

# Chapter XLIX

## The Adoption of Broadband Internet in Australia and Canada

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### ABSTRACT

*Broadband Internet connectivity is seen as a means to increase the efficiency and competitiveness of an economy. But despite ongoing efforts to promote broadband in Australia, uptake has been much slower than expected. This chapter aims to identify areas that have been holding up the broadband development in Australia. In examining multiple areas for attention (competition, user characteristics and behaviors, applications, network characteristics, and pricing), we refer to the experience of Canada, a leader in broadband deployment, to show the differences in each area. The chapter outlines objectives for the development of a more user-friendly broadband environment in Australia, which would encourage broadband adoption. Although both countries discussed here have their own policy agendas and some unique circumstances related to broadband deployment, the chapter provide valuable insights for policy makers and industry leaders in Australia, and in other countries which are struggling to develop widespread broadband deployment.*

### INTRODUCTION

Broadband has been considered as a key to enhancing competitiveness of an economy and sustaining economic growth (International Telecommunication Union, 2001, 2003c; OECD Directorate for Science Technology and Industry, 2001, 2002). The Commission of the European Communities (2006) states that broadband is “crucial for fostering growth and jobs” (i2010, 2006). Gillett, Lehr, Osorio, and Sirbu (2006) provide some preliminary

evidence to show that broadband access does result in positive economic benefits, but Fransman (2006) notes that there is very little evidence to justify the claimed benefits of broadband adoption. Nevertheless, there is no doubt that governments around the world are committed to extending broadband networks to their citizens (Broadband Advisory Group, 2003; Office of the e-Envoy, 2001; Task Force on Broadband Communications, 2002). The extent and speed of broadband adoption has varied widely across nations.

## The Adoption of Broadband Internet in Australia and Canada

The Australian government has been keen to deploy broadband across the country to build a foundation for the information society or knowledge economy, and thereby enhance Australia's national competitiveness (Broadband Advisory Group, 2003). When compared to other countries, however, Australia is far behind in this race of broadband adoption,<sup>1</sup> despite strong government support for broadband development over the past decade (Australian Information Economy Advisory Council, 1999; BSEG, 1994; DCITA, 2004). The latest OECD figures (2006b), shown in Table 1, ranked Australia in 17th place for broadband subscriptions, among the 30 OECD countries. This is an improvement from 21st place in 2004, and a move above the OECD average for the first time.

However, countries like Australia and the U.S. continue to lag behind Korea, Canada, and Scandinavian and European countries (e.g., Iceland, Netherlands, Denmark). It is noted that in 2006, Australia remained in the lower half of the ranks while Canada was superseded by a number of other nations in the rankings. The United States' poor performance has been subject to much scrutiny, with Bleha (2005) suggesting that consumers there have broadband services that are "among the slowest, most expensive, and least reliable in the developed world" (p. 111).

Despite the fact that up to 7 million Australian homes, housing 91% of the population, are ADSL<sup>2</sup>-enabled (meaning that broadband access can be provided over existing telephone lines) (Houghton & Morris, 2001), the one million subscriber milestone was reached only at the end of June 2004 (ACCC, 2004). It is reported that Australia is 2 years behind other developed countries like the U.S. and Canada (Riley, 2004), a comparison that only considers the number of subscribers. When the quality of services (i.e., speed) is considered, the gap is even larger. Whereas access speeds of 1 Mbps (megabits per second) or above are the norm in leading countries (with speeds in excess of 50 Mbps available in countries like Japan and Korea) (International Telecommunication Union, 2006a), standard broadband plans in Australia provide speeds of only 256 Kbps (kilobits per second). Furthermore, there is a strict download cap applied to Australian broadband services which discourages users from becoming active surfers. Although the number of broadband subscribers in Australia is increasing steadily, a 2004 report by IDC predicts that Australia will remain in the broadband "backwater" when compared against other developed countries (IDC, 2004).

The purpose of this chapter is to explore the conditions for broadband adoption in Australia to

Table 1. Broadband subscription ranking of OECD countries (excerpt)

| 2002-2006 June      | 2002       | 2002 Rank | 2003        | 2003 Rank | 2004       | 2004 Rank | 2005        | 2005 Rank | 2006         | 2006 Rank |
|---------------------|------------|-----------|-------------|-----------|------------|-----------|-------------|-----------|--------------|-----------|
| Denmark             | 6.7        | 4         | 11.11       | 4         | 17.0       | 2         | 21.8        | 3         | 29.3         | 1         |
| Netherlands         | 3.9        | 10        | 9.2         | 6         | 15.6       | 4         | 22.5        | 2         | 28.8         | 2         |
| Iceland             | 4.7        | 7         | 11.22       | 3         | 15.5       | 5         | 21.7        | 4         | 27.3         | 3         |
| Korea               | 19.1       | 1         | 23.17       | 1         | 24.4       | 1         | 25.5        | 1         | 26.4         | 4         |
| Canada              | 10.2       | 2         | 13.27       | 2         | 16.7       | 3         | 19.2        | 6         | 22.4         | 9         |
| United Kingdom      | 1.3        | 19        | 3.63        | 18        | 7.4        | 15        | 13.5        | 13        | 19.4         | 10        |
| United States       | 5.6        | 6         | 8.25        | 10        | 11.2       | 11        | 14.5        | 12        | 19.2         | 12        |
| Australia           | 1.3        | 18        | 2.65        | 20        | 5.3        | 21        | 10.9        | 17        | 17.4         | 17        |
| <b>OECD average</b> | <b>3.8</b> |           | <b>6.06</b> |           | <b>8.6</b> |           | <b>11.8</b> |           | <b>13.55</b> |           |

Source: Organization for Economic Co-operation and Development (2006b); Broadband access per 100 inhabitants, annual figures measured in June of each year.

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