



Growing exports via online communities and regional web-portals: A case study from the central highlands region of victoria

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Abstract

Despite a rise of interest in information communications technology (ICT) and in community informatics (CI) initiatives, these are not 'magic bullets' or 'quick-fix solutions' for SMEs or even larger organisations, communities, or industries. There is growing recognition of the need to go beyond anecdotal evidence and to assess more effectively the change brought about by providing access to and utilisation of ICT in communities. Denison et al. (2002) have presented a taxonomy which differentiates between various types of ICT and community networking initiatives. The application of this schema to a cluster of community informatics initiatives originating from the Central Highlands region of Victoria proves to be useful. A single case study is then presented which reviews the evolution of GrowExport.com, one of the online communities within that cluster. The diverse factors which are involved in establishing sustainable online services are examined. Access to a comprehensive toolset specifically designed to meet the skills and infrastructure gaps which often exist in regional areas has been important. The active involvement of community members in designing, implementing and sustaining web-based services has also been important. By generating debate and discussion and by sharing the critical learning from specific cases it is hoped that others can be better informed about the major characteristics and the diverse factors which impact on the effectiveness and long-term sustainability of CI initiatives in a regional and rural context.



INTRODUCTION

Information communications technology (ICT) has been identified as a key enabler in the achievement of regional and rural success, particularly in terms of economic and business development. The potential of achieving equity of service through improved communications infrastructure and enhanced access to government, health, education and other services has been identified. ICT has also been linked to the aspiration of community empowerment where dimensions include revitalising a sense of community, building regional capacity, enhancing democracy and increasing social capital.

There has been strong support for the view that the information economy will play a seminal role in the growth of regional and rural Australia. Online capabilities and services have been promoted on the basis that they can build stronger and more viable regional communities with enhanced investment, employment and skills, and improved quality and convenience of life. ICT has been identified as providing opportunities to ‘level the playing field’ with access increasingly being seen as critical for both economic and social well-being. Benefits have also been espoused in terms of ‘location independence’ and the end of the ‘tyranny of distance’ (Department for Information Technology and the Arts 1998; National Office for the Information Economy 2000; Multimedia Victoria 2002). In terms of enhancing community well-being, it has been argued that online capabilities can help to stimulate and reinvigorate geographic communities and communities of interest.



There has been considerable interest in promoting ICT and eCommerce uptake for small and medium enterprises (SMEs) with the role of local government in promoting SME uptake receiving consideration (Romm and Taylor 2001). Summary case studies have been presented to demonstrate how individual businesses have adopted and benefited from ICT and eCommerce (see, for example, National Office for the Information Economy 2000; Papandrea and Wade 2000; Ernst & Young and Multimedia Victoria 2002). Less attention has been given to the uptake of online technologies by other sectors of the community.

A raft of government policies and programs has been launched and reports published and disseminated, based around the theme of ICT and online capabilities. However, a range of barriers continues to impede uptake, particularly in regional and rural areas. Issues which have been explored include the ‘digital divide’ and ‘equity of access’. While it has been argued that regional and rural communities require first class infrastructure to harness the power of ICT (Victorian Government 2002), others, perhaps more realistically, argue that the goal of true equity of access may never be achieved (Hunter 1999; Fong 2001). Hunter, for example, believes that regional Australia must stop ‘talking down’ its ability to participate in the new global economy (Hunter 1999, p. 3). Supply and demand and economies of scale ‘will always ensure technology and therefore services will be rolled out in metropolitan areas long before they are even considered for regional areas (Hunter 1999, p. 1). ‘If we wait for equity of access, we will wait forever’ (Hunter 1999, p. 3).



Calls for regional communities to join the globalised, online world are supported by the view that success today is based less and less on natural resource wealth, labour costs and relative exchange rates and more and more on individual knowledge, skills and innovation. But how can regional communities ‘grab their share of this wealth’ and use it to strengthen local communities (Simpson, 1999, p. 6)? Should communities be moving, as Porter (2001) recommends (for business), away from the rhetoric about ‘Internet industries’, ‘e-business strategies’ and the ‘new economy’ to see the Internet for what it is ‘an enabling technology - a powerful set of tools that can be used, wisely or unwisely, in almost any industry and as part of almost any strategy’ (p. 18)?

Recent Australian literature (particularly government literature) does indeed demonstrate somewhat of a shift in terms of the expectations of ICT and eCommerce (National Office for the Information Economy 2001; Multimedia Victoria 2002; National Office for the Information Economy 2002). Consistent with reflections on international industry experience, there is now a greater emphasis on identifying locally appropriate initiatives, exploring opportunities for improving existing communication and service quality and for using the Internet and ICTs to support more efficient community processes and relationships (Hunter 1999; Municipal Association of Victoria and ETC Electronic Trading Concepts Pty Ltd 2000; National Office for the Information Economy 2002).

In spite of a context where ICT and online capabilities are promoted as critical elements of potential success, few attempts have been made to draw together various intellectual



streams of research with examples of community practice to gain a clear understanding of their contribution. Goggin (2001) identifies the need to redress apparent oversights in the literature dealing with online technologies and regional development. Denison et al. (2002, p. 1) recognise the need for research which clarifies many of the assumptions and unspoken expectations about how electronic tools can be used by groups and organisations. Black et al. (2000) make a specific call for research to be instigated to collect case studies that demonstrate how successful community-based Internet services can be established for socially and economically beneficial purposes. This paper makes a contribution by disseminating information on the experiences of various groups and communities and their attempts to combine economic and social development with the uptake of ICT and online technologies. This information is drawn from a wider study which is investigating factors which affect the success of community informatics in a regional and rural context.

POLICY VISION

In Australia, there has been a vision for online services to be used to open up regional communities to the rest of the world. Government support has been seen ‘as enhancing the competence levels of local economies and communities so they become strong enough to deal equitably in an increasingly open marketplace’ (McGrath and More 2002, p. 40). Two Federal Government programs managed by the National Office for the Information Economy (NOIE) provide examples of the support which has been available. The Information Technology Online (ITOL) program aims to accelerate Australian adoption of business-to-business eCommerce and encourage collaborative



industry based projects (McGrath and More 2002). The complementary, five-year \$464 million program, Networking the Nation (NTN), was designed to help bridge the gap in the level of telecommunications services, access, and costs between urban and non-urban Australia. Both programs have provided a funding source for initiatives, variously termed as portals, online communities, comprehensive gateways and regional websites (Department Communications Information Technology and the Arts 2001). Funding priority has been given to projects that offer regional aggregation of business, government and community services and provide interactive services to clients both within and external to a region (Commonwealth of Australia 2001).

While no formal evaluation of the NTN program has been published, a recent evaluation of the ITOL program explores the notion of online communities and reports on the success of portal projects funded through that program (McGrath and More 2002). Findings indicate that most are not fully meeting original objectives. Unforeseen challenges during the course of project implementation have included technological problems; delays in legal agreements; slowness of industry and/or project beneficiaries to respond to the eCommerce initiative; and an underestimation of the time and effort required. For most, the plan to provide full online eCommerce capabilities (for example online ordering and payments) will not be achieved (McGrath and More 2002).

McGrath and More (2002, p. 67) observe that these potential online communities are 'evolving rather than having arrived'. Further, that despite the rise of interest in online communities these alliances are not 'magic bullets or quick-fix solutions for SMEs or



even larger organisations, communities, or industries’ (McGrath and More 2002, p. 67). They however observe that ‘where commitment, compatibility, [and] shared strategic intent are at the heart of collaborative relationships, success and learning is much more likely to occur’ (McGrath and More 2002, p. 68).

CENTRE FOR ELECTRONIC COMMERCE AND COMMUNICATIONS

The University of Ballarat (UoB) is a distinctive, dual-sector regional institution pre-eminently serving the Australian communities of the Central Highlands and Wimmera regions of Victoria. The UoB vision is to be a regional university of international standing, highly regarded by the communities it serves. UoB provides clear educational pathways between TAFE and Higher Education and offers a broad range of courses to meet the diverse educational and training needs of the region. The University also has a growing national and international focus. A key objective of the University is to provide leadership for the uptake of ICT in industries, local government and within and among regional groups. Through its activities UoB also seeks to contribute to the educational, social, economic and cultural well-being of the region.

The Centre for Electronic Commerce and Communications (CECC) contributes to these objectives by promoting the advancement of eCommerce, particularly in its practical application in regional and rural Australia. Since being established in 1998 CECC has built extensive partnerships and strategic alliances within and beyond the University region and developed and implemented a range of projects utilising information communication technologies. Different education and training strategies have been



used by CECC to foster learning and to build social capital through ICT and eCommerce.

Through the implementation of a \$409,000 NTN funded regional portal project (www.mainstreet.net.au) during the period 1999 to 2001, CECC gained an enhanced understanding of regional ICT needs. CECC also established significant capabilities in developing, replicating and customising online services capable of meeting the specific needs of regional communities, groups and organisations. Diverse groups and communities now access online services through CECC. These include local governments, town based communities, membership based organisations, industry groups and small and medium enterprises. In almost all cases the websites, online communities and/or web-portals are meeting or exceeding the initial client objectives. Clients have strong ownership of their online activities, maintain their own web-based information and are committed to investing annually to maintain the shared infrastructure and services they access.

This paper highlights some of the systems and processes which CECC has established to support regional groups and communities in establishing and sustaining online services. It demonstrates how CECC has evolved as an organisation that assists regional initiatives, businesses, governments and community groups in developing ICT capacities and capabilities.

MAPPING ORGANISATIONAL ASPIRATIONS FOR ICT ENGAGEMENT



Denison et al. (2002) identify that many entities have deployed ICT to communicate and interact with their members, clients and the rest of the world. In an attempt to generate debate and discussion and to alleviate some confusion they constructed a community networking taxonomy to communicate the major characteristics and community utilisations of ICT in Australia. Five major categories of organisations are described: individual organisations; clusters of like organisations; cross-sectoral collections of geographically based entities; civic networks; and service and application provider organisations. While these categories are not mutually exclusive the authors believe



they provide a relatively good fit to the observed reality of the Australian ICT scene (Denison et al. 2002). These organisational categories are then mapped against factors drawn from a review of community informatics evaluations in a number of counties. These dimensions include: enhancing strong democracy; increasing social capital; empowering individuals; revitalising a sense of community; and providing economic development opportunities (Denison et al. 2002, pp. 6-7). The matrix reproduced in Table 1 below serves to summarise the aspirations for ICT engagement of the identified groups.

Table 1. Explicit aspirations for ICT engagement

	Individual organisations	Cluster of like organisations intra-sectional	Collectives of neighbourhood stakeholders cross-sectoral	Civic Networks Government agency led	Service and application provider organisations
Enhancing strong democracy	Generally LOW	Generally LOW	HIGH	HIGH	HIGH
Increasing social capital	Generally LOW	Generally LOW	HIGH	HIGH	HIGH
Empowering individuals	Medium to HIGH	Medium to HIGH	HIGH	HIGH	HIGH
Revitalising sense of community	Generally LOW	Generally LOW	HIGH	HIGH	HIGH
Providing economic development opportunities	Generally LOW	Generally LOW	HIGH	HIGH	HIGH

Source: Denison et al. 2002, p. 7.

The Denison et al. taxonomy is applied in this paper by mapping the ICT activities of CECC and various client organisations. The goal is to determine whether the matrix



schema might assist practitioners and policy-makers ‘to be more focused and aware in their policy development and program implementation and to have more realistic expectations of the different sorts of projects’. Further, whether the taxonomy can ‘enable researchers to ask more relevant questions, and help to more accurately contextualise practices within the community networking landscape’ (Denison et al. 2002, p. 10). A single case study is then presented to demonstrate how a service and application provider organisation can support community organisations and the general community in developing ICT capacities and capabilities.

MAPPING ASPIRATIONS FOR ICT ENGAGEMENT OF CECC

Individual organisations

Individual organisations generally utilise ICT services and applications to meet organisation-specific goals or to enhance business organisational processes (Denison et al. 2002). The online services of Matthew Tol and Associates (MTA)¹, Chartered Accountants in Ballarat, provide an example. MTA recently launched web-based services which were designed to assist both in attracting new clients to the firm, thus contributing to achieving the promotional and marketing goals of the organisation, and in empowering clients to access web-based taxation records and other relevant resources and services. The launch of the online client services for MTA represents a new avenue for clients to access specialist services. For MTA the incentive was to provide excellence in client service utilising the latest technology, but also to free-up staff from

¹ www.mta.com.au



less productive activities such as responding to repetitive telephone and email requests for basic client information. While enhancing client service was the primary motivation, some potential for economic development opportunities was also identified.

Clusters of like organisations intra-sectional

Denison et al. identify that clusters of like organisations are exemplified by ‘virtual networks’ where peak body organisations bring together groups within a specific activity area. One local example is the Central Highlands Export Community.² This community has launched ‘virtual’ services which have been designed to meet the goals of various regional development bodies and support agencies (such as representatives from Australian Industry Group, Austrade, Local Government and Regional Development Victoria), particularly in terms of inter-organisational communication and interaction. The GrowExport.com site incorporates a comprehensive database of the capabilities, training and other needs of over 200 firms who are exporting or aspire to export from the Central Highlands region of Victoria. While some information is accessible to the general public, much of the information is accessible only to the regional development agencies. The goal is to support them in better targeting their services using the information and communication platform and tool kit, which is now accessible for the constituent group. Further information on GrowExport.com is provided in the case study below.

² www.growexport.com



Collectives of neighborhood stakeholders

Denison et al. identify collectives of neighborhood stakeholders as the ‘classic community network manifestation’ with these sorts of ‘activities articulated in the work of Doug Schuler, the Blackburn Electronic Village, and the old freenet movement’ (Denison et al. 2002, p. 9). A shared characteristic of this collectivity network is that they often draw on a community development model, provide a wide range of functionalities and are place-based. CECC has developed web-based systems which support a cluster of regional portal initiatives with examples including Ararat, Moorabool and Pyrenees Online.³ More recent initiatives include the development of services for the Wendouree West Community Renewal project, as one component of a multi-million dollar project which aims to regenerate a public housing estate which is home to approximately 400 residents. The web-based systems are used for the collection, collation and storage of information on the skills and learning needs of community members. The goal in this project is to provide a means for matching employment and learning opportunities with the articulated needs and interests of residents.

Civic networks Government Agency Led

Denison et al. (2002) identify portals as a very visible manifestation of government aspirations for developing ICT capacity within individuals or organisations within a constituency. The Young Australian Rural Network⁴ (YARN) is an initiative which is

³ www.ararat.asn.au, www.mconline.com.au, www.pyreneesonline.com.au

⁴ www.yarn.gov.au



driven by the federal government both to develop ICT capacities among young people in rural industries and to provide a range of support functionalities and services to organisations to encourage involvement using web-based systems. YARN brings together communication and information activities of disparate organisations within one constituency. Multiple organisations and individuals participate via publishing event information, news stories, promoting opportunities for young people, joining discussion forums, submitting web-links and resources and by developing information sites for organisations which provide support for young people in rural industries.

Service and application provider organisations

The final category described by Denison et al (2002) is service and application provider organisations. CECC provides an example of an organisation which has evolved to assist community organisations and the general community in developing ICT capacities and capabilities. While activities were initially concentrated within the Central Highlands and Wimmera regions of Victoria, this geographical area of focus has expanded as CECC has been engaged to deliver services that support statewide and national initiatives. The CECC team demonstrates the major characteristics as identified by Denison et al. (2002) which include high levels of ICT expertise, a client provider model, and frequently, a high level of social entrepreneurialism.

Table 2. Aspirations for ICT engagement of CECC and Client Organisations

	Individual community organisations	Cluster of like organisations	Collectives of neighbourhood stakeholders	Civic Networks Government agency led	Service and application provider organisations
<i>Examples:</i>	<i>Matthew Tol and Associates</i>	<i>Central Highlands</i>	<i>Wendouree West</i>	<i>Young Australian</i>	<i>Centre for Electronic</i>



		<i>Export Community</i>	<i>Community Renewal</i>	<i>Rural Network</i>	<i>Commerce & Communications</i>
Enhancing strong democracy	LOW	Generally LOW	HIGH	HIGH	HIGH
Increasing social capital	LOW	MEDIUM to HIGH	HIGH	HIGH	HIGH
Empowering individuals	MEDIUM to HIGH	MEDIUM to HIGH	HIGH	HIGH	HIGH
Revitalising sense of community	LOW	Generally LOW	HIGH	HIGH	HIGH
Providing economic development opportunities	MEDIUM	MEDIUM	HIGH	HIGH	HIGH

Using the model schema which was proposed by Denison et al. (2002), Table 2 provides a summary of the explicit aspirations for ICT engagement for CECC and the client organisations which have been reviewed in the previous sections. This framework provides a useful focus for differentiating between the objectives of various ICT related initiatives which involve individuals, firms, organisations and membership based groups from various regional and rural communities.

In the following section a case study for the Central Highlands Export Community is presented to demonstrate how one initiative within the cluster has been implemented in a way that has actively engaged and involved constituents in the development and ongoing maintenance of the online community.



CENTRAL HIGHLANDS EXPORT COMMUNITY AND GROWEXPORT.COM

GrowExport.com is an interactive online community - a vehicle for exporters and potential exporters - in the Central Highlands Regions of Victoria to communicate directly with economic development agencies across the region and with each other to keep in touch, collaborate, share ideas and strengthen networks.

GrowExport.com emerged as an outcome of the Growing Jobs Through Export (GJTE) project which was funded by the Department of Transport and Regional Services through the Regional Assistance Program. The GJTE project was implemented by the Australian Institute of Export (Vic) Ltd with the support of the organisations detailed in Table 3 below. The three major project objectives were to grow export capability; increase the skills base within the export sector; and develop an export culture within the region.

Table 3. Participant organisations in GJTE project

Organisation	Government or Industry Sector	Organisation Overview
AusIndustry	Federal Government	AusIndustry helps firms to undertake research and development and to commercialise the results. It also assists companies using imported components to make exports and early stage firms needing help to bring new products to market.
Austrade	Federal Government	The Australian Trade Commission (Austrade) is the Federal Government agency that helps Australian companies win overseas business for their products and services by reducing the time, cost and risk involved in selecting, entering and developing international markets.
Australian Industry Group	Industry and Employer Body	The Australian Industry Group is one of the largest industry and employer bodies in Australia, representing more than 10,000 member companies in the manufacturing, construction, engineering and service industries. The Ballarat office services members throughout the Ballarat and Wimmera region. Members can access a wide range of services from the International Trade Division including export documentation and advice, trade assistance, participation in trade missions and regular trade updates.



City of Ballarat	Local Government	Business Ballarat is the economic development unit with the City of Ballarat. Their role is to promote Ballarat as a place to live, work and invest and to support the sustainable growth and business activities of existing businesses. Business Ballarat also undertakes a range of strategy and business analysis and has resources and information to assist businesses with strategic decision making. In addition, Business Ballarat facilitates and supports a range of business forums, workshops, training programs and business seminars and events that provide the Ballarat and region business community with relevant and up-to-date information.
Central Highlands Area Consultative Committee	Non Profit	Area Consultative Committees are non-profit, community-based organisations funded by the Commonwealth Government under the Regional Assistance Program. Members are volunteers drawn from the community, local business and government who act as key regional stakeholders to build networks and partnerships to find local solutions to problems. They promote and disseminate information on Government priorities and programs for the benefit of business and the community.
Hepburn Shire	Local Government	The Hepburn Shire is located in Central Victoria just 90 minutes from Melbourne. The main towns in the region include Daylesford/Hepburn, Creswick, Clunes and Trentham. The local economy is becoming increasingly diversified. While agriculture, forestry and manufacturing continue to be important, tourism, service industries, retailing, education as well as health and community services have grown.
Industry Capability Network (Victoria) Limited	State Government	The aim of the Victorian Industry Capability Network (ICN) is to promote Victorian and Australian industry through import replacement and opportunities for participation in overseas projects. The ICN performs a technical role providing purchasers with a free sourcing service to identify Australian manufacturers capable of supplying those items that would otherwise be imported.
Moorabool Shire	Local Government	Moorabool Shire is a semi-rural municipality located eighty kilometres immediately to the west of the Melbourne metropolitan area. Moorabool Shire is traversed by a nationally significant transport route and is within easy access to Melbourne and the two major regional centres of Ballarat and Geelong. Over twenty distinct communities constitute the Shire. This includes the majority of the population centred in and around Bacchus Marsh. The Moorabool Shire seeks to create a community culture that embraces economic development through establishing partnerships with stakeholders to promote an environment of growth and sustainable development to bring economic and social value to their community especially manifest in the creation of employment opportunities.
Pyrenees Shire	Local Government	The Pyrenees Shire is centred around an agricultural industry base which supports cattle, sheep, deer, alpacas as well as extensive cropping and an expanding wine and tourism industry. The area is well serviced with major arterial roads with attendant road freight hauliers, three phase power, substantive telecommunication infrastructure reticulated potable water and reticulated sewage systems in the major towns and a well skilled work force.



Regional Development Victoria	State Government	Regional Development Victoria has whole of government responsibility for shaping policy for regional development and delivers programs to enhance economic and infrastructure development, investment attraction, job creation and community development in regional and rural Victoria. Major objectives include recruiting new industry and investment, enhancing regional infrastructure and services and providing a stronger voice for regional Victorians.
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The Australian Institute of export employed a fulltime project officer, initially for a period of twelve months, to ensure that the objectives of the project were achieved. The GJTE Steering Committee was also formed with representation from each of the above organisations.

One major project activity was the conduct of an audit to identify exporters and potential exporters across the region. The goal was to create a profile of the export community and then undertake specific activities which would support the project steering committee in enhancing the export capability and capacity in the region. Through the GJTE project two-hundred and twenty (220) Central Highlands companies were identified as either exporting products, services or intellectual property; or as aspiring to export within the next two to five years. One-hundred and fifty (150) of these firms then participated fully in an export survey which was conducted during 2002. Information was predominately collected through face-to-face interviews. Where this was not possible a survey was provided to the organisation for completion and return by mail.



The information which was obtained from each organisation included the products they exported, their export destination markets and current level of ICT uptake. Participating firms also provided information about raw material, machinery, building and component requirements; labour shortages; and staff development needs including factors such as export commitment, cultural readiness, quality assurance, export market development skills; finance, documentation, and shipping requirements.

Collected information was then entered into an access database for later analysis. At the completion of the survey SED Consulting was engaged to compile the questionnaire results and present a report based on the following criteria:

1. Summarise the results in terms of: export sector; business size; age of business; export status; location of business; export destination; and utilisation of the internet.
2. Present findings of the export capability and capacity in terms of resource needs (labour, raw materials, capital); import activities; the impact of government regulation; as well as outcomes of the skills audit (levels of operational, market development and technology skills) and indicators in terms of the desire for exporter networking.
3. Identify sectors and enterprises with the potential to increase exports and grow employment.
4. Undertake analysis of additional needs such as venture capital, supply chain opportunities and training and development needs that would directly enhance



the capacity of exporters to enter new markets and/or increase existing market share.

The SED Consulting report titled *Growing Jobs Through Export: Export Audit Report for the Central Highlands Region of Victoria* was finalised during February 2003. This report was distributed to members of the project Steering Committee and a copy was provided to the funding organisation, the Department of Transport and Regional Services. The report provided a useful ‘snapshot’ of the Central Highlands export community at a particular point in time while also highlighting a number of needs and aspirations of the region’s exporting and potential exporting firms.

Members of the GJTE steering committee were motivated to find ways of maximising outcomes from the audit process. One significant finding was that 98 percent of companies identified email as their preferred communication method. The challenge for the GJTE steering committee was therefore to find an effective way of sharing access to the database as a way of ensuring, that as a group, they could deliver relevant information to the desktops of regional businesses. Further they wanted to find ways of bringing exporters together as more than half had indicated an interest in meeting other exporters for networking or mentoring opportunities.

The GJTE steering committee identified the opportunity to establish a web-based communications platform which would utilise the data that was gathered through the audit as a core component. Key regional development agencies would gain efficient



shared access to comprehensive information on the export community and effectively extend the work of the GJTE project beyond the initial seed funded period.

During May 2003, the CECC at the University of Ballarat was invited to submit a proposal for the development of a Secure Online Database and Export Resource Web Presence as members of the GJTE steering committee were aware of the involvement of CECC in projects including the MainStreet Regional Portal⁵, Ararat Online and Moorabool Online. The project brief outlined that the objective was to utilise limited funding to make the Access database available online as a marketing presence and economic development tool. Committee members would use the secure online database as a communication channel for export development and for promoting export opportunities and activities. In addition, the committee sought to establish an export resource web presence, which would provide a brief description of opportunities and the contact details of businesses, services, industry groups and government agencies related to export. Access would also be provided to information and resources relevant to members of the Central Highlands export community.

On the 21 May 2003 CECC received written advice that their proposal had been successful. A four member sub-group of the GJTE committee was formed to work closely with the Project Officer and CECC to achieve the objectives outlined in the brief. Implementation activities commenced with a planning session on the 27th May 2003. Prior to this meeting CECC obtained a copy of the Access database and also

⁵ www.mainstreet.net.au



copies of images and other materials which had been produced and distributed during the GJTE project. These materials would assist CECC in understanding the information needs of the group and also in developing ideas for a ‘mockup’ for later approval.

At the first project sub-committee meeting the functional requirements, project plans, timeline and contractual issues were discussed. An important area of consideration was the proposed arrangements for the City of Ballarat to host the online database and web presence. While CECC advised that this was possible, they also indicated that there was some doubt as to whether the project implementation timeline could not be guaranteed if the application was to be delivered on an external system. They also indicated that access would not be available to ongoing product upgrades and support. After weighing up the additional annual cost of \$1200 per annum against the outlined benefits, the Information Manager at the City of Ballarat recommended that the application be hosted by CECC. The City of Ballarat would enter a separate legal arrangement with the University of Ballarat to formalise ongoing arrangements, which would include a requirement for code relevant to the GJTE web services to be held in escrow.

Discussions took place regarding a suitable website domain name for the project. The first option which was considered was CHEXPORT.com (Central Highlands Export Community). This decision was later amended to GrowExport.com when it was found that CHEXPORT was not available across all domain preferences. The next formal reporting date would be on the 10th June 2003 when CECC would make a presentation to the full committee. At this meeting the committee approved the site map and ‘mock



up'. A power point presentation was used to demonstrate the type of functionalities which would be integrated in GrowExport.com. Key functionality elements are summarised below.

Table 4. Key functional elements of GrowExport.com

Functionality	Description
Overall Management	Powered by CECC Web Manager - The Web Manager acts as a gateway to the various administration functions of CECC hosted websites and online services. Users are provided with appropriate access permissions based on their role/responsibilities.
News	Powered by CECC Content Builder - Content Builder is a powerful content management application for publishing information to websites. This application allows for effective management of content which needs to be changed on a regular basis including news headlines. It is a flexible application which can be adapted to manage many areas of a website. This product includes an image uploading facility, user editable templates and archiving capabilities.
Events Calendar	Powered by CECC Event Calendar - The events calendar is an attractive application with a highly customisable interface. This popular program distributes the workload of managing event information by allowing anyone to register to add events. Clients choose the type of verification system they require before event information is published live to the web. The calendar can allow several clients to share the same database of events. This is often appropriate for communities of interest in the same geographical area.
People and Resources	Powered by CECC Content Builder and Resource Manger - This product facilitates the management of files, documents and web links.
Links	Powered by CECC Resource Manager – Users can create a fully searchable knowledge database of documents or simply create a links repository for online communities or websites. Authorised users can define relevant links and resource categories.
Discussion	Powered by 'Phorum' Discussion Board - Tailored as required with features such as mail server support and message attachments.
Exporters	Custom designed database including search and reporting features, bulk and tailored email capabilities, automatically generated reminders to participants to update details.
Have Your Say	Powered by CECC Quick Poll – A simple application that places a poll question on a website site and allows users to vote. Users can then view the results of the poll in a graphical format. The application enables authorised uses to easily create and implement a new poll at any time.



As the site design and functionality requirements were confirmed, the project development phase commenced. Table 5 provides a summary of the major project activities which preceded the launch of the GrowExport.com in August 2003.

Table 5. Overview of Project for GrowExport.com

Stage of Delivery	Milestone	Timeline
Contract negotiations and signing	Contracts between UoB and City of Ballarat and UoB and Australian Institute of Export in place	26 May 2003 – 06 June 2003
Analysis and design	Consultation with project stakeholders. Analysis of Access 2000 database.	30 May 2003 – 04 Jun 2003
Graphic design	'Mockup' presented to stakeholders for feedback	04 Jun 2003 – 10 Jun 2003
Develop export resource web presence	Presentation of prototype to stakeholders and the City of Ballarat IT Department	10 Jun 2003 – 30 Jun 2003
Develop administration interface	As above	10 Jun 2003 – 30 Jun 2003
Develop client interface	As Above	10 Jun 2003 – 30 Jun 2003
System review	Beta Test Period which includes stakeholder training.	01 Jul 2003 – 21 Jul 2003
Testing and quality assurance	Comprehensive feedback submitted to CECC during testing period.	21 Jul 2003 – 04 Aug 2003
Documentation and training	Delivery of final secure web database and export web presence as specified.	21 Jul 2003 – 04 Sep2003
General release and promotion	Public launch organised by City of Ballarat	Early August 2003

The public launch for GrowExport.com was held at a luncheon at the City of Ballarat in August 2003. This launch occurred towards the end of the funded period of the GJTE project. Initial publicity included television coverage of the launch, the issuing a press release, direct email notification to key organisations and to each of the firms who was registered in the Central Highlands Exporter Database. Key project outcomes to date have included:



1. Promoting and supporting further networking amongst exporters and potential exporters in the Central Highlands region.
2. Providing a two-way communication tool as a conduit for information flow between regional development agencies and industry representatives and their stakeholders, with communication being equally initiated at both ends.
3. Serving as an information 'hub' for exporters and potential exporters to find further information on government and non-government organisations, network and groups, particularly by providing a facilities for all organisations to post information.

Figure 1. GrowExport.com





The establishment of the GrowExport.com has made it possible to effectively publicise export capabilities, services, opportunities, news, events and web links. Site visitors have multiple opportunities to become active contributors to the site through online discussion or other forms of participation. Key stakeholders share access to the secure ‘back end’ of GrowExport.com. They can search the database, identify firms with specific capabilities, skills or learning needs; they can choose to send a bulk email or select firms according to particular characteristics for targeted promotion of opportunities. Additional firms can join the online database online, while key stakeholders also augment information as they become aware of changes within the export community.

Regional representatives from economic development bodies and industry associations are continuing their active engagement in GrowExport.com. This outcome has been achieved through an extensive program of training which has involved a combination of group workshops and one-on-one follow-up sessions. The GJTE steering committee is also continuing to meet on a regular basis to review progress and set new targets.

While it is still early days for GrowExport.com the project has generated significant interest. In the two months since its launch the site has attracted over 16,000 hits, received 527 unique visits and provided site visitors with 4718 page views.

CONCLUSIONS



This paper initially examined the taxonomy which was developed by Denison et al. (2002) to differentiate various types of ICT and community networking initiatives. The application of the model schema proved useful in differentiating between various community networking initiatives. The presentation of the case study for GrowExport then highlighted factors which are involved in establishing sustainable online services. Access to a comprehensive toolset specifically designed to meet the skills and infrastructure gaps which often exist in regional areas has been important. The active involvement of community members in designing, implementing and sustaining web-based services has also been important. Important factors in the success of regional CI initiatives appear to be directly related to the level of ownership that can be created among participants, the ability for multiple users to contribute, publish and maintain the web-based information, and, finally, the degree to which web-based applications are tailored to meet the particular business, organisation or community purpose.

Communities, just like businesses, require assistance in identifying the most appropriate online services for their particular circumstances. Service and application provider organisations can play an important role in developing ICT capacity. Case studies, such as the one presented in this paper, can also be very effective in illustrating the impacts, influences and challenges that are experienced in operationalising and sustaining regional CI initiatives.



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