Abstract
In the early 1990s Federal and State Governments realised that without significant investment in telecommunications infrastructure, rural and regional centres would be left behind in the rush to 'get online'. One response to this realisation was to build the foundations of a telecentre network throughout rural and regional Australia. This paper presents a brief review of the nearly ten-year history of Australian telecentres and describes a proposed research project investigating how this telecentre network can assist in the development of sustainable regional tourism and how in turn, the tourism industry can assist with the on-going sustainability of the telecentres.

Introduction
Australia is a country whose population is located primarily on the eastern seaboard in large metropolitan areas. In these areas, telecommunication infrastructure is well developed and approaching 'world best practice' levels. However, rural and regional areas, particularly in regional Western Australia, are often denied access to this infrastructure.

With the growth of the Internet and concomitant growth in Internet Commerce, rural and regional areas are in danger of being left behind their city cousins.

In the early 1980s, party line telephones constructed from fencing wire could still be found in regular use in rural Australia...the telephone system in country areas was progressively upgraded to provide a modern, automatic, 24 hour telephony service. It was not intended to provide a data transmission service and it became progressively unequal to the task with the increasing use of fax and modems.(Crelin, 1995, p.3)

The Telecentres Program, established in the 1992-93 Federal Budget, is one Government response to this situation. The program grew out of a report commissioned by the Federal Department of Primary Industries and Energy in early 1990 which aimed to examine whether the European 'telecottage' concept would transfer to Australian conditions. (Fuchs, 1998).

Telecentres
Share (1997) defines a telecentre as being "...a facility that offers the public access to advanced IT and telecommunications equipment, together with some degree of support and training...".

Western Australia, as the physically largest Australian State with the most remote population distribution, and hence the state with the greatest need for these services, seems to be leading the way in the establishment and government support of the telecentre network. The number of telecentres in the Western Australian Telecentre Network has grown from 38 in May 1997 to a current level of 68. (Department of Commerce and Trade, 1999b.) Each new telecentre is currently being granted $50,000 in State and Federal Government start-up funding, primarily to fund the purchase of equipment ($30,000) and initial co-ordination salary subsidies. This research project is primarily interested in the role/s that the
telecentre network can play in the on-going sustainability of the regional tourism industry in Western Australia, through provision of services to both tourists and tourist operators in these areas.

Tourism

Tourism in Australia is fast becoming a major earner of export income. In the 1996-7 financial year, tourism earned $16.1 billion worth of export earnings, compared with $58.5 billion for non-rural (manufacturing and mining) industries, and $22.1 billion for rural industries. The average growth of these figures since 1992-93 shows that tourism is growing rapidly with 10.5% annual growth in export earnings, as compared to rates of 8.2% p.a. for non-rural industries, and 6.7% p.a for rural. (ABS, 1998).

It has been estimated that tourism is directly responsible for the employment of nearly 700,000 persons (BTR, 1997a), and indirectly a further 340,000, (BTR, 1997b) which is 12.4% of all those employed in Australia. The on-going sustainability of this sector is seen as being vitally important to the continued health and growth of the Australian economy.

Many regional centres which in the past may have relied on agricultural industries for employment are finding that tourism is fast becoming their 'life-line' to sustained economic viability. This experience is not confined to Australia, rather it is common throughout OECD countries (Share, 1997). A significant Western Australian example of this phenomena is that of Albany, located on the south coast. Traditionally, Albany relied on whaling and processing of agricultural produce as major economic drivers of the town's economy. With the downgrading and cessation of many of these industries, the economy of Albany has now geared itself toward tourism. Native timber-logging towns in the South West of Western Australia will soon be finding that the current concerns as to the long-term sustainability of these industries will require a shift in economic focus, possibly to 'eco-tourism' as an alternative local industry.

Objectives of the Telecentres Program

The original objective of the Telecentre Program was not to provide services to the tourism industry, rather, as stated in the mission statement of the Western Australia Telecentre Network...

"(to be) Building the future of regional and rural communications through local access to enhanced services and a supportive network of communication technologies across Western Australia." (Department of Commerce and Trade, 1999b)

Currently, telecentres in Western Australia are providing such innovative services as: telecentre banking, access to legal services, access to Centrelink services, on-line learning (TEE, TAFE, ECU), access to agricultural researchers and ISP services as well as office equipment such as photocopiers, and training in commonly used software for both adults and children. (Department of Commerce and Trade, 1999a).

The telecentre funding model favoured in most states of Australia has a 2 to 3-year limit (Share, 1997, OLTC, 1995) after which time the telecentre is expected to become self-funding. Whilst Western Australian telecentres continue to receive some government financial subsidies after this initial period, the current taste for 'economic rationalism' is sure to result in the telecentres needing to become self-funding at some stage in the future. The European experience is such that many telecentres cease operations following the withdrawal of subsidies. In Sweden, for example, the number of telecottages dropped significantly when a favourable government data-processing contract ended. The remaining telecottages are run (and live or die) on a purely commercial basis. (Bertin, 1997)

The author suggests that telecentres (particularly those located in areas of high tourism potential) could be examining the potential roles that the tourism industry may have in their on-going sustainability (i.e., through payment for services), and the role that telecentres may have in the on-going sustainability of the regional tourism industry. Further, these roles are seen as involving both provision of services to tourists and provision of services to the tourism industry and tourism operators. Several telecentres in smaller towns are already providing interesting and innovative services to the tourism industry. The Northcliffe telecentre, for example, is currently "...developing a community website, mapping out a series of walk
trails and developing ... (a) forum for local story telling." (Department of Commerce and Trade, 1999b, p. 17).

Services to Tourists

The ease of use, immediacy, cost effectiveness, and pervasiveness of Internet communications applications and technologies means that these technologies are now becoming favoured means of communications for tourists. The ability to keep in touch with family and friends on a regular basis has probably altered the tourist experience for many. Contrast for example, daily e-mail communication with letters, aerogrammes or telegrams as means of keeping in touch. In metropolitan areas, entrepreneurs are establishing 'Internet Cafes' which allow tourists access to these services. In rural areas this role has, in some cases, fallen to the local telecentre. The author suggests that these activities may have already become major income streams for telecentres that have embraced the idea.

Services to the Tourism Industry

The tourism industry, particularly in regional areas, is dominated by micro and small businesses such as 'bed and breakfast' accommodation and tour guides. Electronic access to national and international tourism markets is limited for these businesses for several reasons, including a lack of resources and limited access to quality telecommunications infrastructure. The author suggests that a collaborative approach from the competing small businesses is one way to overcome these limitations. The community profile and 'ownership' of telecentres places them in the position of being a community asset and as such, ideal to provide and facilitate this collaborative approach. Such activities could include marketing destinations and services and on-line booking/payment for tourism activities. Additional services that could be provided to local tourism operators include business and IT training, secretarial services and access to high-end office equipment.

The Research Project

Other research projects in which the author is currently involved are investigating, among others, small business internet commerce, small business strategic use of data, and the role of IT in sustaining small tourism-based businesses. The author believes that telecentres have a potentially vital role to play in these areas and in the regional tourism industry.

The major aims of this project are to discover:

1. Whether or not telecentres are currently playing a role in facilitating the diffusion of information and communication technology (ICT) usage in towns where they exist. As the original intention of the telecentre program was to ensure rural and regional towns are not disadvantaged and become the 'information have-nots', a measurement of whether such objectives have been achieved is important to those who are providing the resources and those who are supposed to receive the benefits.

2. What level of resources (i.e., infrastructure, training, capital) is needed to enable telecentres to play their role effectively. Although initial government (both Federal and State) funding was reasonable, telecentres have taken on new roles voluntarily and strategically. It is important to assess whether current funding (and self-funding) is sufficient to satisfy the course of activities and particularly if local businesses have benefitted from such initiatives.

3. Specifically, what attitudes are exhibited by local tourism operators toward the provision of collaborative marketing of tourism destinations by telecentres? This will tie into the current experience of obtaining business through telecentre activities and confidence into the future that such activities will continue or start up if not already there.

4. Finally, what services provided by a telecentre are necessary to improve the tourist experience of a regional tourism destination. How can telecentres and ICT be packaged to streamline activities along the supply-chain of the tourism industry and the effectiveness of doing so.
Research Method

The initial stage of the research will involve semi-structured interviews, either 'in-person' or by telephone, of telecentre co-ordinators of several telecentres in both the 'Rainbow Coast' (Great Southern) and South-West regions. These are popular tourist destinations for both domestic and international tourists. The purpose of the interviews is to discover what services are currently being offered to both tourists and tourism operators by the telecentres.

The second phase of the research will involve observations and surveys of tourists accessing telecentre services to discover what telecentre services tourists are using, and what services they would desire to access, if available.

The third phase of the project will involve a survey of tourism operators in the regions to discover their awareness of local telecentres, their current use of the telecentres, and services they would see as being important to their businesses, and their attitudes toward collaborative business ventures based around telecentres.

Discussion

Analysis of data gained from this process will be carried out using qualitative and quantitative tools appropriate to each of the phases. It is expected that the pattern will emerge that tourism could be a key support mechanism for the future of telecentres, and that telecentres may have to, in response to possible cuts in funding, become more tourist oriented, developing a high degree of innovation to service the needs of both the individual tourism operator and the tourism industry of the region as a whole.

Based on the analysis, it is also intended to recommend how the local community as a whole can strategically position itself to gain further benefit and exposure from the use of ICT through telecentres. An integrated approach is important because of the effectiveness of cross-leveraging activities when resources are scarce.

Conclusion

This paper has presented a proposed research project that involves investigation of the role of telecentres in both the sustainable future of regional tourism industries and the telecentres themselves. The author suggest that to achieve this aim, telecentres may need to widen their focus to include the tourism industry as an extra source of income and to ensure the on-going sustainability of the regions in which they are based. It is further argued that tourism is more than a revenue generation means. It also provides culturally enriching experiences for both the local community and the tourists. If managed properly, we can bring new skills and innovation through tourism into the local community which may otherwise not be achievable. Once the tyranny of distance is made irrelevant through ICT, telecentres will play a critical role in sustaining continuous growth of their activities.

References

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