

# Tech Jobs Update

May 2023



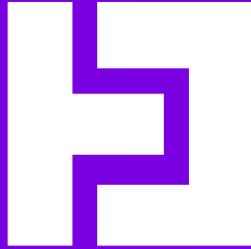
## About the Tech Council of Australia

The Tech Council of Australia is the peak industry body for Australia's tech sector. Providing a trusted voice for Australia's technology industry, with almost 160 members, the Tech Council comprises the full spectrum of tech companies.

We aim to advise and engage with Australian governments, businesses, and the wider community to help support the ongoing creation, development, and adoption of technology across industries. Our vision is for a prosperous Australia that thrives by harnessing the power of technology.

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# Executive Summary

Australia is on track to have 1.2 million tech workers by 2030, with the workforce currently standing at 935,000 as of February 2023. This is the product of strong growth with an 8% increase in tech jobs – double the growth in all other jobs – in the past year.

Having 1.2m people in tech jobs by 2030 is a joint goal of the Australian Government and the Tech Council of Australia.

Most of the recent growth in tech jobs has been driven by the indirect tech sector. Of the 10,500 jobs added in the last three months, 8,200 were tech intensive jobs in the indirect tech sector which includes all non-tech industries, like mining and banking, across the Australian economy.

And despite news of layoffs, demand in the direct tech industry remains stable. The direct tech industry has produced a net gain in jobs – despite a small loss of tech-intensive jobs – with growth in other types of jobs within tech companies.

Average advertised salaries in this part of the industry remain high at approximately \$132,000. This makes the average advertised salary in the direct tech industry second only to CEOs, according to SEEK data.

For those affected by job losses in tech-intensive jobs, there are plenty of opportunities in the same occupations across the economy. For every tech job lost in the direct tech industry over the past three months, 20 new jobs have been created by the indirect industry.

Growth in tech jobs across the economy reflects a long-term structural change in Australia's economy towards increased technology adoption.

Since the mid-1980s, tech jobs have grown at four times the rate of other jobs, surviving multiple economic downturns. Now, 1 in 14 working Australians are in a tech job, with more Software Engineers than plumbers, hairdressers or baristas.

Across all states and territories, tech is a major employer. In South Australia where the tech workforce is relatively small, only employing 5% of the local labour force, tech jobs are still growing at 1.7x the labour force. This means tech represents a distinct economic opportunity for Australians regardless of where they live. Tech is providing good jobs for Australians, across every state and territory, and at scale.

To meet the national tech jobs target of 1.2 million by 2030, an additional 600,000 people are needed in the tech sector. To achieve this target, the tech sector is working with the Government on multiple fronts. We're excited about the work that is building on the outcomes from the Jobs and Skills Summit on a range of initiatives. We're also pursuing work towards industry-led solutions, like improving diversity in the tech sector. With strong growth and continued commitment, the tech sector is poised to be a significant contributor to Australia's future economic prosperity.

# The tech sector is on track to reach 1.2 million tech workers by 2030



The national tech jobs target was announced at The Iconic by The Prime Minister, The Hon Anthony Albanese MP, and Robyn Denholm, Chair of the Tech Council of Australia and Erica Berchtold, with The Minister for Industry and Science, The Hon Ed Husic MP, the Minister for Climate Change and Energy, The Hon Chris Bowen MP and Kate Pounder, CEO of the Tech Council.

In 2022, the TCA made a commitment with the Australian Government to reach 1.2 million tech workers in Australia by 2030. This report is the first in-depth update on progress against the target, and shows we're on track to reach our shared goal.

## Background to the national tech jobs target

The Tech Council has a shared commitment with the Australian Government to reach 1.2 million tech workers in Australia by 2030. For the first time since making this commitment, we are providing an in-depth update on tech workforce trends.

The Australian Government and the Tech Council made the commitment to the national tech jobs target because tech jobs are good for workers and the economy. Workers benefit because tech jobs are among the highest paid, flexible and fast-growing. The Australian economy benefits because these jobs have high labour productivity, support economic growth and competitiveness in a range of industries<sup>1</sup>.

However, for many years Australia has experienced a shortfall of people working in key tech roles. By setting a concrete national target for tech jobs, and working with government, industry, educators and the community on a plan to help Australians enter them, we hope to fill these jobs, and to create more opportunity for Australian workers and for the Australian economy.

1. Source: Tech Council of Australia, Australia's Tech Jobs Opportunity

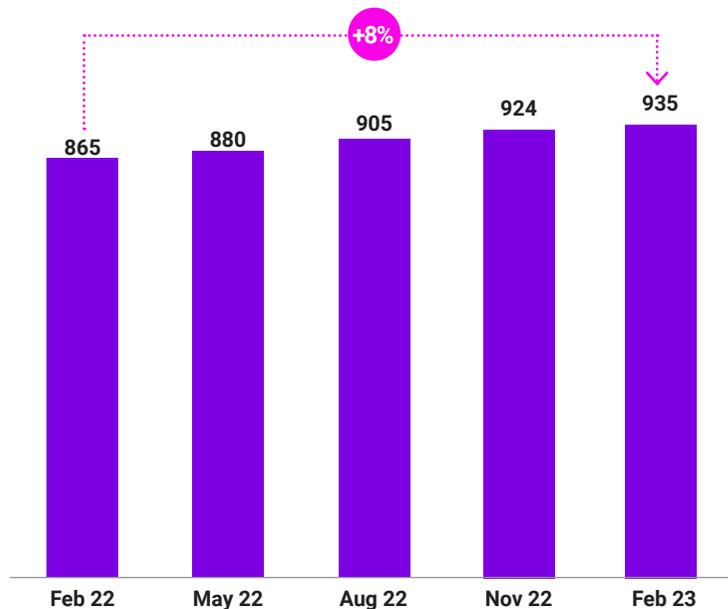
## Australia's tech sector now employs 935,000 people

Australia is making good progress towards the national tech jobs target of 1.2 million people by 2030 having reached 935,000 tech workers in February 2023. This is the product of steady growth over the past year as shown in Exhibit 1.

This report will explore the drivers of this growth and trends in the Australian tech workforce. This includes looking at changes in the direct and indirect tech sectors, as well as different types of jobs included in the tech workforce. An explanation of the definition of tech jobs is included on the right-hand side of this page.

**EXHIBIT 1:** Number of tech workers

'000s, tech workers employed



Source: ABS

## What is a tech job?

Tech jobs exist across the Australian economy and include any job in the direct tech industry as well as tech intensive jobs in other industries. The latter is referred to as the 'indirect tech industry'. Exhibit 2 illustrates the definition of tech jobs. The direct tech industry includes all people employed (regardless of occupation) in four ANZSIC sub-industries:

- > Internet publishing and broadcasting
- > Telecommunications services
- > Internet Service providers, Web Search Portals & Data Processing Systems
- > Computer System Design and Related Services

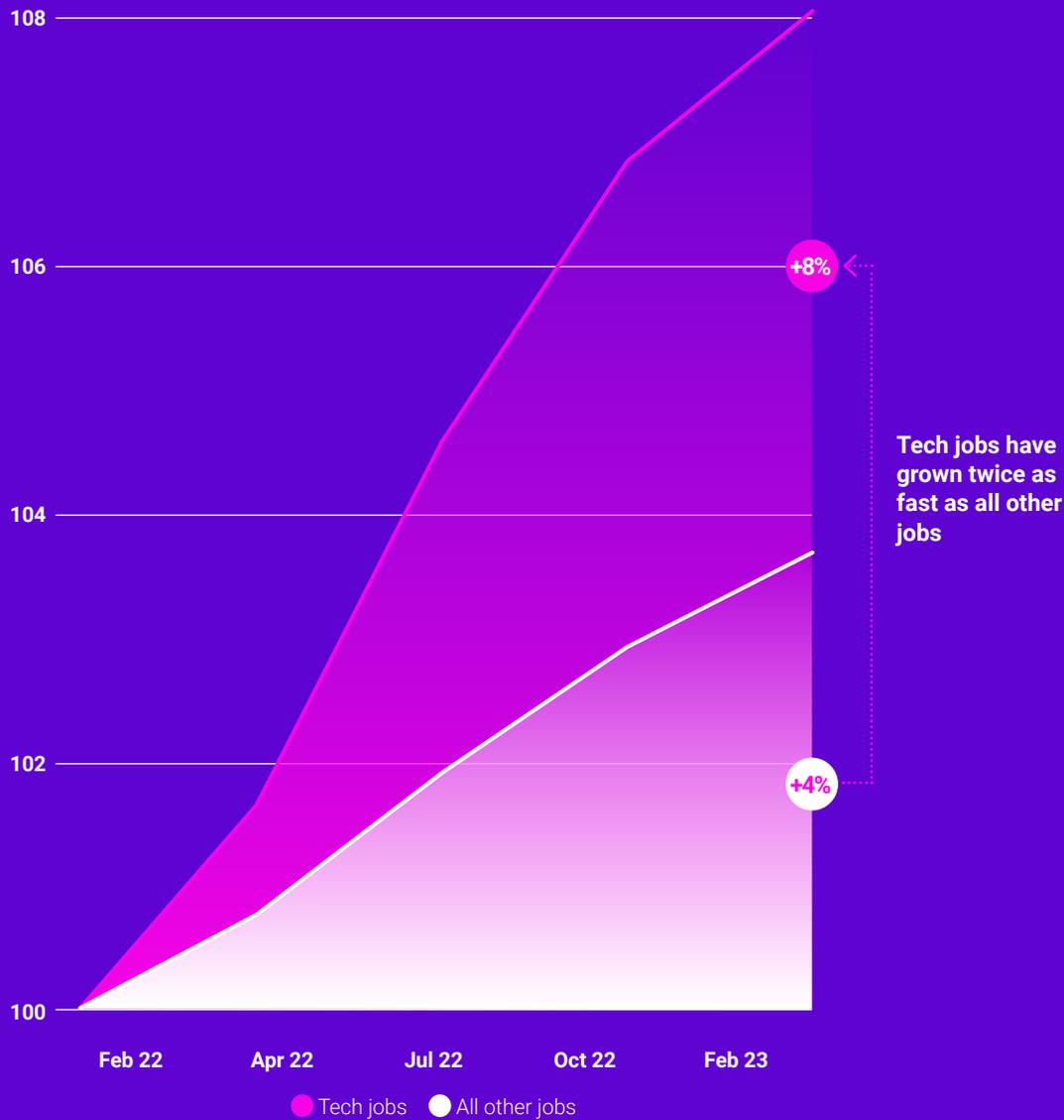
**EXHIBIT 2:** Definition of tech jobs

### Components of tech sector definition by industry and occupation

	Direct tech industries	All other industries				
	<ul style="list-style-type: none"> <li>&gt; Internet publishing and broadcasting</li> <li>&gt; Telecommunications services</li> <li>&gt; Internet Service providers, Web Search Portals &amp; Data Processing Services</li> <li>&gt; Computer System Design and Related Services</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Retail</li> <li>&gt; Banking and financial services</li> <li>&gt; Mining</li> <li>&gt; Government</li> <li>&gt; Professional Services</li> </ul>				
<b>Technology occupations</b>	Technology-specific occupations, including technical, creative and commercial, are counted across all industries.					
	 Software and Applications Programmers	 ICT Project Managers	 ICT Support Technicians	 UX Designers	 Graphic/Web Designers	 Cybersecurity Specialists
<b>Non-technology occupations</b>	Non-technology occupations are only included in tech industries		N/A			
	 Human Resources	 Advertising & PR				 Legal

**EXHIBIT 3:** Growth in tech jobs and all other jobs

Index, where number of workers in February 2022 is equal to 100



Source: ABS

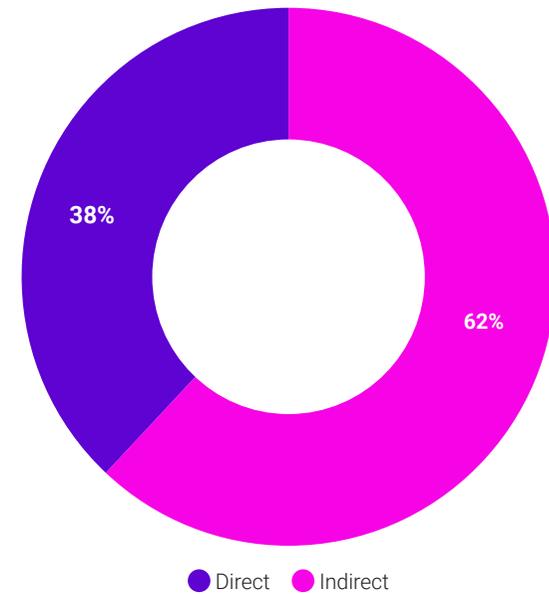
## Demand for tech jobs remains strong in 2023 because these workers are in demand across the economy

Tech jobs have continued to grow strongly in the last year, with 70,000 jobs added since February 2022. Tech jobs have grown at rate of 8% in the last year, double the rate of all jobs in the economy, which have grown by only 4% as shown in Exhibit 3.

Most tech workers continue to be employed outside of the direct tech industry, with 62% of tech workers in the indirect tech industry in February 2023. This is shown in Exhibit 4. The distribution of tech workers across the indirect and direct sectors has stayed fairly constant over the past 20 years.

**EXHIBIT 4:** Distribution of tech jobs by industry type

%, tech workforce by industry type



Source: ABS

## For every job lost, 20 have been created

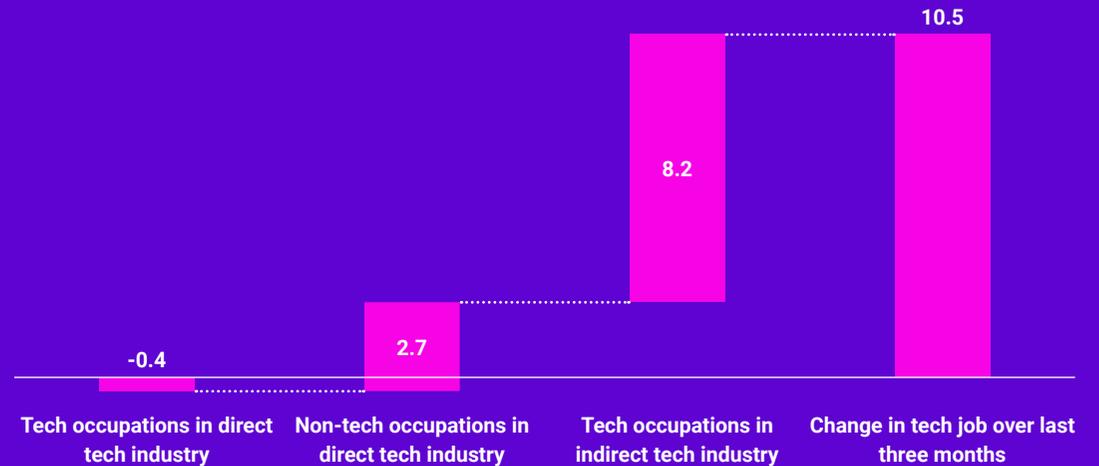
Importantly, the nature of growth in tech jobs has meant that those affected by job losses in the direct tech sector have opportunities to get a similar job in the indirect tech sector. In the last three months, the indirect tech sector has added twenty times the number of jobs lost in the direct tech sector. This is illustrated in Exhibit 5.

Despite the recent news of layoffs in some tech companies, economy-wide demand for tech workers remains high. This demand has primarily been driven by the indirect tech sector. Of the 10,500 jobs added in the last three months, 8,200 were tech intensive jobs in the indirect tech sector as shown in Exhibit 6.

Despite layoffs globally and locally in the direct tech sector in the last year, the Australian direct tech sector is still growing its workforce. In the last three months, the direct tech sector lost 400 tech intensive jobs, but added 2,700 other jobs. These 2,700 jobs include non-tech occupations, such as human resources or legal jobs in the tech sector and are part of the tech workforce.

**EXHIBIT 5:** Recent sources of growth in tech jobs

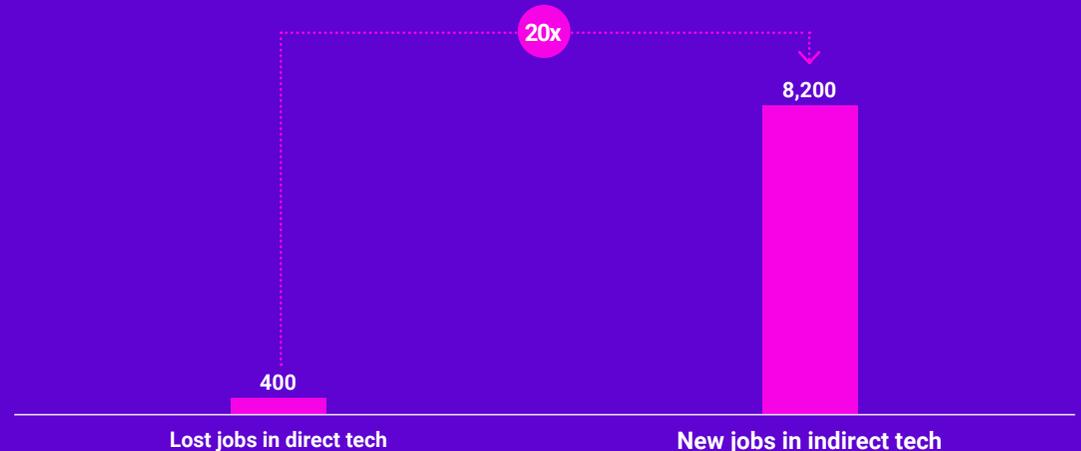
'000s, tech workers employed by occupation and industry type November 2022 – February 2023



Source: ABS

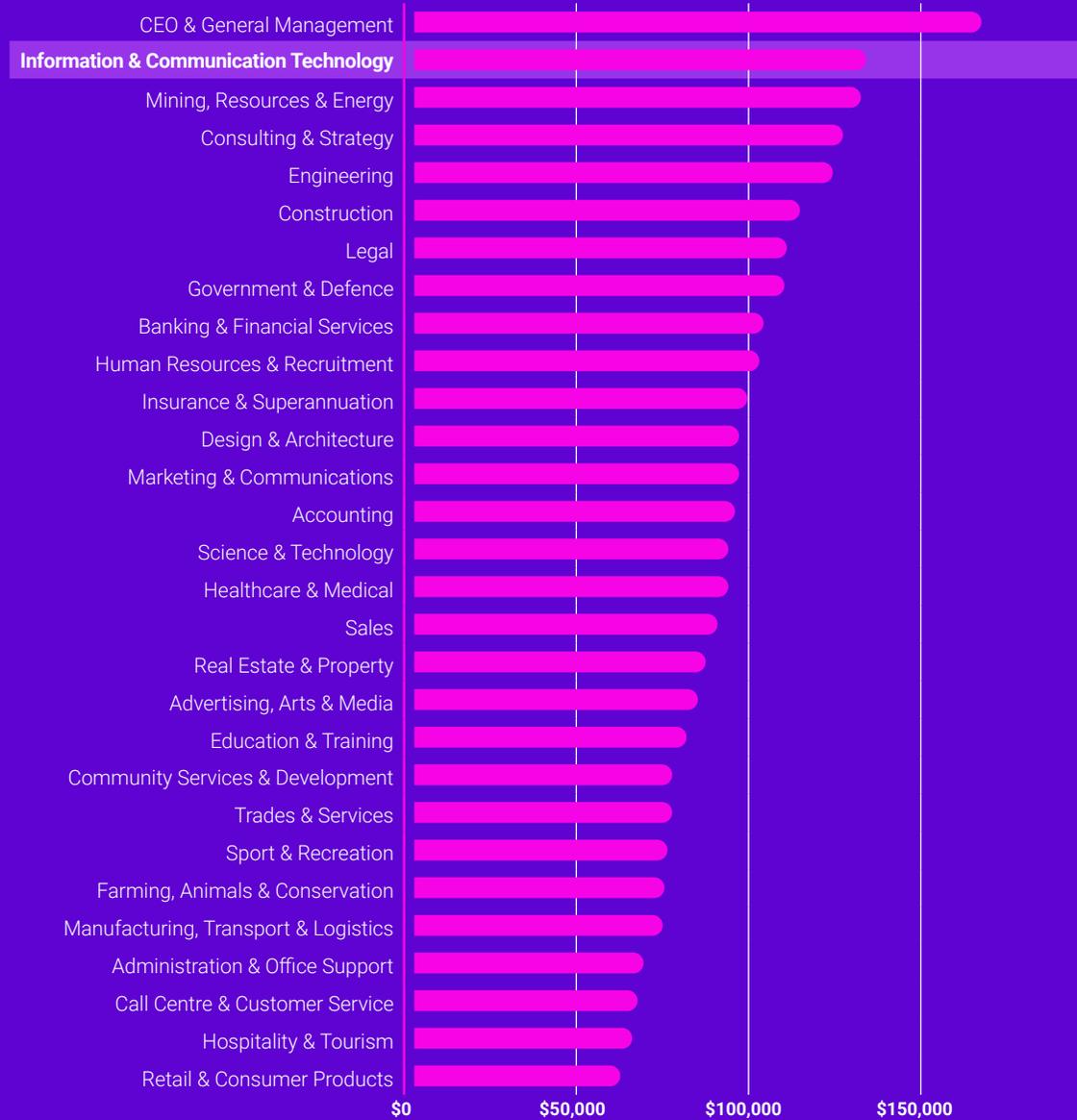
**EXHIBIT 6:** Change in tech jobs in direct tech and indirect tech industries

Number of people employed in technology occupations, November 2022 – February 2023



Source: ABS

**EXHIBIT 7:** Average advertised salary by SEEK classification (AUD)



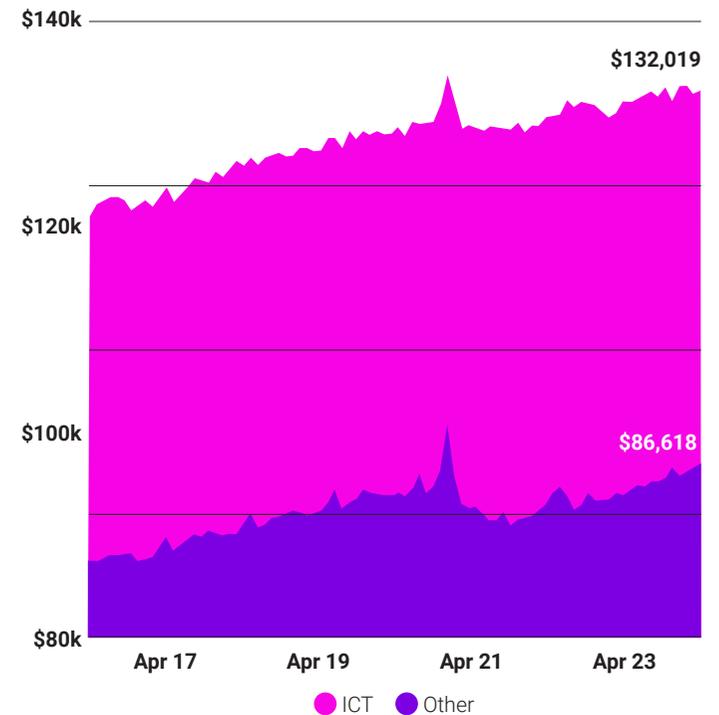
Note: Annual average over the year to April 2023. Not seasonally adjusted.  
Source: SEEK

## Wages in the direct tech sector

Wages in the direct tech sector have remained high and strong. The growth in tech jobs and salaries means that the average tech salary has now surpassed mining, according to SEEK data. This makes the average tech salary only second to advertised salaries for CEOs. This is shown in Exhibit 7.

SEEK data shows that the average advertised salary in the ICT ('direct tech') industry is approximately \$132,000. This is 1.5 times the average salary in all other jobs as shown in Exhibit 8.

**EXHIBIT 8:** Average advertised salaries by industry according to SEEK data



Note: Not seasonally adjusted.  
Source: SEEK

# Case Study: Retraining from frontline customer service to data science

**Shifat Nadi**  
Senior Insights Analyst,  
Commonwealth Bank



Shifat started working at the Commonwealth Bank as a frontline staff member in customer service. Through the Bank's reskilling program, she made the transition into an Insights Analyst role at the bank.

"This was a pivotal opportunity because I was able to complete the transition whilst being on-the-job. I was supported by my manager to attend the weekly one hour class during my work day and attend interviews and assessment centres whilst still working as a customer frontline staff."

In her role as a Senior Insights Analyst, Shifat's typical day revolves around collaborating with diverse teams, driving strategic decision-making through data-driven solutions. Her role is instrumental in guiding how the Bank communicates with its customers, proving to be both valuable to her colleagues and beneficial to the end-users.

The transition into a technology role has been rewarding but was initially daunting. Coming from a non-technical background, she found learning new interfaces and coding languages like SQL the most intimidating part of retraining. But the opportunity to spend a lot of time shadowing a buddy analyst and replicating their work helped her build confidence in these areas. Shifat was also surprised to learn how useful her experience in frontline customer service was to a technical role.

"I was totally surprised by how even in a technical role, a lot of thought is given as to whether we have the customer in the heart of all we do. Although an Insights Analyst does not sit within the remit of customer service, I still ask if what I am doing adds value and is beneficial to the customers."

Shifat emphasises that technical roles require the same time management, prioritisation and communication skills that are crucial to non-technical roles. Making the shift into technical roles requires training, but ultimately it's the commitment to learning new skills that will set anyone up for success.

“  
“Technical jobs aren't an all-encompassing matrix of complex algorithms. If someone has the passion the learning curve is achievable.”

# Strong growth in tech jobs reflects a long-term structural change in the Australian economy

Recent growth in tech jobs has been driven primarily by the indirect tech sector. This reflects a long-term structural change in the Australian economy towards greater adoption of technology thus greater demand for people with tech skills.

Recent growth in tech jobs reflects a long-term structural change in the economy that has been underway for decades. Tech jobs have grown at four times the rate of all other jobs since the mid-1980s, as shown in Exhibit 9. This growth has persisted through the Dotcom Crash, the Global Financial Crisis and the recent contraction in the tech sector.

Tech intensive jobs across the economy are primarily found in three industries: Professional, Scientific and Technical Services (12% of tech intensive jobs across the economy), Government (7%) and Finance (6%). There are also significant numbers of tech workers in Tertiary Education and Healthcare Services which employ almost 10,000 tech workers each. The top 10 industries employing tech workers outside the direct tech sector are shown in Exhibit 10.

EXHIBIT 9: Long term growth in tech jobs

Index, where number of workers in August 1986 is equal to 100

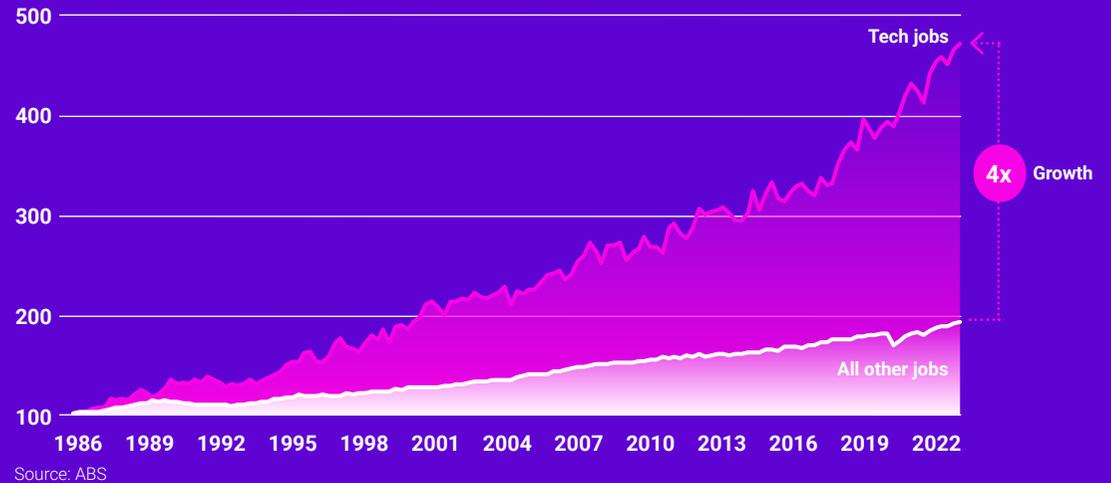
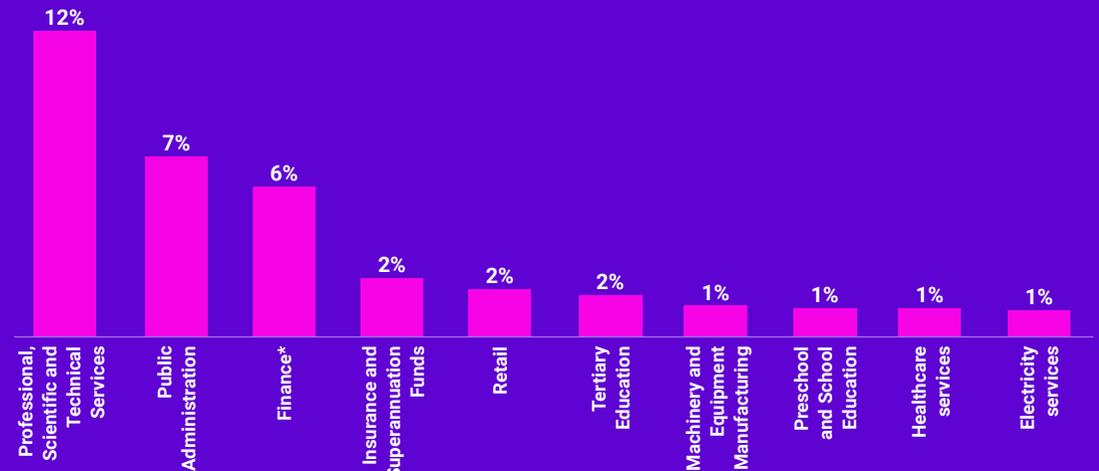


EXHIBIT 10: Top 10 traditional industries employing tech occupations

%, share of workers employed in tech occupations by industry (excluding direct tech industries)



Note: Finance includes both 'Finance' and 'Auxiliary Finance and Insurance' sub-industries. Direct tech industries are excluded.

The strong growth in tech jobs means that 1 in 14 working Australians are in a tech job. There are now more Software Engineers than plumbers, hairdressers or baristas.<sup>2</sup> This growth is driven by the increasing uptake of technology across the economy, rather than solely the result of a rapidly growth tech industry.

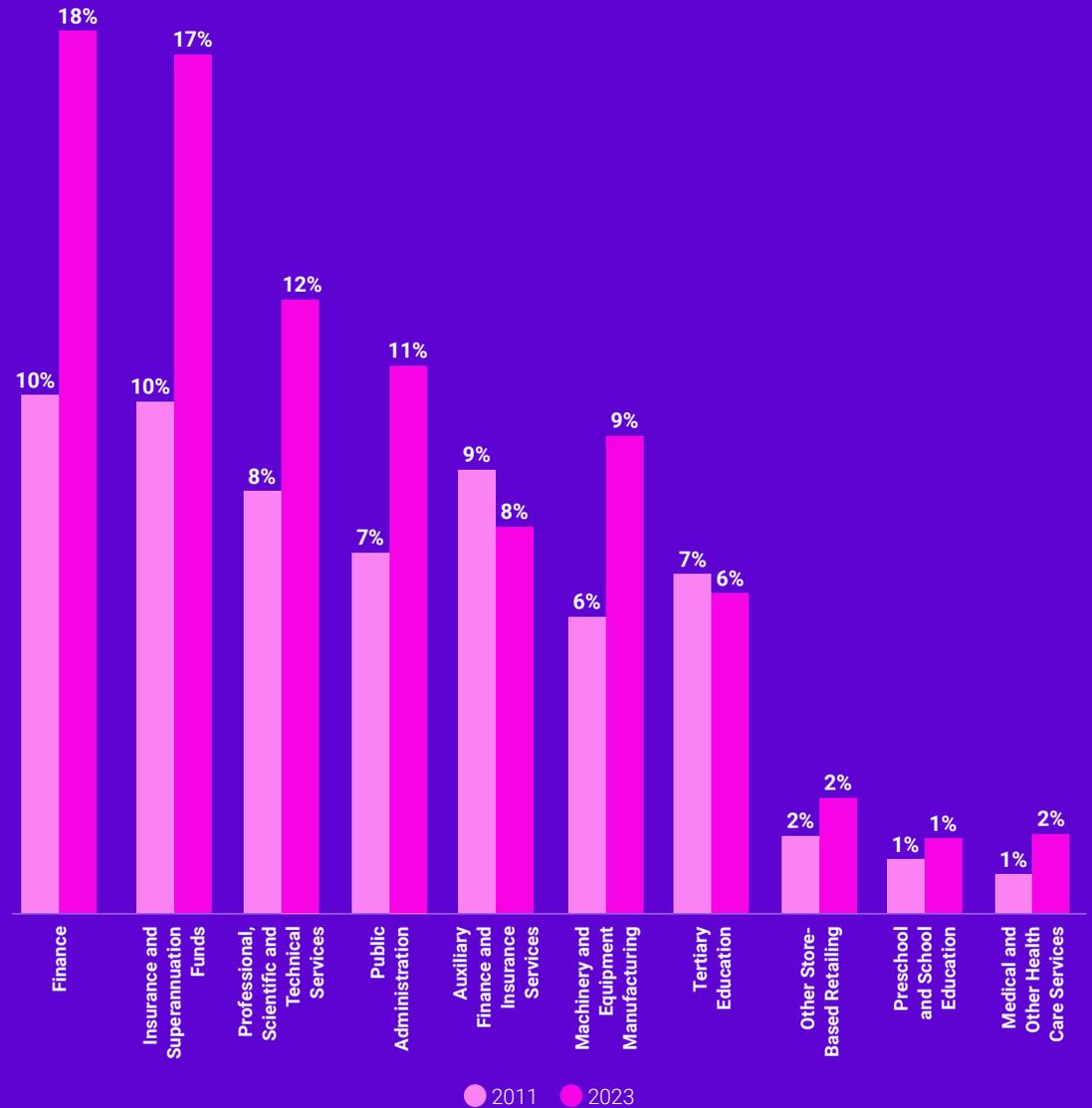
Australia's traditional industries, like banking, government and education, are driving tech jobs growth not just because these industries are growing, but because they are becoming more tech intensive. Since 2011, the tech intensity of the Finance industry has almost doubled. This is measured by the share of workers in the Finance industry that work in tech occupations, which has risen from 10% in 2011 to 18% in 2023. There has also been a significant increase in the tech intensity of the Government workforce and that of Machinery and Equipment Manufacturing. This is illustrated in Exhibit 11.

While Software and Applications Programmers are largely employed in the direct tech sector, other large tech occupations are more spread out across the economy. The second-largest industry of employment for ICT Managers, ICT Support Technicians and ICT Security specialists is Public Administration. This is shown in Exhibit 12 (over page). This illustrates the range of technology skills required to create and adapt technology across different industries.

2. <https://www.beanscenemag.com.au/australian-barista-census-reveals-keeps-baristas-night/#~:text=Australia%20boasts%20a%20thriving%20coffee,84%20per%20cent%2C%20a%20week.>

**EXHIBIT 11:** Share of industry working in tech occupations

% of people in industry employed in tech occupations, 2011 and 2023



Source: ABS

**EXHIBIT 12:** Top five tech occupations and their top five industries of employment

OCCUPATION	INDUSTRY OF EMPLOYMENT (TOP 5)					Share of occupation
<b>2613 Software and Applications Programmers</b> <i>Software Developer</i>	<b>53%</b> Computer System Design and Related Services	<b>6%</b> Finance	<b>6%</b> Professional, Scientific and Technical Services (except Computer System Design and Related Services)	<b>6%</b> Public Administration	<b>3%</b> Auxiliary Finance and Insurance Services	
<b>2247 Management and Organisation Analysts</b> <i>Business Analysts</i> <i>Product Analysts</i> <i>Tech Consultants</i>	<b>44%</b> Professional, Scientific and Technical Services (Except Computer System Design and Related Services)	<b>7%</b> Computer System Design and Related Services	<b>6%</b> Public Administration	<b>6%</b> Finance	<b>4%</b> Auxiliary Finance and Insurance Services	
<b>1351 ICT Managers</b> <i>Project Manager</i> <i>Product Manager</i>	<b>36%</b> Computer System Design and Related Services	<b>8%</b> Public Administration	<b>7%</b> Finance	<b>7%</b> Telecommunications Services	<b>6%</b> Professional, Scientific and Technical Services (except Computer System Design and Related Services)	
<b>3131 ICT Support Technicians</b> <i>Support Technicians</i>	<b>31%</b> Computer System Design and Related Services	<b>10%</b> Public Administration	<b>6%</b> Professional, Scientific and Technical Services (except Computer System Design and Related Services)	<b>6%</b> Other Store-Based Retailing	<b>4%</b> Preschool and School Education	
<b>2621 Database and Systems Administrators, and ICT Security Specialists</b> <i>Cybersecurity Analysts</i> <i>Data Engineers</i>	<b>28%</b> Computer System Design and Related Services	<b>15%</b> Public Administration	<b>6%</b> Professional, Scientific and Technical Services (except Computer System Design and Related Services)	<b>6%</b> Finance	<b>4%</b> Public Order, Safety and Regulatory Services	

Source: ABS

# Case Study: Transitioning from Security to Full Stack Software Engineering at WooliesX

“When I was in high school in the 1990’s if you wanted to get into a role like mine, you went to university or went through a TAFE pathway. You don’t need to go down traditional pathways anymore.”

Clint’s journey from the security industry to becoming a Full Stack Software Engineer at WooliesX exemplifies the diverse pathways into tech. Having originally worked in manufacturing and security, Clint’s career took an unexpected turn when he was injured in a motor vehicle accident. Then during the COVID pandemic, his job was retrenched, prompting him to explore new horizons. He originally joined Woolworths Group in their Customer Service Hub, then undertook an intensive three-month coding bootcamp aimed at reskilling team members and deploying them as developers within the business.

During the intensive three-month program, Clint was paired with a dedicated mentor from WooliesX. His mentor provided guidance and support, helping Clint navigate the challenges of the new role. While he picked up the technical skills quickly, Clint found the new way of working and the size of WooliesX very foreign at first. But through active listening, asking questions, and engaging in team discussions, Clint quickly developed the soft skills necessary to thrive in the new environment.

“While there are certainly moments of focused coding, the role often involves a significant amount of social interaction. It’s not just about writing code but also collaborating and communicating with colleagues and those who will use the end product of our work.”

Clint was initially surprised at how much social interaction was required in an engineering role. While every day is different, most projects begin with his team sitting down, locating at the business challenge and breaking it down into lots of little tasks. Everyone in the team then goes away and tackles their individual tasks, which are then brought together to create the final product.

“Collaboration is essential because everyone writes code in their own way, with their own style and flavour, but it can still produce the same final product.”

Being a Full Stack Engineer, Clint works on both front end (customer facing) and back end system (like databases). So far he has mainly worked on projects that focus on online shopping and deliveries helping to ensuring smooth order fulfilment from the store to the customers.

Clint Kingston  
Full Stack Engineer,  
WooliesX



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“There is immense satisfaction in being presented with a business problem, tasked with building a solution, and witnessing the final product we’ve developed being released to make a difference for our team and/or customers.”

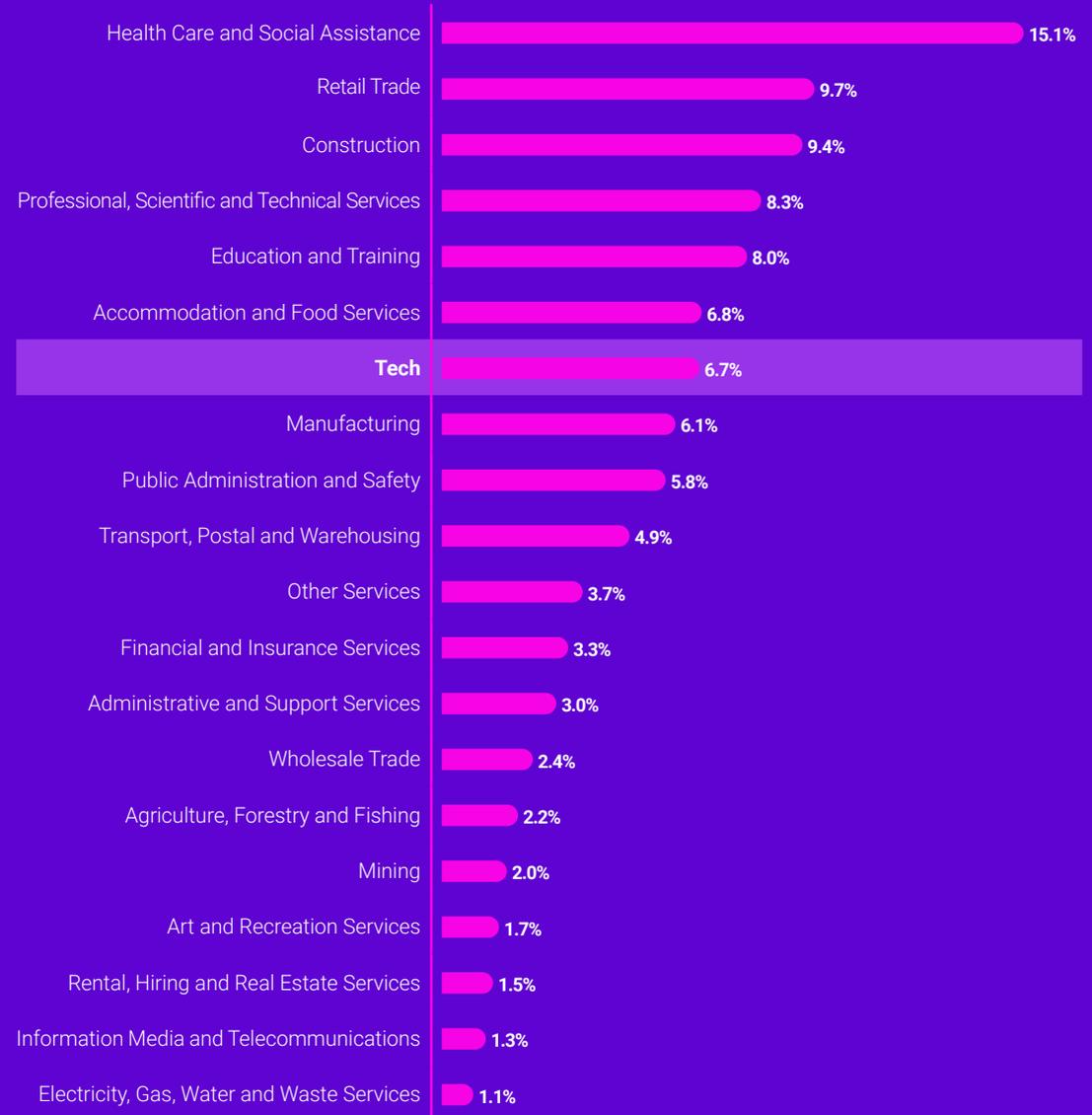
# Tech is now a major employer in all states and territories

The tech workforce is equivalent to the 7<sup>th</sup> largest employing industry in Australia. Across every state and territory, tech is playing a growing role in local economies.

## Tech is the 7th largest employer in Australia

If the tech workforce, in indirect and direct tech industries, were an industry it would be the 7<sup>th</sup> largest employer in Australia. This is shown in Exhibit 13. This makes the tech sector a distinct economic opportunity for Australia through both scale, salary and quality of jobs.

**EXHIBIT 13: Employment by industry**  
%, employed people, February 2023



Source: ABS

## Tech plays a growing role in every state and territory

Importantly, tech jobs are found across Australia. The distribution of the tech workforce largely reflects the population distribution across Australia. Most tech workers are located in the eastern seaboard states of Queensland, New South Wales and Victoria. Tech is present in every state and territory and is growing in each state and territory, as shown in Exhibit 14.

Tech jobs are an important part of state and territory economies. Tech jobs are important to the Australian Capital Territory, employing 14% of the workforce. In Victoria and New South Wales, tech employs 7% of workers in each state and this share has been growing consistently since the mid-1980s.

In the last ten years, tech jobs have grown the fastest in the Northern Territory (+98%), followed by Victoria (+63%) and the Australian Capital Territory (+61%), illustrated in Exhibit 15.

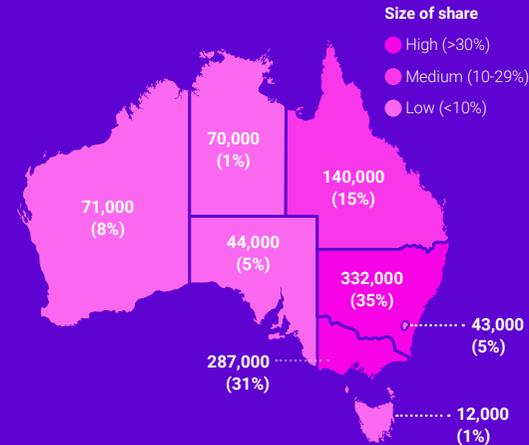
Across all other states and territories, tech is a constant presence, employing around 3 to 4% of the workforce with growth becoming stronger in the last 10 years, as shown in Exhibit 16.

The average growth rate across the labour force was 21% during this period which means the tech jobs in all states and territories grew faster than the average.

While some states or territories are growing faster than others, a consistent trend is the rapid rate of growth in tech jobs relative to other jobs in each area. In every state and territory, tech jobs are growing faster than the average rate of jobs growth in the state or territory, as shown in Exhibit 17 (over page).

**EXHIBIT 14:** Distribution of tech workers across Australia

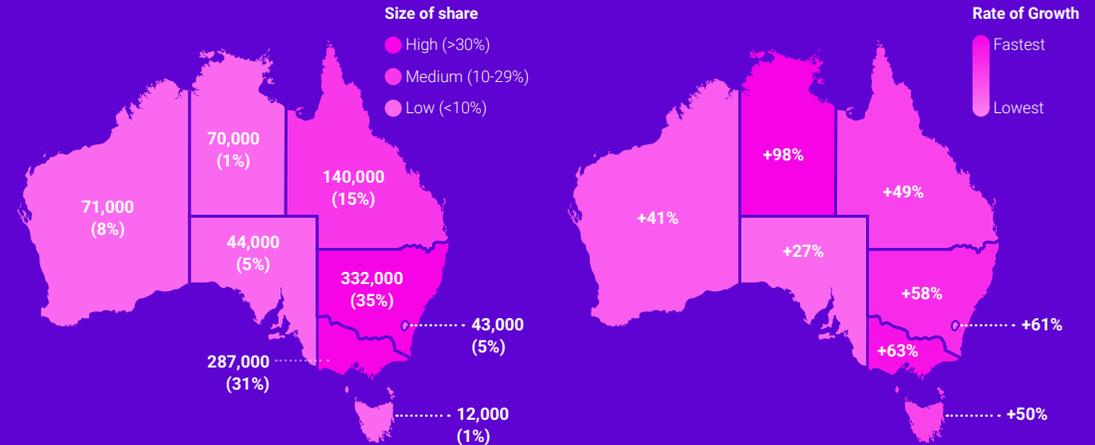
### Number of tech workers, share of national tech workforce February 2023



Source: ABS

**EXHIBIT 15:** Growth of tech workforce, by state or territory

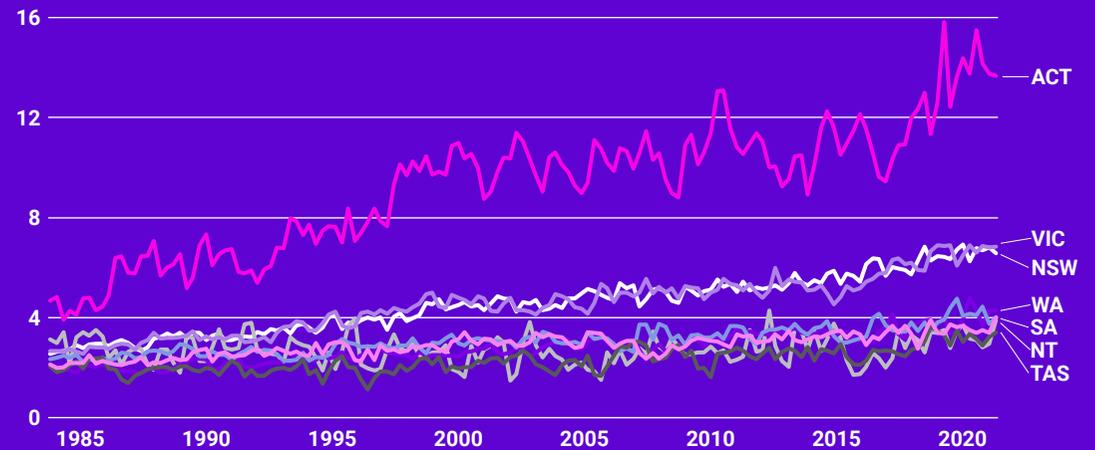
### % growth within area, February 2013 – February 2023



Source: ABS

**EXHIBIT 16:** Share of workforce in a tech occupation

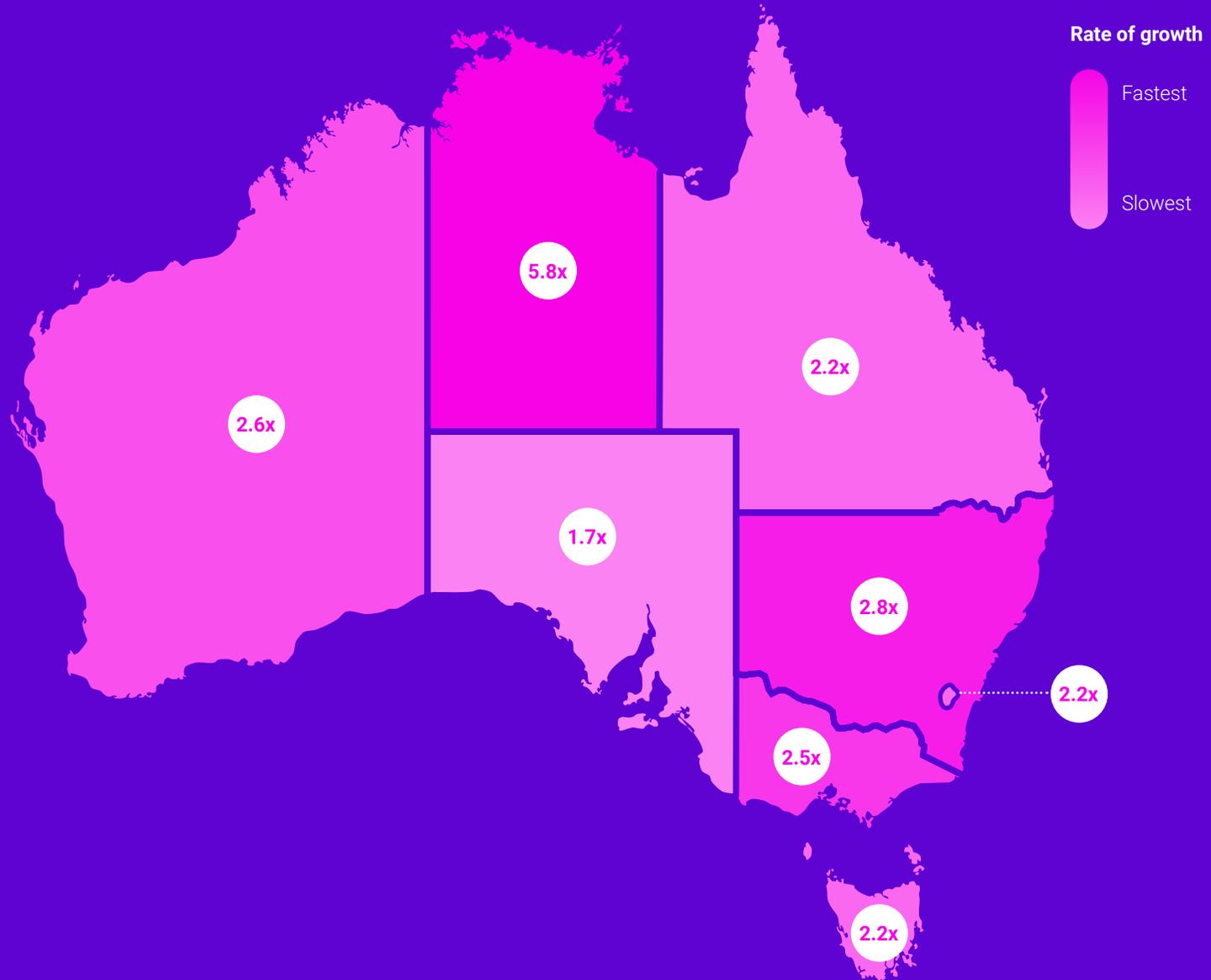
### %, share of state/territory labour force employed in a tech occupation



Source: ABS

**EXHIBIT 17:** Growth of tech jobs relative to the local labour force

Number of times faster tech jobs grew than the labour force in that state or territory (February 2013 to February 2023)



Source: ABS

# Case Study: Retraining into tech to help stop scams

**Salina Tong**  
Scams Data Analyst,  
Commonwealth Bank



Australia's banking industry is using technology to improve and protect customers from online scams. With this change comes the growing need for people like Salina, who is a Scams Data Analyst at the Commonwealth Bank. Salina finds the role rewarding and challenging, especially because it's an opportunity to make a difference.

"What I enjoy most about my role is being able to help our customers by preventing and reducing scams I genuinely love working with multiple stakeholders to deliver data driven insights that can then become actionable goals."

Salina uses a combination of technical and soft skills to translate updated scam intelligence into code that can detect scams in the bank's systems. A key part of her job involves providing data analysis and explaining updates to colleagues across the bank. She particularly loves this part of her job because every conversation is an opportunity for a new perspective on the data.

Her journey to becoming a Scams Data Analyst wasn't linear. Initially, Salina studied psychology and worked as a senior behavioural therapist for several years. She then moved into banking as a Senior Project Officer. But she felt there was more to explore and learn. Combining her established skillset with her passion for mathematics and problem-solving, she successfully transitioned into her current role.

"What was also helpful was building the foundational skills in programming," she mentions, citing the importance of the bank's reskilling course and her graduate certification in Data Science in facilitating her transition. However, overcoming the challenges that came with moving into a technical role wasn't easy. She acknowledges that "the more exposure you have, the more you will learn," stressing the importance of asking questions and seeking help.

To those looking to side-step into technical roles, Salina emphasises the importance of doing your research. Thorough research, building foundational skills, networking, clarity in motivation, and most importantly, enjoying the journey are all important to making the transition into a tech role.

# Australia needs 600,000 more people to join the tech sector by 2030

Strong tech jobs growth means Australia is on track to have 1.2m tech jobs by 2030. This is crucial to lifting productivity across the economy and providing more good jobs for Australians. However, the key now is to ensure enough Australians have pathways to work in these roles.

## Growing the tech workforce is critical to lifting macroeconomic productivity.

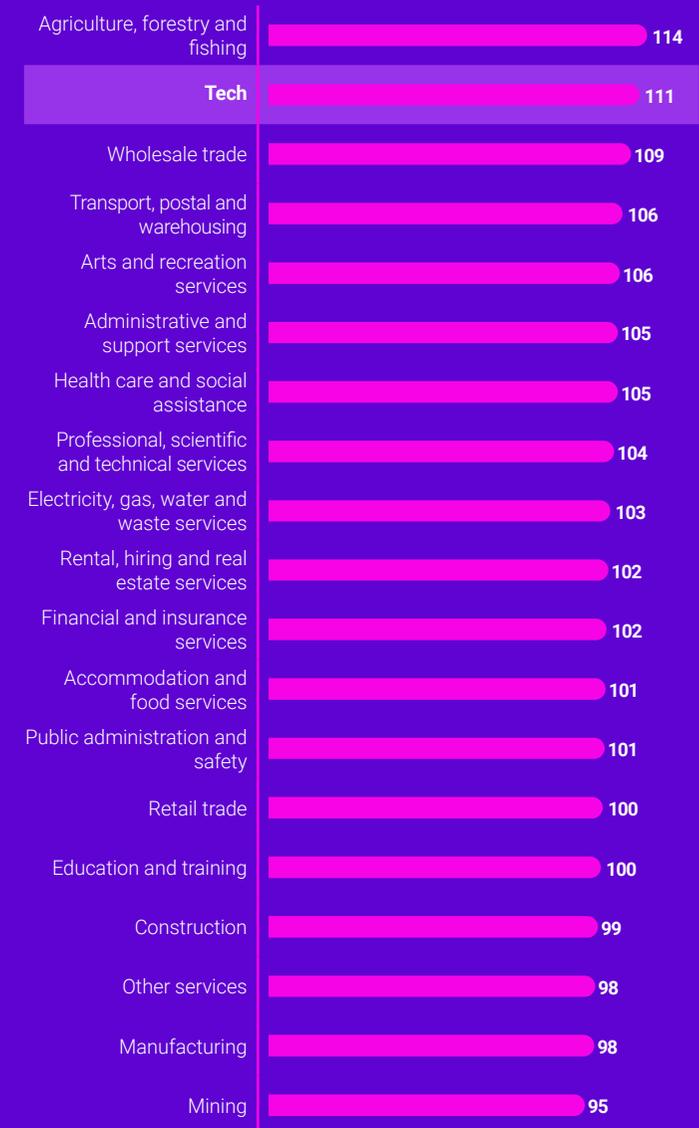
This means strong growth in tech jobs -- driven by a growing direct tech sector and increasing tech intensity of our economy -- is crucial to Australia's future economic prosperity. With productivity at a 60-year low<sup>3</sup>, more growth in highly productive jobs and greater technology adoption is key to driving higher productivity and competitiveness. Tech jobs are amongst the most productive, behind jobs in Agriculture, Forestry and Fishing, and ahead of all other industries as shown in Exhibit 18.

In practice, tech jobs are a significant source of productivity for two reasons. Tech workers are essential to creating new companies, which often develop new technologies or new products that are tech intensive. Tech workers across the economy help older businesses keep pace with technological developments and become more productive. In the non-market sector, tech workers play an important role in ensuring that data analysis (supported by tech infrastructure like cloud computing) can make services like healthcare more efficient while maintaining quality.

3. Productivity Commission, 2021

EXHIBIT 18: Gross Value Added by industry

GVA by hour worked, June 2022



Source: ABS

## Australia still needs another 600,000 people to join the tech sector by 2030

To reach the national tech jobs target of 1.2 million tech workers by 2030, we need an additional 600,000 people to join the tech sector. Approximately 160,000 people will need to come through entry level pathways like universities and VET and almost 300,000 people will need to come from retraining programs. We expect that around 150,000 people will join the Australian tech sector as skilled migrants, filling gaps especially in highly technical roles that require years of experience. These figures allow for ongoing outflows of around 340,000 people due to retirement and career transitions. This is illustrated in Exhibit 19.

## The tech sector is partnering with Government to grow the workforce

The tech sector is committed to working with Government to reach the national tech jobs target of 1.2 million tech workers by 2030 and address ongoing skills gaps. This work has five areas for action:

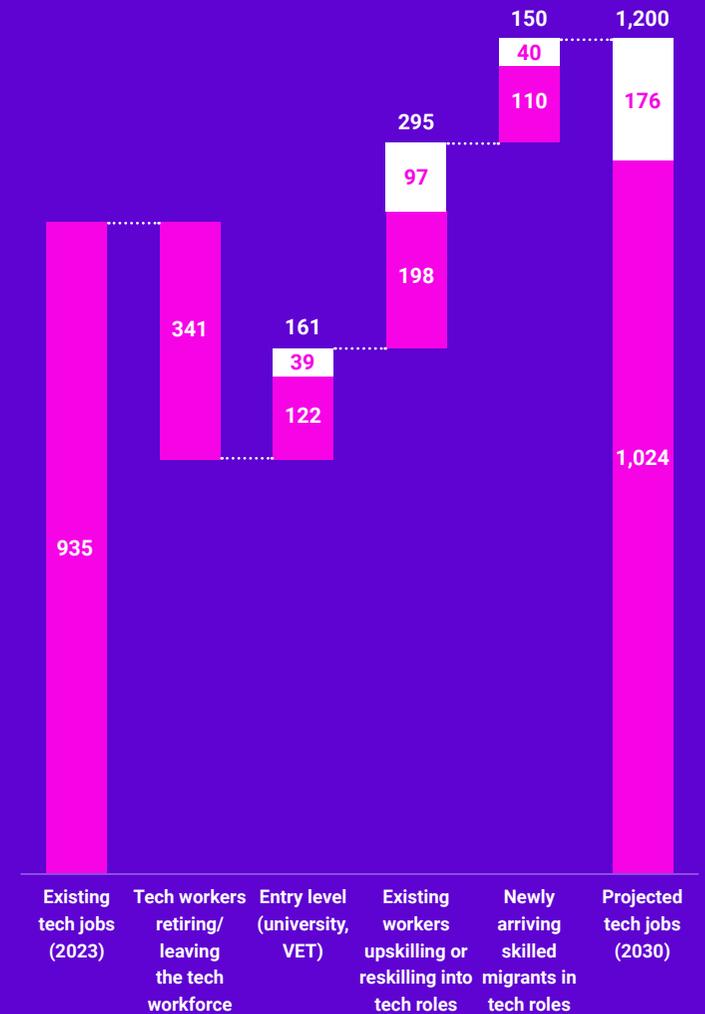
- > Increase awareness and understanding of job opportunities in tech
- > Fix gaps in education and training products and pathways
- > Improve diversity of the tech workforce
- > Target skilled migration to areas of high-need and greatest shortages
- > Improve industry-level workforce supply and demand forecasts

Work across all five areas of action is underway. Exhibit 20 (over page) provides more information on the activities that fall within those five areas of action. On the next page we provide an update on some of the key initiatives progressing as part of our plan to reach 1.2 million tech workers by 2030.

The TCA and its Digital Employment Forum, in partnership with governments and educators, has made good progress in the last year in initiatives to address skills shortages.

EXHIBIT 19: Projected tech sector jobs in 2030

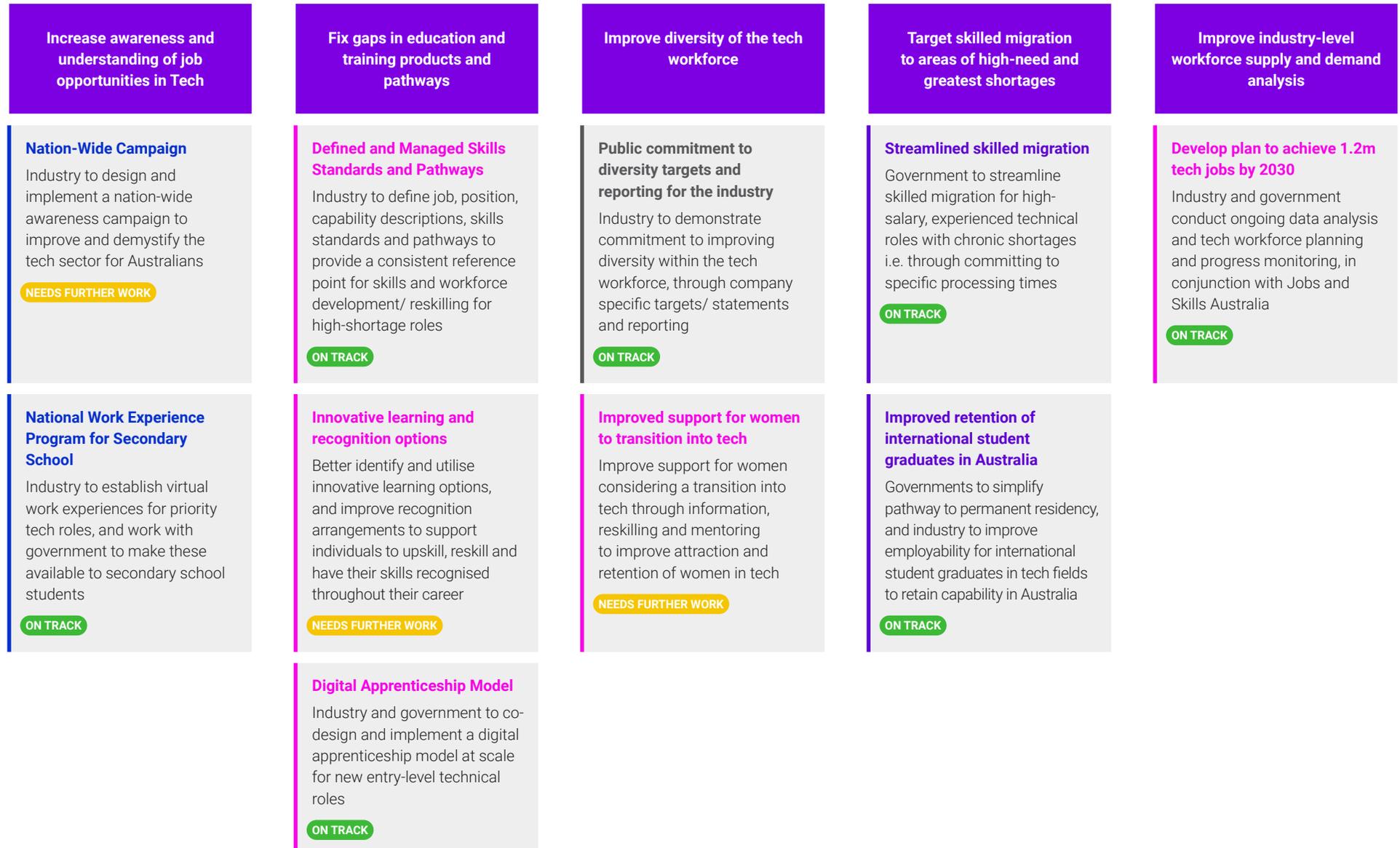
'000, Number of tech sector workers



● Business-as-usual prediction ● Required uplift

Sources: ABS, Tech Council of Australia

**EXHIBIT 20:** Our plan to reach 1.2 million tech workers by 2030



● Primarily Government ● Government & Industry ● Primarily Industry

### **Virtual Work Experience**

The TCA, and the employers and educators we represent, are committed to ensuring that all secondary school students in Australia have the chance to learn about tech careers. To make work experience in tech more accessible, we are establishing a virtual work experience program in partnership with the Australian Government. This commitment is also an outcome of the Jobs and Skills Summit.

### **Modern Digital Apprenticeships**

Tech Council research shows that women are twice as likely to enter the tech force at age 25-30 than before they are 25. This means early to mid-career transitions are the primary way they enter the sector. We believe it is important to increase the opportunities for women to reskill and upskill into tech jobs to become more inclusive.

The Tech Council is working with the Australian Government and other stakeholders towards developing Modern Digital Apprenticeships as part of the Digital and Tech Skills Compact, an outcome of the Jobs and Skills Summit. We support the Government's proposal to include gender diversity targets for this initiative.

### **Migration Reform**

The Tech Council has played an active, constructive role in policy discussions on migration reform. We have warmly welcomed the changes recently announced by Minister O'Neil which we believe will improve the migration system for both employers and migrants. This built on the discussions at the Jobs and Skills Summit.

Improving the administration of the migration system, increasing labour market mobility and creating clearer, faster paths to permanency is key to improving the pathways into Australia's tech sector for migrants which is an important source of cultural, linguistic and gender diversity.

### **Improving Diversity in the Tech Sector**

As part of our plan to reach 1.2 million tech workers by 2030, we have made a identified the need to improve diversity in the tech sector. The first initiative listed in that pillar is 'company-specific commitments to diversity targets and reporting'. We are undertaking research to better understand diversity in the tech sector and opportunities for improvement. This includes benchmarking to identify the current state of diversity in the tech sector, and set up processes to update these measurements. This work is a necessary input to assist companies in forming public commitments on diversity.

# Conclusion

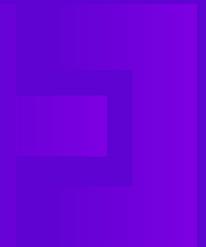
Australia's tech sector is progressing towards our goal of reaching 1.2 million tech workers by 2030, with 935,000 tech workers already in the sector. This growth reflects a long-term structural change in the Australian economy, driven by increased technology adoption and demand for tech skills.

Strong growth highlights how critical tech jobs are across the Australian economy. While this progress towards our goal is promising, now is the time to double down on work towards addressing tech workforce challenges.

The tech sector, in collaboration with the government, is committed to achieving the national tech jobs target. Initiatives such as virtual work experience programs, modern digital apprenticeships, migration reforms, and diversity improvement are crucial to ensuring strong growth persists.



The Hon. Minister Ed Husic MP, Minister for Industry and Science launching the Tech Council's plan to reach 1.2 million workers at Parliament House in August 2022.



# Appendix 1: Occupations included as tech jobs

The following list are the ANZSCO occupations that are counted as tech jobs in the research informing this report. These are the 'technology occupations' that are part of the tech jobs definition illustrated in Exhibit 1.

- > 1350 ICT Managers nfd
- > 1351 ICT Managers
- > 2232 ICT Trainers
- > 2247 Management and Organisation Analysts
- > 2249 Other Information and Organisation Professionals
- > 2252 ICT Sales Professionals
- > 2324 Graphic and Web Designers, and Illustrators
- > 2334 Electronics Engineers
- > 2600 ICT Professionals nfd
- > 2610 Business and Systems Analysts, and Programmers nfd
- > 2611 ICT Business and Systems Analysts
- > 2612 Multimedia Specialists and Web Developers
- > 2613 Software and Applications Programmers
- > 2620 Database and Systems Administrators, and ICT Security Specialists nfd
- > 2621 Database and Systems Administrators, and ICT Security Specialists
- > 2630 ICT Network and Support Professionals nfd
- > 2631 Computer Network Professionals
- > 2632 ICT Support and Test Engineers
- > 2633 Telecommunications Engineering Professionals
- > 3100 Engineering, ICT and Science Technicians nfd
- > 3124 Electronic Engineering Draftspersons and Technicians
- > 3130 ICT and Telecommunications Technicians nfd
- > 3131 ICT Support Technicians
- > 3132 Telecommunications Technical Specialists
- > 3424 Telecommunications Trades Workers

