

ICT and Regional Development in Australia

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INTRODUCTION

Hervey Bay

Hervey Bay is located in the Wide Bay Burnett region of Queensland, Australia. Based on a number of economic and social indicators, the region can be described as disadvantaged (Planning Information Forecasting Unit, 2001). The median weekly income of the region is well below the Queensland state average. The overall unemployment rate for the region is around 16% with about 23% for youth unemployment. The population is aged with 20.7% of the population aged over 65 compared with the Queensland average of 12.4% (Paussa, 2003). Within the region the ratio of welfare payments to personal disposable income is 27.9% (Bray & Mudd, 1998), which is the second highest welfare recipient rate for a region in Australia.

These demographic characteristics are important in understanding the region. Information from the Australian Bureau of Statistics (2001) indicates the overall level of digital inclusion is increasing, albeit at a decreasing rate, with an increase in the number of households with Internet access. However, this inclusion is not uniform across society. Generally, in Australia access to the Internet and a personal computer is positively correlated to income, employment and location in urban areas. Age tends to have an inverse relationship to ownership of a personal computer.

Comparison of the estimated number of Internet subscribers across statistical division populations for Queensland shows a disparity for the Wide Bay Burnett statistical division within which Hervey Bay is situated. This division has 3.2% of Internet subscribers within Queensland (Australian Bureau of Statistics, 2002) and approximately 6.6% of the estimated state population. While it is true that all rural regions in Queensland, apart from Fitzroy (based on the City of Rockhampton), exhibit somewhat similar patterns, Wide Bay Burnett is particularly undersubscribed on a per head basis with respect to

the Internet (Pease, Wright & Cooper, 2003). This is an issue of particular concern for the Wide Bay Region since it illustrates a paucity of rich information and a lack of "connectedness" with the outside world. These statistics point to the potential barriers that may inhibit the uptake of the Internet by individuals and small business within regional Australia.

Despite this, the profile of the region is changing as the city and region grows at a rapid rate, bringing with it, rapid in-migration and investment. In a recent report the region was identified as ranking amongst the top 35 cities within Australia, experiencing one of the fastest growth rates in the country at around 8.5% per annum (KPMG Business Advisory, 2003).

Infrastructure

Australia is amongst the leaders in the provision of infrastructure facilitating the uptake of e-commerce and the Internet. The National Office for the Information Economy (NOIE) ranked Australia 3rd overall behind the United States of America and Sweden in a benchmarking index which ranked 14 key countries across 23 statistical indicators relating to progress in developing the information economy (National Office for the Information Economy [NOIE], 2002).

In this study the United States of America, Scandinavia, Australia, New Zealand and the smaller countries of South East and East Asia are considered to be in a strong position to take advantage of the potential benefits of the emerging global information economy, having the beginnings of the necessary infrastructure and a critical mass of people actively online. It was noted, that for the majority of countries benchmarked, there is still significant room for improvement, with large sections of their respective populations remaining outside the information economy either having access to the Internet and not using this resource, or not having the opportunity to use the Internet due to a lack of access opportunities (NOIE, 2002).

The data presented in the NOIE report shows that Australians tended to be “early adopters” of information economy enabling technologies such as the Internet, computers, and mobile telephones, and increasingly use the Internet for a wide range of activities associated with their day-to-day lives. Australians have been quick to adopt earlier generations of communications technology such as faxes and analogue mobile phones. Like most developed nations, Australia was slow to start with broadband digital services, but is now beginning to climb the broadband adoption curve for second generation services.

In December 2001, Australia was ranked 18th in broadband penetration out of 30 OECD countries (Organisation for Economic Co-operation and Development, 2002). Growth in the uptake of broadband technologies in Australia has continued at a significant rate with the majority of the increase being attributed to the availability of Digital Subscriber Line (DSL) and Asymmetric Digital Subscriber Line (ADSL) and a growing consumer awareness of broadband services (Australian Competition and Consumer Commission, 2002; NOIE, 2003). Australia’s CDMA network is the second largest in the world after that of China (P. Symington, personal interview, May 15, 2003). Still the digital divide in Australia is very real and is manifest in generally differing Internet behaviours in urban and regional areas.

The rate of adoption in Australia of information economy enabling technologies has slowed down relative to other countries which have encouraged the innovative use of ICT technologies. In a report published by The Economist Intelligence Unit (*The 2004 e-Readiness Ranking*, 2004) in conjunction with IBM, early leaders like the USA and Australia have experienced a stagnation of e-commerce growth. The report ranks the world’s 60 largest economies and measures a collection of factors which quantify a country’s “e-readiness,” i.e., a measure of its e-business environment. Australia’s position in terms of e-commerce readiness has declined from 3rd in the world in 2001 to 9th in 2003 and 11th in 2004. With national governments driving the development, countries such as Singapore, Norway and Denmark have eagerly adopted the Internet. The relative position of a country in terms of e-commerce uptake and e-readiness is important in that it indicates its ability to take advantage of the potential benefits of the emerging global information economy.

The Australian Commonwealth Government has implemented a number of strategic initiatives designed to provide a suitable national environment for the development and use of ICT by business (NOIE, 2003). These initiatives include the:

- National Communications Fund (\$50m) which targets the education and health sectors by providing

funding for broadband infrastructure and applications,

- Advanced Networks Fund (\$36 million) to support research and development of advanced network technologies, and
- Networking the Nation (\$464 million) to bridge the gap between urban and regional Australia.

In light of the rise of e-commerce in countries such as Denmark and Singapore, it would appear that an integrated and innovative government strategy to encourage the same growth is needed in Australia.

Telstra, via its business unit Telstra Country Wide, has embarked upon a program of infrastructure improvement in regional Australia, including the Hervey Bay/Maryborough region. In the financial year 2002/3, Telstra Country Wide injected \$187m into improving access to the telecommunication network in regional Australia, \$4 million of which was earmarked for the Wide Bay/Gladstone region within which Hervey Bay is situated (P. Symington, personal interview, May 15, 2003).

From the above it would seem the provision of general infrastructure is not, on the face of it, a major impediment to the uptake of the Internet for individuals or e-commerce amongst business, at least within the Hervey Bay region. The issue of equity and access evident in Hervey Bay seems to arise from a cost perspective. The affordability of personal computers and connection to appropriate infrastructure is prohibitive for some, given their socio-economic position.

This issue of affordability in regional Australia was identified by the Eastens Regional Telecommunication Inquiry (Department of Communications, Information Technology and the Arts, 2002, p. 228) as a major concern and recommended that:

The Government should establish an incentive scheme for the provision of higher bandwidth services to regional, rural and remote areas, to enable all Australians to have access to services at prices comparable to those prevailing in metropolitan areas.

The inquiry considered that access to higher bandwidth services was “vital for the economic and social development of regional, rural and remote Australia” (Department of Communications, Information Technology and the Arts, 2002, p. 205).

A number of initiatives have been adopted in the Hervey Bay region to address the impediment of accessibility by increasing access to Internet-ready computers as well as encouraging the discussion of issues and the provision of assistance regarding access and e-commerce problems individuals and small business proprietors might have. One such initiative is Bay Connect.

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