

28 January 2022

Budget Policy Division
Department of the Treasury
Langton Crescent
PARKES ACT 2600

Dear Directors

Thank you for the opportunity to provide a pre-budget submission on behalf of the Technology Council of Australia (TCA). We would be pleased to meet with the Treasury to discuss the points raised in our submission.

About the Tech Council of Australia and the Australian tech sector

The TCA is Australia's peak industry body for the tech sector. The Australian tech sector is a pillar of the Australian economy, contributing \$167 billion per annum to the Australian economy, and employing 861,000 people. This makes the tech sector equivalent to Australia's third largest industry, behind mining and banking, and Australia's seventh largest employing sector.

The TCA represents over 100 member companies from a diverse cross-section of Australia's technology sector. This includes deep tech and software companies to VC firms and advisors. A number of our members operate or invest in businesses subject to foreign investment approvals, including multinationals and domestic firms, and venture capital funds.

Australia's tech sector will play a key role in the economic recovery in 2022

The Australian economy is in strong shape two years into the COVID-19 pandemic, with unemployment at its lowest point since 2008, and economic activity rebounding well post lockdowns in 2020 and 2021.

This strength has in part been driven by the performance of Australia's tech sector. Tech jobs are growing at twice the average rate and there are now 860,000 people working in tech jobs in Australia. The tech sector contributed \$167b to Australia's economy in FY21, making it equivalent to the largest industry behind mining and banking. Australia has created 99 technology companies in the last three decades that have achieved valuations of \$100m. 20 of them have gone on to be unicorns, valued at \$1bn or more. Tech adoption has been vital to assist Australian businesses to stay open and keep working under social distancing requirements, and has the potential to also improve their productivity and competitiveness.

The Tech Council believes Australia still has substantial room to grow its tech sector and has set three goals to achieve this:

- Employ 1 million people in tech-related jobs by 2025, and 1.2 million by 2030
- Contribute \$250bn to GDP from tech-related activity by 2030
- Make Australia the best place to start and scale a company

To achieve these goals, Australia must support talent attraction and development; boost growth of the Australian tech sector and tech activity; and ensure regulatory settings across the economy work for the tech-enabled economy.

Adopting these policies and the budget measures to support them will also help Australia navigate some of its immediate economic challenges two years into the pandemic.

First, there are serious skill shortages in critical industries and occupations, in part due to skilled migration being curtailed by closed or largely closed borders. These shortages are deeply impacting the tech sector. There are thousands of unfilled tech jobs in Australia today. Analysis of Indeed data shows that tech and STEM jobs have been experiencing the longest vacancies of jobs in the economy, including in crucial areas such as cybersecurity which had the longest period of vacancy for all roles, and nearly double the average of economy wide jobs. Many tech jobs are experiencing wage growth of 15 - 20 percent. This is seriously impacting the ability of Australian firms to grow, export and create jobs.

A second challenge is that low unemployment masks some uneven employment outcomes. Wage growth across the economy has been relatively flat for some time. Women's participation in the workforce has been highly volatile through the pandemic as female workers have been more likely to leave work to take-on caring responsibilities through lockdowns.

Finally, Australia's strong economic performance has been fuelled by record government stimulus and support measures. As these measures have been wound down, and the Australian economy transitions beyond COVID, private sector investment must increase to help maintain economic activity during COVID.

The TCA's budget submission addresses each of these challenges. Creating and filling more tech jobs in Australia is good for workers and the economy because tech jobs are high-paid, secure and flexible. Encouraging more Australians to train or reskill into the sector can help address skills shortages and lift wages. Attracting women in particular can help improve women's labour force participation. It can also improve women's economic security by lowering the gender pay gap, improving women's superannuation balances whilst allowing flexible work conditions.

Stimulating productive business investment can help increase private sector investment. By incentivising investment in productive new digital technologies and services, particularly for SMEs, the government can ensure these investments also help lift productivity, create jobs and put businesses on a more resilient footing.

Finally, making Australia a leading market to create and scale tech companies can create new sources of economic growth and high-value jobs and activity as Australia emerges from the pandemic.

Supporting 1 million tech jobs

Today, there are 860,000 people in tech jobs in Australia. These jobs span the direct tech sector (e.g. software companies), online commerce and digital activity in non-tech sectors, such as mining, banking and manufacturing.

These jobs are highly valuable to the economy and to workers as they are amongst the highest-paid, most secure and most flexible in the economy.

Modelling undertaken by Accenture for the Tech Council has found that Australia can have 1 million tech jobs by 2025 if we grow direct tech sector activity. This is now a goal of the Australian tech industry.

The key barrier to fulfilling the potential of the tech sector to employ 1 million Australians is acute labour shortages facing the sector. To get 1 million people employed in tech sector jobs by 2025, we need an additional 286,000 workers to join the sector.

To meet this ambitious target, reskilling and upskilling workers must become the primary way tech jobs are filled. Modelling by Accenture for the TCA estimates that 146,000 Australians will need to transition into the tech sector via reskilling and upskilling from other roles.

The TCA has four immediate policy priorities that would assist in bringing more Australians into the tech sector:

- Adopting the 1 million tech jobs goal in the Digital Economy Strategy - We recommend that the Australian Government endorses the goal of seeing 1 million people in tech-related jobs by 2025, and 1.2 million by 2030 . This would set a clear, united national mission, and motivate the industry, government and training sector to work together to achieve it. By making the goal concrete, and reporting on progress, it will also motivate key stakeholders to identify how it can be met, and what roles each can contribute to doing so. Finally, it would help Australians understand the practical value to their lives and the economy from implementing the measures in the Digital Economy Strategy.
- Women's reskilling campaign - We recommend that the Australian Government fund a multi-year public program in partnership with the tech industry to attract and assist more mid-career women to switch into the tech sector. Analysis of HILDA data shows that women are almost twice as likely to transition into jobs in tech between 25 - 30 than start their careers in the industry compared to men. Helping more women enter the tech sector in their early to mid career is highly beneficial to women and the economy. That is because the gender pay gap in the tech sector (9%) is half that of the broader economy (18%). Jobs are high-paid and flexible, enabling women to reduce their income and superannuation disparity and balance meaningful careers with other responsibilities.
- The program should address three key actions to make this switch more likely for women, including:

- Running a campaign to inspire women to consider reskilling and transitioning into tech jobs
 - Launching a digital platform to help women experience virtually what different tech jobs involve, and then find advice on jobs and training pathways in their local area
 - Mentor women making the transition to help them navigate the change successfully
- Digital apprenticeships – We recommend that the Australian Government, in conjunction with the Tech Council of Australia (TCA), the Digital Employment Forum (DEF) and their members and the Digital Skills Organisation (DSO) will establish digital apprenticeships with a goal of training an additional 20,000 new digital apprentices by 2025. The benefit of this model is that many jobs in tech are vocational in nature and do not require three - four year degrees to enter them. Forty-two percent of workers in the sector do not have a university qualification, and the gap between VET and university educated workers is small at only 3 percent, compared to an average of 18 percent in other high-paying industries. However, current vocational training models often do not provide a modern, relevant training experience that prepares Australians for emerging jobs in the sector. That is why a new digital apprenticeships model is needed. For more information on this initiative, see Attachment A.
 - Legislate Employee Share Scheme regulatory changes - We support amendments proposed in Treasury Laws Amendment (Measures 4 for Consultation) Bill 2022: Employee 5 Share Schemes that removes regulatory barriers in offering an employee share scheme (ESS). In particular we support proposals to extend regulatory relief and for limited disclosure if an employee is not paying cash, we would also support a further change to remove the issue cap entirely. These changes will allow younger companies to attract talent, reward employees in firms that successfully scale and enable those employees to leave and found their own companies, creating a virtuous circle that accelerates jobs and growth in the tech sector ecosystem.

Boosting business productivity and investment

The adoption of technology is an economic engine for Australia. Productivity growth as a result of tech adoption and digitisation across the economy could be worth 258,000 new tech jobs, and \$45bn in extra growth by 2030. This will make us more competitive in sectors in which we already have strengths, such as in agriculture and resources, as well as supporting the development of new strengths.

However, today Australia ranks in the bottom third of OECD countries for domestic capital investment in technology across the economy. Matching global peers would unlock \$14bn in economic contribution. To achieve this, businesses will need to

increase their investment in software, data, AI, cloud computing, analytics, equipment and other tech related capital.

As the accelerated rate of tech adoption has shown in the pandemic, this will also help these sectors stay competitive, respond to customer needs, create flexible workplaces, increase their productivity, and create more jobs.

Australia can get a double economic dividend by growing our global advantage in making software for the small and medium enterprise (SME) market. Australia and New Zealand are global leaders in creating tech designed for SMEs, such as accounting software products like Xero and MYOB, rostering software such as Deputy, graphic design software such as Canva, payments innovations such as Afterpay and tyro, and WH&S software such as SafetyCulture.

SME tech is a rapidly growing market segment which is delivering some of Australia’s most successful tech companies, creating thousands of jobs, and significant new export revenues. It also benefits Australian small businesses, who get to be the first customers in the world to access these products and services. This helps them cut down on their red tape and costs, grow their business, and get more time back to spend on their business and with their families.

The TCA proposes two specific measures that will immediately boost business productivity and investment, particularly for SMEs:

- Stimulating SMB Digital Investment - Government should introduce a capped rebate or tax offset for expenditure incurred on transformation services which result in the automation, digitisation or upgrade of existing business systems and processes by the relevant taxpayer for the first 12 months of any new service purchased. Eligible services should include Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), artificial intelligence solutions (such as robotics, machine learning, predictive data analytics and text/voice recognition), big data services, expert systems and cybersecurity. Eligibility for the digital transformation tax rebate or offset should be:

Digital incentive tax rebate as a function of business size and annual spend		Annual spend on new digital transformation technology			Eligible Rebate / Offset
		0 - \$499	\$500 - \$1,999	\$2,000 - \$500,000	
Business Size (employees)	Sole trader and micro (0-4)	25%	30%	40%	Taxpayer entitled to a refundable rebate
	Small (5-19)	20%	25%	30%	
	Medium (20-199)	10%	20%	25%	

	Large (200+)	10%	20%	25%	Taxpayer would be entitled to direct tax offset
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- Tax settings that promote investment in research and development in Australia - Improving usability and guidance for the Research and Development Tax Incentive (RDTI) will increase take-up, create jobs and stimulate economic growth. This has never been more important for Australia as ABS statistics show that 39 per cent of total business R&D expenditure in 2019-20 was in information and computing sciences - the highest proportion of spending of any category of R&D by Australian businesses. To further improve the RDTI we recommend Australia adopt elements from the system in New Zealand. The NZ regime was designed with software claimants in mind and does not include the requirement for a “systematic progression of work”, instead requiring a “systematic approach” be adopted. This requires “a planned, logical investigation to solve the problem” in order to be eligible for the R&D tax incentive and would simplify compliance with the program.

Making Australia the best place to found a company

By making Australia the best place in the world to launch and scale a company making SME tech, we can also make Australia one of the best places in the world to launch and grow a business in any sector of the economy.

This is important as to drive growth Australia needs to keep founding and growing new tech start-up companies. New companies could contribute 30,000 new jobs and an extra \$7bn in value by 2030, and investing in and scaling-up, more early stage Australian tech companies, which could contribute a further 65,000 jobs and \$14bn in value.

In this context the TCA has two immediate policy priorities to boost the growth of the tech sector:

- Make it easier for more Australians to invest in start-ups and scale-ups by introducing an ‘experienced investor’ category in the ESIC rules - Introducing a definition of experienced investor would enable more Australians to invest via programs such as the ESVCLP, including people with the experience and desire to invest in early stage companies that do not meet the asset and income test, such as women, who may have taken career breaks to raise children, and younger Australians working in the sector who have not yet had the opportunity to acquire substantial assets
- Maintain the venture capital tax concession programs, particularly the ESVCLP - These tax concessions have been extremely effective at growing the pool of investment available for early stage Australian companies, increasing

the number of tech firms that scale in Australia, and therefore the number of jobs created. These concessions should be maintained, with minor amendments to improve their efficiency and effectiveness

Ensure regulatory settings work for the tech-enabled economy

Australia can be one of the world's leaders in creating and adopting new tech products. To do this, we need a regulatory environment that is proportionate and predictable for investors, innovators and consumers, interoperable with other jurisdictions, and that consistently follows a set of best practice regulatory principles.

Australia's stable government, strong economy and track record of early consumer adoption of tech makes us an ideal market to lead on a sensible approach to the regulation of emerging products, services and industries, particularly in a period of geopolitical unrest globally.

Making Australia a leader in digital economy regulation will have a direct economic benefit. Modelling by Accenture shows that economies that are leaders in digital economy regulation grow on average by 6.3 percent per year. Countries that are medium performers grow by 4.3 percent, while laggards at regulation grow by 2.9 percent. Australia is currently sitting between a laggard and medium performer. If we become a medium performer, we will hit our \$250bn growth goal by 2030. If we became a digital economy leader today - and got the corresponding growth bounce - we would achieve our goal of tech activity contributing \$250bn to GDP by 2027 - three years early.

We propose policies in three areas of regulation to ensure that regulatory settings work for the tech-enabled economy:

- Better regulatory design:
 - Principle-led development of regulation - Government should establish a regulatory environment that is proportionate and predictable for investors, innovators and consumers, interoperable with other jurisdictions, and that consistently follows a set of best practice regulatory principles. The principles we propose are that policy and regulation should be:
 - Informed and coordinated
 - Proportionate
 - Timely
 - Consistent and interoperable
 - Have a bias to innovation and growth
 - More technical expertise in Government - Industry should coordinate technical and policy briefing sessions for policymakers with subject matter experts, this will improve the development and design of regulation and reduce potential unintended impacts on business and

economic costs, this is an urgent requirement as industry experts are well embedded in technical areas, however this isn't reflected in policy development

- Consistency in legislation - Government should always consider and formulate legislation, in consultation with industry, in the context of other legislation, domestic and international
- Regulation to incentivise and promote the development of high value businesses and assets in Australia:
 - Build on the Transforming Australia's Payments System reforms to create a regulatory environment that attracts digital asset businesses to Australia - government should approach digital asset and payment reform through a pro-growth lens, 28.8% of Australians now own or have owned crypto assets and the crypto industry currently contributes \$2.1 billion to GDP, with the potential for this to grow to \$68.4 billion by 2030, government should focus on the immense potential of digital assets and new payment systems to generate economic growth and create jobs as well as assessing the risks involved.
 - Prioritise reforms that make Australia a great place to build to build a tech business - recent reforms such as digital identity reform and proposals to modernise document execution will improve the regulatory environment and help to spur business and job growth, it is important that new reforms such as the adoption of e-invoicing, that could generate cost savings of \$23.5 billion for the economy, continue this momentum
- Reduce red tape:
 - Introduce a 45 day approval deadline for non-complex approvals in sensitive industries - Growing critical, strategic industries and technologies, such as AI, quantum computing, and space, is an essential objective of the Australian Government. Australia attracts 2.8 per cent of global VC funding into quantum businesses, well above our expected attractiveness, uncertainty regarding FIRB approvals places this investment at risk, setting 45 days as a clear deadline for lower risk applications would help to address this uncertainty
 - Consistency across key legislation - Government should ensure regulatory consistency, for instance definitions of critical technologies in legislation, and the treatment of critical technology sectors, need to be consistent

Thank you for the opportunity to make this submission. We would be pleased to discuss the comments in our submission with the Department of the Treasury.

Yours sincerely



Kate Pounder

CEO

Tech Council of Australia

Attachment A – Digital Apprenticeships

Issue

To reach 1 million jobs by 2025, the tech industry will need an additional 286,000 workers. These will primarily come from Australia's university and vocational training system (68,000), and up/reskilling workers from other industries (146,000).

For many Australians attending university or going back to university does not suit their circumstances, and it will also take too long to address acute skills shortages that exist today in the tech sector.

Proposal

The Federal Government, in conjunction with the Tech Council of Australia (TCA), the Digital Employment Forum (DEF) and their members and the Digital Skills Organisation (DSO) will establish digital apprenticeships with a goal of training an additional 20,000 new digital apprentices by 2025.

By structuring learning around the flow of activities at the workplace, Digital Apprenticeships reduce the amount of face-to-face training that is required in a formal institution when compared with traditional university and VET pathways.

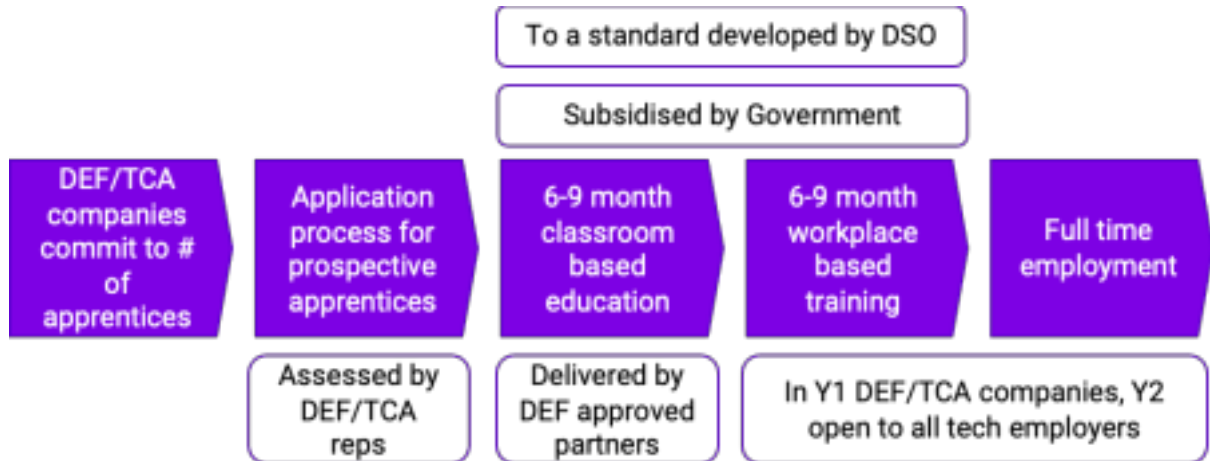
By combining training and work, digital apprenticeships provide pathways for school leavers from a variety of backgrounds, including gender and geographic location to enter a tech career, as well as existing employees looking to shift into technology from another career.

Challenges faced by previous apprenticeship/traineeship/cadetship programs in digital careers have been a poor completion rate, overly short training, lack of quality assurance, out of date training content, lack of employer acceptance and managerial ability to properly support largely unskilled and unproductive workers entering the workplace while they train. This program de-risks this by:

- placing the training upfront before the work placement occurs;
- actively engaging employers in the design and implementation from day one through the combined membership of the TCA and DEF;
- aligning to an industry-designed digital skills standard through the DSO and only having approved public and private providers with relevant, high-quality content delivering courses;
- actively investing and supporting the uplift of employers to integrate, train and support apprentices in the workplace;
- increasing the probability that apprentices will have jobs at the end of the course to incentivise completions and ensure public subsidisation of courses is a worthwhile investment.

In the first instance the apprenticeships will be for the following jobs: junior developer, junior data analyst, junior product manager, junior cloud/systems administrator and after-sales support worker.

Digital apprentice process diagram



Fiscal impact

Component	Fiscal impact \$UCB – 2022/23-2025/26
Wage subsidy (assuming a 10k wage subsidy)	\$200m
Cost of delivery (assuming a 10k course cost)	\$200m
On the job training	To be covered by participating employers

There is also the potential to use innovative finance models, such as through TCA member company FORTE to reduce the fiscal impact on government, and only pay for those apprentices who successfully transition to full time employment.