.auDA

Digital Lives of Australians 2024

Opportunities and challenges of a rapidly evolving internet

auDA.org.au

Contents

01 Introduction Page 03

02 The internet is of fundamental value to Australians Page 07

03 Emerging technologies will further enhance the value of the internet Page 13

04 Growing concern cyber threats are compromising use of the internet Page 21

05 Improvements to online security practices are required to support Australians Page 25

06 Building digital skills will unlock value from the internet Page 34

01 Introduction

Foreword

Rosemary Sinclair AM
auDA Chief Executive Officer

The digital landscape as we know it is undergoing a profound transformation. Emerging technologies such as artificial intelligence (AI) are becoming embedded in mainstream internet use and hold the potential to unlock far-reaching changes to how we engage online. Alongside it, cyber security threats are escalating, with new threats or attacks consistently making headline news.

Despite this, the internet remains essential to the everyday lives of Australians, connecting us to friends, family, colleagues, customers, essential services, information, business opportunities and more.

These trends provide the backdrop for auDA's *Digital Lives of Australians 2024* report, the fourth report in our annual study, which commenced in 2021.

This year's report identifies that, in 2024, Australian consumers and small businesses rely on the internet more than ever; a near universal 99 per cent of Australian consumers and 97 per cent of small businesses find value in the internet.

However, the heightened cyber threat environment is compromising how Australians are accessing and benefiting from the internet, and they remain cautious about the rate of change driven by emerging technologies.

On the topic of cyber security, the research found almost four of five (77%) consumers who responded to our survey had firsthand experience of a cyber threat or attack. With such a high proportion encountering a cyber security issue, it is perhaps unsurprising that some Australians are reducing their use of the internet. Specifically, two thirds of consumers (64%) and half of small businesses (55%) say they avoid at least one online activity due to fears around privacy and data protection.

This is leading more Australians to recognise the importance of strong cyber security practices, which is a step in the right direction. Two of five consumers (43%) and small businesses (40%) would like to strengthen their online security but are unsure where to start. Alarmingly, only half of consumers (52%) and two thirds of small businesses (65%) know where to report a data security breach.

In addition, the research uncovered that four of five consumers (83%) and small business (79%) believe companies should be doing more to protect their customers' personal information from cyber breaches, and a similar proportion (81% consumers and 74% small businesses) believe companies should be subject to penalties where they fail to do so.

When it comes to emerging technology, consumers and small businesses can see how new technologies such as AI could support their everyday lives and business activities. Yet the majority (61% consumers; 67% small businesses) say they would feel more comfortable if there were stronger regulatory safeguards around AI.

While these findings raise a number of challenges, they also present opportunities. It is our hope that the insights identified in auDA's *Digital Lives of Australians 2024* report empower industry leaders, government bodies, businesses and educational institutions with knowledge to inform decision-making that supports Australian consumers and small businesses to not only overcome these challenges, but to thrive in an evolving digital world.

Through our collective efforts, we can unlock social and economic value for Australians from the internet now and into the future.

About the research

This report details the main findings from primary research conducted in February and March 2024 with a sample of Australian adults (consumers) and small business owners or managers (small businesses). This is the fourth iteration of the ***Digital Lives of Australians*** study, which commenced in 2021.

The starting point for the 2024 research was an online survey completed by 1,500 consumers and 400 small businesses.

Samples were recruited via accredited market research panels and quotas were used to ensure coverage of major demographic and business profile segments. The final samples were weighted to reflect their respective population profiles. For the consumer sample, weighting included age, sex, geographic location, highest level of education and workforce participation. The small business sample weighting included industry sector and geographic location.

Consumers

Small businesses

Throughout the report these icons are used to indicate findings for consumers and small businesses.

Some results may not sum to 100% due to rounding. Likewise some NET results may not add up because of rounding.

Following the survey, 24 consumer and 16 small business participants were selected to take part in a three day online qualitative discussion forum. The forum included individual and group activities and discussion threads, moderated by SEC Newgate Research, to establish an in-depth understanding of information provided by the participants in the survey results.

The final stage comprised 16 qualitative in-depth interviews, conducted with 8 consumer and 8 small business participants from the online forum to further explore their individual experiences, attitudes and behaviours.

A selection of survey items were retained from auDA's ***Digital Lives*** surveys in 2021-2023 and time series comparisons have been included in the report where appropriate. However, recognising the dynamic nature of the internet and the technologies and activities it supports, the majority of questions were new.

A detailed sample breakdown of the research participants is set out on **page 39**.

auDA commissioned SEC Newgate Research to undertake this research on its behalf.

SEC Newgate Research is one of Australia's preeminent market and social research firms for issues, opinion and reputation research. It explores and measures knowledge, attitudes, experiences and behaviours to inform decisions around policies, organisational strategies, communications and messaging. SEC Newgate Research is accredited to ISO 20252:2019 (the international standard for market and social research) and is a member of The Research Society (the professional association for the research and insights industry in Australia) and the Australian Polling Council.

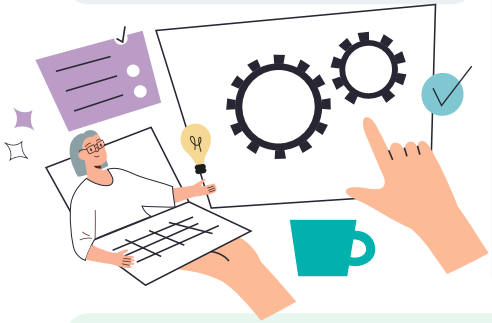
SECNewgate Research

Snapshot of key findings

Value of the internet

99% consumers
97% small businesses

feel the internet adds at least some value to their lives



Key benefits of the internet for **consumers**:

- Information and learning
- Access to goods and services
- Connection with others

78% **small businesses** would struggle to function without the internet

97% **consumers** feel the internet has a positive impact on their lives

88% **working Australians** rely on the internet to perform their job*

*either could not do their job without it, or feel it makes their job easier or better

The internet is most valuable to **small businesses** for:

- Customer interactions
- Task and process efficiency
- Promoting the business
- Working remotely

Emerging technologies

48% consumers and
53% small businesses would like to learn more about AI

39% working Australians believe being able to use AI tools will increase their employment prospects

48% small businesses believe being able to use AI tools will increase business efficiency

61% consumers **67% small businesses**

would feel more comfortable about AI if there were stronger regulatory safeguards around it

Cyber security

64% consumers

55% small businesses

avoid online activity due to concerns about data security

48% consumers
35% small businesses

do not know where to report a data security breach

43% consumers **40% small businesses**

would like to strengthen their online security but are unsure how

81% consumers
74% small businesses

believe companies should do more to protect the personal information of customers from cyber attacks

83% consumers
79% small businesses

feel failure to protect the personal information of customers should result in penalties

Digital skills

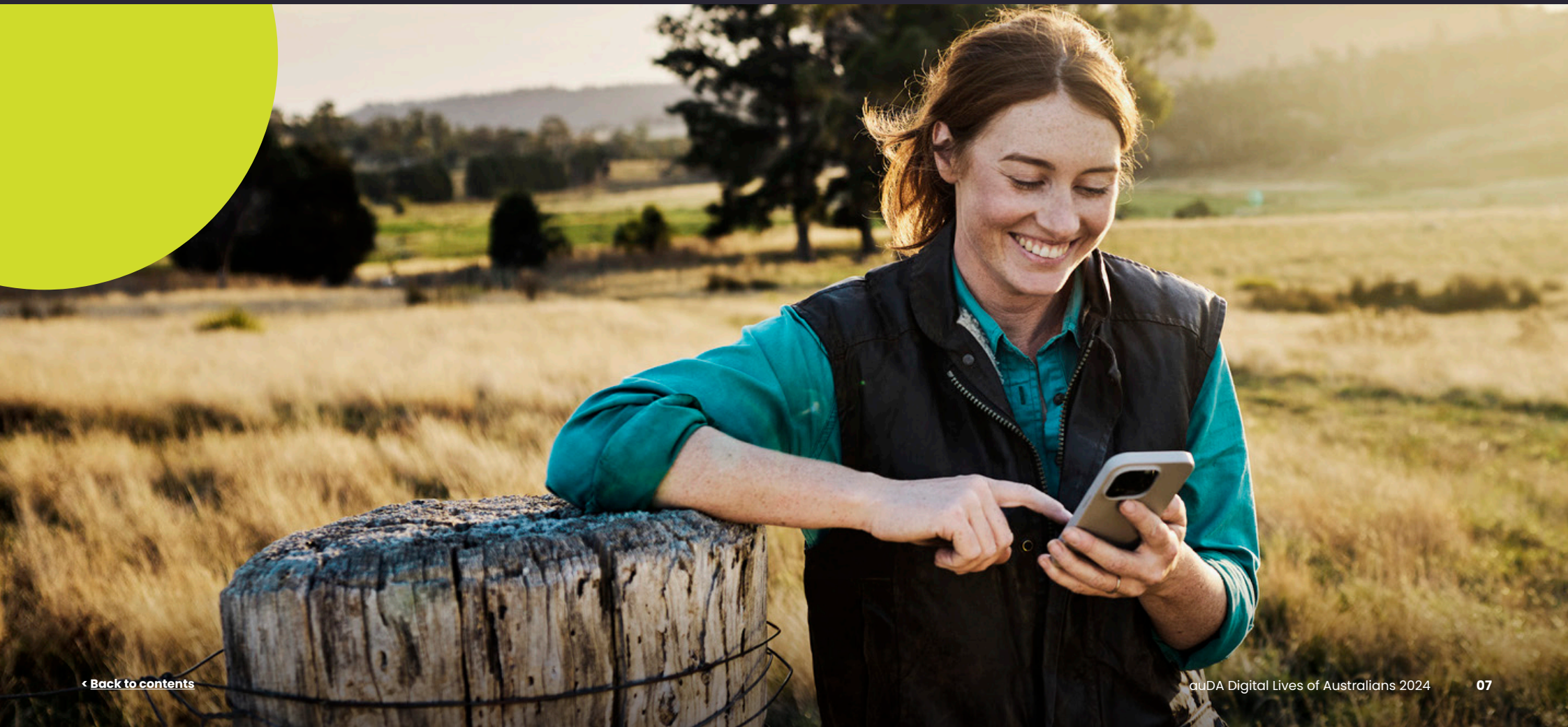
62% consumers **77% small businesses**

consider cyber security skills the most important digital skill for their future

13% consumers **24% small businesses**

feel they have high capability with cyber security skills

02 The internet is of fundamental value to Australians

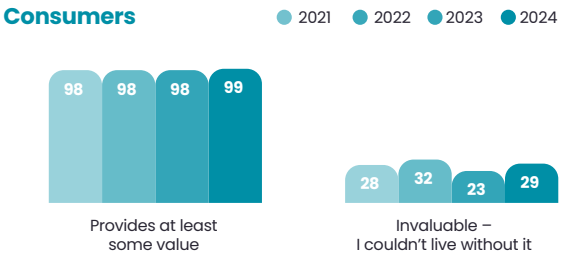


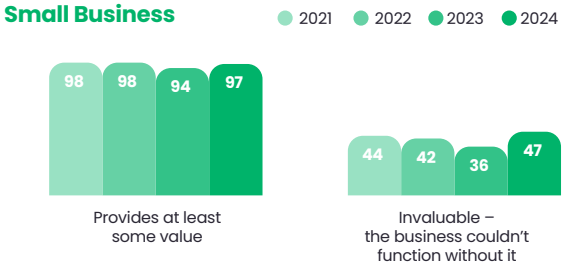
Australians value the internet as it underpins core aspects of their everyday lives

Almost all Australians – 99% of the adult population – feel the internet adds value to their lives. This near ubiquitous value has been constant since the *Digital Lives* study commenced in 2021 and has increased slightly (up 1 percentage point) in 2024.

Nearly a third (29%) of consumers say the internet is invaluable to them and they couldn't live without it. Almost half (47%) of all small businesses say their business could not function without it.

Perceived value of the internet to everyday lives (%)





Consumers and small businesses in Australia's five major capital cities are significantly more likely than others to feel the internet is "invaluable" to their daily lives:

- **31%** vs **23%** of consumers in other parts of Australia
- **51%** vs **38%** of small businesses in other parts of Australia.

The internet is valued by Australians because it supports a vast range of benefits that span all aspects of our daily lives.

Across most areas explored in the survey, the majority of consumers feel the internet has a positive impact on their lives, with 97% selecting at least one positive impact. The most wide-reaching effects are related to learning and access to goods and services (including government services).

These results are consistent with the *2022 Digital Lives* study. Compared to 2022, there has been a small uplift in the proportion who feel the internet enhances their ability to earn additional income (64% this year vs 58% in 2022). This may be indicative of more people turning to online 'side hustles' or gig economy jobs in response to cost-of-living pressures and changes in work patterns.

"I use the internet for everything. Aside from my studies, I use it for budgeting, searching holiday ideas, streaming movies and TV shows, listening to my favourite music, shopping and price comparing ... the list goes on."

(Man, 35-49, Perth)

Impact of the internet on aspects of everyday life – consumers (% Positive impact)

Ability to learn new things about the world and life in general	83%
Ability to access goods and services	82%
Ability to access government services	78%
Getting involved in hobbies or interests	68%
Managing personal affairs	65%
Ability to earn additional income	64%
Relationships with friends	63%
Work-life balance	61%
Relationships with family	59%
Ability to make new social connections	56%
Connecting with the local community	55%
Professional development and skills-building	54%
Having a say about causes you support	50%
Ability to work	49%
Mental health and wellbeing	49%
Physical health and wellbeing	43%
Romantic relationships	31%

97% of consumers report the internet makes a positive impact on one or more areas of their life

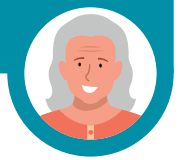
Information and connection are the most valued benefits of using the internet

When asked to rank the benefits of using the internet in their everyday lives, around a quarter of consumers ranked 'information and learning' and 'connection with others' at the top of their list.

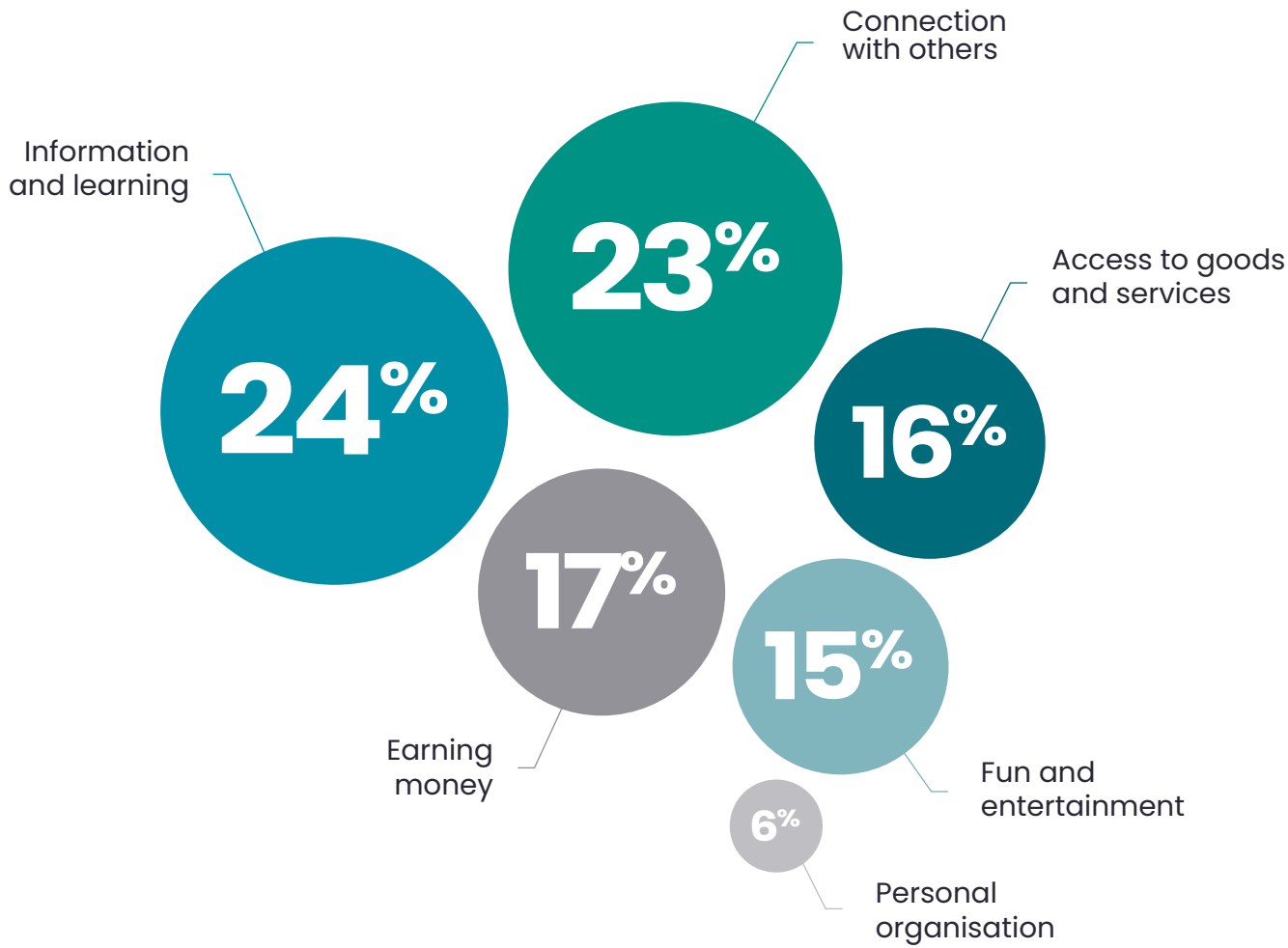
The internet is especially valued for enabling social connection among women (27% ranked first) and Australians aged 70+ (32%), while 'earning money' is the top ranked benefit among younger Australians (aged 18 to 34 years) (at 23%) and those who work exclusively from home (38%). 'Information and learning' is the top ranked benefit among culturally and linguistically diverse (CALD) consumers (28% ranked first).

"I love the internet and the whole world it opens you up to – all at the tip of your fingers."

(Woman, 70+, Sydney)



Benefits of using the internet – consumers (% Ranked first)



The internet supports connection and wellbeing for those living with disability

Case study: Omar

*Not his real name

Profile

- Male
- Age 50-69
- Regional VIC
- Lives with disability

Key data points

- Considers the internet invaluable – couldn't live without it
- Internet has a positive effect on:
  - Accessing medical and government services
  - Pursuing hobbies and interests
  - Making social connections
  - Mental health and wellbeing

Omar* lives with disability and has restricted physical mobility. He uses the internet every day for entertainment, education, social connection, accessing services and financial management.

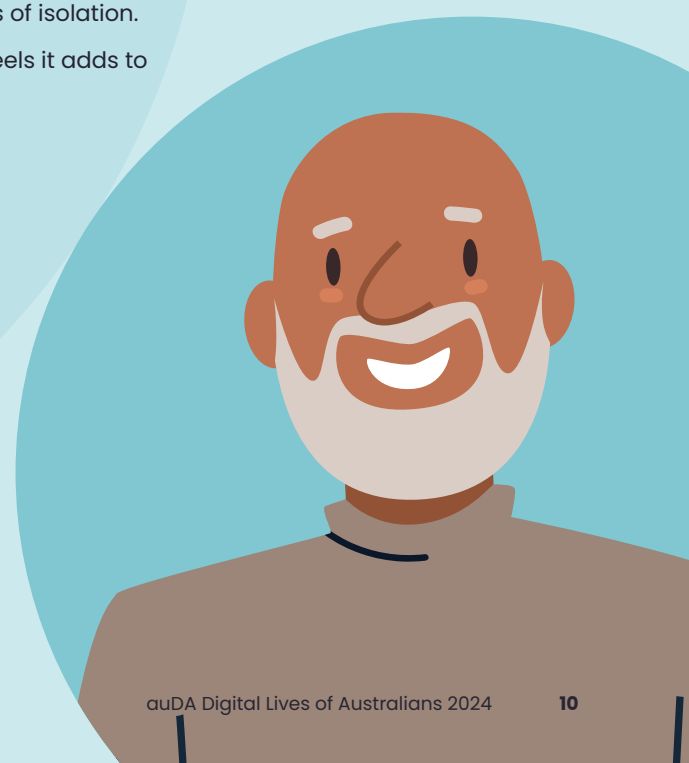
He enjoys accessing content online across a range of topics and areas of interest. This ranges from watching sports and documentaries to tutorials for home maintenance and other skills. He accesses this content through platforms like YouTube, podcasts and online communities.

Omar also relies on the internet for his health and wellbeing. Living in a regional area and having limited mobility, telehealth appointments are a huge benefit. These allow Omar to access the medical support he needs without having to travel to in-person appointments. Similarly, online shopping is convenient.

He has built social connections and friendships through online communities, which help to reduce feelings of isolation.

Omar values the internet immensely and feels it adds to his quality of life.

"We don't have the greatest medical access here. My GP is 10 kilometres away and the nearest major hospital is 50 kilometres. Being able to do appointments via telehealth has saved me so much time and money."



The internet is critical to most jobs

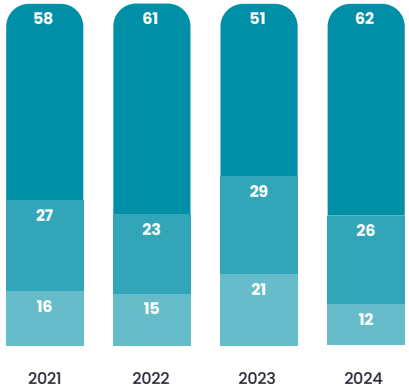
The vast majority of working Australians rely on the internet to do their job. Nearly two thirds (62%) say they would not be able to perform their job without it. Conversely, only 12% of jobs can now be undertaken without the internet – the lowest since the *Digital Lives* study began in 2021.

Workers in Australia's major capital cities are more likely to depend entirely on the internet for their jobs, than those in other parts of the country (63% vs 56%).

Similarly, most small businesses need the internet to operate – nearly half (47%) say their business could not function without it. Only 3% of small businesses could function fully without it.

Dependence on the internet for work - consumers in the workforce (%)

- I could not do my job without the internet
- I could do my job without the internet, but it helps make my job easier or better
- I can do my job completely without the internet

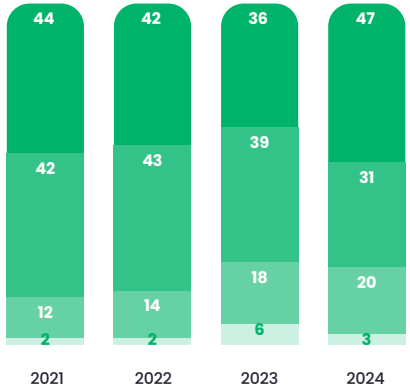


"I make and sell items such as scarves and beanies. I used to sell them at market stalls but these days I exclusively sell online. Without the internet, my business wouldn't exist!"

(Sole trader, Retail, Regional VIC)

Value of the internet - small businesses (%)

- The internet is invaluable; the business couldn't function without it
- The internet adds a lot of value; the business would struggle to function without it
- The internet adds some value, but the business could function without it
- The internet doesn't add any value; the business could function fully without it



"For small businesses a constant online presence is a must. You have to let people know you exist and that you are there if they require services that your business offers."

(Micro business, Construction, Perth)

Small businesses value the internet for a range of reasons — enabling customer interaction is the greatest benefit

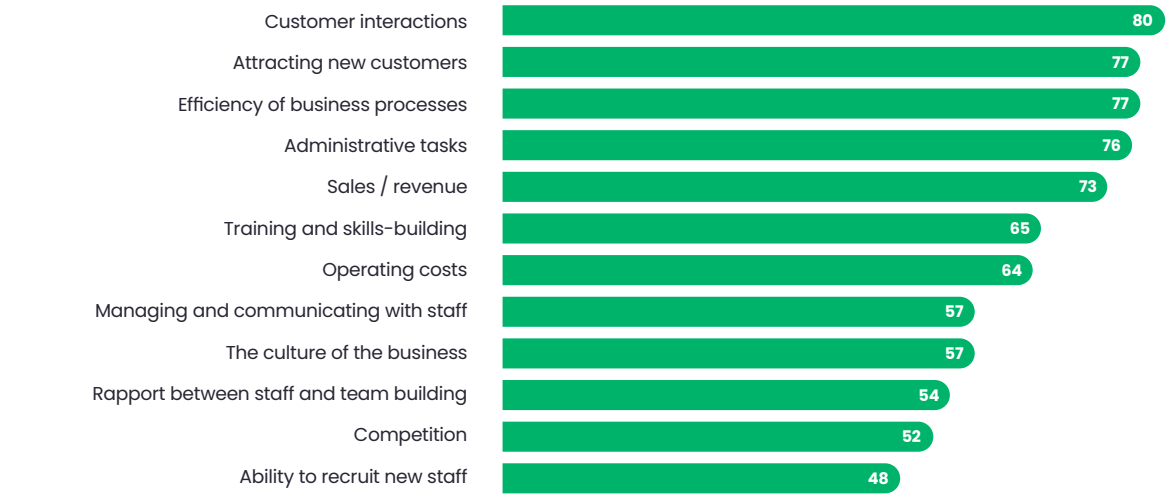
Just as the internet has a positive impact on the lives of Australian consumers, it also has a positive impact on many aspects related to running a small business.

When asked to identify the greatest benefits the internet provides to their business, nearly two thirds (64%) of small businesses overall considered enabling customer interactions one of the greatest benefits.

Other strong benefits include promoting the business, information and learning, the ability to work remotely, business management and administration, and generating sales.

67% of businesses with a website feel 'promoting the business' is a top benefit of using the internet (vs 45% of those without a website).

Impact of the internet on aspects of small business (% Positive impact)



Benefits of the internet – small businesses (% Selected in 5 'greatest benefits')

*Asked of employing businesses only (micro and small businesses)

03 Emerging technologies will further enhance the value of the internet

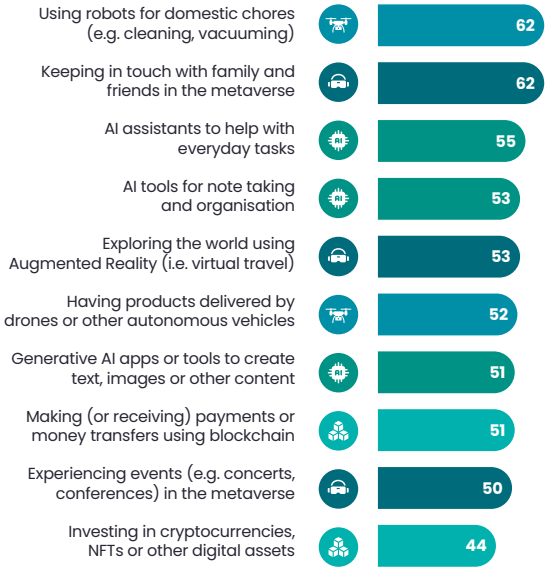
Emerging internet-enabled technologies are expected to become further integrated into everyday activities and routines

Four broad emerging technologies are explored in the *Digital Lives* study.

- Robotics
- Augmented and Virtual Reality
- Blockchain
- Artificial intelligence

These technologies and the activities they support are becoming more accessible to varying degrees. Many consumers consider activities supported by these technologies as potentially useful to their lives. Consumers who live in one of Australia's major capital cities and those from a CALD background are more likely than others to consider these activities useful.

Activities enabled by emerging technologies – consumers (% Think would be useful)



Robotics

For consumers, the benefits of robotic devices for basic household chores such as vacuuming and cleaning are clear. These devices are expected to free up time for other purposes and help people with limited mobility and busy lives.

> **"Using robots for domestic chores could reduce the time taken to complete the task and reduce stress in my life, meaning I'm able to spend more time with family."**
>
> (Woman, 18-34, Brisbane)

Consumers have concerns about products delivered by drones, including adding to the congestion of airspace, the possibility of deliveries being intercepted and putting delivery workers out of a job. However, there is optimism around the use of drones and robotic devices for tasks that are dangerous or difficult for humans, such as rescue operations, performing medical procedures and agricultural processes.

Augmented and Virtual Reality

AR / VR promises the opportunity to experience places and/or events that would not be easy or possible in the physical world. This is expected to particularly benefit people who have restricted mobility or live with disability, and where cost or distance are barriers. There is a general acceptance that the AR / VR experience would be different from – and would not replace – 'real life' experiences.

> **"I love music, but many concerts don't come to Perth, so being able to attend a VR concert would be as close you could get to the live experience."**
>
> (Man, 50-69, Perth)

There is a strong social element with people excited about the prospect of sharing virtual experiences with friends and family members who are in different locations. Some people perceive other practical possibilities with AR / VR, such as the ability to see how an item of furniture fits before purchasing or delivering training for disaster prevention and response.

Blockchain

Blockchain remains a mystery to most consumers. There is low level interest in the technology and its potential benefits and consumers express a sense of cautiousness and desire to build a better understanding before they would consider using it. This apprehension stems, at least in part, from a somewhat negative perception of cryptocurrencies.

"I don't quite understand the details of these types of transactions. What does 'non fungible' mean exactly?"

(Woman, 50-69, Brisbane)

Artificial intelligence

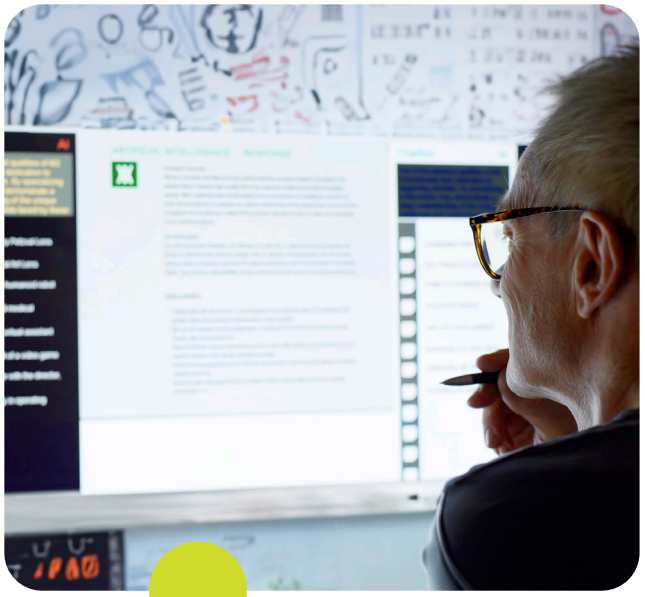
There is a growing familiarity with AI assistants and generative AI platforms, and several participants in the qualitative research forum reported they have started experimenting with AI tools and AI assistants.

While many users are astonished by the speed at which AI tools can summarise and generate content, doubts remain about the accuracy of its output. There are also concerns about the legal ownership of content.

Interest in AI tools stems from the ability to quickly perform tasks that would otherwise be time-consuming or highly repetitive, freeing people up to spend their time on more valuable tasks.

"I produce a club newsletter. I would quite like the ability to create images and text that I could use in the newsletter but I am uncertain whether these may be affected by copyright."

(Man, 70+, Regional NSW)



Time poor consumers hope AI will create more time in the day

Case study: Eric

*Not his real name

Profile

- Male
- Age 35-49
- Perth, WA
- Employed full-time, part-time student

Key data points

- Little knowledge of AI – has a reasonable understanding but would struggle to explain it to others
- Has tried using AI in his personal life, and is thinking about using it for his studies
- Perceives using AI assistants to help with everyday tasks as very useful
- Perceives AI tools for note taking and organisation as very useful

Eric* works full time, studies part time and has a newborn baby.

He is interested in using AI to streamline his personal life and make his studies more efficient. His university has provided resources on how to use AI to help with studies. He hasn't explored them but intends to. He has experimented with an AI platform to research topics related to his course and he found it "incredibly useful". A fellow student also recommended an AI-powered note-taking tool.

Outside of his studies, Eric has used AI at home to provide meal ideas. He has also seen friends use AI to help with job applications and is amazed at the efficiency these platforms can provide.

In the future, he hopes AI can assist him with other daily tasks, such as creating more efficient schedules and to streamline his note taking.

"Working full time, studying part time and having a young family means there's not enough time in the day. If AI could help me get more sleep because of better, streamlined practices in my everyday life, that would be fantastic."

Small businesses feel they can use emerging technologies to streamline or improve their day-to-day activities

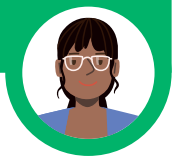
Australian small businesses are embracing AI tools and platforms – more than half of small businesses (57%) report having used AI.

AI tools are increasingly being used in addition to, or instead of, search engines as users seek more specific and curated information.

Some small businesses interviewed during the qualitative research reported embracing AI tools across various aspects of their business, including content creation, marketing and task management.

"I currently use search engines to find answers to technical questions. If that can be enhanced by AI, I'm all for it."

(Sole trader, Technology, Melbourne)

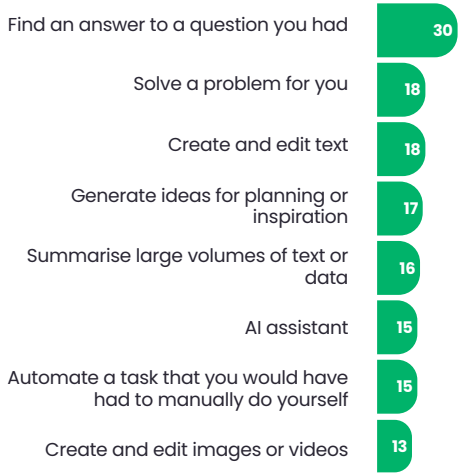


"Our business could certainly use AI tools to create images to advertise our store and website ... it would be faster than waiting for a designer."

(Micro business, Retail, Melbourne)

57% **of small businesses have used an AI tool for at least one purpose**

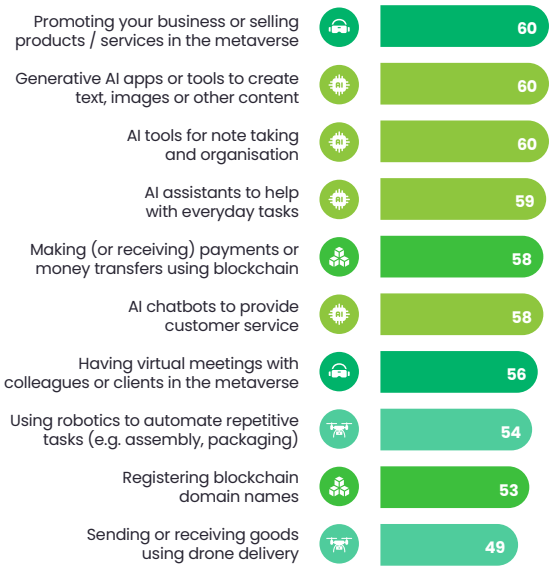
Use of AI tools by purpose – small businesses (% Used)



Many small businesses – including those yet to embrace emerging technologies - see potential value in activities supported by these technologies.

Robotics
Augmented and Virtual Reality
Blockchain
Artificial intelligence

Activities enabled by emerging technologies – small businesses (% Think would be useful)



Artificial intelligence

Many small business owners have encountered chatbots as customers themselves and typically describe their experience as 'frustrating', perceiving chatbots to have limited flexibility beyond 'basic' queries. However, some feel AI chatbots could be useful for their own business to triage customer enquiries and provide prompt responses. They also acknowledge it would be important to continue providing customers access to personal, human interaction.

"A chatbot could be beneficial if integrated into the website or social media page. It may answer general questions but I would always let customers know they can call us back or we will contact them if they wish."

(Micro business, Painting, Perth)

Robotics

Most small businesses see no obvious application of robotics to their business or consider their business too small to justify the investment. However, the potential for some types of businesses to benefit from robotics was widely acknowledged.

"It's relevant for factories and manufacturing companies because most of their jobs are repetitive. The benefit is reaching their targets and not spending more on labour. "

(Small business, Construction, Melbourne)

Augmented and Virtual Reality

In qualitative discussions, small businesses struggled to identify potential use cases for AR/VR within their business. There was little comprehension of how business activities might function within a metaverse setting. The most tangible benefit of AR / VR that small businesses perceive, is the potential to present a visual representation of how something might look in reality.

It could be relevant to my business to give clients a better understanding of how we operate and what to expect in a visual way if they had our cleaning services."

(Micro business, Cleaning, Regional VIC)

Blockchain

Like consumers, small businesses have limited awareness and understanding of blockchain. They also struggle to see its potential relevance to their businesses apart from the potential for payments to be made with cryptocurrencies. There was no unprompted recognition of other potential ways in which businesses might use blockchain technology, such as smart contracts.

"It may be relevant in the future, however, at the moment cryptocurrencies are too volatile for me to want to be paid in them. I don't want to add another risk factor to my business."

(Sole trader, Financial services, Sydney)

AI tools help small businesses realise significant efficiency gains

Case study:

Samira

*Not her real name

Profile

- Female
- Age 35-49
- Sydney, NSW
- Sole trader
- Financial services

Key data points

- The internet is invaluable; the business couldn't function without it
- Early adopter of new technologies
- Business uses AI regularly
- Generative AI apps / tools considered extremely useful

Samira's* business provides financial education to clients in Australia and overseas. Customer interactions are primarily through social media and instant messaging platforms. Social media is a primary channel to promote her business.

Samira uses various online apps and platforms to generate content and automate correspondence with current and prospective clients, for example, automatically sending pre-prepared materials on request via the business' website.

She uses AI to generate ideas for blog posts or video scripts for the business' website and social media pages. It has been a steep learning curve and she has invested substantial time to 'train' the AI tool to use language that is consistent with the business' style.

As a sole trader, she has been able to realise significant efficiencies by embracing generative AI.

"AI levels the playing field between small business and large corporations. You don't need a million-dollar marketing budget to create content – but AI will never get it 100% right. If it can do 70% of the work, that's a massive time saver. I still need to make sure it's factually correct and it sounds authentic."

AI tools could continue to be adopted as knowledge increases and safeguards are implemented

Interest levels and the perceived usefulness of AI tools both increase in line with knowledge of the technology. While this feels intuitive, it is particularly critical in the context of AI, given the scrutiny of it. These findings suggest that once people develop a good understanding of AI, they are more likely to realise its potential benefits.

Perceived usefulness of AI activities – By level of knowledge – consumers (% Think would be useful)

In addition to building knowledge, Australian consumers and small businesses seek reassurance that AI can be used safely. Consistent with the *2023 Digital Lives* study, the majority of consumers and small businesses would feel more comfortable about using AI if there were stronger regulatory safeguards in place.

"I would feel more comfortable about AI if there were stronger regulatory safeguards around it" (% Agree)

consumers

61% 2023

61% 2024

small businesses

68% 2023

67% 2024

04 Growing concern cyber threats are compromising use of the internet

The proliferation of scams and high profile cyber attacks is causing deep concern among internet users

A number of high-profile cyber attacks in 2022 and 2023 received significant media coverage and impacted millions of Australians, bringing the threat of cyber criminals firmly into the public consciousness. There have since been several more attacks, exposing the personal information of millions more Australians.

Indeed, most consumers (77%) surveyed for the *Digital Lives 2024* study reported having experienced some form of cyber security threat or attack.

68% recalled receiving a scam text message or email*

39% recalled receiving a scam message or fake friend request on social media*

18% knowingly had their personal data compromised due to a cyber attack on a company of which they were a customer*

12% reported having their email or social media account hacked*

*We note that these figures represent people who were aware they had been subject to a scam. Given scams can be difficult for consumers to detect, the actual number of Australians who have experienced this is estimated to be substantially higher.

The primary concerns Australian consumers and small businesses have when using the internet are fears about online scams, privacy of online activities and security of personal data.

Concerns when using the internet – consumers (% Considered a major concern)

Concerns when using the internet – small businesses (% Considered a major concern)

When considering demographic differences, older Australians (aged 70+) are most concerned about the privacy of their online activities (64%) and identifying fake news and misinformation online (54%). Consumers from a CALD background are more likely to feel concerned about identifying fake news and misinformation online (52%).

Qualitative research participants also described an erosion of confidence and a greater sense of caution and anxiety using the internet due to these concerns.

"In recent years, I've heard a lot about online scams, which makes me very concerned. I receive lots of scam emails. I don't know how they have my contact details. It must be because some websites I subscribe to sold my data without my consent."

(Man, 18-34, Adelaide)

"My confidence online is lower because of the amount of cybercrime I hear about. I had a near miss with a fake website that I started entering my details into. Plus, some of my details were leaked in two data hacks. So I'm generally a bit fearful when I use the internet for anything that involves my data."

(Woman, 35-49, Sydney)

Few Australians feel very confident in their ability to stay secure online and older Australians are least confident

Beyond creating strong passwords, less than a quarter of Australian consumers are very confident in their ability to implement key online security safeguards. Confidence is somewhat higher among small businesses but still only a minority are very confident with any of the safeguards.

Confidence with online security safeguards (% Very confident)

We asked consumers to complete a cyber security checklist, which detailed steps individuals can take to strengthen their personal cyber security. This exercise generated mixed responses. It caused some to feel more confident and some less so. For those who felt more confident, the checklist provided validation they have adequate online security measures in place. Typically, they noted one or two extra things they should do, which tended to be things they were aware of but hadn't actioned. Completing the checklist was considered a useful prompt, demonstrating the value in 'security check' reminders.

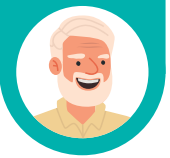
"It was a good reminder to add multi-factor authentication for my email – this is a priority today. I haven't done this, not for any particular reason - I've just been slack. I also should back up my phone, which I don't do very often because it takes a bit of time."

(Woman, 50-69, Perth)

For those who felt less confident after completing the checklist, the exercise was a cause for concern. The consumers in this group were not sure where or how to start to fix things. Some consumers may appreciate additional step-by-step guidance on setting up security features.

"I feel rather inadequate, I don't do a lot of things and probably need to get on them sooner rather than later... but I am unsure of how to do some of these things."

(Man, 50-69, Perth)



Those least confident in their ability to implement safeguards include:

Women are less confident than men that they can keep their personal information secure online (17% vs 24% very confident)

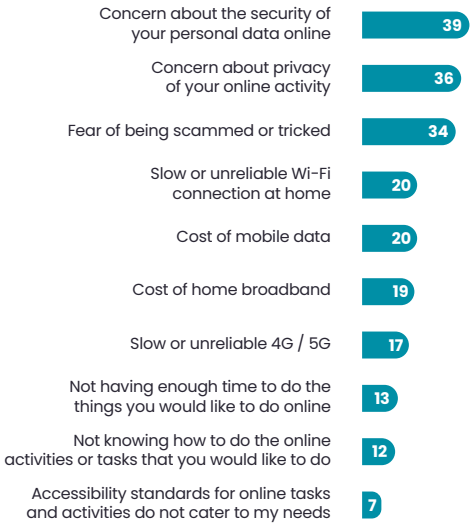
Older Australians (aged 50 years or above) are less confident than their younger counterparts (aged 18 to 49 years) for all safeguards, most notably 'keeping your personal information secure online' (13% vs 26%) and 'finding reputable information on how to be secure online' (14% vs 27%)

Sole traders are less likely to feel confident in keeping their business information secure online (22% vs 35% of micro and 36% of small businesses).

Concerns about privacy and data security represent the largest barrier to doing more online

The biggest barriers that prevent consumers from using the internet more relate to online security.

Issues preventing people from using the internet more – consumers (% Selected)



"I would like to post more on social media to stay in touch with my family and friends who don't live in the same town. I consider myself quite tech savvy, but it seems things are so easily hacked these days - nothing seems to be secure."

(Woman, 18-34, Regional VIC)

Concerns about online security are a greater barrier to using the internet for consumers from a CALD background.

This suggests a need for greater cyber security support for Australia's diverse communities.

49% said 'concern about the security of personal data online' stopped them from doing more online (38% for non-CALD consumers)

43% said 'fear of being scammed or tricked' stopped them from doing more online (33% for non-CALD consumers).

People who have been the victim of a cyber attack on a company of which they were a customer are more likely to avoid online activities due to concerns about online security. They are more likely to avoid activities that support connection with others (social media and instant messaging apps) and newer activities and technologies (virtual assistants, smart home devices, and wearable devices).

"I would like to do more online shopping, however, cyber security is a big concern for me, I fear my bank details may be stolen."

(Man, 18-34, Adelaide)

Online activities avoided due to security concerns – consumer (%)

	Had personal data compromised	Have not experienced any cyber security threat
Using social media / posting content on social media	28%	17%
Using a virtual assistant	25%	12%
Using internet connected 'smart home' devices	24%	14%
Communicating with others using instant messaging apps	18%	10%
Using an internet enabled wearable device	17%	12%
Managing investments online	14%	9%
Any activities avoided	**68%**	**50%**

64% of consumers say they avoid at least one online activity due to concerns about online security

05 Improvements to online security practices are required to support Australians

In the face of increasing cyber threats, most consumers and small businesses recognise the need to maintain vigilance online

In 2024, a significantly higher proportion of Australians agree it is important to stay up to date with online security in the face of increasingly sophisticated cyber security threats.

Consumers

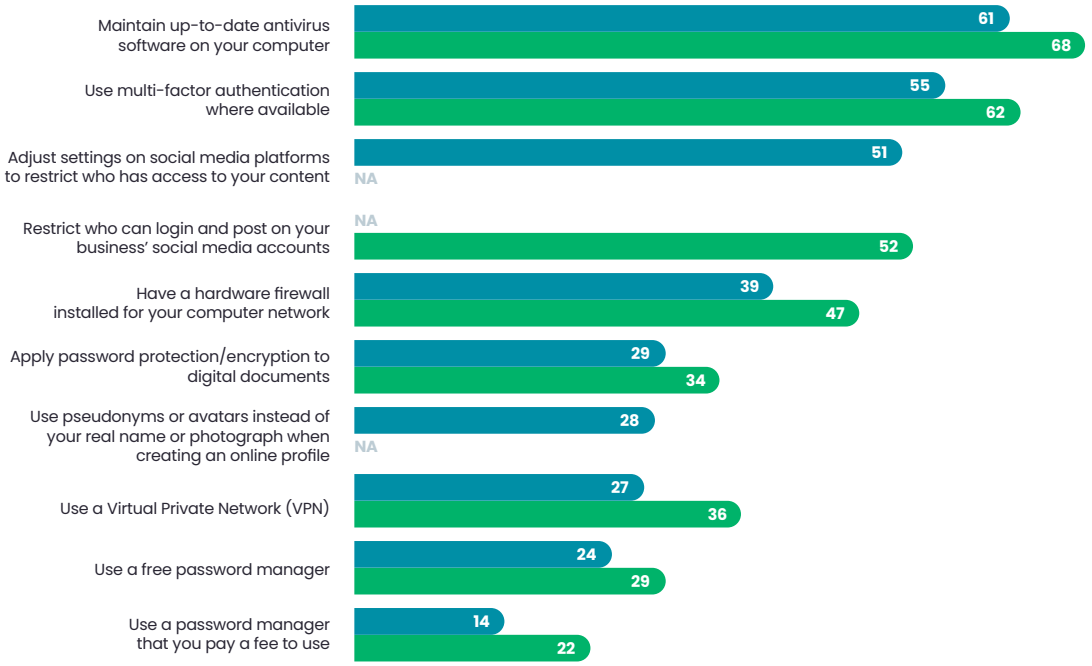
74% (2022) → **82%** (2024)

agree that cyber criminals are becoming smarter and more sophisticated, so it is important to stay up to date with the latest online security trends

This sentiment is stronger among older Australians – 89% of those aged 50 years or above agree, compared with 76% of those aged 18 to 49 years.

Most Australian consumers and small businesses report they are currently using online security measures. Experiencing a data breach has been a trigger for some consumers to review their online security.

'Good' online security measures (% Do currently)



91% consumers

90% small businesses

practice at least one online security measure

"Anti-malware software is a safety blanket for me. I trust that it protects my data. I have to update it from time to time, I have to run safety checks. It takes time, but I have trust in the result."

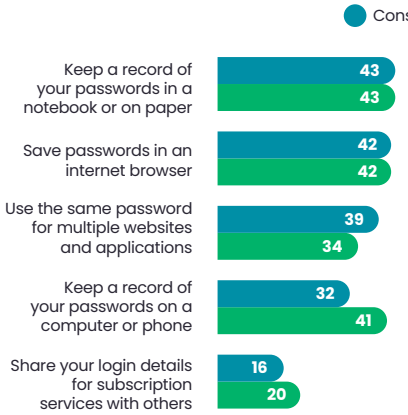
(Sole trader, Marriage celebrant, Sydney)

"I think the term 'multi-factor authentication' puts people off. It sounds complex so people think it will be difficult to set up and use every time. Once people have set up one account with it, they can see it's simple, so they are more likely to use it for more accounts."

(Woman, 50-69, Perth)

However, many consumers and small businesses report behaviours that may leave them vulnerable to cyber security threats.

'Poor' online security measures (% Do currently)



Small businesses appear to adopt formal cyber security processes as they grow. While nearly all small businesses with 5-19 employees have some formalised cyber security processes, more than half (54%) of sole traders do not have any.

Cyber security processes – small business (% Do currently)

	Sole traders	Micro	Small
Regularly talk about cyber security with staff*	NA	33%	45%
Employ someone with responsibility for IT and online security*	NA	25%	44%
Provide staff with regular cyber security training*	NA	24%	43%
Regularly talk about cyber security with the business owner / manager*	NA	25%	31%
Use an external IT and online security consultant	11%	28%	39%
The business has a cyber security policy	16%	24%	34%
Audit cyber security practices and procedures on a regular basis	11%	27%	29%
Don't do any of these	**54%**	**21%**	**9%**

*Among employing businesses only (Micro and Small)

A sizeable proportion of the population would like to improve their online security capabilities but need guidance

Many consumers and small businesses are unsure how to strengthen their online security.

43% consumers

40% small businesses

would like to improve their online security, but they don't know what to do

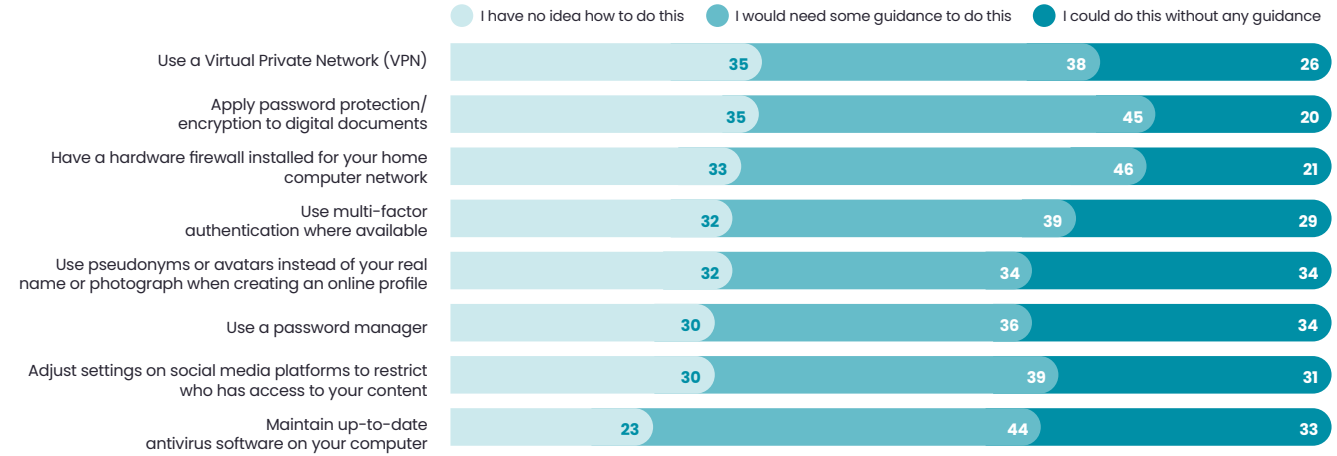
Women are more unsure how to improve their online security than men (47% vs 40%).

When looking specifically at those who don't currently have online security measures in place, we see that many would need guidance to implement them, with older Australians most likely to require support. A higher proportion of older consumers (aged 50+) report having low or no capability with all these online security measures, apart from maintaining up-to-date antivirus software.

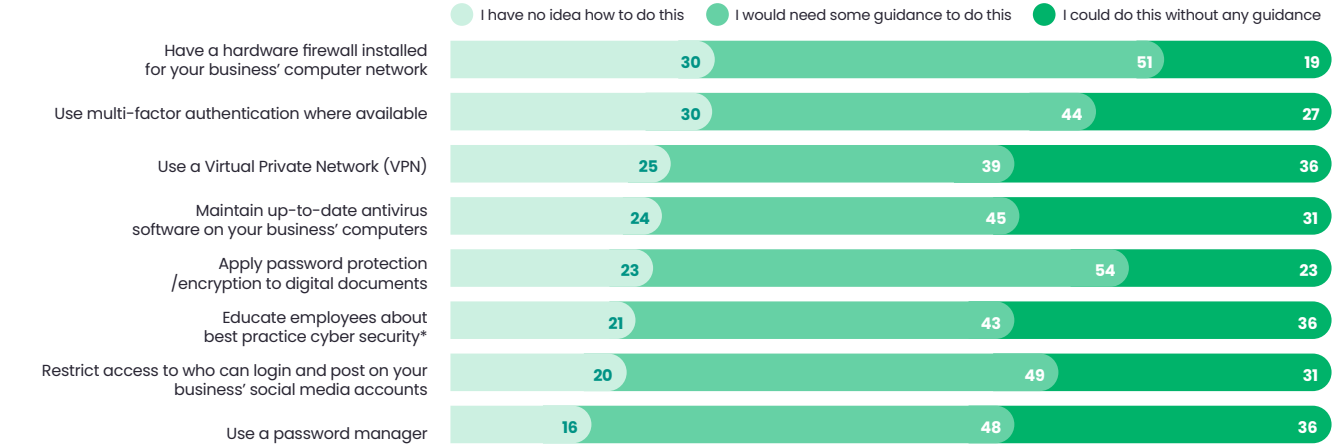
Similarly, most small businesses would need assistance to implement online security measures they do not use currently.

In addition to support for implementing practical online security measures, nearly two-thirds of employing businesses would need guidance for educating their staff about best practice cyber security.

Capability with online security measures – consumers who do not currently have measures in place (%)



Capability with online security measures – small businesses who do not currently have measures in place (%)



*Among employing businesses only (Micro and Small)

Small businesses take steps to boost online security

Case study:

Kathryn

*Not her real name

Profile

- Female
- Age 50-69
- Regional VIC
- Sole trader
- Online retailer

Key data points

- Very confident overall using the internet
- Very confident in safeguards to keep the business' data secure online

Kathryn* runs her small business from home, selling homeware products via online marketplaces. She feels cyber security is an ever-present concern and acknowledges the importance of being proactive in online security, especially given her responsibility for customer information. She keeps up to date with new and emerging cyber security threats by reading newsletters and through participation in small business discussion forums online.

Kathryn uses a range of measures to maintain the business' cyber security. These include maintaining up-to-date antivirus software on business devices, using a VPN to connect to the internet whenever she is working away from home and maintaining vigilance to ensure communications received via the online marketplace are legitimate.

She has implemented complex passwords for applications and accounts that are critical to the business such as internet banking and online marketplaces.

While it is time consuming, she estimates spending a few hours every week checking and verifying communications. She notes the risk to her business' reputation if something were to go wrong would be catastrophic.

"As a small business owner, there is a great responsibility. It's not just your information, you have information for all your customers that you need to be mindful of ... You have to question everything that you receive nowadays and ask 'is it genuine or not?'."

‹ Back to contents

Use of official sources for cyber security information and advice remains limited

Australian consumers continue to depend on search engines, family and friends for information or guidance in relation to online security. Only a quarter say they would go to a government website for support, which is only marginally higher than reported in the *Digital Lives 2022* study. Whether they'd used it before or not, consumers in the qualitative discussions found the cyber.gov.au website trustworthy, helpful and comprehensive.

Sources of online security information and advice – consumers (% Who would use each source)

	2022	2024
Google (or another search engine)	36%	34%
Family	33%	33%
Friends	25%	27%
Government websites (e.g. cyber.gov.au or esafety.gov.au)	22%	25%
Workplace IT support	15%	21%
Online resources (e.g. YouTube videos)	19%	20%
Your internet service provider	19%	18%
Technology website or magazine	12%	14%
The help and support function on individual websites or apps	11%	12%
Online forums or discussion boards	14%	12%
Work colleagues	11%	10%
Your bank	10%	9%
A website manager or developer	6%	8%
A domain name registrar	4%	7%

Search engines are a first step for many when searching for information about cyber security and often enable consumers to find information they need.

However, the search engine experience can be counterproductive due to the sheer volume of information and the effort required to validate search responses.

"A search engine is generally my first stop for questions. You get a lot of information to choose from, so it can be easier to find what you're looking for but it can also be overwhelming."

(Woman, 50-69, Brisbane)

Some also mentioned a lack of trust in searching for cyber security guidance or training online as there are many sites and checklists available, making it hard to know which sources are trustworthy.

This can cause some to turn to family members. Women are much more likely to seek help from a family member than men (41% vs 24%), and less likely to seek information via online resources such as YouTube videos (25% vs 16%), technology websites or magazines (18% vs 9%), and online forums or discussion boards (14% vs 9%).

"I find setting up passphrases and password management overwhelming. I've had help from a family member which has eased a bit of the anxiety around this."

(Woman, 18-34, Brisbane)

Consumers from a CALD background report greater likelihood of using online information sources, compared to non-CALD consumers:

- **Online resources** (e.g. videos) (32% CALD vs 18% non-CALD)
- **Online forums or discussion boards** (20% CALD vs 11% non-CALD)

There has been a notable increase in the proportion of small businesses that would consider engaging a cyber security consultant for advice on improving their business' online security. They seem to have a greater appetite for online security information and guidance in general, with a higher proportion likely to use online resources such as online searches or tutorials compared to 2022.

"I don't use security measures on my own without the help of a professional. I trust the consultant is my weapon to protect my data."

(Sole trader, Personal services, Sydney)

However, like consumers, only around a quarter (28%) of small businesses would go to a government website in the first instance when seeking cyber security information or support – for some this could be in part due to having a dedicated IT or cyber security consultant to turn to.

Sources of online security information and advice – small businesses (% Who think they would use each source)

	2022	2024
IT or cyber security consultant	34%	42%
Google (or another search engine)	23%	31%
Government websites (e.g. cyber.gov.au or esafety.gov.au)	25%	28%
Your internet service provider	24%	23%
Online resources (e.g. YouTube videos)	15%	23%
Friends	16%	18%
Family	17%	17%
A website manager or developer	14%	16%
Online forums or discussion boards	13%	15%
Technology website or magazine	11%	15%
Work colleagues	16%	14%
The help and support function on individual websites or apps	9%	13%
A domain name registrar	10%	12%
Your bank	12%	8%

The implications of having low awareness when it comes to official sources of cyber security support are most acute in the event of a cyber security breach. Only around half (52%) of consumers and two thirds (65%) of small businesses are confident they would know where to report a data security breach. This suggests there are many who would need guidance in the event of a cyber security attack.

This highlights a need for further education to ensure Australians are equipped with the knowledge and resources required in the event of a data breach or cyber attack. Older Australians (aged 50+) and sole traders are most in need of this content.

52%
consumers

65%
small businesses

know where to report a data security breach

59%
small businesses

know what to do if any of their business accounts are hacked or the business has an online security breach

There is a widely held view that companies should be accountable for protecting customer data – those that fail to do so risk losing customers

As set out in on **page 22**, 51% of consumers and 45% of small businesses consider 'knowing which companies you can trust to keep your information secure' to be a major concern. A majority of consumers and small businesses also agree companies should be doing more to protect customer data and be subject to penalties if they don't.

83% **consumers**

79% **small businesses**

agree that companies should be doing more to protect the personal information of their customers from cyber attacks

81 **consumers**

74% **small businesses**

agree that companies should be subject to penalties if they fail to protect their customers' personal information from cyber attacks

These findings indicate Australians have high expectations that companies will do their part to uphold their online security – yet qualitatively, people have a limited understanding of what companies are doing in this regard. Regardless of their understanding of companies' data protection policies there is little tolerance for companies that fail on cyber security.

Consumers say they would lose trust and switch providers should they experience a data breach by a third party company. However, some feel the risk of a data breach is similar regardless of provider, and say they would wait and see the explanation for and handling of the breach before taking action.

The steps consumers feel an affected company needs to take in the event of a breach are:

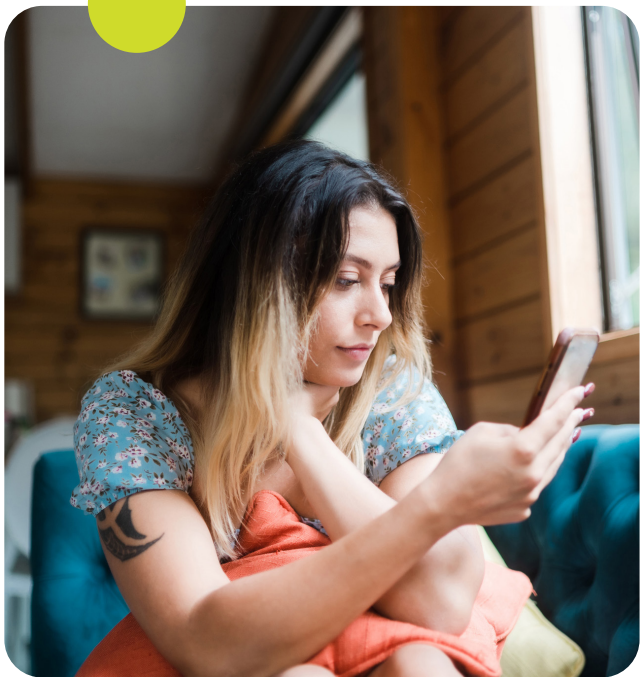
- **Open and transparent communication** about the cause of the breach and how they have been affected
- **Detail about steps** being taken to address the issue and steps consumers themselves need to take
- **Outline a plan** for improving security to avoid another incident occurring in the future
- **Provide customers with additional protection** (e.g. access to credit monitoring services, support replacement of identity documents).

"[Being involved in a breach] opened my eyes to how much you have to do when certain personal information is exposed."

(Woman, 18-34, Melbourne)

"If the company is helpful, I will trust them and stay. If they try and cover it up, I will not deal with them in any way ever again; they don't deserve my membership."

(Man, 50-69, Perth)



Trust in organisations is eroded following cyber security breaches

Case study:

Sarah

*Not her real name

Profile

- Female
- Age 25-39
- Melbourne, VIC

Key data points

- Somewhat confident in safeguards to keep personal data secure online
- Strongly agrees that companies should be doing more to protect the personal information of their customers from cyber attacks
- Avoiding online threats such as phishing scams is a major concern when using the internet

Sarah* has had her personal data compromised in multiple cyber security breaches, including some companies she'd previously closed accounts with. She no longer trusts these companies and wouldn't go back to them, believing they didn't do enough to protect her information. Her initial reaction was shock that such big companies could fall victim to cyber security breaches. One of her biggest frustrations is knowing that her personal details are now on the internet.

The main safeguard she has in place is antivirus software installed on her laptop and phone that monitors her details and flags if anything may have been compromised. This software also provides a VPN service. She is now more cautious of the details she shares on social media and other websites. She avoids sharing any sensitive information. She also has notifications for banking transactions turned on, and is careful about which emails she opens (deleting those she doesn't recognise).

In the near future, she is interested in learning more about cyber security to keep her data secure and feels that new technologies require people to do more to protect themselves. She is most likely to use a search engine and her professional network as sources of information for improving her cyber security.

"The breaches made me more proactive to make sure I don't share my information too widely. On social media I'm conscious of my privacy settings and I'll only share certain details on my profile."

‹ Back to contents

06 Building digital skills will unlock value from the internet

Cyber security skills are considered the most important skills for our digital futures

Building knowledge and skills is of critical importance to ensure consumers and small businesses can harness the full value of the internet now and into the future.

Cyber security looms as the area with the greatest digital skills gap – current capabilities are insufficient relative to its perceived importance.

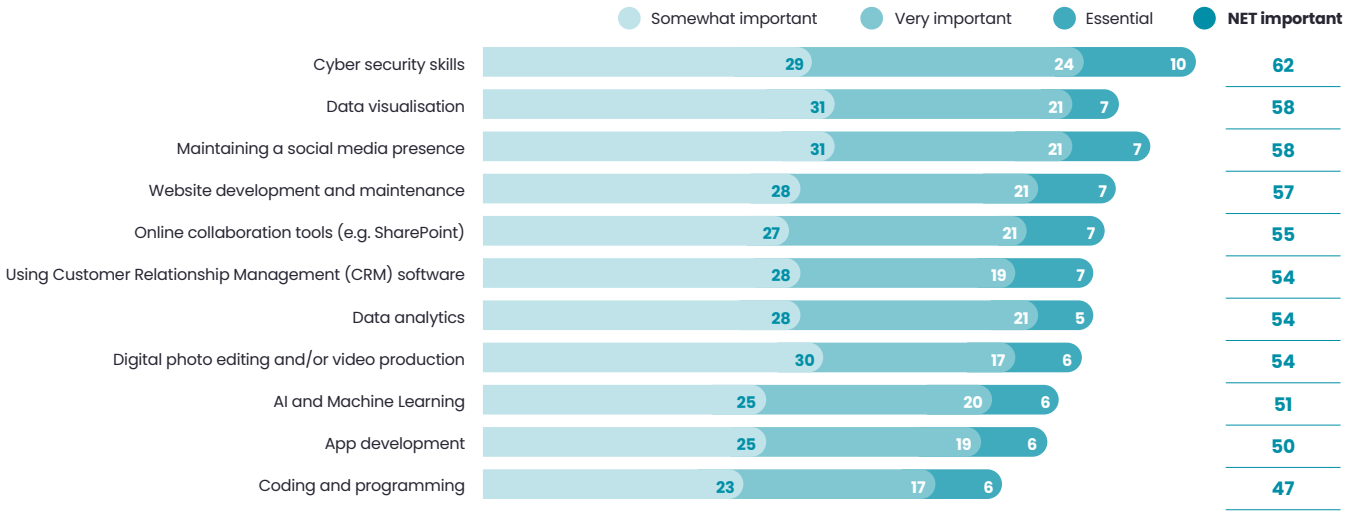
Improving online security capabilities is not just important for ensuring one's own online activities are secure – cyber security skills are also considered highly important in the workplace.

Among a range of digital skills explored in the research, cyber security skills are most widely seen by consumers of working age as important to their job or career – now or in the future. Those from a CALD background were much more likely than others to consider all these skills important to their career.

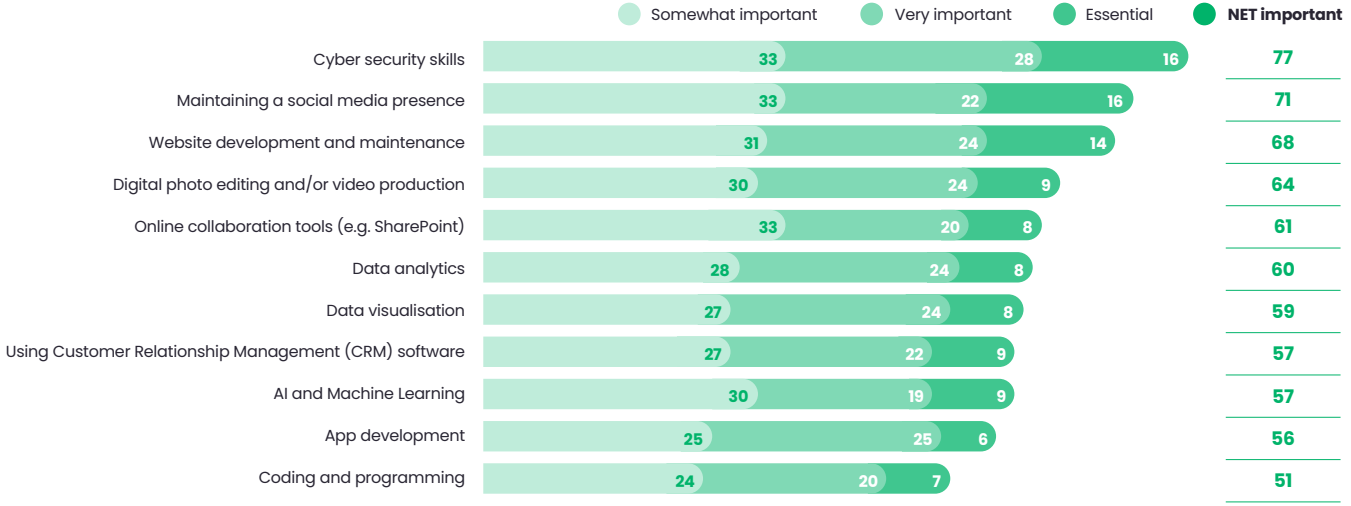
Cyber security skills are also considered the most important digital skill among small businesses, with more than 1 in 7 rating it as 'essential'. Maintaining a social media presence and website development are other highly desired skills.

Small businesses in major capital cities consider most of these digital skills more important than those in other parts of Australia – except for maintaining a social media presence and digital photo and/or video editing. Fewer sole traders consider any of these skills important, in comparison to employing businesses (micro and small).

Perceived importance of digital skills - consumers of working age (%)



Perceived importance of digital skills (% Small businesses)



Capability with cyber security and other digital skills is currently limited

Few Australian consumers or small businesses feel they have high capability with these digital skills – the majority would need guidance to develop and use them.

Digital skills capabilities (% High capability – can do without guidance)

	Consumers	Small businesses
Maintaining a social media presence	46%	35%
Digital photo editing and/or video production	27%	26%
Online collaboration tools (e.g. SharePoint)	20%	23%
Using AI and Machine Learning	18%	18%
Using Customer Relationship Management (CRM) software	16%	25%
Website development and maintenance	16%	24%
Data visualisation	16%	21%
Data analytics	15%	23%
Cyber security skills	13%	24%
App development	13%	20%
Coding and programming	12%	19%

When importance and capability are overlaid, the biggest skills gaps for consumers are in:

- Cyber security skills
- Data visualisation
- Website development and maintenance
- Using CRM software
- Data analytics

For consumers, building capability with other digital skills is desired for various reasons – including to earn extra income as a 'side hustle', for career advancement or for personal enjoyment. For small businesses, other benefits of building the digital skills listed include improved business efficiencies and cost savings by doing things themselves.

"If you could build and run your own website, you'd save a lot of money every year and you control it without relying on someone else to support your dream. It also means that if anything goes wrong with the site you can fix it yourself and not wait for someone else."

(Micro business, Retail, Melbourne)

Amongst consumers and small businesses, the main barriers to building digital skills are lack of knowledge and time. For some consumers, these skills have simply not been on their radar. There is a lack of knowledge of where to start, how to go about building these skills or how to find resources to develop them. There is also a sense it would be time consuming to learn new skills and people feel they don't have sufficient time available.

"I would like to develop my skills in cyber security as I feel it would provide opportunities for career advancement and it would also give me a sense of personal fulfilment."

(Woman, 35-49, Brisbane)

"I'd like to improve my photo editing skills. What's holding me back? Not having the time to invest in learning the software and needing more money to purchase newer software and potentially a training course or two."

(Man, 35-49, Sydney)

Other barriers to building digital skills include:

- Time and effort required
- Not understanding it well enough therefore not seeing the benefit
- Feeling it is not relevant / they have no need for these skills
- Lack of interest
- Have tried it before without success / it is considered too hard
- Needing guidance
- Feeling too old to learn something new
- Cost of equipment / software / training courses

Among consumers there is a perception that it simply isn't possible to keep up with advancements in cyber security threats and changes in technology.

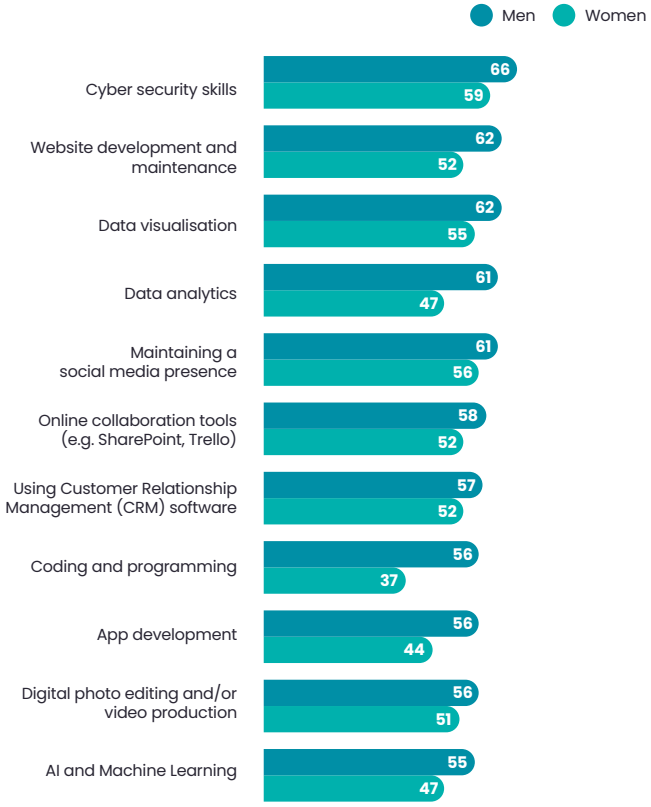
"I think the hackers and criminals are adapting so fast it'll be hard for experts to find new ways to defeat them and for inexperienced people like me to learn cyber security skills."

(Woman, 70+, Sydney)

As with other STEM fields, a distinct gender gap is evident in the perceived importance of, and interest in, digital skills.

Men are more likely than women to consider digital skills important to their job and career, especially coding and programming, which was ranked as least important overall due to a notable lack of perceived importance among women.

Perceived importance of digital skills - consumers of working age (% NET Important)



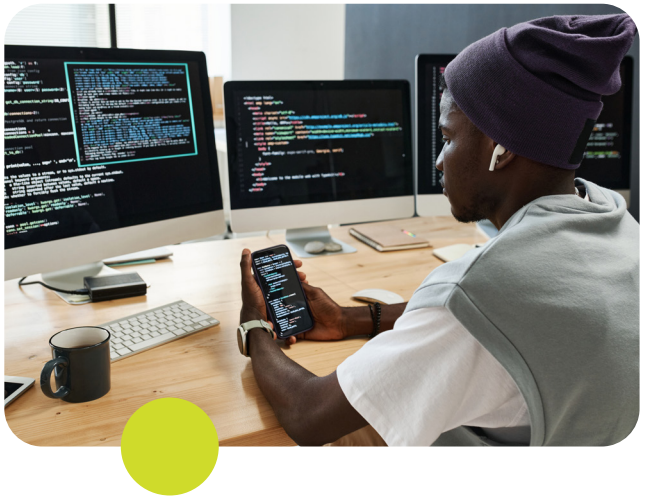
Men are also significantly more interested than women in learning how AI could benefit them, and more likely to agree that being able to use AI will increase their career prospects.

57% men **46%** women

would like to learn more about AI and how it could benefit them in their life

45% men **33%** women

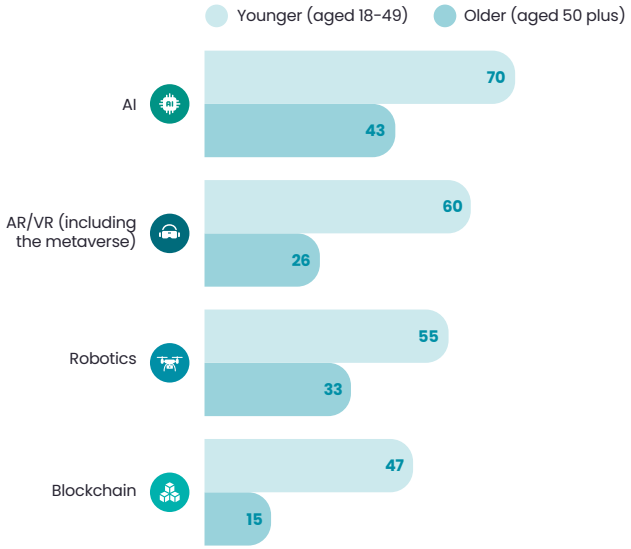
feel that being able to use AI tools will increase their employment prospects



Emerging technologies could cause the digital divide to widen between younger and older Australians

auDA's previous *Digital Lives* studies have found that younger Australians (aged 18-49) are much more active and confident online compared to Australians aged 50+. The 2024 study finds this age divide remains strong, especially in relation to emerging technologies. Younger Australians report much stronger knowledge of these technologies, and express greater interest in using them.

Knowledge of emerging technologies – consumers (% Know at least a little)



Far more younger Australians are interested in using AI for various purposes than their older counterparts. Beyond problem solving or finding answers to questions, very few older Australians seem interested in using AI.

Interest in using AI tools – consumers (% Very interested)

	Younger (aged 18-49)	Older (aged 50 plus)
Solve a problem for you	41%	13%
Find an answer to a question you had	40%	14%
Summarise large volumes of text or data	35%	6%
Create and edit text	35%	6%
Generate ideas for planning or inspiration	30%	6%
Automate a task that you would have had to manually do yourself	28%	6%
Create and edit images or videos	28%	7%
Use AI based customer service e.g. chatbots	26%	3%
Use an AI assistant (e.g. Windows Copilot, Bing AI)	24%	4%

This apparent lack of interest in AI among older Australians may relate to their lower level of knowledge about the technology. Whatever the reason, it is notable that when participants in the qualitative forum were asked to select a potential application for AI, both younger and older participants identified ways in which they might use it.

"I'd like to use AI to shape a talk I have to give in a couple of weeks. I could provide dot points to AI to shape notes for a 5-minute talk. That would save me time. The challenge would be refining the notes to personalise them."

(Woman, 50-69, Perth)

"I can see a great future for AI, especially for people with disabilities. I learnt to touch type in high school but due to my disability I'm restricted to typing with one hand. I've previously used "voice to type" software, but it was still difficult. I can imagine improved software being created in the future that will make the lives of people with a disability better. I look forward to trying these programs."

(Man, 50-69, Regional VIC)

Detailed sample breakdown

The following tables show the number of participants in each stage of the research.

Online Survey

		Consumers	Small businesses
Total		**1500**	**400**
Gender	Male	735	--
	Female	765	
Region	5 Major Capital Cities (Sydney, Melbourne, Brisbane, Adelaide, Perth)	972	271
	Rest of Australia	528	129
Age	18-34	399	103
	35-49	394	137
	50-69	403	122
	70+	304	33
Personal characteristics	CALD	225	--
	Employed / working	903	--
Business characteristics	Sole trader	--	200
	Micro business		150
	Small business		50

Qualitative Discussion Forum

		Consumers	Small businesses
Total		**24**	**16**
Gender	Male	10	6
	Female	14	10
Region	5 Major Capital Cities (Sydney, Melbourne, Brisbane, Adelaide, Perth)	16	12
	Rest of Australia	8	4
Age	18-34	4	0
	35-49	8	7
	50-69	9	8
	70+	3	1
Personal characteristics	CALD	2	--
	Employed / working	15	--
Business characteristics	Sole trader	--	6
	Micro business		8
	Small business		2

Qualitative Interviews

		Consumers	Small businesses
Total		**8**	**8**
Gender	Male	4	3
	Female	4	5
Region	5 Major Capital Cities (Sydney, Melbourne, Brisbane, Adelaide, Perth)	4	6
	Rest of Australia	4	2
Age	18-34	2	0
	35-49	2	2
	50-69	4	5
	70+	0	1
Personal characteristics	CALD	1	--
	Employed / working	7	--
Business characteristics	Sole trader	--	5
	Micro business	--	3

SECNewgate Research

Disclaimer: In preparing this report we have sought to ensure the accuracy of all information contained in the report. We have endeavoured to analyse and interpret the data objectively and have only included findings that are adequately supported by the data. Where we have made assumptions in interpreting the data used in this report, we have sought to make those assumptions clear. Please ensure that you take these assumptions into account if using this report as the basis for any decision-making. The qualitative research findings included in this report cannot be considered statistically representative and therefore cannot be extrapolated to the general population. Some participant quotes have been edited for brevity and clarity without altering their original intent. This project was conducted in accordance with ISO 20252:2019, the international quality standard for market, opinion and social research.

auda.org.au

To read auDA's suite of *Digital Lives of Australians* reports, visit **www.auda.org.au/digital-lives**

.au Domain Administration Ltd

ABN 38 079 009 340

Copyright © All copyright subsisting in the material contained in this publication is owned by .au Domain Administration Ltd unless otherwise stated. Except as provided by the Australian Copyright Act 1968 (Cth), no part of this publication may be reproduced without the prior written consent of the copyright owner.

All rights reserved.