Digital Divide in Australia: Overview

Introduction

The internet and associated digital technologies have become central to life in Australia since their emergence in the 1990s —but many people lag behind, lacking access to the resources or skills needed to benefit from the digital revolution. Some demographic or socioeconomic groups, like older Australians or those with low incomes, have become persistently disadvantaged in that regard. Others are encumbered by old and outdated infrastructure, such as those forced to rely on slow fibre-to-the-node (FTTN) networks. Many experts fear that the gap between the digital 'haves' and the 'have nots' will widen, particularly in the wake of the COVID-19 pandemic, which has accelerated society's reliance on digital technology. A vigorous debate exists among politicians and information technology specialists on the best means of mitigating this digital divide.

Understanding the Discussion

Broadband: High-speed internet access that can carry multiple data channels at the same time.

Digital divide: The gap that exists between those who have access to affordable and high-quality digital technologies and those who do not.

Digital inclusion: The goal of enabling all people to access and use digital technologies effectively.

Fibre-to-the-node (FTTN): Broadband networks that are partly reliant on old copper telephone wires, resulting in slower internet speeds.

Fibre-to-the-premises (FTTP): Broadband networks that use newer technology in the form of super-fast optical fibre, resulting in faster internet speeds.

Socio-economic: An attribute that relates to the social standing and income of a person or group.

"The rapid acceleration of the digital economy is emerging at a time when some members of the community still face real barriers to online participation."

Statement from "Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2020", RMIT and Swinburne University of Technology, Melbourne, for Telstra. Photo courtesy Unsplash.

History

The phrase 'digital divide' refers in broad terms to the gap between those who have ready access to affordable and high-quality digital technologies and those who do not. In the early 2000s—reflecting general usage that had emerged with the advent of the internet—the Organisation for Economic Co-operation and Development (OECD) defined the digital divide as the 'gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities'.

The National Broadband Network (NBN), the largest infrastructure project in Australian history, was first announced in 2009 as an effort to implement internet access across the country and address the country's digital divide. The project brought high-speed broadband to much of Australia via a combination of fibre-optic, fixed-wireless and satellite technologies. It was the nation's first wholesale, open-access (unrestricted) broadband network, offering the same terms and conditions to service providers and to those who desire access. Built and operated by the Australian Government, the telecommunications network was criticized for not using the latest technology and for its high cost. Though it

was projected to be finished by 2020, the NBN was still being rolled out at that time, with about 8 million homes and businesses connected by March 2021.

In the early 2020s there were significant variations in access to ICT in Australia. As journalist Nicola Heath noted, in 2021 approximately 2.5 million Australians did not have access to the internet, while another 4 million only had access through a mobile connection. Many of those who have poor access come from lower socio-economic groups. Heath observed that the gap between rich and poor Australians had changed little over the preceding four years; an annual report known as the *Australian Digital Inclusion Index*—measuring a combination of access, affordability, and digital ability—attributed a score of 43.8 out of 100 to the lowest-income households and a score of 73.8 to the wealthiest households in 2020.

Yet income is not the only predictor of digital disparities among Australians. A report from 2018 published by the Australian Bureau of Statistics (ABS), a federal government agency, provided a more detailed breakdown of the nature of the digital divide. The data showed age, geography, employment and language ability also remained significant factors in terms of accessing and using online resources. Summarising the report in an article for *The Conversation*, academics from RMIT University and the University of Canberra remarked that nine out of ten people between the ages of fifteen and fifty-four used the internet, but fewer than six out of ten did so among those aged over sixty-five. There was also a gap between urban and regional areas. Internet access dropped off progressively as distance from cities and towns increased: nearly 88 per cent of those in large cities had access, followed by around 83 per cent in inner regional areas, 81 per cent in outer regional zones, and 77 per cent in remote parts of the country. The ABS survey did not include remote indigenous communities, where access to the internet is generally very poor. Other aspects that impacted internet access included employment status (95 per cent among those with jobs versus 72.5 per cent of those without) and language skills (roughly 82 per cent among non-English-speaking migrants, compared to nearly 88 per cent among those born in Australia).

Beyond socio-economic, demographic, and spatial factors, the quality of internet connections is a major element of the digital divide, as critics of Australia's ICT infrastructure have pointed out. During 2020, Laurie Patton, vice-president of a major telecom company in Australia, noted that large numbers of Australians were dependent on obsolete technology that delivered slow internet speeds, citing that about a third of the population was still encumbered by slow fibre-to-the-node (FTTN) connections. Furthermore, he claimed no amount of extra capacity among service providers would help because more data would not increase FTTN speeds, but rather upgraded connections were necessary. Moreover, statistics related to NBN performance showed that in May 2020, 4.7 per cent of FTTN users were not even receiving the minimum twenty-five megabytes per second that had been promised.

Digital Divide in Australia Today

The spread of the coronavirus disease 2019 (COVID-19) pandemic in 2020, and the need for people to work from home during lockdowns, reinvigorated discussion of the digital divide in Australia and abroad. Indeed, Patton's critique of Australia's broadband infrastructure was driven by his concerns about the interrelationship between the pandemic and inadequate internet access, hence his conclusion that it had 'never been more important to bridge the digital divide'.

A year after COVID-19 reached Australia, the pandemic had exacerbated some of the impacts of digital inequality. In education, about 20 per cent of the country's primary and secondary students were from households in the lowest income bracket who had insufficient internet access. Experts warned this could have dire effects on that population's educational future. Other experts found that access to devices was a problem for many and noted that some had only their phones for online learning. Meanwhile, according to one survey, more than half of primary school teachers reported that work standards had dropped during lockdown, and online attendance by students of all ages had fallen. Among the elderly—the group with the lowest internet usage—mental and physical health had declined, with evidence suggesting that social isolation had accelerated conditions such as dementia.

The pandemic also had complex impacts on employment and the job market. In a study from August 2020, PwC Australia, a professional services firm, concluded that accelerated digitalisation would continue to have a large impact on businesses and broader implications for society as a whole following COVID, making it more difficult for people to surmount 'barriers of access, affordability, and . . . digital ability'. In addition, workers who were able to improve their digital skills were predicted to have a significant advantage over those who do not.

Governments and international organisations have been making efforts to bridge the digital divide. In 2020, the secretary general of the United Nations released a Roadmap for Digital Cooperation, which aimed to initiate a number of practical measures that could be taken to improve the way that different countries and organisations could work together to increase the accessibility and affordability of digital resources around the world. Research institute Chatham House, in an analysis of the roadmap, noted that one of the key objectives of the plan was to establish universal benchmarks that would help to measure digital inclusion.

In Australia, Prime Minister Scott Morrison's administration announced a major upgrade to the NBN in September 2020. According to *ABC News*, the Coalition government said it would spend $3.5 billion on extensions to the network, replacing many obsolete sections of FTTN networks with faster, more reliable fibre-optical cables to the premises. The opposition Labor Party criticised the move, labelling it as a 'backflip' given that Labor's original plan for the NBN had been to install fibre at the outset.

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About the Author

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