February 2024

Business Internet
White Paper

NBN® CO. LIMITED

ERGO STRATEGY

Introduction

Ergo Strategy is a boutique consumer insights consultancy offering specialist market research services.

Established in 2009, Ergo conducts sophisticated modelling and analysis to translate data insights into commercial value for clients.

Since 2018, Ergo Strategy has conducted an annual large-scale study among business internet decision-makers to understand their usage of and perceptions towards the internet, and how this is changing over time.

Drivers of internet choice, price elasticity and willingness to pay for different internet features are key aspects of the research.

This project has been a valuable resource for **nbn**® to facilitate RSP discussions, assist with wholesale pricing decisions, and to understand trends and market demand to support product development and portfolio optimisation.

This paper is based on the trends and observations since 2018, primarily focusing on the 2023 Business Pricing study (with fieldwork from 20th July to 15th August).

The sample for this study consists of n=2,000 Australian business internet decision-makers, with most businesses connected to **nbn** and some connected to competitor networks (in nationally representative proportions). Businesses were sampled and weighted by size in nationally representative proportions.

The study involved both survey data and choice modelling. Significance testing was undertaken at 95% confidence.

Executive Summary

Businesses and residential households use the internet very differently.

Businesses are increasingly using the internet for cloud applications and collaboration, whereas consumers are using the internet for streaming, gaming, and working from home. Businesses can require higher speeds, more upload capacity and have a higher dependency on their connectivity than residential households.

Amongst businesses, there is a spectrum of internet needs ranging from basic to advanced, based on size and sophistication.

More advanced businesses are less price sensitive, have lower tolerance for downtime and place higher value on technical specifications. They are often prepared to pay more for faster upload and download speeds and higher reliability, compared to businesses with more basic internet needs who are strongly focused on price and convenience.

The Covid-19 pandemic fundamentally altered business operations, normalising remote and hybrid working, and accelerating the uptake of previously less common applications and collaboration tools.

Big data, large files, connected devices, concurrent usage, Cloud, and collaboration continue to increase and drive internet usage across businesses today. Many businesses are now seeking additional support to manage their IT requirements and purchasing via Managed Serviced Providers. Data security and reliable back-ups are key business concerns, both now and in the future.

There are still unmet needs in the business segment.

48% of business customers are looking to upgrade their internet in the next two years. Businesses with less sophisticated internet needs are less likely to feel that their internet is good value, even though they are spending less than those with more advanced needs, suggesting that their needs and internet plans could be better aligned.

The emerging internet activities gaining traction among more advanced businesses are a leading indicator of what the future holds.

Over time, these new activities gain traction and diffuse down to smaller businesses.

Regular plan reviews and upgrades are important to maintain long-term satisfaction.

With the pace of change in the telecommunications environment, ensuring that internet plans keep up with ever-changing business requirements is key to ensuring a positive business internet experience in the long-term. Since 80% of businesses review their internet plans at least every 2 years, this is a great opportunity to facilitate timely upgrades.

1.0 Business Customers' Internet Behaviours

Telecommunications in Australia continues to evolve, with greater internet usage requiring better internet connectivity. While similarities between residential and business customers exist, different usage requirements in a business context suggest that a different product portfolio is necessary to effectively meet this market's needs.

1.1 Defining the business customer

The way business customers use the internet is different from residential customers. In the residential market, internet usage is generally defined by downloading, primarily streaming. In the business market, customers engage in more uploading activities.

The top five internet activities in 2023 among residential and business customers can be seen below.

|	Residential			Business	
1	Email, web-browsing, banking, online shopping	92%		Website & online services (for customers or clients or the general public)	54%
2	Social media	81%		Social media marketing	49%
3	Video streaming or catch-up services	75%		Videoconferencing or calling	48%
4	Streaming Free to Air TV Channels	57%		Uploading files to the Cloud	46%
5	Music streaming	56%		Cloud applications	42%

Videoconferencing, uploading files to the Cloud and Cloud applications are among the top five business internet use cases, all of which rely on uploading capacity. Although our studies show that many residential customers use video calling or conferencing (53%) and some use Cloud-based services (32%), the primary residential use cases are downloading activities.

The nature of videoconferencing and extent of Cloud usage also generally differs between residential and business customers. While only 5-6% of residential customers videoconference or use the Cloud every day, 35% of businesses do so daily.

Residential customers are likely video calling family and friends using apps such as FaceTime and storing personal materials on platforms like Google Drive. They may engage with business-focused videoconferencing and use Cloud platforms to access and collaborate on files, but primarily when working from home.

In a business context, however, videoconferencing consistently emulates more formal meetings between colleagues and clients, requiring the ongoing use of additional features such as screen sharing in applications like Microsoft Teams or Zoom. Likewise, when working with files on the Cloud and collaborating with colleagues, usage is likely to be a continuous rather than an occasional activity.

Videoconferencing and Cloud Frequency

Videoconferencing daily

6% of residential customers

Cloud usage daily

5% of residential customers

VS

35% of business customers videoconference or upload to the Cloud daily

1.0 Business Customers' Internet Behaviours

Business customers, however, are not a homogenous group. Internet behaviours differ considerably across different businesses.

Examining a range of indicators, Australian businesses can be grouped into four cohorts with increasing internet requirements: from basic, quite simple internet needs to more advanced, sophisticated internet needs.

Basic	Moderate	Complex	Advanced
Typically have 1-2 employees and closely resemble residential customers. They tend to be run from home and predominantly use residential internet plans	Typically have 3-19 employees and engage in more uploading activities than Basic needs businesses	Typically have 20-49 employees and engage in more uploading activities than Moderate needs businesses but use fewer sophisticated internet applications compared to Advanced Needs businesses	Tend to have 50 or more employees and utilise many sophisticated, technical internet applications

Typical Characteristics

Basic	Moderate	Complex	Advanced
Newer businesses (55% operating for less than 5 years) Revenue less than $200,00 (81%) Revenue flat or in decline (52%) Commercial business (75%) or other type of organisation (e.g. self-employed (15%)) Operate from a residential premise (90%)	Revenue between $100,000 and $5 million (71%) Revenue growing (58%) Commercial business (83%) or NGO (10%) Operate mainly from a business premise (63%) with some at a residential premise (34%)	Revenue between $200,000 and $10 million (71%) Revenue growing (62%) Commercial business (83%) or NGO (11%) Operate from a business premise (84%)	More established businesses (79% operating for more than 5 years, 59% for more than 10 years) Revenue more than $1 million (61%), almost a third more than $10 million (23%) Revenue growing (65%) Commercial business (72%) or Public Sector (14%) or NGO (12%) Operate from a business premise (88%) 22% have employees outside of Australia, 27% have employees that travel overseas for business

These needs-based cohorts strongly correlate with business size, and this can be a useful heuristic to segment the business market. There are, however, always exceptions; not all small businesses are basic internet users and likewise, not all large organisations have high internet needs.

1.0 Business Customers' Internet Behaviours

1.2 How Australian businesses are using the internet

Each year businesses become more dependent on the internet for business operations.

Internet connectivity is essential for our business operations
% AGREEMENT

	Basic	Moderate	Complex	Advanced
2023	68%	75%	82%	86%
2021	62%	70%	75%	78%
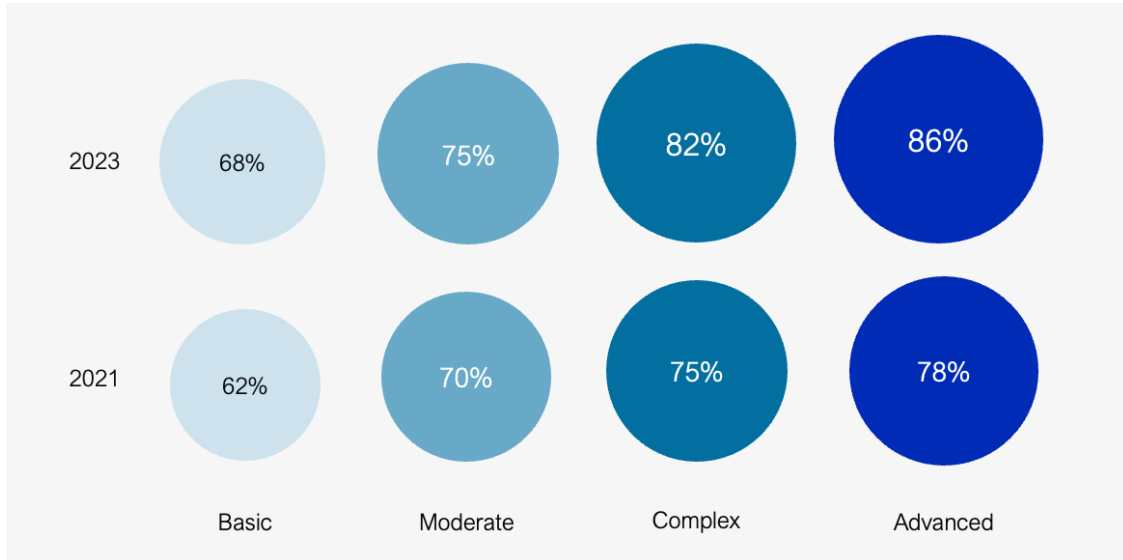
The majority of businesses recognise the importance of reliable, high-speed internet; particularly those with Moderate or greater internet requirements

It is important to have extremely reliable, high-speed internet 2023
% AGREEMENT

	Basic	Moderate	Complex	Advanced
2023	69%	80%	79%	82%
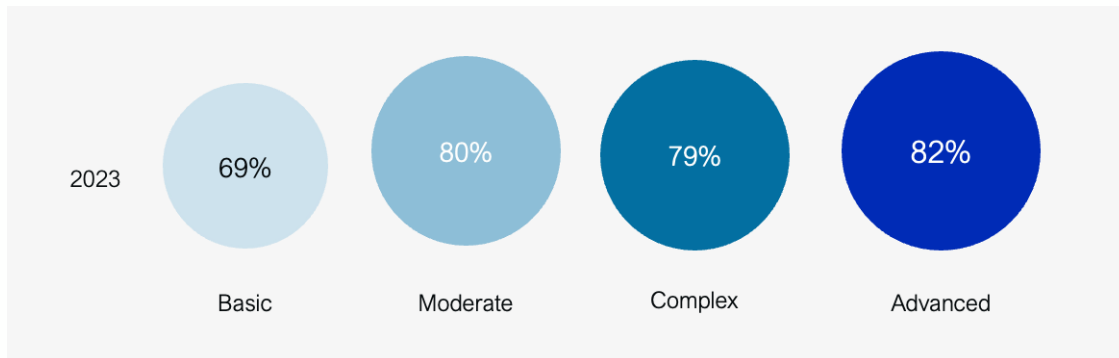
In the 2010s, increasing internet usage was primarily the result of digital innovations that made business processes more convenient. In the 2020s, the Covid-19 pandemic fundamentally altered business operations, normalising remote and hybrid working and accelerating the uptake of previously less common applications.

1.0 Business Customers' Internet Behaviours

One of the greatest changes observed during the pandemic period (across businesses of all sizes) was the dramatic increase in the use of Cloud applications and software. This was driven by the sudden need to remotely access work files and collaborate with colleagues at home.

With initial uptake barriers now overcome, the convenience and security of the Cloud has been established and more businesses continue to adopt it. Amongst various Cloud functions, Cloud Storage Solutions (e.g., iCloud, Google Drive) have seen the greatest growth across all businesses over the past five years, now penetrating half of each business cohort.

Like Cloud usage, videoconferencing also becomes more common as internet needs (and business size) increase.

Advanced needs businesses are likely to have more employees videoconferencing, often across multiple sites and with remote workers, creating a high need for internal videoconferencing. Among businesses with Basic needs, in contrast, videoconferencing is likely to be largely external.

Cloud usage over time
% OF BUSINESSES USING THE INTERNET FOR CLOUD APPLICATIONS
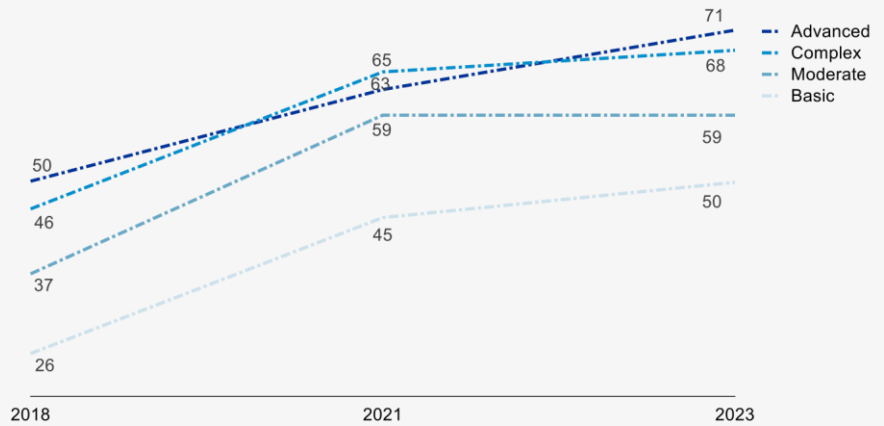
Rise of internet activities with increasing internet needs
% OF BUSINESSES USING THE INTERNET FOR VIDEOCONFERENCING OR CLOUD APPLICATIONS IN 2023

1.0 Business Customers' Internet Behaviours
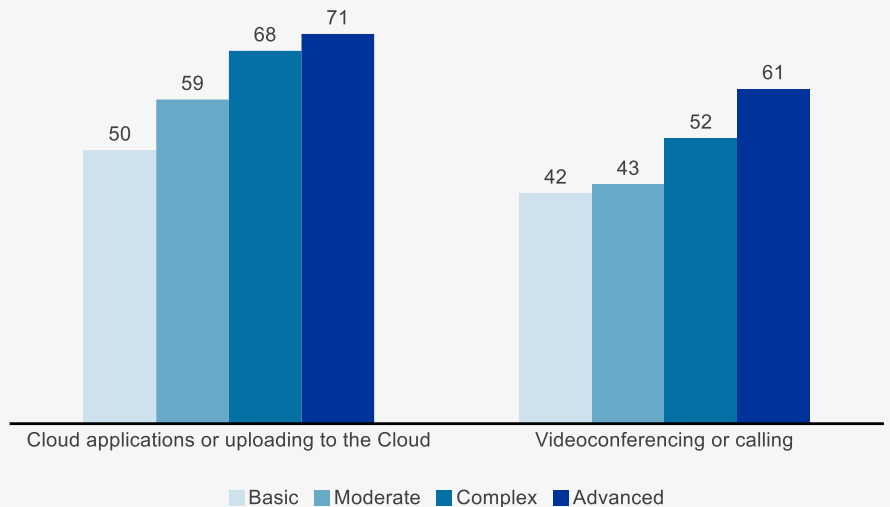
Since 2018, the overall incidence of videoconferencing has increased among Basic and Moderate businesses but remained relatively flat for Complex and Advanced. What differentiates businesses, however, is frequency of usage. Advanced needs businesses tend to video conference daily (and do so significantly more than they did in 2018 – 61% vs. 37%), while businesses with Basic needs videoconference significantly less often (only 13% daily).

Business Videoconferencing
% USING DAILY IN 2023

Basic	Moderate	Complex	Advanced
13%	**33%**	**39%**	**61%**
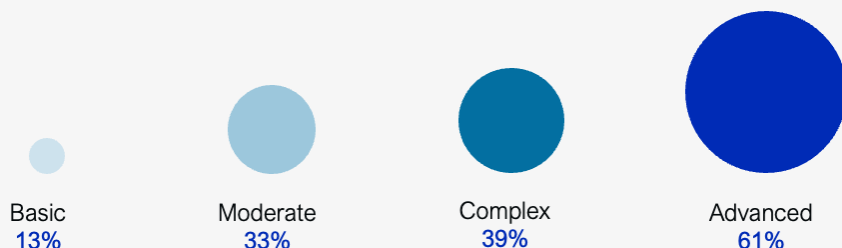
Overall, the pandemic accelerated internet usage and fundamentally shifted the way businesses work and use the internet. Remote working requirements have proliferated the use of technologies like Cloud and videoconferencing, which make remote working feasible and facilitate the more flexible working environment that is now the norm.

Today, businesses are using the internet to meet a variety of

different and often complex requirements. The prevalent internet use cases and range of platforms engaged with, continues to evolve as businesses leverage the internet in new and different ways.

Larger businesses with more advanced needs tend to use a wide variety of online services and are more likely to engage with sophisticated or emerging internet activities such as office automation,

Wide Area Network (WAN), artificial intelligence (AI) and virtual reality (VR).

Over time as new internet applications emerge and are trialed by Advanced businesses, we can expect many of the current "new" applications to trickle down, gain traction and be adopted by businesses with more basic internet needs.

Internet Usage in 2023

Usage	Basic	Moderate	Complex	Advanced
Typical internet activities	Website and online services, Cloud applications, Uploading to Cloud, Social media marketing, Videoconferencing	Cloud applications, Uploading to Cloud, Website and online services, Social media marketing, Videoconferencing	Cloud applications, Uploading to Cloud, Website and online services, Videoconferencing, Social media marketing, Security systems, Phone systems, HR systems, Merchant terminals, Remote backups	Cloud applications, Uploading to Cloud, Videoconferencing, Website and online services, HR systems, Security systems, Phone systems, Social media marketing, Remote backups, CRM, Online education, CRM, e-Commerce solutions, Connecting to an off-site server
Main online applications used	Cloud Storage Solutions, Microsoft 365	Accounting Software, Cloud Storage Solutions, Microsoft 365	Microsoft 365, Accounting Software, Cloud Storage Solutions	Microsoft 365, Accounting Software, Cloud Storage Solutions, HR, Procurement and Logistics Software, Sales and CRM Applications, Custom Cloud Applications, Online/Cloud Back-ups, Customer Support and Live Chat, Adobe Creative Cloud
Emerging and sophisticated use cases	Smart Systems (e.g., Google Home)	Smart Systems (e.g., Google Home)	Smart Systems (e.g., Google Home)	WAN, Office Automation, Smart Systems, Artificial Intelligence, Industrial control or IOT, Virtual Reality or Metaverse

1.0 Business Customers' Internet Behaviours

1.3 What matters to businesses and what they are looking for to support their connectivity needs

Our research shows that the top two IT issues that are a business focus (for all business cohorts) are data security followed by reliable back-ups. This holds true both now and looking into the future at predicted areas of focus in the next two years.

Advanced businesses are more concerned with IT issues in general and the most concerned with secure file transfers. Along with Complex businesses, providing a faster/more reliable remote experience for employees is key. Enhancing website services and merchant functionality stand out for Complex and Moderate needs businesses.

Business IT Focus Areas	Basic	Moderate	Complex	Advanced
Data security				
Data security, defense against hacking or penetration	41%	46%	56%	52%
Reliable backups	35%	39%	44%	45%
Secure file transfer application	18%	22%	29%	37%
Uploading activities				
Providing faster/more reliable remote experience for employees	14%	28%	34%	37%
Greater use of cloud-based applications	19%	23%	28%	28%
Higher bandwidths for better video conferencing and collaboration	17%	17%	26%	25%
Other IT improvements				
Increasing the functionality of our website	25%	33%	34%	28%
Enhancing merchant services (e.g., Eftpos terminals)	10%	18%	28%	15%
Monitoring and managing remote equipment/facilities	4%	11%	11%	20%
Moving servers offsite	1%	9%	7%	15%

Red=significantly lower than total sample
Blue=significantly higher than total sample

1.0 Business Customers' Internet Behaviours

What businesses are looking for from their internet depends on the complexity of their requirements. Different requirements translate into different perspectives on what matters, and different criteria to prioritise when choosing an internet plan.

Internet-Related Attitudes AGREE + STRONGLY AGREE	Basic	Moderate	Complex	Advanced
Value				
Keeping costs down is the most important concern in the business	80%	64%	69%	58%
It all comes down to price when choosing an Internet service provider	61%	47%	52%	45%
We would be prepared to pay more for higher reliability	42%	61%	69%	77%
We would be prepared to pay more for a faster internet service	40%	58%	69%	73%
We would be prepared to pay more for higher upload speeds	33%	50%	63%	68%
Data security				
We go to great lengths to protect our data	64%	73%	82%	84%
We use data security software to protect the business	57%	75%	83%	82%
We make sure all Internet devices are protected with data security software	66%	74%	84%	80%
Other				
We like to be seen and treated as a business customer	42%	72%	86%	81%
What we care most about is having a full fibre connection to the business	26%	41%	60%	59%

Red=significantly lower than total sample
Blue=significantly higher than total sample

1.0 Business Customers' Internet Behaviours

How important is upload speed for your business?
PRIORITY RANKING AND IMPORTANCE

Top 3 priorities when choosing an internet plan	Basic	Moderate	Complex	Advanced
1	Low monthly fee	Reliability	Download speed	Download speed
2	Reliability	Download speed	Reliability	Reliability
3	Download speed	Low monthly fee	Low monthly fee	Upload speed

Upload speed
% VERY IMPORTANT (8-10)

Basic	Moderate	Complex	Advanced
44%	61%	61%	70%
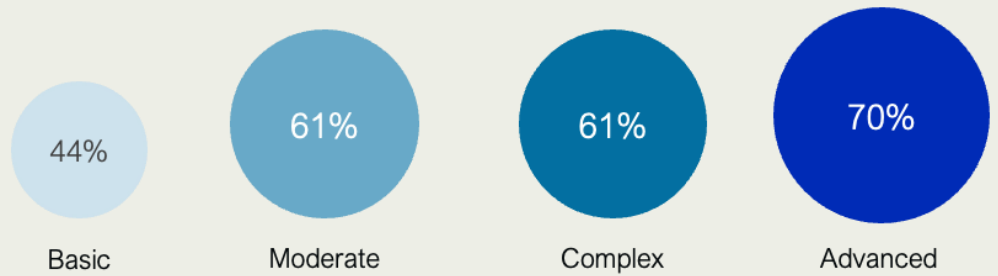
Businesses with Advanced internet needs care more in general about most aspects of the internet, including the highly technical ones; with cost being less of a concern. They would be willing to pay more for faster speeds, and in particular higher upload speeds, which are a top 3 priority and important for 70% of Advanced businesses.

Prioritised data, redundancy back-up and having an additional phone line are also relevant to this cohort. Being treated like a business customer is a high priority for Advanced needs businesses.

Businesses with Advanced needs have the lowest downtime tolerance of all cohorts, so need a connection that is reliable and/or has a redundancy back-up.

Downtime tolerance	Basic	Moderate	Complex	Advanced
Less than 5 min	11%	14%	18%	24%
Less than 30 min	24%	34%	45%	51%
Less than one hour	41%	56%	70%	73%

Moderate and Complex businesses fall in between Basic and Advanced in terms of their internet priorities and place a similar value on upload speeds (even though Complex needs businesses engage in more uploading activities). Being treated like a business customer is significantly more important to the Complex needs cohort and they are more likely to be willing to pay more for higher upload and download speeds.

Basic needs businesses are focused on price and convenience. They require their internet plans to be affordable above all else, with keeping costs down being their primary concern. They are more likely than the other cohorts to want their internet to be easy to set up and do not see extras such as prioritised data as important.

Red=significantly lower than total sample
Blue=significantly higher than total sample

1.0 Business Customers' Internet Behaviours

1.4 How businesses are meeting their internet needs

Compared to residential customers, business customers are more likely to be on **nbn**, know what speed tier they are on and to use a Tier 1 internet service provider. While over time residential customers have become more willing to experiment with smaller service providers, business customers are more likely to minimise risk and go with the key players they trust (particularly those in the Advanced needs cohort).

Within the business market itself, as needs increase so does plan complexity and **nbn** penetration.

	Basic	Moderate	Complex	Advanced
TYPE OF INTERNET PLAN	Residential plan (82%)	Small or Medium Business plan (64%)	Small or Medium Business plan (72%)	Enterprise plan (45%) Small or Medium Business plan (39%)
NBN MAIN CONNECTION	69%	80%	85%	83%
DOWNLOAD SPEED	50Mbps or less	100Mbps or less	100Mbps +	100Mbps +
UPLOAD SPEED	20Mbps or less	50Mbps or less	100Mbps +	100Mbps +
SYMMETRICAL SPEEDS	14%	34%	35%	42%
REDUNDANCY OR BACK-UP	15%	20%	36%	46%
SD-WAN	4%	17%	28%	41%
USE AN MSP	3%	18%	32%	42%
HAVE AN SLA	11%	20%	26%	47%
CONTRACT	Month-to-month (64%)	1-3 years (51%)	1-3 years (66%)	1-3 years (64%)
MONTHLY BILL	Less than $100	Less than $500	Less than $500	More than $200

Red=significantly lower than total sample
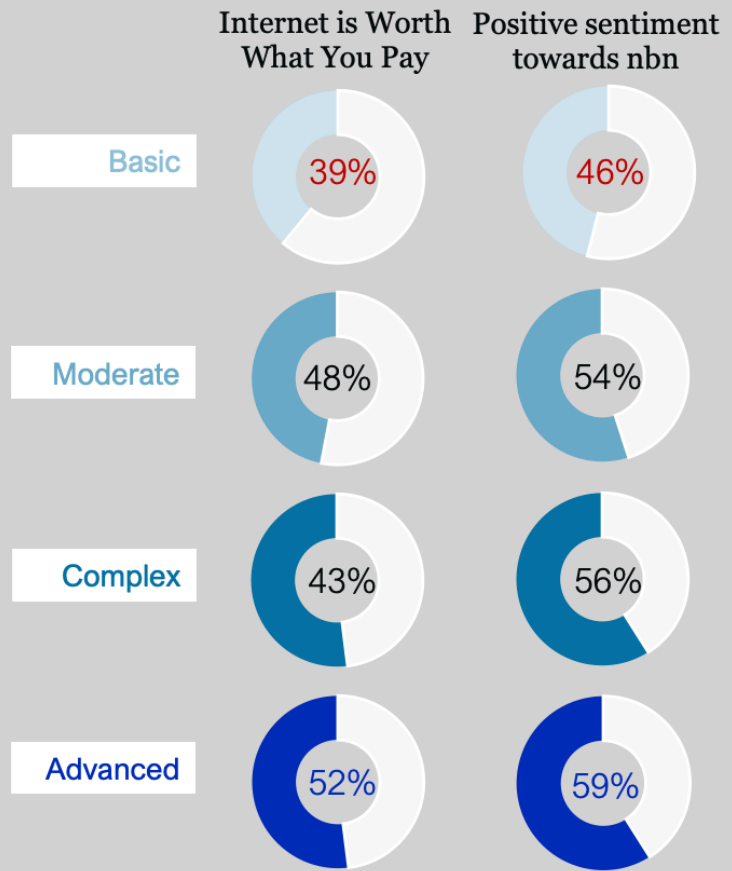Blue=significantly higher than total sample

1.0 Business Customers' Internet Behaviours

Businesses with Advanced internet needs pay more and feel that they get more. They are on business or enterprise internet plans with higher speeds, service levels and support; and are most likely of all cohorts to feel that their internet is worth what they pay. The majority have committed to a long-term contract. Almost half now use a Managed Service Provider, which is consistent with a general increase in consideration of MSPs in the business market over time. Advanced businesses have high requirements, which are largely being met.

Businesses in the Complex cohort tend to be on higher speed (100Mbps+), more sophisticated business plans; but are not as likely as Advanced businesses to feel that their internet is worth what they pay. This suggests that their higher requirements, lower downtime tolerance and a strong desire to be treated like a business customer are not being fully met at present.

Businesses in the Moderate cohort tend to be on a Small or Medium business plan. They have higher value perceptions than those in the Basic and Complex cohort, suggesting a better match in terms of having their requirements met.

Businesses in the Basic cohort are generally on cheaper residential plans with lower speeds. It should be noted, however, that with their higher product knowledge and upload activity they are still distinct from residential customers. Their more basic requirements are best suited to a lower specification plan, but this does not necessarily translate into a cohort whose needs are being effectively met by the residential portfolio. These businesses are least likely to feel that their internet is worth what they pay, suggesting there is scope for a product that better meets their needs. 41% do not know what their download speed is, 48% do not know their upload speed, and the majority who do know what plan they are on, are on an average (50/20 or less) residential plan as opposed to a high-speed tier plan. Although these businesses have lower internet needs compared to other businesses, they could still benefit from greater product education to ensure that their internet plan and service level match their requirements.

	Internet is Worth What You Pay	Positive sentiment towards nbn
Basic	39%	46%
Moderate	48%	54%
Complex	43%	56%
Advanced	52%	59%

Red=significantly lower than total sample
Blue=significantly higher than total sample

2.0 Supporting the Business Market

Our studies show that businesses that spend more to effectively meet their internet needs are generally happier with their overall internet experience. Ensuring that internet plans keep up with the rate of change will be key to ensure a positive internet experience in the long-term. 80% of businesses review their internet plans at least every two years (Moderate: 85%; Complex: 88%; Advanced: 81%). Therefore, the importance of upgrading plan features needs to be communicated regularly to facilitate upgrades during each review period.

2.1. Advanced

Businesses in the Advanced cohort tend to use the internet extensively and therefore require the most sophisticated plans with the highest speeds, support and technical specifications. They are most likely of all cohorts to be trialling new and emerging use cases, so ensuring that their internet connectivity keeps pace with their evolving usage is important. They review their internet at least every 2 years, and most think that they are likely to upgrade when they do so.

2.2 Complex

These businesses use the internet substantially, in some cases almost as much as businesses with Advanced needs. These businesses also value many aspects of the internet, other than the highly technical ones, to a similar extent. Serious about being treated like business customers, they need an internet plan that offers high speed reliable internet with business-grade service. They are less likely to feel that their internet is good value, suggesting that many businesses in this cohort require a plan that better suits their complex internet needs. They have a high likelihood to upgrade in the next two years, so are likely to be open to propositions that are a better fit.

2.3. Moderate

This cohort's more positive value perceptions compared to businesses in the Basic and Complex cohorts suggests that there is a better match in terms of the plans they are on and their internet requirements. They have lower likelihood to upgrade than businesses with more sophisticated internet needs, so ensuring that their internet keeps pace as their needs develop will be important to ensure this continues.

2.4. Basic

This cohort's poor internet experience compared to other businesses suggests these businesses are likely to benefit from higher speed tiers to support their greater uploading requirements compared to residential customers. Even though they are very cost focused and the least likely of all business cohorts to agree that they would like to be treated as a business customer, there is possibly still scope to provide some level of business support to improve their overall internet experience. These businesses are least likely to upgrade for greater reliability or speed in the next 2 years (only 34% likely to upgrade), so overcoming inertia and clearly articulating the benefits of upgrading and business level service will be key to provide a better internet experience to these customers.

2.0 Supporting the Business Market

2.5. Conclusion

Business internet customers are a distinct market from residential customers and can be further divided into cohorts based on their patterns of internet usage and needs.

Across all business cohorts, internet needs and the suitability of plans will continue to evolve with changing business practices, technological advances, and socioeconomic contexts. Thus far, the Covid-19 pandemic and the fundamental shift in business practices that it triggered has defined the 2020s decade. Businesses are using the internet more, and this trend is here to stay even with the shift back to the office as part of the new hybrid workweek.

Cloud usage has increased dramatically over the past five years and is expected to continue to increase until it has saturated the market. Between 2018 and 2023, all businesses (especially those with more sophisticated internet needs) have indicated their increased focus on data security as an area of focus, both currently and for the next 2-3 years.

In a rapidly changing social and technological landscape, it is more important than ever for businesses to identify and anticipate their changing internet needs. To avoid persisting with plans that functioned in the past but are no longer sufficient, businesses need to actively and repeatedly be supported to select internet plans to match their changing internet and data security requirements.