

# Digital Lives of Australians 2025

How the internet supports Australians and small businesses in a changing world

5th Edition (2021–2025)

# Contents





# -Introduction

#### Introduction

# CEO Foreword

Since auDA's *Digital Lives of Australians* (*Digital Lives*) research began in 2021, Australians have navigated incredible transformation in their lives, including the impact from a global pandemic, high profile data breaches that reshaped the cyber security landscape, and the emergence of generative Artificial Intelligence (AI), widely regarded as one of the most significant technological developments of the last decade.

Our 2025 *Digital Lives* Report provides unique insight into the key shifts in the online experiences of Australian consumers and small businesses across the five-year period (2021-2025) and culminates with a detailed picture of their digital lives in 2025.

The research shows that despite the evolution of the online landscape, the internet's role in our everyday lives remains indispensable. Since 2021 there has been a significant uplift in the number of working Australians who rely on the internet to perform their job (now 64%, up from 58% in 2021). Similarly, the number of small businesses that say their business could not function without the internet has continued to grow (now 51%, up from 44% in 2021). The internet has evolved into a crucial lifeline for regional Australians, with 57% now relying on the internet to function - surpassing metropolitan small businesses' reliance on the internet for the first time since the research began.

Sentiment toward and use of AI platforms has grown steadily in recent years. In 2022, research participants felt cautiously optimistic toward AI. In 2023, when generative AI entered public awareness, the excitement around its potential benefits was offset by concerns such as content accuracy, bias and data security. This year's research finds a majority of consumers and small businesses utilising the technology in their daily lives. Despite its increased use, concerns regarding the regulatory safeguards and transparency of AI applications remain strong.

This desire for enhanced regulation and data privacy protection is also reflected in attitudes toward digital identification (Digital ID), which is measured for the first time in this year's survey. A vast majority believe Digital ID providers must be regulated and held accountable for any privacy breaches that might occur (86% of those with a Digital ID and 80% of those without one).

Interestingly, though only 34% of those surveyed say they have a Digital ID (14% are unsure), government data shows over 55% of Australians hold a government issued Digital ID (myID). Raising public awareness and understanding of Digital ID providers and the current use cases may help to improve adoption, enabling more Australians to capitalise on the benefits of this digital innovation.



Dr. Bruce Tonkin auDA CEO

> For the first time, the 2025 research finds that a majority of Australians feel very confident using the internet (52%), rising from a low of 41% in 2023 that coincided with major data breaches in Australia. While a positive step forward, 58% of Australian consumers say online privacy and data security remains concerning. 83% are worried about their ability to keep ahead of cyber criminals, as they hear about the increasing sophistication of cyberattacks. Despite these concerns, only one-in-five small businesses report they have key cyber security practices and policies in place to keep their business and/or customers secure online. This underscores a critical need to educate and provide support to small business to strengthen their cyber security knowledge and practice to adequately protect themselves from evolving cyber threats.

In producing these insights auDA aims to share knowledge and generate discussion about online behaviours, threats and opportunities. Through this, we hope to encourage action within industry, business, government and educational sectors to support Australians to better harness online benefits and prevent online harms, thereby contributing to Australia's digital economy and ensuring an uplift in the value derived by Australians from the internet.

# About the research

This report presents the main findings from research conducted by SEC Newgate on behalf of the .au Domain administration (auDA) in February and March 2025 with a cross section of Australian adults (consumers) and small business owners or managers (small businesses). This is the fifth iteration of the *Digital Lives* study, which commenced in 2021.

The research comprised an online survey completed by 2,000 Australian consumers and 400 small businesses , a 3-day online discussion forum with 14 consumers and 12 small businesses, and qualitative in-depth interviews with 8 consumers and 7 small businesses.

#### Notes for the reader:

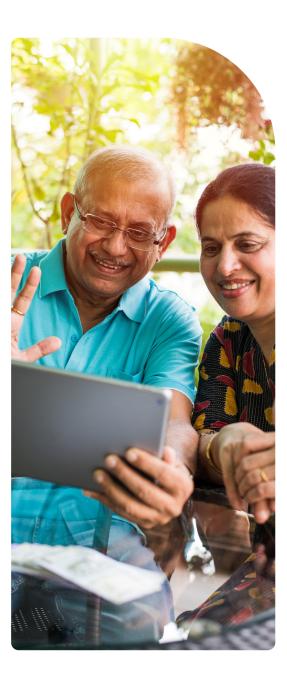
Where available and relevant, results from previous *Digital Lives of Australians* surveys have been included for comparison purposes.

Where time series data is reported as 'NA', this indicates that specific question was not asked that year.

Some total or NET results may not sum to 100% due to rounding.

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





# Five years of change

Now in its fifth year, auDA's *Digital Lives* research tracks how Australians' online behaviours and attitudes have evolved since 2021. Below are five key trends that reflect our increasingly rich and complex digital lives.



More Australians, especially in regional areas, now rely on the internet to work—most say they couldn't do their job without it.



Remote work is driving stronger belief in the internet's role in improving work-life balance.



Online security habits like multifactor authentication are on the rise, with growing user confidence despite ongoing cyber threats.

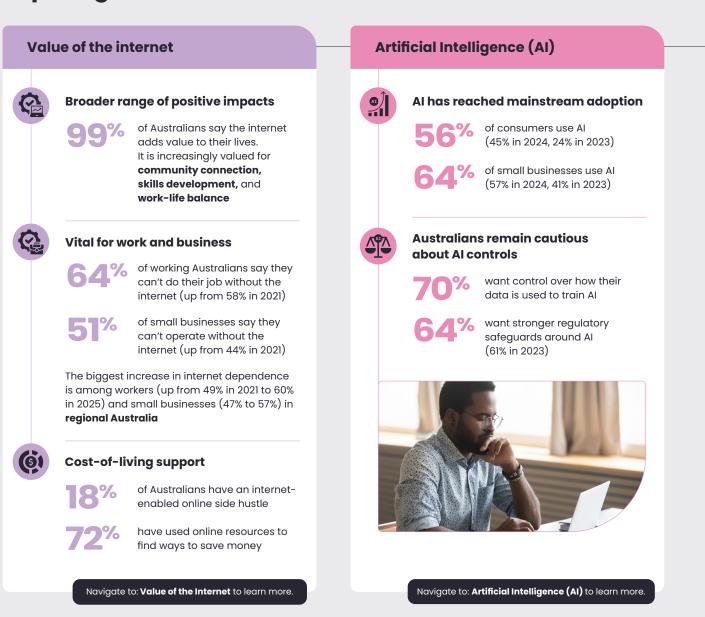


Most Australians now use Al—and with increased use comes greater demand for stronger regulation.



Tech is still seen as male-dominated and women continue to report lower interest and confidence in digital skills-though younger women (aged 18-34 years) are shifting this trend.

#### Top insights from 2025 This year, we explore five key areas of how Australians use the internet:



#### **Cyber security**

A

Confidence grows with increased cyber security behaviours



of Australians now feel very confident online (up from 41% in 2023)

**73**°

31%

use multifactor authentication (up from 55% in 2024)

use trusted government resources for cyber security information (up from 23% in 2021)

## Despite growing confidence, caution remains, and readiness lags

**67%** 

of consumers now avoid online activities due to security concerns (up from 58% in 2022)



of small businesses have a cyber policy or offer staff training—both down since 2021

small businesses invest nothing in cyber security

#### Digital ID\*



8

Adoption limited by lack of understanding

**34%** 

Digital ID (substantially lower than government estimates)

of Australians report having a

**Top barriers:** Not knowing how to set it up (40%) or that it exists (31%)

#### Privacy benefits recognised, but protection essential



with a Digital ID feel it improves privacy – vs 42% without one

86% ad

want providers regulated and accountable for breaches

\*'Digital ID' in this report refers to Australia's secure system for verifying identity online. It reduces the need to repeatedly share documents like passports or bank statements and is stored safely on a device. This differs from a digital driver's licence, which is just a digital copy of one ID. Digital IDs can be created through accredited providers like myID (formerly myGovID) or Australia Post. For more information: <u>digitalidsystem.gov.au</u>

Navigate to: Cyber security to learn more.

Navigate to: Digital ID to learn more.

#### **Digital skills**



#### Cyber security skills top the list

Cyber security is rated the **#1 skill needed in the future** for careers and businesses by:



of consumers (up from 77% in 2023)

### **69**%

6 of small businesses (up from 62% in 2023)



### Gender gaps remain in tech upskilling

Significantly more **men** than **women** are interested in developing digital skills such as **data science** and **software engineering** 

Younger women (18–34) show a much stronger interest in a career in STEM than women in older age groups



Navigate to: Digital skills to learn more.

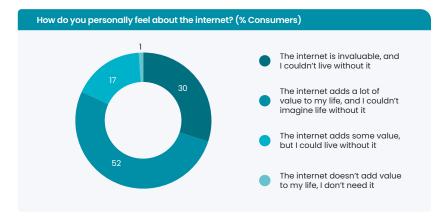


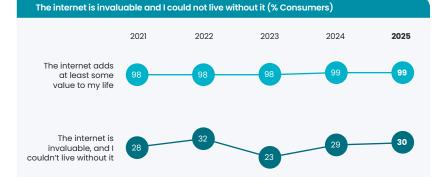
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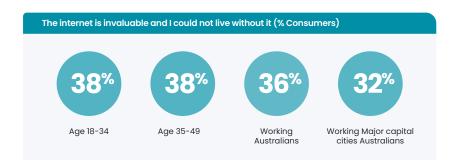
# The internet continues to have near universal value for Australians

Since auDA's *Digital Lives* research began in 2021, almost all Australians report that the internet adds at least some value to their lives. 99% feel this way in 2025, while more than half (52%) believe it adds a lot of value to their lives.

Around 3 in 10 Australians say they couldn't live without the internet, which has also remained relatively consistent over time. This sentiment is strongest among younger Australians, those who live in major capital cities, and those in the workforce.







# Working Australians are increasingly reliant on the internet

Nearly two-thirds of Australians currently in the workforce say they could not perform their job without the internet – 6% higher than in 2021 (58%) when COVID-19 caution remained and lockdowns were reintroduced in some states and territories. The rise has been sharpest among workers outside Australia's five major capital cities who are now almost as dependent on the internet as workers in metropolitan centres.

I could not do my job without the internet (% Consumers)					
	2021	2022	2023	2024	2025
All working Australians	58%	61%	51%	62%	64%
Workers in regional Australia	49%	53%	47%	56%	60%
Workers in Australia's major capital cities	60%	64%	52%	63%	65 %

## More Australians today are experiencing positive outcomes online

Virtual education and learning and accessing goods and services online remain the most impactful benefits of the internet. Consumers who access government services online most value the time saving it allows (67%), and faster access to the services (60%).

Participants also recognised the advantages of accessing certain services online. Those that access:



**mental health support services** online feel more comfortable doing so online (46%)



**aged care services** online value the ability to access a wider range of service providers (38%)

emergency and crisis support services online feel their privacy is better protected online (18%)

Compared to 2021, significantly more Australians feel the internet contributes to their experience of a better work-life balance.

Since 2021, there has also been a rise in the proportion of Australians who feel the internet supports them to connect with their local community and build their skills.

"The internet allows me to work from home rather than travel one hour each way to the office. It saves time and energy and makes my work-life balance better."

Female, 18-34, Metro VIC

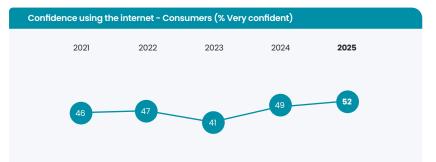


Impact of the internet on life as	pects – Con	sumers (% P	ositive impa	ct)	
	2021	2022	2023	2024	2025
Ability to learn new things	81%	80%	NA	83%	86%
Ability to access goods and services	80%	82%	NA	82%	85%
Ability to access government services	80%	79%	NA	78%	81%
Work-life balance	47%	57%	NA	61%	64%
Connecting with your local community	55%	53%	NA	55%	60%
Professional development and skills-building	NA	52%	NA	54%	59%
Having your say about causes you support	60%	53%	NA	50%	57%

# Australians are more confident online now than over the last five years

For the first time in the five years of *Digital Lives* research, more than half of Australians say they are 'very confident' using the internet.

Confidence has rebounded strongly from a low point in 2023 which coincided with a series of high-profile cyberattacks that affected many Australians.

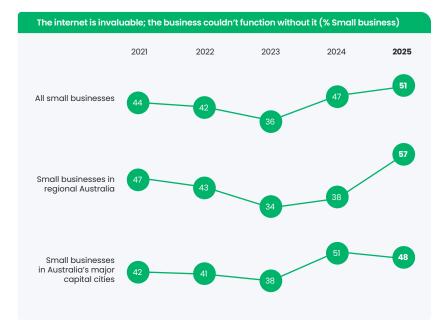


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## More small businesses than ever rely on the internet

The internet is increasingly valuable to Australian small businesses. Over half (51%) say their business couldn't function without the internet, up from 44% in 2021.

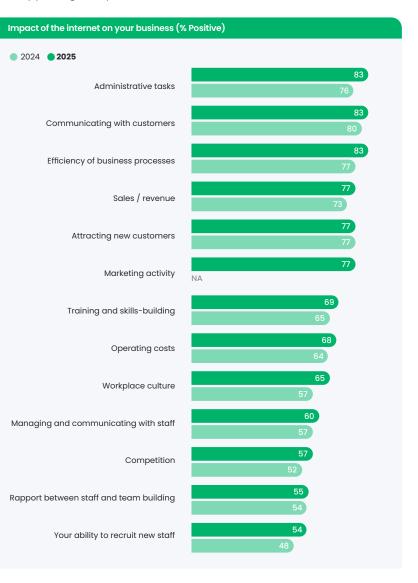
In 2025, the proportion of small businesses located outside Australia's major capital cities that rate the internet as invaluable to its function was 57% - the highest reported over the five-year period and is now higher than metropolitan small businesses.



"For my little business, digital life is everything because without using the internet I wouldn't be able to run it."

Micro business, Regional QLD

In 2025, small businesses recognise the increased value of the internet to their business. The largest increases in value over the past year relate to using the internet for administrative tasks, business efficiency processes and supporting workplace culture.



Value of the internet

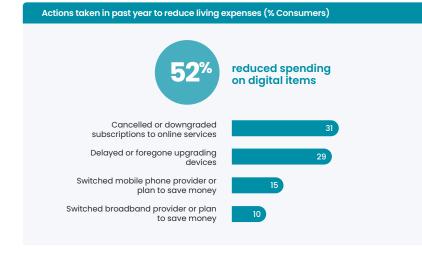
#### The internet and cost of living

Increased cost of living has dominated news headlines and impacted all aspects of Australians' lives in 2025, including their digital lives. While one in two Australians have reduced their spending on digital goods or services, Australians have also turned to the internet to ease cost-ofliving pressures. "I've been searching online for ways to offset the rising cost of living. I am thinking of starting a side-hustle to share information and tips that I have found helpful with other young families. I would need to improve my video production skills if I was going to do it as that's what's going to get people engaged."

Sole trader, Regional NSW







Almost a quarter of those surveyed (22%) report they started a side hustle or increased time spent on an existing side hustle to generate additional income to help offset cost-of-living pressure. The large majority say it would not be possible without the internet (83%).



2. The value of the internet continues to grow

Four in five Australians with a side hustle say **their side hustle would not be possible without the internet** (83%)

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## Many Australians are using online tools and resources to find ways to save money

Price comparison websites and online coupon codes, vouchers or cashback offers are the most widely used online resources to help with cost of living. Younger Australians, whose earning capacity in many instances is lower, report being significantly more likely to use these tools and resources. However, cost of living affects all age groups and more than a third of those over 70 years of age report using price comparison websites.

This highlights the valuable role the internet plays as a resource for managing household expenditure and reinforces the need for accessible digital tools to support Australians during economic challenges.

Top online resources used to help with cost of living (% Consumers by Age)						
	All Consumers	18 - 34	35 - 49	50 - 69	70 plus	
Price comparison websites	36%	35%	42%	35%	32%	
Online retailers that offer deals or discounts	28%	29%	34%	26%	20%	
Coupon codes for online purchases	28%	35%	36%	22%	12%	
Apps with price alerts	23%	22%	25%	24%	18%	
Websites that offer cash back on purchases	21%	27%	31%	12%	7%	
Online vouchers or gift cards that can be purchased for less than the voucher value	20%	23%	30%	15%	10%	
Use at least one online resource to help with cost-of-living	72%	81%	82%	64%	50%	

"I've been using AI tools to help with cost of living, asking questions to understand the best deals like which banks in Australia provide the best interest rates. It's helped me narrow down my search results."

Male, 18-34, Metro VIC



#### Digital lives in focus: Kiara

# The value of the internet in challenging times

#### Female, 18-34, Regional VIC

Key data points:

- Considers the internet invaluable

   could not live without it
- Internet has a positive effect on mental health and wellbeing and ability to learn new things
- Uses the internet to access primary healthcare online, considers main benefit being faster to access the service

Kiara became chronically ill in 2023. She has used digital technologies during her recovery to help manage her illnesses.

For example, Kiara uses a smart watch to monitor her heartrate during daily activities to avoid over-exerting herself, which is connected via the internet.

As her ongoing health issues has meant she had to take time off work, digital technologies have also allowed her to stay up to date with work communications in preparation for her return.

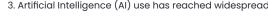
"

I don't know what my life would look like without these technologies. A smart watch has allowed me to pace myself in my recovery so I'm doing a lot better now.

"



# 3. Artificial Intelligence (AI) use has reached widespread adoption



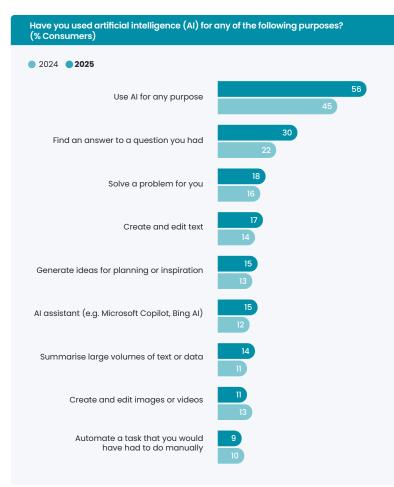
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Artificial Intelligence (AI)

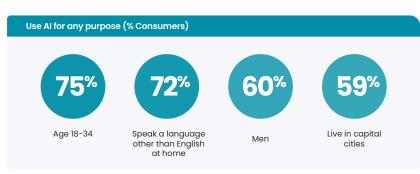
#### Majority of Australians now using generative AI

The majority of Australians (56%) now report using AI, a significant uplift in the past year (up from 45% in 2024).

Consistent with 2024, the main purpose for using AI is to find answers to problems and queries - indicating AI continues to be used as an alternative to traditional search engines, in increasing numbers. There has also been a slight increase in the use of AI assistants, and using AI to create, edit or summarise text.



Al use is highest among younger Australians, those who speak a language other than English at home, men and those who live in big cities.



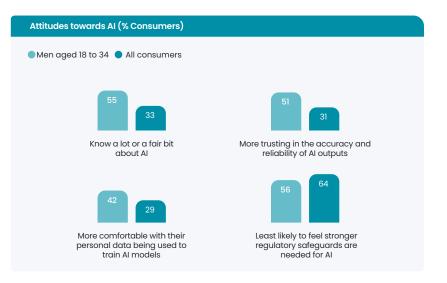
Participants in the qualitative research shared details of other specific ways in which they are using AI, including:



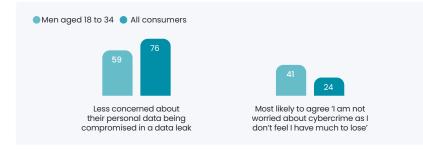
The rise of AI has driven positive increases in the internet's value for small business, for example, helping with administrative tasks, creating efficiencies and marketing endeavours.

# Young men are the most eager adopters of AI, but may be leaving themselves vulnerable

Overall, more men (60%) than women (52%) are using AI and men aged 18 to 34 years are the biggest user group (79%). They report notably different attitudes towards AI, as shown below.



The open attitude of young men towards AI is also apparent in their attitude towards cyber security where they are:



This is despite being the least confident that they have safeguards in place to keep their personal data secure online (49% vs 56% of all consumers).

## Factors influencing acceptance and use of Al

Over half of Australian consumers surveyed say they are using Al in their daily lives, indicating it has become embedded into mainstream technology use.

During the qualitative *Digital Lives* research, discussions revealed examples of people who were influenced to try AI because of 'social norming', that is, recognising others are using AI tools in their business, work and personal lives, they began to use them too.

Most people who use AI acknowledged that AI technology is still evolving and that practice refining AI prompts can improve the outputs from AI tools. Despite this, many rated high satisfaction levels with the creativity, usefulness and timesaving ability that AI provides, and now use it regularly.

As AI models continue to develop and become more accurate, and as people become more familiar with AI technologies, it is likely that use of AI will continue to grow.

#### Digital lives in focus: Mirna



# Using AI to manage teachers' workloads and benefit students

#### Female, 35–49, Metro VIC

Key data points:

- Could not do her job without the internet
- Uses AI daily at work, occasionally in personal life
- Uses AI to: summarise data, create/ edit content, answer questions, generate ideas, automate tasks

Mirna, a teacher at a private secondary school, uses AI up to five times a day. Her school actively encourages AI use, and Mirna relies on it for admin tasks like drafting meeting actions, follow-up emails, lesson plans, and differentiated activities for students. This has improved her productivity, quality of work, and problem solving.

Her school is also creating custom ChatGPT-powered chatbots for students to use for purposes such as exam revision. Mirna sees AI as a way to remove barriers and support creativity for students.

She believes AI is part of students' lives whether schools allow it or not. By using it herself, she feels better equipped to recognise AI-generated student work.

> Being able to use AI when preparing classroom materials really helps my creative process. I use it to come up with ideas for activities, generate images, and edit instructions for students.

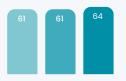
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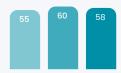
#### A degree of caution remains despite more Australians using Al

While use of AI has increased rapidly since 2023, attitudes about AI have remained constant over this time. Around two-thirds (64%) of Australians would like to see stronger regulatory safeguards around AI and nearly three-in-five (58%) remain concerned about AI replacing human workers; both measures are essentially unchanged since 2023.

Do you agree or disagree with the following statements about artificial intelligence (AI)? - Consumers (% Strongly or Somewhat agree)

#### 2023 2024 2025





I would feel more comfortable about artificial intelligence (AI) if there were stronger regulatory safeguards around it

Artificial intelligence (AI) will replace human workers and lead to unemployment

"The government should pass legislation that when AI generates images, sounds and ideas, it is made very clear that it is AI and which AI tool has been used."

Male, 50-69, Metro VIC



"

"My biggest concern is when AI looks like real people. We won't know what is real and what is AI."

Male, 50-69, Metro VIC

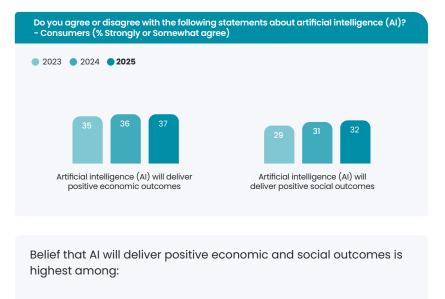


"I think AI can really help society as long as we continue to use it responsibly. Employers should be encouraging workload reduction through AI but should provide training on how to use it effectively and tech companies need to ensure they are securing users' privacy."

Female, 18-34, Regional QLD



Many Australians remain unconvinced that AI will deliver positive economic and social outcomes. Only around a third agree this will happen, consistent with the past two years' results.





# Views on the use of individual data to train AI algorithms

A common concern among consumers about AI is the way in which user data is used to train and build their intelligence. The large majority of Australians say they would like to have some control over what data of theirs might be used to train AI models (70% strongly or somewhat agree).

Relatively few are comfortable with their data being used to train Al models even in deidentified form (29% are comfortable and 42% are uncomfortable). This is likely due, at least in part, to a lack of trust that Al companies have appropriate safeguards in place to handle user data (only 37% agree this is the case, and 35% disagree).

These attitudes have been shaped by experiences with other social media platforms. Online tracking has become normalised for many. Participants in the qualitative research noted how they were targeted with online advertising that related to a topic they had recently viewed on the same social media platform.

There is recognition among respondents that AI tools are more useful once provided a certain amount of data as they can then tailor outputs to the needs and preferences of the user. "Al gets more intelligent as you feed it information. My shopping is made easier with my history being displayed. My likes and dislikes are saved. A customer feels valued this way when shopping online."

Female, 35-49, Regional WA



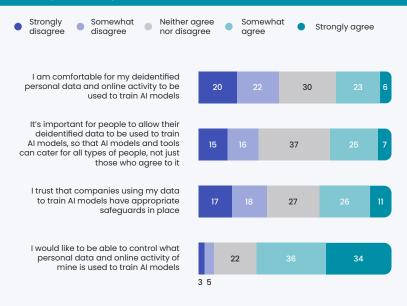
"Tracking by social media platforms has become so deeply embedded in our online interactions that we rarely stop to question it. While it offers convenience and personalised content, it also raises significant concerns about privacy and <u>autonomy</u>."

Female, 18-34, Metro VIC

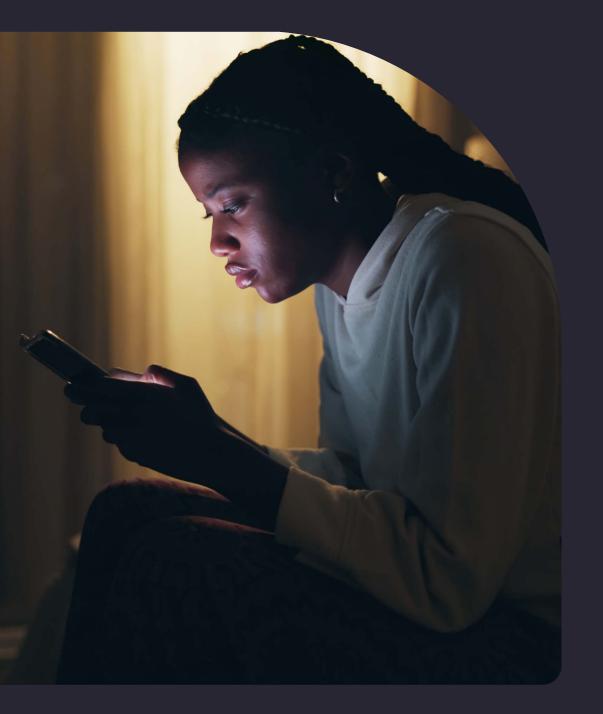


People are concerned about receiving false or irrelevant information due to previous accidental activity or generalising data from other users. Another concern relates to the security of personal information collected by AI tools, with some fearing what might happen if their personal data was leaked or provided to third-parties without their permission.

Agreement with statements about the data used to train artificial intelligence (AI) models (% Consumers)



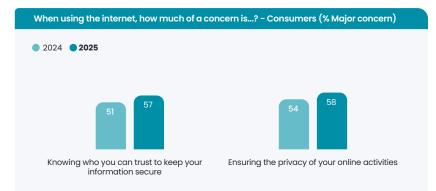




4. Concern about cyber security continues to rise

#### Australians remain alert to cyber security threats

A series of high-profile cyberattacks on major organisations in 2022 and 2023 thrust cyber security into the mainstream, impacting millions of everyday Australians. Several years on, these events and the persistent threat of cyber attacks remain front-of-mind for many. In 2025, cyber security concerns rose further, with 58% of those surveyed saying online privacy is a *major* concern in their online lives.

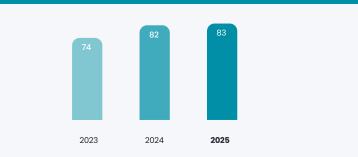


"I have security software installed which I think keeps me secure to a degree, but cyber criminals will always try to find new ways to get into your computer. They keep upgrading their attacks so I am a bit worried about what they can do."

Male, 50-69, Regional NSW

There is a widely held perception that cyber criminals are becoming more sophisticated (83% agree) and staying ahead of cybercrime is a difficult, yet crucial task, given cyber security threats continue to evolve.

Cyber criminals are becoming smarter and more sophisticated, so it is important to stay up to date with the latest online security trends (% Strongly or Somewhat agree)





# Confidence in online security precautions on the rise

Heightened concerns about online privacy and data security have led Australians to strengthen their cyber security capabilities. People are more confident undertaking behaviours to strengthen their defence against cyber security threats than they were in 2022.

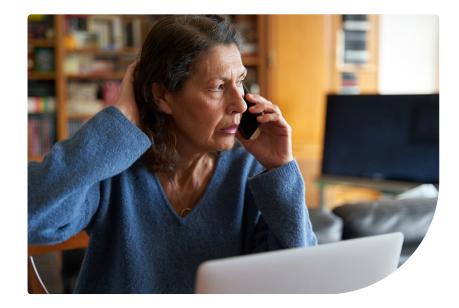
How confident are you in each of the following? (% Very or Somewhat Confident)					
	2022	2023	2024	2025	
Creating strong passwords/ passphrases for websites or apps	77%	NA	78%	81%	
Spotting an online scam	72%	NA	72%	74%	
Keeping your personal information secure online	67%	NA	67%	70%	
Finding reputable information on how to be secure online	63%	NA	66%	68%	
Spotting misinformation or 'fake news'	65%	NA	64%	67%	
Safely backing up your data and files	61%	NA	63%	65%	
Knowing where to report a data security breach	47%	NA	52%	50%	

Almost three quarters (74%) of Australians feel confident in their ability to spot an online scam.

Consequently, there is a view that online scams are less of a concern than other cyber security threats, such as identity theft, account compromise and data breaches. Unlike spotting and avoiding scams, there is a sense that individuals have less control over these other threats. "The cyber security threats I'm most worried about are my accounts being compromised, identity theft and data breaches because they can have long term effects and can be really hard to fix. Scams and phishing are still a risk but feel easier to avoid."

Female, 35-49, Metro VIC





# In 2025, most Australians exercise some degree of vigilance with cyber security

Almost all Australians (90%) continue to take steps to reinforce their online privacy and data security. Most notably there has been a significant uptick in use of multifactor authentication since 2024.

Online security behaviours – Consumers (% Do currently)		
	2024	2025
Use multifactor authentication where available	55%	73%
Maintain up-to-date antivirus software on your computer	61%	59%
Adjust settings on social media platforms to restrict who has access to your content	51%	55%
Have a hardware firewall installed for your home computer network	39%	35%
Apply password protection/encryption to digital documents	29%	28%
Use a free password manager	24%	28%
Use pseudonyms or avatars instead of your real name or photograph when creating an online profile	28%	28%
Undertake a cyber security 'health check' to assess the strength of your cyber security measures	28%	26%
Use a password manager that you pay a fee to use	14%	12%
Do at least one of the above online security actions	88%	90%

Almost three quarters (73%) of Australians say they currently use multifactor authentication, a significant increase from just over half (55%) a year ago. Those who use it are significantly more likely to feel confident in the effectiveness of their cyber security precautions.



#### The role of industry

The significant uplift in use of multifactor authentication is a positive step towards improving online security practices. This increase is likely, in part, attributed to more digital platforms and services making multi-factor authentication a requirement.

This highlights the effectiveness of industry-led initiatives to support Australians to adopt better cyber security behaviours. It also adds emphasis on the importance of industry, government and small business adopting a <u>Secure by Design</u> approach for digital technology. By taking the responsibility of cyber security away from the end user and placing it on those responsible for creating it, it helps to create a more secure online environment for all.

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#### In order to minimise their exposure to potential cyber security risks, more Australians are avoiding certain online activities.

In 2025, despite a reported increase in cyber vigilance, two-thirds (67%) of Australians report avoiding at least one online activity due to cyber security concerns, up from 58% in 2022, and the highest since the survey began.



The use of generative AI tools remains the activity most likely to be avoided for security reasons. Online dating, virtual assistants and selling products via online marketplaces are among the activities that are increasingly being avoided.

Avoidance of online activities varies between cohorts – some notable differences include:

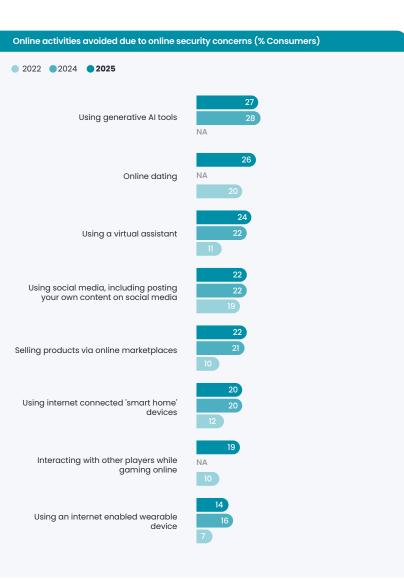


Men (25%) are more likely than women (20%) to avoid using social media for security reasons

English-only speakers are more likely than those who speak another language at home to avoid using social media (23% vs 15%) and to avoid interacting with others while gaming online (20% vs 12%)



Women (28%) are significantly more likely than men (23%) to say they avoid online dating for security reasons



# Small business cyber security concerns increase but do not lead to heightened practices

The majority (60%) of small businesses have at least one process for monitoring their cyber security. This is higher than 2021 (53%) but has remained at a similar level over the past few years.

However, only around one-in-five small businesses report having formalised their cyber security processes – 20% have a cyber security policy, and just 18% audit their cyber security practices on a regular basis.

Which of these things does yo	ur business d	o in relation	to cyber secu	ırity? (% Do o	currently)
	2021	2022	2023	2024	2025
Employ someone with responsibility for IT and online security	NA	21%	NA	21%	20%
Use an external IT and online security consultant	NA	NA	NA	21%	20%
The business has a cyber security policy	27%	20%	NA	21%	20%
Regularly talk about cyber security with others in the business	33%	33%	NA	31%	24%
Provide staff with regular cyber security training	22%	22%	NA	20%	21%
Audit cyber security practices and procedures on a regular basis	22%	16%	NA	19%	18%
Have at least one formal cyber security practice	53%	59%	NA	58%	60%

There are various pressures on small businesses that may prevent them from dedicating time and resources to formalised cyber security practices, particularly in the context of the constrained economic environment in the past few years. However, there is a stark difference between sole traders and employing small businesses when it comes to introducing cyber security practices:

#### Have at least one formal cyber security practice (% Small businesses)



This indicates small businesses implement more formalised processes as they grow in size, including in relation to cyber security. The research finds that small businesses with 5-19 employees are significantly more likely to do most of these things.

#### Does business size matter?

Compared to small and micro businesses, sole traders feel less confident their business has adequate safeguards in place to keep their online data secure. Despite this, sole traders are significantly less likely to implement cyber security measures.

Notably, sole traders are less likely to attribute cost as a barrier to upgrading or improving their online security.

The optimism bias – where people tend to underestimate the likelihood of a negative event happening to them, can result in people ignoring the potential of unwanted outcomes. In the case of cyber security, this can stop people taking preventative measures and may explain why sole traders are less likely to do so. This is supported by our qualitative findings, where many sole traders reported the main reasons they felt they didn't need formal cyber security measures was due to the small size of their business.

# Digital lives in focus: Raf

# Small business owner prioritises staff cyber training

#### 5-19 employees, NT

Key data points:

- Major concerns: protecting business privacy, securing data, avoiding scams
- Current measures: password managers, multifactor authentication, limited social media access, cyber security policy, regular staff training and discussions
- Annual spend: approx. \$6,500 on virus protection, training, and a consultant

"

• Plans to increase spend in 2025

Raf, a cafe owner in the Northern Territory, employs staff who use the business computer for orders, checklists, and admin tasks. He once saw cyber security training as optional-until a malware attack hit the café when an employee clicked a malicious link, freezing the system. The incident changed Raf's outlook. Now, all staff must complete mandatory cyber security training through the local TAFE. The training, paid for by the business, helps staff identify suspicious activity and respond to potential scams. Each employee who completes the training receives a statement of attainment.

Despite tight margins, Raf believes prevention is worth the cost and plans to increase investment in cyber security this year.

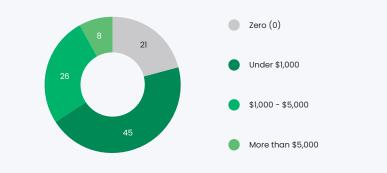
> Rather than counting the cost of a cyberattack, I'd rather be proactive and invest money to make sure one doesn't occur.

> > ,,,

#### Despite cyber security concerns, many small businesses do not invest in heightening their cyber security practices

The median spend on cyber security across all small businesses is \$300 per year. This varies significantly by business size and around a fifth (21%) of all small businesses say they don't spend any money on cyber security.

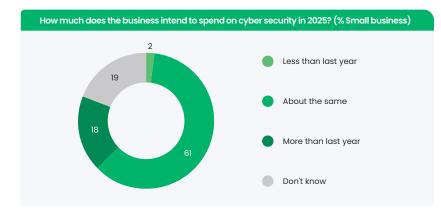
Approximately how much does the business spend each year on cyber security? (% Small business)



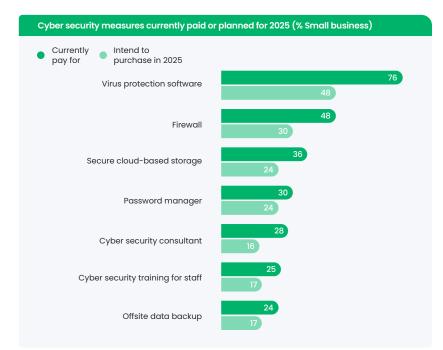


Looking ahead, most small businesses intend to maintain (61%) or increase (18%) their spend on cyber security measures in 2025.

Small businesses with 5-19 employees, who are the biggest spenders currently, are most likely to increase their spend this year (33% vs 21% of micro and 10% of sole traders).



Virus protection software remains the highest priority for cyber security spend. Firewalls, password managers and cloud-based storage are also higher considerations this year, while relatively few small businesses are likely to spend on cyber security consultants or training.



# Digital lives in focus: Anne



#### Cyber insurance felt to safeguard against productivity loss

#### 5-19 employees, Regional NSW

Key data points:

- Spends ~\$5,000 annually on cyber security
- Cyber security measures used: password manager, MFA, document encryption, antivirus software, firewall, external IT support

Anne runs a manufacturing business and decided five years ago to purchase cyber insurance. With cloud-based systems in place, she saw it as essential for protecting the business from potential hackingrelated disruptions. The insurance helps cover financial losses, business interruption, and system recovery. Anne also subscribes to monthly external IT support for software updates, system patching, data backups, and email filtering. She's satisfied with her current protections and plans to maintain the same investment in the year ahead.

#### "

Cyber insurance is to cover us in case we're hacked, to protect us as a business for costs we may incur. That includes the time it might take us to re-input information back into our systems, costs associated with our IT consultants working on recovering our data, and the loss of productivity because we might not be able to do our work while we try to resolve the hack.

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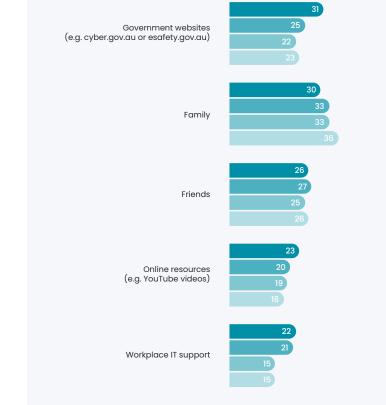
#### Growing awareness of trusted cyber security resources

Cyber threats have become more prevalent post-COVID and Australians are increasingly conscious of the need to protect themselves against them.

They believe that misinformation, disinformation, use of deep fakes and online scams are becoming more commonplace, and so they are turning to reliable and trusted sources of information and advice about their online security.

The 2025 survey results show an uptick in use of government sources of information about cyber security. Nearly one third of Australians are now likely to consider visiting government websites such as cyber.gov.au to help inform their cyber security behaviours, which may be a result of heightened awareness of cyber threats and ongoing public awareness campaigns from government.

Despite this increase, at 31%, only a minority of Australians are using official cyber security websites, so there remains a need to continue building awareness of these resources.



Sources likely to be used for information and advice about online security (% Consumers)

2021 ●2022 ●2024 ● 2025

Google (or another search engine)



# Overcoming complacency to further strengthen cyber security

Despite high levels of concern about cyber security threats, attitudes do not always correlate with behaviours. Survey respondents recognise using more complex passwords, changing passwords regularly and not using the same password across multiple sites or accounts as the most effective cyber security behaviours. Yet significantly fewer regularly change their passwords or avoid using their passwords for multiple accounts.

A lack of time and the perceived effort to implement cyber security measures are the main barriers that prevent people from improving their cyber security, even for simple actions such as updating passwords.

#### Cyber security behaviours - Perceived usefulness and Actual behaviour (% Consumers)

- Considered helpful to strength online security
- Behaviour undertaken in the past 12 months



Use more complex passwords	Change passwords more regularly	Avoid using the same password for multiple sites or	Avoid connecting to public Wi-Fi	Avoid saving credit card details in your device or web browsor	Avoid saving passwords in your device or web browser
		accounts		browser	

#### The risk of cyber security complacency

While survey results indicated Australians are increasingly concerned about cyber security and are exercising greater vigilance, qualitative discussions revealed a risk of complacency due to 'data breach fatigue'. Nearly all qualitative participants had experienced a data breach or attempted scam, yet for many there was limited impact. This lack of adverse consequences, combined with an attitude that data breaches are due to 'bad luck' and often beyond individual control, can appear to result in increased complacency. As part of the research, participants used tools to check if their data or passwords had been compromised. Almost all found compromised accounts – ranging from a few to as many as 285 accounts. While some immediately updated their passwords, others admitted they were unlikely to take further action.

**Reasons included:** 

- Feeling it's too difficult to update all passwords
- Believing breached accounts were unimportant or inactive
- Thinking there is no inherent risk because "nothing bad has happened"

Increased education for consumers and small businesses about simple, achievable and effective cyber security practices, coupled with increased Secure By Design practices that ensure security is built into new applications, services and products will support better data security in the online environment.

[285 compromised passwords] "This makes me feel a bit concerned but it's my fault as I use similar passwords. It's way more than I was expecting but it isn't for important accounts."

Female, 18-34, Regional VIC



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# 5. Digital ID in Australia

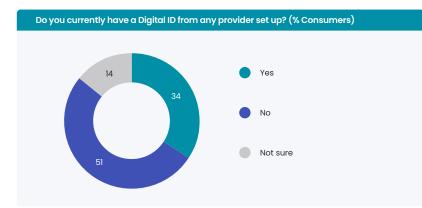
#### How is Digital ID benefitting Australians?

Digital ID is a technology that enables identity verification online without having to share sensitive documents such as passports and birth certificates.

Digital ID is issued by accredited providers and therefore differs from other forms of electronic identification such as a digital driver's licence.

According to government data, some 13 million Australians – more than half the adult population – are registered with myID (the Digital ID platform operated by the Australian Government). Other Digital ID providers such as Australia Post have been able to provide Digital ID since December 2024<sup>\*</sup>.

Our survey results show only around one-in-three (34%) Australian consumers report having a Digital ID from any provider, and one-inseven (14%) say they are not sure if they have a Digital ID from any provider, suggesting there is confusion about what a Digital ID is and if people using myID are aware they have a Digital ID.



More than half of those who report having a Digital ID from any provider use it for accessing government services (58%). By contrast, relatively few use their Digital ID to provide proof of identity online (22%) or in person (14%). This could indicate a lack of awareness of how and when Digital ID can be used at present in Australia.

Agreement with statements about Digital ID (% Consumers)					
Strongly or Somewhat agree	Those who have Digital ID	Those who do not have Digital ID			
Using a Digital ID would be a more convenient way of accessing government services	85%	61%			
Using a Digital ID would be more convenient when submitting applications or opening accounts	82%	61%			
Digital ID can make your life easier overall	81%	54%			

Most Digital ID users agree it is a more convenient way to access government services (85%) and verify identity when submitting applications or opening accounts (82%). Non-users are less likely to agree with these statements, but around three-in-five (61%) do agree, suggesting convenience would be a strong motivator for adoption.

"I like the idea of having everything in one place, it seems very convenient. It would mean I don't have to search for all my IDs. I can enter them once and set and forget."

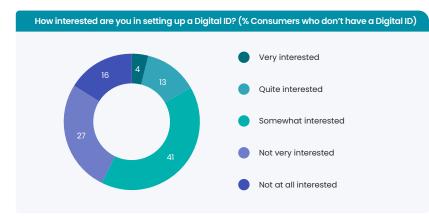
Female, 18-34, Metro VIC



\*For more information about Australia's Digital ID system visit: digitalidsystem.gov.au

# Understanding the barriers to setting up a Digital ID

Among those who don't have a Digital ID, interest in setting one up is mixed. While the majority are at least somewhat interested, only 4% have very strong interest, and around two in five say they have little or no interest in setting up a Digital ID.



The main barriers preventing non-users from setting up a Digital ID are not knowing how to set it up (40%) or not being aware it exists (31%).



Concern about the security of personal information within the Digital ID system also appears to be a barrier – more non-users are worried about their personal data being stolen or misused. Meanwhile, those who have Digital ID are significantly more likely to feel it is a far more secure way of verifying identity than providing personal documentation.

Agreement with statements about Digital ID (% Consumers)					
Strongly or Somewhat agree	Those who have Digital ID	Those who do not have Digital ID			
I worry that my personal information could be hacked or stolen through Digital ID	66%	71%			
I worry that my personal information could be used for other unintended purposes through Digital ID	63%	70%			
I would feel that my privacy is more secure using a Digital ID instead of providing copies of personal documents	73%	42%			

These results suggest that building awareness and understanding of Digital ID systems, including how data is secured within those systems, will support broader adoption. Indeed, simply learning about Digital ID during the *Digital Lives* research was enough to encourage some to look into it further. "With Digital ID I've got it all in one place. Whether or not that's a good thing, I'm not sure. If it gets hacked I'll be exposed, because all my personal documents are in there. But I find it convenient that I don't have to print paperwork, photocopy stuff, get it signed by anyone. It's all online and I can access it anytime and anywhere."

5-19 employees, NT



"Seems very convenient, it means I don't have to search for all my IDs, I can enter them once and set and forget. But if this ever got leaked a large number of accounts of mine would be impacted. I would need more information around privacy, what to do if you think you have been compromised, and how they will assist if that happens."

Female, 18-34, Regional VIC



# Regulatory safeguards are expected to secure the Digital ID System

A clear majority of Australians, regardless of whether they have Digital ID or not, feel the Digital ID system must be regulated and providers held to account for privacy breaches.

There is also wide agreement that the Digital ID system should be voluntary, allowing people to use alternative methods if they prefer.

Agreement with statements about Digital ID (% Consume	ers)	
Strongly or Somewhat agree	Those who have Digital ID	Those who do not have Digital ID
Digital ID providers must be regulated and held accountable for any privacy breaches that occur	86%	80%
Digital ID systems should be voluntary, not compulsory	73%	75%





# 6. The changing dynamics of the digital skills workforce

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#### Overcoming misconceptions: encouraging more Australian women to pursue careers in IT and technology

In Australia, women comprise a small percentage of the IT workforce – especially in leadership positions<sup>1</sup>. There is also a substantial gender pay gap in the tech industry<sup>2</sup>. This lack of representation can limit innovation and the development of technology that caters to a broad and diverse user base.

The research finds substantially more men than women are interested in developing digital skills – this is true of all eight skills we asked survey respondents.

Interest in developing digital skills and IT / Technology roles – Consumers of working age (% At least somewhat interested)					
	Men (all)	Women (all)	Women (18-34)	Women (35-49)	Women (50-69)
Web and app development	60%	41%	53%	39%	25%
User experience design	58%	42%	50%	42%	28%
IT support	57%	40%	47%	36%	31%
Cyber security analyst	57%	38%	43%	37%	30%
Data science	57%	37%	46%	39%	23%
Network and systems administration	54%	40%	48%	38%	27%
Software engineering	55%	32%	39%	33%	22%
Al engineering	53%	34%	43%	33%	20%

Women are most interested in UX design, web and app development, IT support and systems administration skills and least interested in software and AI engineering.

Younger women (aged 18-34) who are earlier in their career journey are significantly more interested in developing all digital skills than their older counterparts.

Women are more likely than men to have doubts about whether a career in IT and technology would be right for them. Almost threequarters (72%) of women believe they don't have the technical skills required for a career in IT and technology compared to just 54% of men; and 60% of women feel they don't fit the norm of a 'typical IT worker' vs 48% of men who believe this about themselves.

#### Agreement with statements about working in IT and technology – Consumers of working age (% Strongly or Somewhat Agree)

	Men	Women
I don't have the required technical skills	54%	72%
Technology moves too quickly and it is too difficult to keep pace with changes	48%	61%
I don't fit the norm of a typical 'IT worker'	48%	60%
I'm not interested in working in IT / technology	45%	63%
I believe it would be too monotonous	40%	49%
The IT / technology sector is too male dominated	34%	49%
I wouldn't fit in with the workplace culture	37%	45%
There are a lack of role models or mentors who I can look to for guidance and support	35%	41%

1. 23% of Australia's IT workforce are female according to the 2020 Australia's STEM Workforce Report released by the Office of the Chief Scientist (<u>https://www.chiefscientist.gov.au/news-and-media/2020-australias-stem-workforce-report</u>)

2. Women in Australia's STEM workforce are paid around 20% less than their male counterparts, according to Women in Technology (https://wit.org.au/about/making-a-difference/)

However, a majority of women (57%) and almost half of men (48%) recognise the value that diversity can bring to the IT industry for innovation and problem-solving. While 4 in 10 women (38%) feel online platforms would better meet their needs if more women were involved in their development, a third (33%) of men also feel this way.

"I think IT and technology is viewed as a male-dominated industry, so many women aren't willing to try it, even if they have an interest."

Female, 18-34, Regional QLD



Qualitative discussions indicated that there is a view that women interested in IT have lacked support to pursue it as a viable career option, but there is a feeling this may be starting to shift, especially in schools. Many men and women feel encouragement must start at a young age through things like school subjects. "I guess there's the challenge of not seeing many women in tech roles, which makes it harder for women to picture themselves there."

Female, 35-49, Metro VIC



Data shows that the younger generation of women entering their careers are more positive about careers in technology. Compared to older generations, they are less likely to agree with statements that reinforce the barriers underpinning the IT gender gap.

#### Agreement with statements about working in IT and technology – Consumers (Women by Age) (% Strongly or Somewhat Agree)

	18-34	35-49	50-69
I don't have the required technical skills	67%	75%	77%
Technology moves too quickly and it is too difficult to keep pace with changes	53%	62%	75%
I don't fit the norm of a typical 'IT worker'	52%	64%	68%
I'm not interested in working in IT / technology	58%	66%	67%
I believe it would be too monotonous	46%	54%	52%
The IT / technology sector is too male dominated	54%	51%	37%
I wouldn't fit in with the workplace culture	45%	46%	44%
There are a lack of role models or mentors who I can look to for guidance and support	40%	42%	43%

#### The importance of shifting perceptions

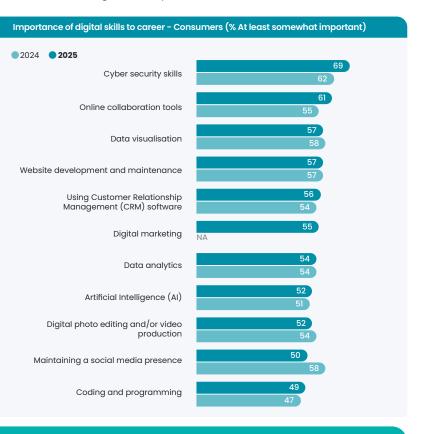
Challenging these beliefs and shifting perceptions of what an IT worker or a career in the IT sector looks like is imperative to narrow the gender gap.

Emphasising the variety of roles in the technology industry and profiling the work that other women are doing can help shift perspectives and encourage more women to look to careers in the IT industry. Current efforts being made in this space do appear to be making headway with younger people and should continue doing so as new initiatives and programs to encourage women in technology continue to be a focus.



# Digital skills workers with strong cyber security capabilities are increasingly valuable

More than two-thirds (69%) of Australians of working age feel cyber security skills are at least somewhat important for their job today or their future career – a significant uplift from 62% in 2024.

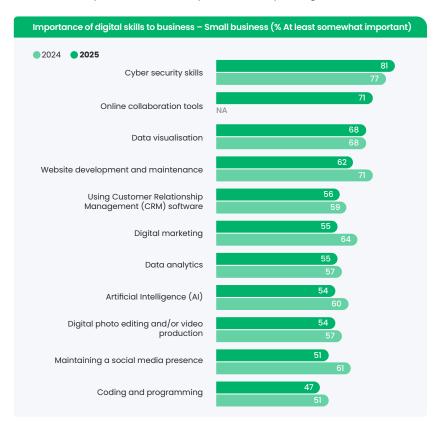


"I want to upskill. I've been self-learning penetration testing. IT has many fields, and I want to explore them because I see cyber security as a strong future career."

Female, 18-34, Metro VIC



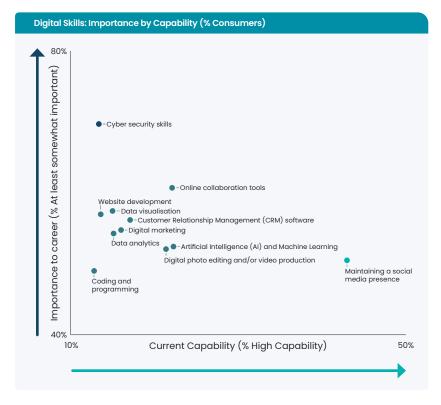
The perceived importance of cyber security skills is even higher among small businesses, with 81% rating it at least somewhat important for their business today or in the future, up from 77% a year ago.



By contrast, some digital skills are considered *less* important this year than they were in 2024 – most notably maintaining a social media presence and digital photo or video editing. While more consumers consider being able to online collaboration tools important, small businesses are less likely to consider this important in 2025.

## Skills gap in cyber security is an opportunity for future digital skills workers

Cyber security skills among working Australians remain low relative to its importance. There is a growing challenge for industry to boost cyber security capabilities. In the meantime, workers with cyber security skills will likely find themselves in high demand so long as this skillset remains scarce.



Only 17% of working men, and 10% of working women feel they have high capability with cyber security skills. These figures highlight a clear opportunity for aspiring tech workers to forge a career supporting the digital lives of Australians and Australian businesses.

#### **Research Methodology**

#### **Online survey**

The survey was completed by 2,000 Australian adults (aged 18+) and n=400 small business owners or managers. Participants were sourced from an opt-in market research panel.

Quota targets were set to ensure coverage of major demographic and business profile segments. Both samples were weighted to reflect their respective population profiles.

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. Sample breakdown below:

		Consumers	Small businesses
Total: 2400		2000	400
Gender	Male	987	
	Female	1013	
Region	5 Major Capital Cities (Sydney, Melbourne, Brisbane, Adelaide, Perth)	1305	240
	Rest of Australia	695	160
Age	18-34	533	. <u></u>
	35-49	534	
	50-69	533	
	70+	400	
Personal characteristics	CALD	245	
	Employed / working	1239	
Business characteristics	Sole trader		199
	Micro business		121
	Small business		80

#### **Online discussion forum**

Following the survey, 14 consumer and 12 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 a deeper understanding of information provided by the participants in the survey.

#### In-depth interviews

The final stage comprised 15 qualitative in-depth interviews, conducted with 8 consumer and 7 small business participants from the online forum to further explore their individual experiences, attitudes and behaviours.

#### **Research questions**

Many of the survey questions were retained from previous *Digital Lives* surveys to enable time series comparisons. New questions were included in this year's research to explore and measure:

- · The impact of cost-of-living pressure on online behaviour
- Small business spending on cyber security
- Reactions to experiencing a data breach
- Views on data used to train AI models
- Awareness and use of Digital ID
- Attitudes towards working in IT and technology

#### 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 <u>auda.org.au/news-insights/research-reports/digital-lives-of-australians</u>

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