expertise

Many of the respondents reported problems with finding reliable, impartial experts to consult on a range of issues. They recommended central sources of advice and solutions. More information on business issues, in particular the use of business-to-business EC4Ex, would be particularly valuable.

This issue is illustrated by the following comment:

The most significant obstacle in getting eCommerce for export functioning well is lack of awareness of how eCommerce can be used in an export context. Exporters need to be educated in eCommerce. There needs to be more information available on the way eCommerce can be applied to support export and the export functions and processes. While there is a lot of discussion about doing business, selling and working with suppliers, there hasn't been much information specifically on how an exporter can profit from embracing eCommerce concepts.

A number of respondents commented on the poor quality of some of the claimed expertise in eCommerce. Several reported experiences with unreliable operators. Their reactions to adverse experiences in going online has been either to learn the technology and do the eCommerce implementation themselves or search for and pay substantial sums to acquire the specific expertise.

A recurring problem is knowing where to turn for specific advice. Much of the information on specific aspects of eCommerce seems to be scattered and not readily accessible. It was suggested that there is a role for a central, authoritative repository of dependable information, with links to appropriate experts and relevant information sources. Access to reliable information on international trading regulations and administrative procedures relevant to EC4Ex was another high priority area.

Difficulty with the Technical Aspects of e-Commerce

Technical issues created difficulties in a number of ways. For some the technology can be overwhelming. There are difficulties in getting an effective website with the right links so that a company can be found by international customers. A common problem appears to be how to develop a high profile for their website to attract the attention of overseas customers. As one respondent observed:

If you want to use eCommerce and increase your business then you need to be aware that there a large number of companies who will build you a website and stick it up on the Internet, but in most cases they might as well stick it down a coal mine.

This is both a design and a technical issue for companies. Knowledge about how to get listed and be easily found on search engines internationally is a key requirement for being found by potential customers.

Several companies had encountered problems with integrating their eCommerce systems with other business systems they used and, in cases of B-2-B, the business systems their overseas clients were using. While this problem was usually sorted out over time, it still posed a significant obstacle to the effective introduction of EC4Ex.

Getting the customers or agents to the right level in terms of training and systems knowledge can be a real problem. A big issue for the company is to make sure the backend systems can cope and are 100% accurate in dealing with the requests. Once hooked up to the extranet or the Internet the expectations will be extremely high. This is a big challenge. The volume, accuracy and consistency of information and service expected is enormous. If expectations are not met it leaves customers disappointed and their faith and commitment to the process will most likely fade. As soon as the company is on the Internet it is on show for all to see and judge.

Need for a Physical Presence in Export Countries

One of the sobering findings of this study was that a significant majority of the companies found it necessary to have an office or agents overseas. Those that did not, found that lack of a local presence was a significant hurdle both in terms of local knowledge and practical issues such as dealing with local payments and legal requirements. Several of the participants were either in the process of setting up new offices or moving their operations overseas (all to the United States). Conducting EC4Ex online appears not to be sufficient and requires some type of conventional business presence as well.

Companies wanting to export, especially first time exporters, are looking for overseas partners who can act as a broker for them and introduce them to new markets and provide local market information. Contact numbers at a local

Australian embassy was deemed to be inadequate for this purpose. One respondent described the problem as follows:

In trying to reach export markets we have hit a few brick walls. We need to be able to find out the scope of local overseas markets and to get informed, up to date advice of the needs of people in the area and what their access to technology is. For first time exporters it is a minefield trying to make your way through [the red tape]. There are no programs, no sessions to attend. ... some of the information that is available is too polished We need more grass roots work and to be linked with people who are trying to do similar things ... we need to be put in contact with the right people, the right institutions.

Several companies have found that entering overseas markets was very difficult and have subsequently let opportunities pass.

Many of the respondents had not been able to overcome all the obstacles highlighted above. Some tried to work out a solution to their problems by trial and error, others believe the solution was outside their control, for example requiring government action (e.g., lowering the cost of telecommunications, or required legislative changes for changes to capital gains tax).

Lessons from Experience

The interviewees were asked what advice they would give companies which were introducing eCommerce. They offered a wide range of suggestions which we have condensed into three major areas of advice:

- **Realistic knowledge and expectations of eCommerce and its export potential**
The eCommerce exporter must beware of oversold solutions. Much of what is written and broadcast is useless or misleading. It is essential to have realistic expectations of what eCommerce can deliver to the company. The approach should be to do one's homework and get opinions from various sources, although it is often difficult to know how reliable a source is. A company should recognise that online presence is not a substitute for face to face interactions in all situations. Physical and personal links to trading partner countries may also be necessary to support the export activities. Local knowledge and contacts may be critical.
- **Linking eCommerce to business goals**
It is unwise to undertake EC4Ex just for the sake of doing it. It is important to understand the company's business and how eCommerce can contribute to it. A business needs to identify its export needs and look for an eCommerce solution to meet them. If there are real benefits for the company and its customers, then it should develop a business plan for eCommerce introduction and use. Even though some companies had succeeded with a more ad hoc approach, they did not recommend it.

- **Implementation arrangements**

It is important to get senior management commitment to implement EC4Ex. A company needs to be clear about the skills needed for proper implementation and must not underestimate the importance of training. One participant suggested that for every dollar spent on hardware, a company should spend two on training. Although outsourcing non-core skills was a good strategy, a company should not just rely on outside experts, but should experiment and learn itself. A reliable and trustworthy expert to guide the implementation is invaluable and it is important to find a good website designer who understands the whole of eCommerce, not just the technical aspects. A designer for B-2-C export must know how to position a website so it is easily found by export customers.

The message that comes through from these interviews is that a company needs to be well-informed, hard-headed and clear about the actual costs and benefits of using eCommerce for export.

Get as many opinions as possible. Research who you are going to get information from, then decide what you are going to do and get opinions on that. Make sure that your customer or end user is going to reap the benefit of the eCommerce and is capable of implementing it. There is no point in setting it all up if your customers can't access it or it is too slow because you've got all these whiz bang graphics. They may very well have a very restricted Internet access service in their country.

Priorities for Action

The participants were asked to nominate developments that would most enable Australian companies to use eCommerce for export. Many of the developments and initiatives suggested were appropriate for bodies such as private providers, industry association, individual companies, software vendors, consultants and regional development organisations to address. These suggested market activities focused on attitude change, inclusion of eCommerce as part of standard business planning and business practices and development of appropriate commercial services to support eCommerce. The suggestions are summarised below.

Market-Based Activities

Participative (not just passive) workshops would enable Australian companies to use eCommerce for export. It would be useful to run workshops where exporters or potential exporters could interact, perhaps with some simulated exercises 'to stimulate in their own minds how they would use some of the technology and new businesses processes to improve export initiatives'.

- Attitude change could be encouraged by means of industry-focused training seminars using real life case studies, change in attitudes to customer service and programs to raise awareness and inform businesses and industry sectors.

- The companies participating in pilots such as the FoodConnect Project and regional development initiatives (Castleman and Cavill, 2000) found them particularly beneficial.
- Strategies to mainstream eCommerce as part of business processes could include developing improved financial and banking services, better business planning and improved training of senior management regarding ICTs in general.
- The development of appropriate commercial services to support EC4Ex should include a more competitive market for telecommunications offering higher speed access and lower costs. This may include a separate, probably more expensive, Internet for business.
- It was suggested that consultants on various aspects of eCommerce should develop an improved ability to link technical and business processes. As the industry develops it is expected that the typical competence level of consultants would rise and the ability of companies to choose appropriate consultancy assistance would improve.
- Skills shortages will partly be addressed by public training in schools and universities, but specialised training provided by eCommerce exporters will also be significant in developing the skill level in this area. This will require substantial investment and commitment by the various stakeholders in eCommerce development.
- Accreditation of eCommerce 'experts' would go part of the way to ensuring some form of quality assurance. One way to achieve this could be the checking of credentials of expert consultants and vendors before they are allowed to be listed on an official one-stop site for eCommerce and export, or endorsement of experts by industry associations.

Government's Role in Developing e-Commerce for Export

The study highlighted a divergence of opinion about the role of government in developing and supporting eCommerce for export. Some believe that the government should be highly active, taking responsibility for a variety of services and infrastructure and providing impartial advice not available from private bodies which have vested interests. Others believe that the government should deregulate and maintain a hands-off policy. Keeping this in mind, many suggestions were made for ways in which Australian government could support and foster eCommerce development to promote export. The following includes a number of suggestions made by various respondents, not all of which are necessarily compatible as they were proposed by various interviewees.

- eCommerce strategy should be coordinated between all levels of government, i.e., Commonwealth, State and local government. Some respondents argued that national export incentives and assistance schemes could be effectively implemented only at a local level with local expert facilitators.

- Several respondents indicated that they wanted the Government to continue with existing eCommerce awareness initiatives, but shift focus to offering more practical implementation advice rather than generic awareness raising.

A lot of times dealing with the bureaucrats gets a little non-core for us so we don't really bother with it. If they are service providers - which I believe they are - they should probably be putting it to us in terms of letting us know what those services are. Because once you get down into it, there's a lot of stuff like funding for this and assistance with that but it's hard and it takes a lot of work to get to that level.

- Most respondents thought of the Government, through Austrade, as being the appropriate source for impartial advice, the site for the one-stop shop, the location or sponsor of a service bureau and source of facilitators. One respondent suggested that the Government should set up a government agency specifically geared to assisting SMEs the use of eCommerce.

Some sort of support service, comprising more than just a Web site. An actual service, such as an Austrade service perhaps, staffed by people who exporters or potential exporters can consult with regarding how to embrace eCommerce for export. Assistance from people who can assist exporters turn ideas and concepts into reality. A bureau where businesses can go to obtain general information, obtain starter kits, get referrals to experts. A support service that acts as a facilitator to help make eCommerce for export happen. An organisation that is part of government or a semi government authority that can focus on acting as a facilitator for exporters in this area.

- Organisations want assistance in identifying opportunities for using EC4Ex, assistance in developing overseas contacts, access to tradeshows, new ways to market their services electronically, provision of access to market intelligence in potential foreign markets and practical implementation advice and assistance.

Austrade should be developing overseas contacts, networking in Australia and overseas, tradeshows. The changes are about selling digital information. Marketing is a huge issue in the knowledge, information area. It is about selling music, information, plans, patents. ... Australia needs to look at it as a whole system of digital distribution. We need to think about how different that is to the delivery of goods and consider innovative ways that are quite different from the norm, it is to do with marketing with people on the ground in other countries. They mustn't look at digital export as being too hard and go away and concentrate on physical goods.

- Another important role for Government was as a user of Australian IT and eCommerce products and services, to 'showcase' them to international customers. Other countries such as Canada and France actively promote the use

of their own technology internally and then can point to its use as part of convincing overseas buyers that their product is viable.

- There was support for the Government offering incentives for organisations to start using EC4Ex. Some respondents wanted Government to provide this assistance on an industry sector basis, others thought that local or regional development bodies were the appropriate bodies to deliver assistance.
- Streamlining customs procedures was an area where respondents thought Government could take action. In particular, enabling documentation through electronic means, and addressing the issue of goods ordered via the Internet and returned to Australia by overseas customers.
- Government should act to develop international treaties to regulate cross-border impact of eCommerce.
- Various other enabling legislation & procedures were suggested to:
 - Reduce tax inhibitors to export;
 - Clarify Tax status Australian Internet transactions ;
 - Clarify direct & indirect taxes in distant jurisdictions ;
 - Legislate to require higher speed national telecommunication infrastructure;
 - Ensure customs regulations work reciprocally between countries;
 - Introduce immediate legislation covering income and sales tax, public key authentication, privacy and security.
- To improve access to higher speed and cheaper telecommunications, Government should encourage more competition in the telecommunication industry. One respondent suggested that Government encourage industry and institutions to provide access to neighbouring communities to their high speed private networks via extranets, as the USA does by funding for networks in schools, hospitals and other public organisations.

There are equity issues as far as costs and access to services. Access costs in the USA are so low in comparison to here. Until the government starts to take control of the industry and understand the barriers that are put in place due to high costs of Internet access it will be hard to compete in global markets when US counterparts don't have the same barriers."

- Little action was suggested for improving Internet infrastructure in overseas destinations apart from a general comment that perhaps the Australian Government could lobby overseas governments on Internet infrastructure and eCommerce awareness.
- While there was general support for some of the existing government initiatives in the eCommerce area in terms of awareness raising, it was felt that there was now a need to turn towards facilitating some action where exporters can do something with the information the government has spent several years

collecting and assessing. More emphasis now needs to be placed on the execution phase, on helping companies use eCommerce for export in their day to day operations.

4. Conclusions

Electronic commerce is still at a relatively early stage of development in Australia and exporters who want to use eCommerce for export encounter a variety of difficulties in accessing the support they need for this development. The company representatives who were interviewed reported problems with telecommunications infrastructure, poor general awareness about eCommerce and a lack of trustworthy information and advice about how to implement eCommerce into a business context. When compared to the rest of the world Australia appears to have a reasonable level of general support and resources available to assist organisations with the use of eCommerce (Castleman and Cavill, 2000). However, these resources tend to be scattered and often difficult to find, whilst some are of doubtful quality. The problem is even more acute when companies look for support resources and information relating specifically to the use of eCommerce for export.

The participants in this study all had considerable experience in and success with eCommerce to support or develop their export activities. They therefore are worth heeding as Australian business and government seek to develop the eCommerce capability of the nation. Their advice suggests that development should be concentrated in three key areas. These are:

- the provision of consolidated, impartial information and advice about eCommerce use for export, including raising general awareness about eCommerce. To this end the government should work with private providers.
- training and skills development to facilitate the implementation of eCommerce;
- improvement in the infrastructure on which eCommerce depends.

A somewhat more supportive environment has evolved since the participants in this study developed their EC4Ex applications. But their experiences are still relevant for refining and improving resources to enhance this important aspect of SME development.

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