

# Communication

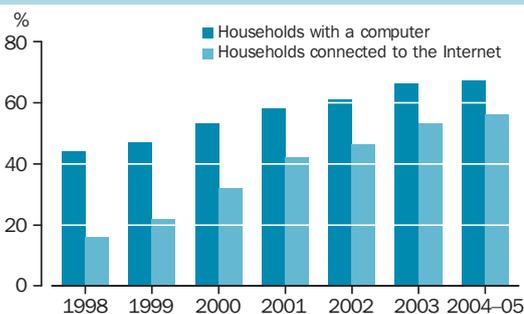
Access to the Internet among Australian households grew rapidly between 1998 and 2004–05, and 56% of households were using the Internet at home by 2004–05. However, there are substantial differences in levels of access between different groups of the population.<sup>1</sup>

The communication of information, ideas and knowledge is important to many aspects of Australian progress, such as education and economic efficiency. Many aspects of communication – including the freedom and quality of Australia's press, television and radio, and how much we communicate and with whom – are important. This commentary focuses on the Internet, an increasingly important form of communication. Those who have access are able to take advantage of an increasingly diverse range of activities and they can communicate with a broader range of people. Many companies, organisations, universities, political parties and individuals have web sites. Online services include education, banking and shopping. And the Internet helps people to work from home or to stay in contact with family and friends.

The number of households with home Internet access has increased significantly since 1998. In 1998 about 16% of households (1.1 million) had home access to the Internet. By 2004–05 this figure had risen to almost 56% (4.4 million). The percentage of households with access to a home computer also continued to increase, but at a much slower rate than home Internet connections over the same period (from 44% in 1998 to 67% in 2004–05). Of the 7.8 million adults aged 18 and over accessing the Internet at home, 36% used it every day, 49% used it at least on a weekly basis and 13% used the Internet at least once a month. Of those adults accessing the Internet at work, 59% reported accessing the Internet everyday.<sup>1</sup>

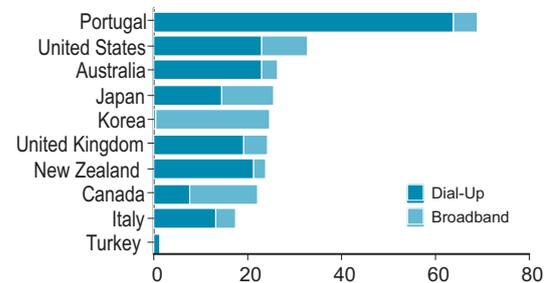
Australians are increasing their use of information technology, in particular making more use of the Internet to purchase or order goods or services. In 2004–05, of all Australian adults, an estimated 31% purchased or ordered goods or services via the Internet for private use. Travel, accommodation or tickets were identified as the most popular product purchased.<sup>1</sup>

## Household computer and Internet access



Source: Household Use of Information Technology 2004–05, cat. no. 8146.0.

## Total Internet, dial-up and broadband subscribers, selected OECD countries, 2003(a)



(a) per 100 people

Source: OECD Communications Outlook, 2005

Broadband access – defined by the ABS as an ‘always on’ Internet connection with an access speed equal to or greater than 256 Kilobits per second – provides much faster access to the Internet than other services such as dial-up modems. The development and use of broadband communications technologies can influence the way people live, work and do business.<sup>2</sup> While the number of broadband services provided to all types of customers (including both businesses and households) in Australia increased significantly between June 2002 (258,100 services) and June 2005 (2,183,300 services),<sup>3</sup> dial-up access remained the most popular method of Internet connection for households during 2004–05. Of the 4.4 million households accessing the Internet at home in 2004–05, 69% had a dial-up connection while 28% reported a broadband Internet connection.<sup>1</sup>

The importance of broadband technologies is being recognised across the world.<sup>2</sup> Internet connectivity continues to expand rapidly in the Organisation for Economic Cooperation and Development (OECD) member countries. By the end of 2003, there were roughly 259 million subscribers to fixed Internet connections and 84 million broadband subscribers across these countries. By August 2004, the number of broadband subscribers had passed 100 million, equating to an average annual growth rate of 77% since 2000. Korea continued to be a leader in the adoption of broadband technology, with more than 24 broadband subscribers per 100 people. Australia's level of broadband access (3.5 per 100 people in 2003) is well below the OECD average of 7.2 per 100 people.<sup>4</sup>

More generally, access to communication networks continues to expand in all OECD countries, However, there appear to be large shifts between the different segments of the market for a number of countries including Australia.<sup>4</sup> While the number of mobile phone services is continuing to grow in Australia (in 2004–05 around 90% of the population had a mobile phone service compared to 42% in 1999–00), the number of fixed line telephone services is declining (the number of

fixed services in operation fell from 11.7 million in 2003–04 to 11.5 million in 2004–05 despite population growth and a trend towards smaller, and therefore more, households).<sup>5</sup>

Television broadcasting is another means by which many Australians receive information. In June 2005 approximately 1.7 million households subscribed to pay TV services, which represents around 26% of TV viewers (or around 21% of households).<sup>5</sup>

### Some differences within Australia

Although Internet use has increased rapidly since 1998, access to the Internet differs according to household characteristics – data show that people on low incomes, living outside metropolitan areas, aged over 65, and particular population groups (e.g. Indigenous Australians) are less likely to use the Internet.<sup>1</sup> The term ‘digital divide’ is used to describe unequal access to information and communications technology within parts of the community.<sup>6</sup>

In 2004–05, households with incomes between \$40,000 and \$80,000 were nearly twice as likely to have access to the Internet at home than those with incomes under \$40,000 (63% compared to 32%) and metropolitan households were more likely than those outside the cities to have access to the Internet at home (59% compared to 51%).<sup>1</sup>

In 2003, 29% of people aged 60 or over reported having used a computer in the last 12 months, with a slightly smaller proportion of people in this age group reporting having used the Internet during the same period (21%).<sup>7</sup> By comparison, most children aged 5–14 used a computer (95%) and accessed the Internet (64%) in the 12 months to April 2003. Computer usage by children increased with age from 90% for 5–8 year olds to 99% for children aged 12–14. Internet usage by children also increased with age, from 37% of 5–8 year olds to 88% for 12–14 year olds.<sup>7</sup>

In 2002, 56% of Indigenous people aged 15 or over reported they had used a computer in the last 12 months and 41% reported they had use the Internet over the same period. Indigenous people in non-remote areas were almost twice as likely to have used a computer or the Internet as those in remote areas.<sup>7</sup>

Among the states and territories, the Australian Capital Territory had the highest proportion of households with home internet access (65%) in 2004–05, possibly because of the ACT's relatively high average incomes and younger age profile. Tasmania had the smallest proportion with home internet access, at 46%. People accessing the Internet in the ACT are also more likely to purchase or order goods or services via the Internet.<sup>1</sup>

Businesses use of the Internet is discussed in the *Productivity* commentary.

### Factors influencing change

Many factors affect whether people decide to connect to the Internet at home. These include cost, interest in the Internet and ownership of a computer.

Interest in the Internet is likely to rise as the breadth of online services increases and people become more accustomed to using them. The number of businesses with a web presence – a website, homepage or entry on another entity's website – continues to increase. In 2003–04 the number of businesses with a web presence rose to 25%, up from 16% in 1999–00.<sup>8</sup> Australian adults are also using the Internet more to purchase or order goods or services. In 2004–05, 31% of Australian adults purchased or ordered goods or services via the Internet for private use – this proportion has increased from 5% in 1999 and 15% in 2002.<sup>1</sup> In 2002, 21% of adult Australians accessed government services via the Internet, with about half of this proportion reporting the main reason was to pay bills.<sup>9</sup>

Of the 4.1 million households without access to the Internet in 2002, 41% reported a lack of interest in the Internet or no use for the Internet as the main reasons they didn't have home access. A further 26% reported the costs for home Internet access were too high. But households with high income (\$100,000 or over) were more likely to report having access elsewhere, rather than cost, as a reason for not having the Internet at home.<sup>9</sup>

The notion of digital inclusion recognises that equitable Internet access is not just a matter of physical access to an Internet connected computer

### Social networks and the Internet

Information and communications technology (ICT) impacts on the communities in which we live and the way individuals, business, government and civil society interact and develop. As the use and impact of ICT increases, so does the prospect that ICT can influence community development and an individual's social networks.<sup>10</sup>

The Internet may be used to supplement existing social relationships by providing another means of communication. It allows people to keep in touch with established contacts, and disseminate information simultaneously to whole networks and provides greater opportunity for extending social networks within a community.<sup>10,11</sup>

ICT may also provide access to new social networks – expanding the concept of community to those groups that are not bounded by geography through chat rooms and subscribing to or linking in with e-mail networks. These networks can be particularly important for communities and groups isolated by geography or circumstance.<sup>10,11</sup>

However the Internet has also been identified as having the potential to diminish some social relationships as it can draw some people away from family and friends and reduce social participation and physical interaction. Some people find that as global communication and involvement increases, interest in local community and politics decreases.<sup>10</sup>

### Internet security

The ability of individual users to feel confident about releasing personal information, such as credit card details, into the network, or authenticating and verifying the information that they access is of critical importance to the success of the Internet. Security threats such as computer viruses, identity theft and spyware reduce user confidence and trust.<sup>5</sup>

Of the 9.5 million Australians accessing the Internet in 2004–05, 4.9 million chose not to purchase or order via the Internet – 27% of these people reported security concerns or concerns about providing credit card details on-line as the reason.<sup>1</sup>

or digital device.<sup>5</sup> Information technology skills and the capacity or even the willingness to use the Internet to access government, business and personal communications services are also important factors in an individual's level of participation in the information economy.<sup>5,12</sup> As more services and activities become Internet based, groups with limited access may not have the full opportunities to participate in social, economic and political life.

Factors believed to be a barrier to effective Internet access or use include lack of skills and training, limitations on the awareness of the benefits and uses of ICT, the availability of technical support and concerns over security. The quality of the available services (ie access to broadband) also impacts on an individual's ability to access information. The use of the Internet in the workplace has the potential to stimulate people to become connected at home, while children who use the Internet at school or a friend's house could to provide a push to their own households to become connected.

### Links to other dimensions of progress

The Internet can be used for education; it is a powerful research tool and many education institutions are developing distance learning courses over the Internet. Education also plays a part in driving change: people's knowledge of and ability to use the Internet help determine whether they choose to connect at home.

The Internet can be used for cultural or recreational pursuits, and can save time (through activities such as Internet banking) which can be spent on other things. The growth of Internet use might also act as a catalyst for greater social cohesion and improved governance: it can provide better links across a local community while also offering access to national and international resources.

The flow of knowledge and information over the Internet can stimulate innovation. It also allows consumers a way of comparing the prices of, and even purchasing, goods and services from outside their local area, or outside Australia. This access to other markets might make Australian industry more competitive, both domestically and internationally.

See also the commentaries *Productivity; Education and training; Family, community and social cohesion; Democracy, governance and citizenship*.

### End notes

- 1 Australian Bureau of Statistics 2005, *Household Use of Information Technology 2004–05*, cat. no. 8146.0, ABS, Canberra.
- 2 Department of Communications, Information Technology & the Arts 2003, *Australia's Broadband Connectivity*, National Office for the Information Economy, Canberra
- 3 Australian Competition & Consumer Commission 2005, *Snapshot of broadband deployment as at 30 June 2005*, ACCC
- 4 Organisation for Economic Co-operation and Development 2005, *OECD Communications Outlook*, OECD, Paris
- 5 Australian Communications and Media Authority 2005, *Telecommunications Performance Report 2004–05*, ACMA, Melbourne.
- 6 Organisation for Economic Co-operation and Development 2001, *Understanding the digital divide*, OECD, Paris
- 7 Australian Bureau of Statistics 2004, *Household Use of Information Technology 2002 and 2003*, cat. no. 8146.0, ABS, Canberra.
- 8 Australian Bureau of Statistics 2005, *Business Use of Information Technology 2003–04*, cat. no. 8129.0, ABS, Canberra
- 9 Australian Bureau of Statistics 2003, *Household Use of Information Technology 2001–02*, cat. no. 8146.0, ABS, Canberra.
- 10 Department of Communications, Information Technology and the Arts 2005, *The role of ICT in building communities and social capital*, DCITA, Canberra
- 11 Australian Bureau of Statistics 2004, *Measuring Social Capital, an Australian Framework and Indicators*, cat. No. 1378.0, ABS, Canberra
- 12 Department of Communications, Information Technology and the Arts, *Digital Inclusion*, <[http://www.dcita.gov.au/ie/community\\_connectivity/social\\_impacts\\_of\\_ict/digital\\_inclusion](http://www.dcita.gov.au/ie/community_connectivity/social_impacts_of_ict/digital_inclusion)> last viewed 23 February 2006.