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OUTBACK CONNECT: BRIDGING THE DIGITAL DIVIDE

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INTRODUCTION

The South Australian Outback¹ is a vast area. A population of 17 427 people live in an area of 706 891 km² (ABS 2005b) - or a density of one person per 40.5 square kilometres. Approximately 1% of the state's population lives in the outback, which comprises 70% of South Australia's land area. Indigenous people represent about 16% of the total population of this area (ABS 2001).

South Australia is the driest state of Australia and has a predominantly flat and low-lying terrain. The Simpson, Great Victoria and Sturt Stony deserts contain the Musgrave, Gawler and Flinders Ranges and many large saline lakes, including Lakes Eyre, Torrens and Gairdner. The area contains the vast Pitjantjatara and Maralinga -Tjarutja Aboriginal lands and is also home to the Adnyamathanha and Arabana people.

Traditionally the pastoral industry provides the main land use, with mining development experiencing a current boom. Tourists and "sea changers" are increasingly changing the dynamic of the population along popular travel routes.

Information and communication technologies (ICTs) already play important functions in remote regions. Almost every aspect of daily life can be enhanced through access to services on line such as e-banking, shopping, licensing, and information provision including weather forecasting, industry developments and leisure interests. The potential value of the Internet as a means of maintaining links with others cannot be overstated in a region where neighbours and help can be several hundreds of kilometres away.

There has been considerable Government and private investment in ICTs for very remote regions, including mobile phone access, broadband and satellite internet infrastructure. However, there is still a significant lag in up-take of on-line technologies by people living in this area. In a telephone survey of Outback residents commissioned for this project, (Harrison 2005), in the SA outback:

- 64% used a computer for any reason at home, work or anywhere else
- 55% used a computer daily or more often and 76% weekly or more often
- 54% used a computer at home
- 49% had Internet access at home

This result suggests that usage rates compare favourably with the rates across Australia. However, a phone survey would provide a very biased sample and is unlikely to capture people already marginalised by the digital divide, such as itinerant workers and aboriginal people. The levels were also significantly lower than for home computer access and internet use in urban areas. In metropolitan areas, 69% of households have a home computer. This rises to 84% for families with children under 15, while 59% have home internet access (ABS 2005a).

While this urban/outback imbalance can be attributed in part to continuing problems with the availability and reliability of infrastructure, there are also issues which have been labelled the “three Cs” of the digital divide – connectivity, capability and content (Pacific Bell 2002). Connectivity is not just wires or waves, but needs to take into consideration the appropriateness of the infrastructure to the physical, human and economic environment. Capacity is the skills and abilities required to utilise new technologies, but more significantly also recognises the need for motivation for people to become ICT literate and confident in using this technology. Content refers to the information provided, which must meet the information and service needs of users to enhance their daily lives, but also be appropriately expressed and easily accessible.

These factors guided the project development of Outback Connect, in applying for funding from the Australian Government’s DCITA IT Training and Technical Support Fund (DCITA 2004) The model developed for Outback Connect considered the particular environment and needs of this region: the need to overcome vast distances, to gain community acceptance and ownership, to be relevant to regional and cultural needs, to maintain economies of scale in the face of potential cost escalation. It provides innovative solutions to the various issues of remoteness which impact on the effective use of ICT for individual and community benefit.

OUTBACK CONNECT, THE MODEL

Outback Connect offers free basic training and technical support through a “virtual” classroom. Derived from the model used by School of the Air in South Australia, the project uses CENTRA² “Symposium” technology, a web based and user - friendly conferencing facility. Clients register for class sessions and receive on-line agendas and notes, where relevant. Through headsets and microphones, and occasionally webcams, all class participants can interact, ask questions, share applications, enter breakout rooms, make entries on a class whiteboard, even share a joke or applaud (but silently).

Outback Connect aims to develop the use of online service through three main means: Training in Information Technology (IT); Development of IT skills to support the sustainability of local organisations; Provision of technical IT support. The main features of these components are outlined below.

Training in IT

A basic list of classes in a flexible time framework is offered, and Outback Connect clients can request particular topics to be included in the schedule. TAFE SA Regional at Port Lincoln was the successful tenderer to deliver this training and TAFE staff members have developed their skills in virtual and non-accredited instruction to provide this on-line program.

Use of this program requires a minimum computer knowledge and dial up internet speed and so can be used by people in all locations and with all levels of Internet access. The project provides instruction sheets, web based information and complimentary headsets and microphones to assist clients get started. As this software is the same as that used by School of the Air and Aboriginal Education Study Centres, it can be assumed that many of the target population already has some familiarity with this package. However, Outback Connect also aims to assist first time and novice computer users and many prospective clients do not have any familiarity or confidence with technology at all. To meet this need, the project has made arrangements to provide individual, face-to-face assistance by IT trainees based in local organisations.

Developing a skill base for future IT support and organisational sustainability

IT traineeships are offered to local young people who are hosted by regional organisations, for example Yunta Post Office and Telecentre, Streaky Bay Area School or Ceduna TWT Community Development Employment Project (CDEP). Trainees, using the facilities of their host organisation, can offer support to community members in using computers and accessing Outback Connect. A client from Penong, for example, regularly travels to the Ceduna Aboriginal Art and Cultural Centre for booked sessions with a trainee based there. Trainees also complete certificate study in IT which could be the foundation for a potential career or small business pathway. In many instances, trainees also can enhance the sustainability of their host organisation through their on-the-job competency development which helps to maintain the ICT functionality of their host organisation, provides technical support and assists with staff skill development.

Providing technical support

A feasibility study conducted prior to the commencement of Outback Connect indicated a clear demand for accessible technical support in very remote regions.

Many outback families and organisations saw themselves as competent computer users, but were disadvantaged in gaining local access to technical support. Issues such as virus protection and computer security, privacy and consumer rights, setting up peripherals, upgrading software and hardware become mammoth hurdles when there is no computer shop down the road or friendly workplace “technophile” to offer assistance. These things can be resolved, virtually, through the Outback Connect software.

This software can allow computers to be accessed remotely for technical support, and a 1300 connection to a registered technician has been established. Basic technical queries are resolved through Outback Connect. More advanced problems are referred to a choice of local providers where consumers are charged at commercial rates.

PARTNERSHIP MODEL USED BY OUTBACK CONNECT

When Outback Connect ends in June 2007, it aims to have:

- generated a demand for on-line service provision
- created a network of young people skilled in IT service provision
- demonstrated an income producing model of IT support

These outcomes will provide a potential business opportunity through increased community and private use of online resources with a consequent increased demand for technical support. The feasibility of a commercial operation will have been tested during the period of subsidised support, while existing commercial providers will have benefited from clients referred from the project.

A major principle of Outback Connect is to cooperate with existing programs and organisations to maximise the support and training that can be provided to very remote South Australians. As previously indicated, this is a core value and impetus for the project and is essential in gaining support and buy-in from outback residents and organisations. This will also increase the likelihood that the services provided will continue after the project funding ceases.

Outback Connect is built on a partnership model – developing joint ventures, working with existing programs, value adding to other projects, gaining guidance and support from the local knowledge and community networks of other organisations.

Project partners, who form the Outback Connect Advisory Committee, include:

- The Public Library network (PLAIN Central Services). PLAIN hosts the project server and maintains a parallel trainee and public education program. At the conclusion of the project, ownership of the virtual classroom software will be transferred to PLAIN, providing a tested training and communication resource across all South Australian libraries and reinforcing the value of ICT in conducting community business.
- Rural Solutions SA, a business unit of the Department for Primary Industries and Resources. Rural Solutions is contracted to coordinate the delivery of the project. Outback Connect complements many existing Rural Solutions programs conducted for pastoralists and this partnership provides invaluable links to the pastoral community, and other programs operating in very remote areas.
- Outback Areas Community Development Trust (OACDT) is the administrative organisation for these remote regions. As part of the sustainability of the project, OACDT will also assist in evaluation studies to identify future needs and development options.
- School of the Air (SOTA) has provided the model on which this project is built and continues to advise Outback Connect on the most effective use of the program.
- Aboriginal Education and Employment, a Directorate of DFEEST provides a link to Aboriginal communities through the Aboriginal Education Study Centres program. The Outback Connect project brief specifically focuses on these communities and this project can assist in developing ICT literacy and providing IT traineeships for Aboriginal people.

OUTBACK CONNECT: CREATING OPPORTUNITY

Outback Connect is a project of the Digital Bridge Unit, DFEEST. This title echoes its strategic approach to the issue of the “digital divide” which is positive and facilitative - implementing programs which offer opportunities for communities and individuals to assess their own needs and explore the degree of interaction with ICTs which is appropriate for them.

The use of information as an economic resource is part of major social change, which is impacting on community dynamics and personal circumstances. Access to information and on-line services can provide significant socio-economic benefits, such as access to global markets and instantaneous information and service delivery. While equality of access is a wider issue than can be covered by this paper, it reinforces the view that on-line resources should be available to all and that all people should have the opportunity to assess its relevance and benefit for themselves. Outback Connect seeks to provide and support that opportunity

While traditional socio-economic measures of disadvantage are also indicators of a digital divide, there are other factors across “class” or wealth boundaries, including age, occupation type, gender, ethnicity, location, available infrastructure, for example, which also inhibit access to digital technology. By many measures, such as the vast distances from services and low population density, the people of very remote regions are at risk of being excluded from the benefits of this technology.

As discussed earlier, the dimensions of the digital divide include more than the provision of adequate infrastructure. In adopting the 3C paradigm (Pacific Bell 2002), “Connectivity”, must be reinforced by “Capability” and “Content” if there are to be inroads made to reducing digital exclusion.

Outback Connect is addressing the “Capability” of people and organisations in very remote South Australia to access digital information and communication resources and to develop the “digital fluency” to effectively use these resources. The project also invites clients to explore the ways in which this technology can be beneficial for them. The model for Outback Connect develops from the availability of digital infrastructure and relies on appropriate and useful content, thus reinforcing the inter-relationship of these three concepts.

The partnership model of Outback Connect facilitates access to and participation in the program through:

Adding value

- Many Outback families and Aboriginal communities were early adopters of internet technology through Telstra’s satellite subsidy scheme and Telecommunications Action Plan for Remote Indigenous Communities programs. The feasibility study conducted by Outback Connect identified technical support as integral to the continuing viability of these technologies.
- The use of the same communication software as School of the Air increases the recognition factor for outback families and offers an added incentive for accessing the Outback Connect programs.

Evolution into other programs

Examples include

- Farm Biz is planning to extend the introductory training offered by Outback Connect to offer vocationally based training to the Outback Connect network.
- Developing confidence in the use of ICT provides opportunities for residents of very remote areas for greater access to Vocational and Adult Education.

Tapping into established networks

- The Outback Areas Community Development Trust provides funding assistance to 36 remote communities. There is a natural alliance with Outback Connect marketing through the network of local Progress Associations, OACDT Communication outlets and working with OACDT programs.

“In the more recent years assistance with projects to upgrade existing communications technology and adopt new approaches has increasingly occupied the Trust’s time. These projects have related to radio and TV rebroadcast facilities, [and] computer awareness and public access to the internet”(OACDT 2005b)

- Rural Solutions business and community development programs have developed a network of contacts across the region and the alliance between this organisation and Outback Connect provide an opportunity to offer complementary, collaborative and extension programs.

Designing program delivery appropriate to the circumstances of the clients

- This is a core value of the design of Outback Connect, across all sectors of the target population. For example, it must be recognised that Aboriginal communities require culturally sensitive approaches if a program is to be effective. The digital divide is

particularly pervasive in most Aboriginal communities and will increase if awareness and relevant training programs (as well as the development of culturally sensitive on-line content) are not implemented. The role of Indigenous organisations in supporting and defining the parameters of a program such as Outback Connect for Indigenous users is critical. The advisory and collaborative role of Aboriginal Education and Employment will be a major determinant of success in this population.

CONCLUSION

The Outback Connect Project is based on the thesis that greater use of ICT in the outback can assist in the process of building sustainable communities in remote areas. Outback Connect is built on a community development model, integrating existing local resources, being responsive to local needs and offering a self directed functionality.

A pre-requisite of this project is to gain community support in an area where the hardships of the physical and economic environment have generated an independent self sufficiency which can be suspicious of new technologies and Government funded programs. Outback Connect has sought to overcome this through building on accepted technology, the “virtual classroom” of School of the Air, and making it more widely accessible.

Outback Connect relies on links with partner organisations that are already part of the community fabric – for the choice of a delivery platform, and also the promotion of the project within the community and ensuring that the project meets local needs,

Outback Connect has been designed according to, and is a model of, three key learnings based on experience in the South Australian Outback:

1. that partnership models across agencies need to be clearly articulated at project start up
2. that community engagement is a critical component of service delivery of this nature
3. that understanding existing culture is a critical success factor in community engagement

Notes

1. For the purposes of this paper, “the Outback” is defined as “those areas which have been designated as very remote according to the Australian Bureau of Statistics. The Accessibility/Remoteness Index of Australia (ARIA) measures the remoteness of a point based on the road distances to the nearest ABS defined Urban Centre. Remoteness is a factor of the relative distance one must travel to access a full range of services.” (DCITA 2004)
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