

# The Future of Telecommunications



A Finder report  
June 2022

# Contents

<b>Key statistics</b>	<b>3</b>
<hr/>	
<b>Introduction</b>	<b>4</b>
<hr/>	
<b>Sector-wide trends</b>	<b>5</b>
COVID-19 made connectivity an essential service	5
The shift to the digital-first customer experience	5
<hr/>	
<b>Trends in mobile</b>	<b>6</b>
The no-names are on the rise	6
Mobile markets are amalgamating	6
eSIMs could contribute to increased competition	7
5G will become more accessible	7
<hr/>	
<b>Trends in broadband</b>	<b>8</b>
Broadband customers are happier than ever...	8
... but younger customers need more	8
Market competition is high	9
Connected households will drive exponential growth in demand	10
Could 5G be the future of home wireless?	10
<hr/>	
<b>Insights from Finder's experts</b>	<b>11</b>
<hr/>	
<b>References</b>	<b>12</b>
<hr/>	
<b>Methodology</b>	<b>12</b>

## Key Statistics

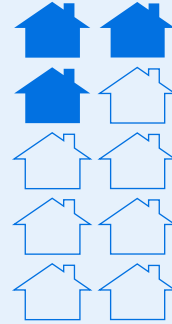
**1 in 3**

workers upgraded their home Internet during the pandemic



**30%**

of homes are on a 100 Mbps or higher Internet plan



MVNO mobile plans are

**28%**

cheaper than those of the 3 major providers



**1 in 5**

mobile customers has access to 5G



**78%**

of broadband customers are satisfied with their Internet speed



Top 3 reasons customers would switch their broadband

**55%** a cheaper deal

**44%** faster Internet

**20%** more or unlimited data

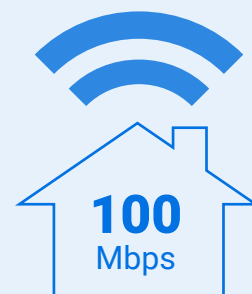
**30**

predicted number of Internet-connected devices per household by 2024



**12%**

of households will have mobile network fixed wireless Internet by 2024



## Introduction

Telecommunications is entering a new era. Consumers have benefitted from faster connectivity over the past couple of years, and competition between providers is increasing as virtual operators become more prominent. Finder has seen a rise in low-cost alternatives to major providers, with a growing reliance on a digital customer experience online over a physical presence in person or on the phone. With network capacities producing higher speeds than ever, price is becoming an increasingly crucial product feature.

Unsurprisingly, most of the key trends shaping the future of the telco industry have been moulded in some way by COVID-19. The pandemic exacerbated the shift to more connected households, with many more Australians working, shopping and socialising from home. The connected household model is predicted to continue to grow, as demand for streaming services and online shopping increases. The average number of Internet-connected devices per household is expected to reach 30 by the end of 2024, a growth rate of 500% since 2010.

Meanwhile, the new hybrid workplace – where many workers will move to a mix of working from home and working from the office – will also see a demand for more Internet usage, and broadband providers will need to monitor their product offerings and pricing as the line between household and business customers becomes more blurred.

This report explores the major trends shaping the future of mobile and broadband markets, how COVID-19 has affected customer needs, and what Finder's experts think of the road ahead.

## Sector-wide trends

### COVID-19 made connectivity an essential service

During the pandemic, being connected at home became a necessity. In the early months of COVID-19, there was a rapid increase in the number of Australians working and studying from home, driving up broadband demand during all hours of the day. In October 2020, NBN Co reported weekly peak downstream network throughput was 45% above the pre-pandemic baseline, and daytime download traffic levels peaked at 81% above the baseline.<sup>1</sup>

As a result of the shift to remote work and study, Australians have prioritised their home Internet in a way they hadn't before. A Telsyte report found 3 in 5 workers now have a dedicated work from home set-up, and 1 in 3 (31%) have upgraded to faster Internet.<sup>2</sup> Over the 12 months to November 2021, the percentage of NBN customers on 50 Mbps plans or above increased from 70% to 77%.<sup>3</sup> Today, nearly a third (30%) of Australian homes are now on an Internet plan with a speed of 100 Mbps or higher.<sup>4</sup> Once a luxury, fast and reliable Internet is now an essential for a large portion of Australian households.

**1 in 3** workers upgraded to faster Internet during the pandemic

**30%** of Australian homes are on a 100 Mbps or higher Internet plan

### The shift to a digital-first customer experience

In the first stage of the pandemic, telco contact centres were overwhelmed with customers who needed support. As Australians struggled with the shift to working from home, as well as connection or network issues and financial concerns, customer support became more important than ever.

There is no doubt the pandemic has accelerated the trend towards the digital customer experience. Traditionally, the telco customer's journey often started in store and in person. Increasingly, customer interactions are taking place through web and social media channels, using virtual agents supported by predictive analytics.

The use of artificial intelligence (AI) in telco is growing. Most major providers are using virtual chatbots in some capacity to diagnose and address customer issues, but AI is also being used in contact centres. In 2021, Optus became the first telco in Australia to adopt Google Cloud's contact centre AI.<sup>5</sup> Vodafone has also ramped up investment in AI contact centre solutions, including a tool that allows remote diagnosis and resolution of technical issues without the need to send out a technician.<sup>6</sup>

**80%** of CX professionals believe AI provides a better contact centre experience

**58%** of CX professionals expect AI will be extremely important in the contact centre in 2025

According to a global report by Talkdesk, 80% of CX professionals believe AI provides a better contact centre experience for customers, and 58% expect AI will be extremely important in the contact centre in 2025.<sup>7</sup> As customer service is now arguably the most important differentiating factor for customers choosing between telco providers, delivering a seamless digital support centre – without replacing human interaction where it is needed most – will become more important.

# Trends in mobile

## The no-names are on the rise

Like many industries, the mobile services market was impacted by the pandemic and the ensuing recession, with the total number of services in operation declining 1.7% between 2019 and 2020. However, while some of the larger operators struggled, mobile virtual network operators (MVNOs) performed strongly, with services increasing 13% for this segment over the same period.<sup>8</sup>

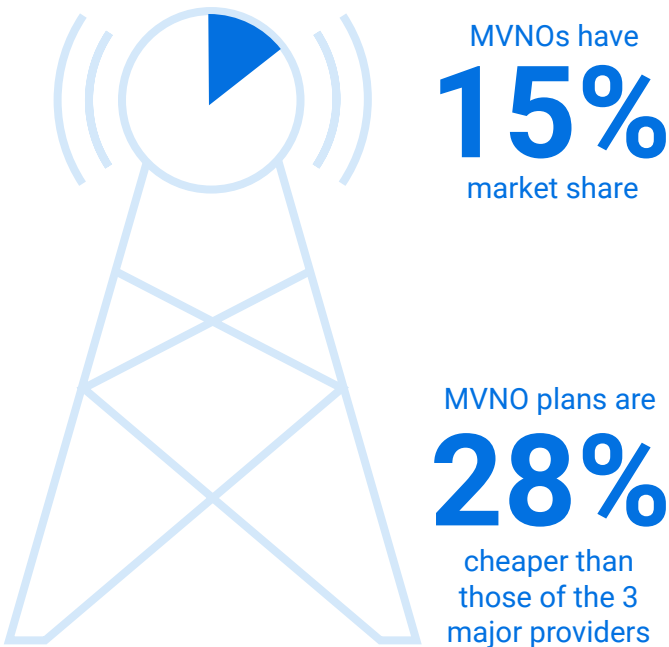
MVNOs are not new, but they are becoming more competitive. According to Finder product data, mobile plans from MVNOs are 28% cheaper on average than those from Telstra, Optus or Vodafone.<sup>9</sup> Finder has witnessed an increase in the number of MVNOs, as well as the competitiveness of their offerings. In 2016-17, MVNOs made up 11% of retail market share, a figure which increased to 15% in 2019-20.<sup>10</sup> A report by Global Market Insights predicts the MVNO market in the Asia Pacific region will achieve an annualised growth rate of 10% between 2021 and 2027.<sup>11</sup> With lean operating models – typically forgoing bricks and mortar shopfronts and call centres – MVNOs could be well-placed to take advantage of the digital ecosystem for mobile customers.

## Mobile markets are amalgamating

Competition is growing in the mobile market. Between 2015-16 and 2019-20, the median postpaid mobile plan declined in price by 12.5%, while the median prepaid plan declined by 18.7%. At the same time, data allowances have grown. Per GB of data, postpaid plan prices have fallen by 50% and prepaid plan prices by 26% in 2019-20 alone.<sup>12</sup> Rising network speeds and data allowances, and an increase in the number of low-cost carriers have contributed to increased price competition, but so has the merging of postpaid and prepaid mobile markets.

- ▼ **18.7%**  
prepaid mobile plan prices 2016-2020
- ▼ **12.5%**  
postpaid mobile plan prices 2016-2020

Increasingly, the lines between prepaid and postpaid phone plans are blurring. Major providers like Telstra and Optus now offer postpaid plans that are paid upfront at the beginning of the month. At the same time, most prepaid plans today can be set to automatically recharge, meaning the difference between these options is becoming less relevant to customers. The amalgamation of these markets means more options for consumers and more competition among providers.



## eSIMs could contribute to increased competition

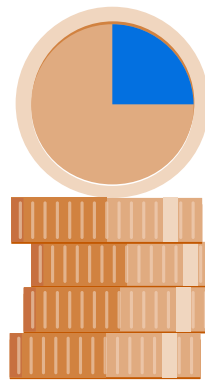
eSIMs are digital SIM cards that can be downloaded rather than physically inserted into your phone. They have a range of benefits, including the ability to have multiple phone numbers, travel overseas without needing to switch SIM cards, and link a smartwatch to a phone – and they are expected to continue to grow in popularity.

eSIMs have not quite taken off yet in Australia, but they have the potential to ramp up competition between providers because it is much easier for customers to switch. While eSIMs are predominantly only available through Telstra, Optus and Vodafone, Telstra has now opened up the technology to other providers on its network. As MVNOs begin to offer eSIMs, smaller mobile providers without a retail presence may become more visible to consumers.

## 5G will become more accessible

With data requirements and the number of connected devices growing continually, the 5G network is a promising evolution in wireless technology. Its speed and bandwidth extends far beyond what current mobile technology permits, allowing advances in the uptake of technologies like virtual reality and Internet-connected household appliances. As of June 2021, Telstra's 5G network covers 75% of Australian homes, and Vodafone now covers 85% of Australia's major cities.<sup>13,14</sup> However, consumer uptake is relatively slow.

According to Finder data, mobile plans with 5G access remain 25% more expensive on average than their 3G and 4G counterparts, meaning there is still a way to go in making the 5G network accessible to all Australians.<sup>15</sup> Only 19% of mobile customers have access to 5G, with gen Z (29%) and millennial (27%) customers the most likely to be on 5G, compared to 6% of baby boomers. Nearly three-quarters of baby boomers (72%) are not interested in 5G at all.<sup>16</sup>



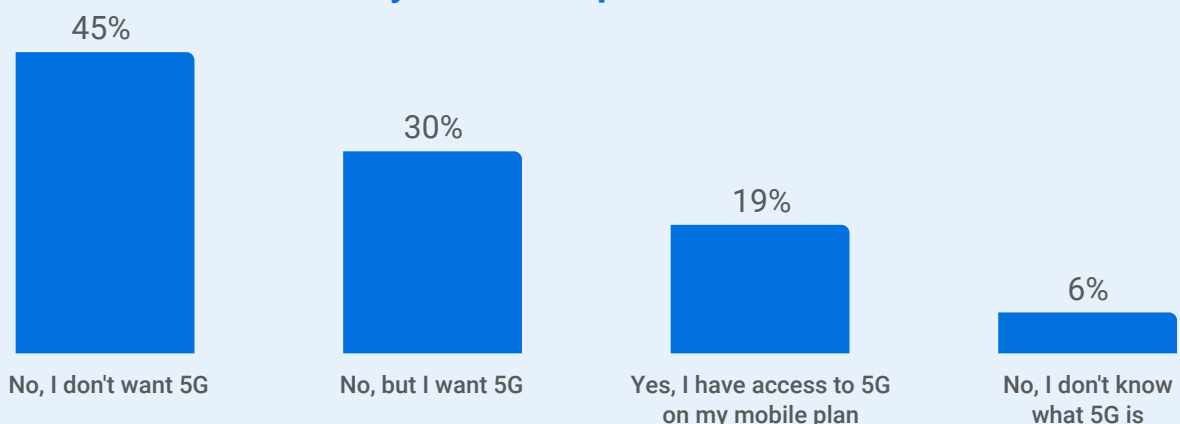
5G mobile plans are  
**25%**  
more expensive

**1 in 5**  
mobile customers  
has access to 5G

Aside from cost, the other issue is most providers don't offer 5G. Currently, it is predominantly available through 3 major network providers. Customers of Optus (24%), Vodafone (23%) and Telstra (20%) are more likely to have 5G access than those with smaller providers (7%).<sup>17</sup>

However, this is changing. In October 2020, Optus opened up its 5G network to third party providers, allowing SpinTel to offer 5G to its customers.<sup>18</sup> In the future, we expect to see a growing number of smaller providers offering 5G plans. By 2024, it is estimated that 55% of services in operation will be on the 5G network.<sup>19</sup>

## Does your mobile phone have 5G?



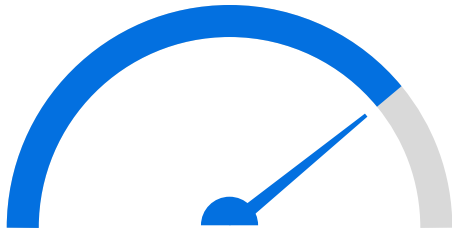
Source: Finder Consumer Sentiment Tracker, June 2021

# Trends in broadband

## Broadband customers are happier than ever...

According to Finder's Consumer Sentiment Tracker, 78% of customers are somewhat or extremely satisfied with their broadband speed; this is the highest this figure has been since the survey began in May 2019.<sup>20</sup> The number of customers who never or rarely experience buffering issues when streaming video content hit a high of 36% in September 2021, compared to 25% in the same period in 2019.<sup>21</sup> The findings are in line with statistics from the Australian Competition and Consumer Commission (ACCC) which show NBN download speeds have improved substantially over the 12 months to December 2020, now reaching 95-100% of their maximum plan speeds.<sup>22</sup>

**78%** of broadband customers are satisfied with their internet speed.



## ... but younger customers need more

However, there is variance between the generations. Among broadband customers who stream video content, more than two-thirds of gen Z (69%) encounter buffering issues at least monthly, compared to 63% of millennials, 54% of gen X and 38% of baby boomers. Similarly, only 7% of millennials and 9% of gen Z wouldn't switch their broadband because they are happy with their plan, compared to 41% of baby boomers.<sup>23</sup>

A viable explanation is that younger generations are more digitally connected. They are streaming content more frequently than their parents, and so are likely to suffer Internet problems more often. A global study by Ericsson found young people aged 15-24 stream video content 6 times more frequently than those aged 45 and older.<sup>24</sup>

However, it is also true that digital natives have higher expectations of what fast Internet should look like. The Ericsson study found that in 12 of the 14 countries surveyed, young people were more critical of network performance than those aged over 45. Overall, less than half of young users said their broadband quality expectations had been met.<sup>25</sup> While the study focused on smartphone users, the implications extend to all services with digital touchpoints, from broadband to social media to food delivery apps. As the population ages, and digital natives become the population majority, providers need to ensure they are consistently exceeding evolving speed and quality standards.

Only **7%** of millennials and **9%** of gen Z wouldn't consider switching their broadband plan.





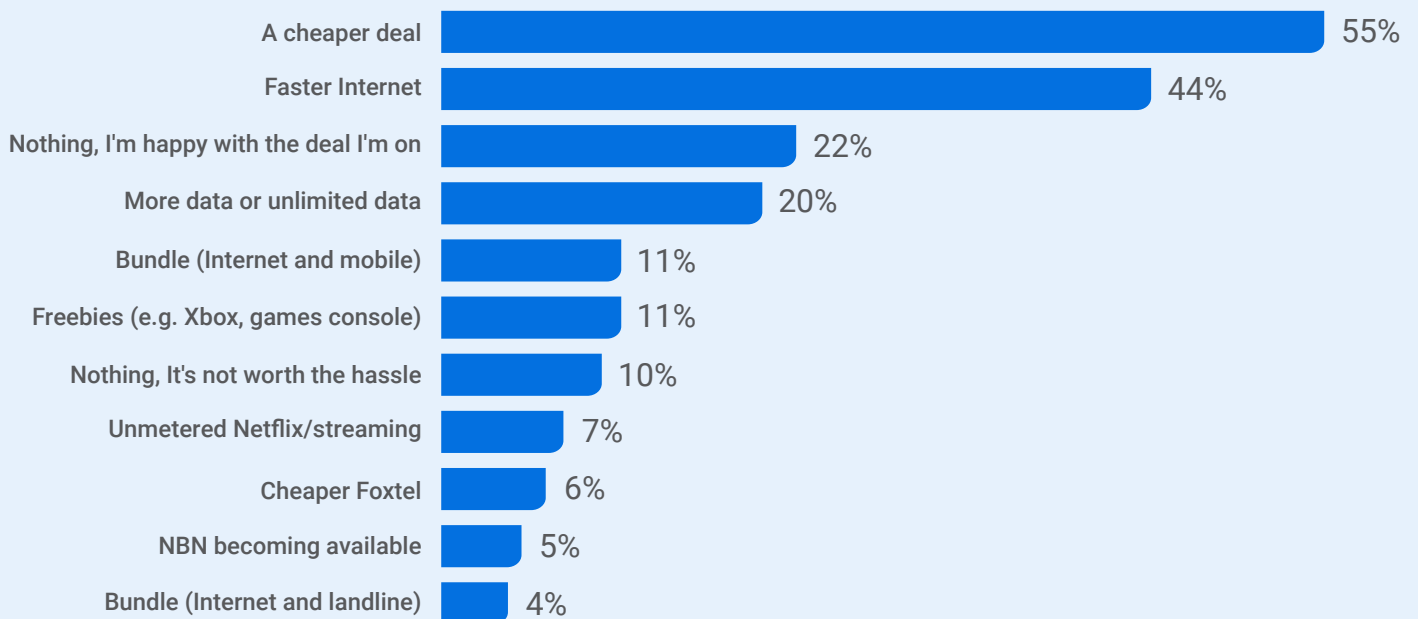
## Market competition is high

Over the past few years there has been a noticeable increase in price competition between broadband providers. Adjusting for features, the median NBN fixed line plan declined in price by 12.5% between 2015-16 and 2019-20, while non-NBN plans declined by 17.8% over the same period.<sup>26</sup> On Finder, sign-up discounts and free usage periods are becoming more common among providers. Exclusive discounts, such as those found only through comparison websites, are another way providers are securing new customers.

Today, price is the number one factor influencing customer decisions. A Finder survey in 2021 found that a cheaper deal on their Internet is the top factor that would cause users to switch providers, with 55% of respondents citing this as one of their top 3 reasons. Finding an offer with faster Internet (44%) came in closely behind, indicating that customers are not willing to trade one for the other.<sup>27</sup>



## What would make you switch broadband providers?



Source: Finder Consumer Sentiment Tracker, June 2021

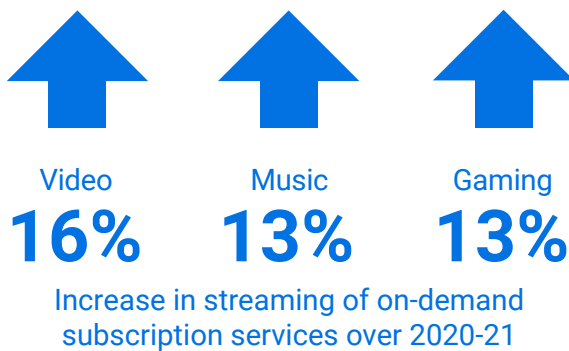
With Internet plans offering increasingly competitive speeds and NBN plans reaching maximum speed capacities, the difference in Internet speed between providers is becoming smaller. Most customers only need higher speeds up to a certain point before it starts to make little difference, and, as a result, price has become the biggest consideration for customers.

Over the past few years, there has also been steady growth among smaller market players (that is, those other than Telstra, TPG, Optus and Vocus). Between 2016-17 and 2019-20, the market share of smaller providers increased from 3% to 8%, which is likely to have increased the number of plans available to consumers.<sup>28</sup>

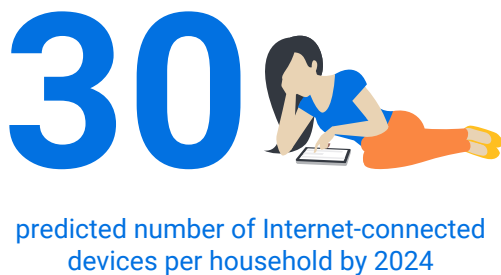
## Connected households will drive exponential growth in demand

While remote working during the pandemic was driving up Internet demand during daytime hours, the use of streaming services also increased as Australians were unable to leave their homes. Within a matter of weeks, the digital world – social media, online shopping, telehealth and online banking – were in use daily as many Australians were locked down or staying increasingly at home.

A Telsyte report found streaming of on-demand subscription video services (16%), music (13%) and gaming (13%) all experienced strong year-on-year growth in the 12 months to June 2021.<sup>29</sup> The research estimates adoption of on-demand subscription video will increase by another 36% over the next 3 years to 2025, highlighting the need for increased network capacity to deal with growing demand from households.<sup>30</sup> The entertainment subscriptions industry is poised for high growth, with the total number of subscriptions forecasted to increase by 58% between 2020 and 2024.<sup>31</sup>



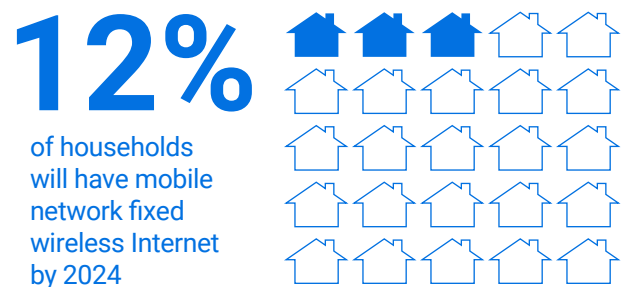
The rise of online shopping also adds to ongoing Internet demand in future, with the percentage of retail trade conducted online more than doubling from 6.3% in January 2020 to 15% in August 2021.<sup>32</sup> Also, 1 in 3 (33%) Australians are now doing some or all of their grocery shopping online, with millennials (54%) the most likely to do so.<sup>33</sup>



At the heart of these trends is the shift towards more connected households. In 2015, Australian households each had 9 Internet-connected devices, such as laptops, smartphones and tablets.<sup>34</sup> By 2024, that figure is expected to reach 30, with advanced Internet-connected health devices, televisions, gaming appliances and security systems becoming more common.<sup>35</sup> Fast-tracked by the pandemic, the digital age has driven the expansion of Internet connection to almost every context. With 5G access expected to soon cover more than half of mobile services in operation, the mainstream proliferation of Internet of things (IoT) devices is nearing.

## Could 5G be the future of home wireless?

The rollout of the 5G network has raised questions of whether 5G home wireless Internet will begin to compete with the NBN. Finder has seen a steady increase in interest in home wireless plans over time, with traffic to our home wireless page growing 150% between May and August 2021. By 2024, Venture Insights has forecasted that mobile network fixed wireless connection will reach 12% of Australian households.<sup>36</sup>



While its coverage is still limited compared to the NBN, 5G offers faster maximum speeds which could make it a viable NBN alternative in the future. In particular, the successful deployment of mmWave technology now allows providers to transmit data over 5G faster than ever, providing the opportunity to meet growing household data requirements in future.

It is also no more expensive than the NBN, with Finder analysis finding home wireless to be the same price or cheaper than NBN plans by the same provider on average.<sup>37</sup> Going forward, there is an opportunity for providers to secure greater market share by bundling their 5G mobile and 5G home wireless Internet plans together.

## Insights from Finder's experts



**Mariam Gabaji**  
Senior Writer, Utilities

*"With working, studying and socialising from home now the norm, providers need to make sure their services are running as efficiently as possible, with special focus on customer support initiatives."*

Fast and reliable connectivity is more important than ever, and as competition ramps up in mobile and broadband markets, customers are benefiting from higher speeds and cheaper data allowances than ever. Sign-up discounts and first-month-free offers, alongside a growing number of bundled plans by energy providers, is making the broadband landscape particularly competitive as higher network capacity narrows the difference between plans. In mobile, the smaller players are slowly taking on greater market share.

Looking forward, while price competition is escalating, keeping the digital customer experience front of mind will become increasingly relevant as customers are increasingly forgoing retail channels for online ones. As speed and data capacities inevitably increase over time, customer experience will become a key differentiating factor for providers.



**Angus Kidman**

*"More competitive mobile and broadband markets means consumers can get more for less."*

Mobile data plan inclusions have increased massively over the last few years, giving Australians the best of both worlds – more data and more choice at a lower cost. As MVNOs slowly gain more market share, consumers can benefit from introductory deals and cheap prices that still offer effective services.

With the NBN rollout effectively complete, we're seeing stronger competition between broadband providers, and regulatory changes should help drive this even further in the future. Consumers still demonstrate a reluctance to switch, but a change to wholesale models could definitely help there.

More people are working from home than ever before, and many have upgraded their connection, seeking the right balance between cost and speed. As more devices within households become connected, Internet reliability will become even more crucial.

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## Methodology

Finder's Consumer Sentiment Tracker is a nationally representative survey of more than 30,000 Australians. The survey has been running on a monthly basis since May 2019. The survey is owned by Finder and operated by Qualtrics, an SAP company.

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