FUTURE SKILLS ORGANISATION
Finance Technology Business

Jobs and Skills Councils
An Australian Government Initiative

Initial Workforce Plan

‘Building a skilled workforce’

Executive Summary

December 2023

The Australian Government has established Jobs and Skills Councils (JSCs) to identify skills and workforce needs, map career pathways, develop contemporary vocational education and training (VET) training products, support collaboration between industry and training providers, and act as a source of intelligence on issues affecting their industries. This in turn will support the development of high-quality, relevant training pathways and opportunities across the Australian economy. The Future Skills Organisation (FSO) has been appointed as the JSC for the finance, technology and business (FTB) sectors.

Workforce planning is a critical first step in fulfilling the JSC's mandate because it provides the evidence base for government, employers, unions and educators to agree on workforce needs, training priorities, and training design and delivery. The key objective of the initial workforce plan is to understand current labour force dynamics and characteristics, with a view to identifying emerging and future key workforce challenges and opportunities. By discerning these challenges, the plan lays the foundation for crafting strategies and offering advice. It also paves the way for a more detailed workforce plan next year and in subsequent years.

The development of this plan involved a mixed-methods research approach including:

- A desktop scan of existing initiatives and strategies
- Analysis of workforce and training data
- A survey of over 600 FSO Collaborators (84 respondents)
- A series of workshops and interviews with key stakeholders including industry, unions, peak bodies, state and territory governments, Registered Training Organisations (RTOs) and community groups
- Discussions with other Jobs and Skills Councils

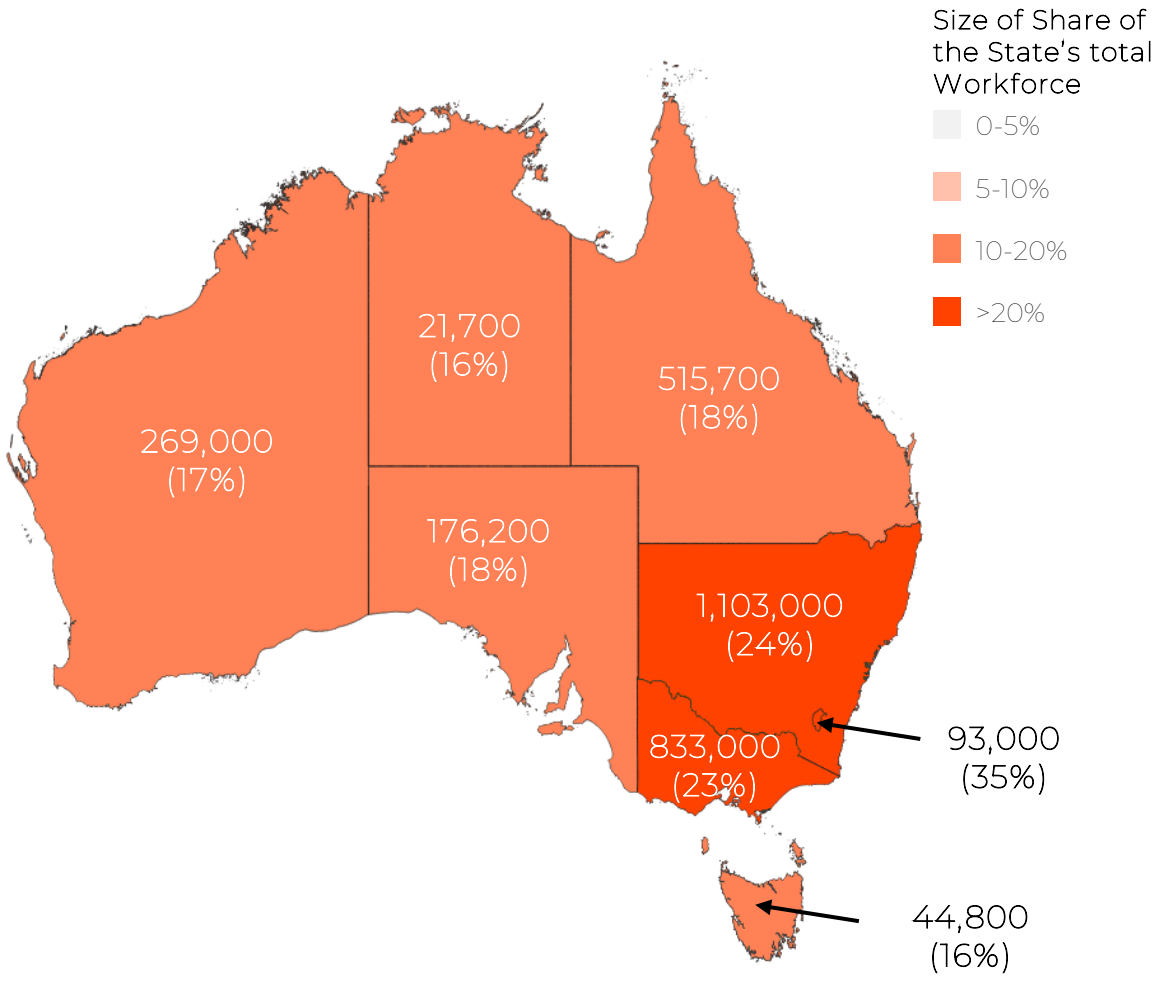
Previous versions of this plan included forecasts for supply and demand of FTB occupations in 2028. Following advice from Jobs and Skills Australia (JSA) on the complexities of forecast modelling, this plan focuses solely on the current workforce.

Finance, technology and business occupations and skills are a significant part of Australia's economy and skills needs are changing quickly

Currently, around 1 in 5 workers across Australia work in finance, technology or business occupations, with around 841,600 people employed in finance occupations, 749,300 in technology occupations, and 1,402,200 in business occupations (source: four quarter average (Aug 22 – May 23), ABS Detailed Labour Force Survey (Table EQ08)). Workers in these occupations are found across the economy in every industry (sources: four quarter average (Aug 22 – May 23), ABS Detailed Labour Force Survey (Table EQ08). ABS Census 2021 (Employment and Income data) - Tablebuilder; Accenture analysis).

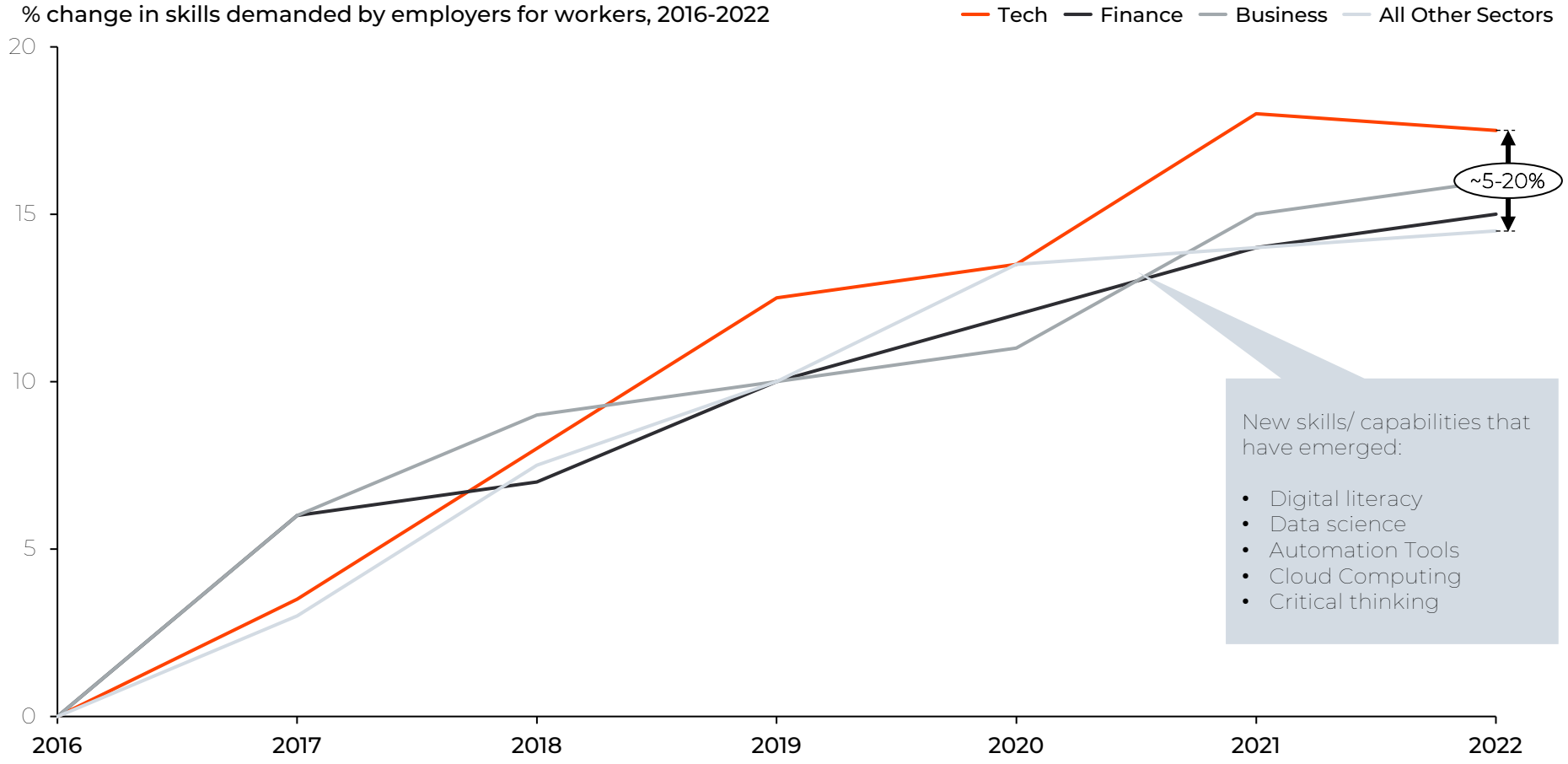
There are 51 FTB occupations currently in shortage (source: JSA, Skills Priority List 2023) and, on average, since 1986, tech occupations have grown 3x faster and business occupations 1.5x faster than other occupations (source: ABS Detailed Labour Force Survey, (Table EQ08), trend data 1986-2023; Accenture analysis). At this rate of growth in demand, it is anticipated that job vacancy rates will increase further.

Source: Map data uses Labour Force Survey data and is proportioned by state/territory using historical ABS Census 2021 state splits



In FTB occupations,skills needs are changing quickly with a 5-20% greater skill change compared to other occupations, with demand for digital skills driving this change (source: Lightcastdata; Accenture analysis). The skilling system will need to adapt at a faster pace while maintaining quality in order to ensure people are gaining skills relevant to industry requirements. Stakeholder feedback reinforced that almost all FTB workers now require at least a baseline of digital capability to perform their job.

Tech skills have changed 20 percent more quickly than average for occupations outside FTB



Sources: Lightcast Job Advertisement data, mapped to occupations in scope; Accenture analysis

VET has been a source of around half of training for entrants into FTB occupations, but its prominence has been declining over the last 5 years, particularly at lower levels (Certificates I –IV).

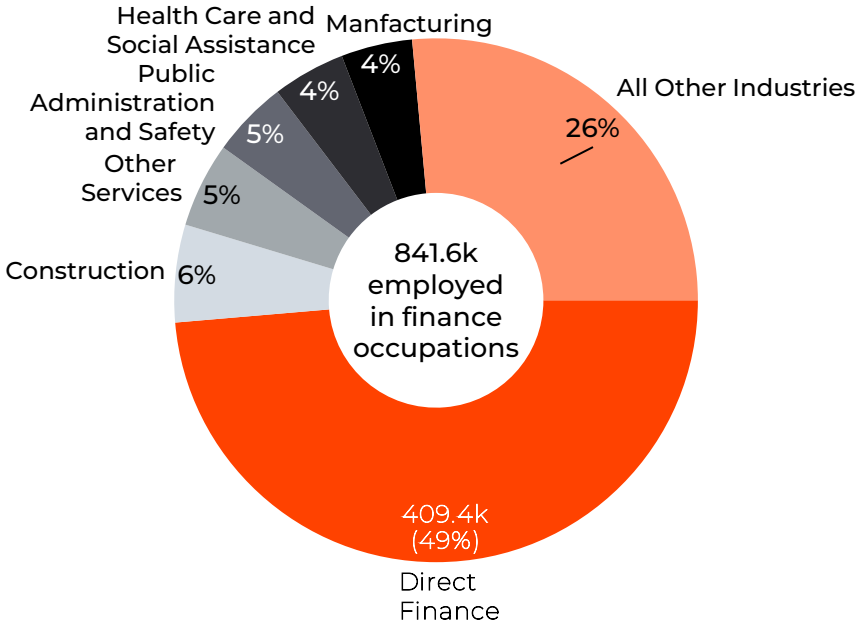
Consultation with stakeholders reinforced the need for the training system to keep pace with changing skills demands, but also indicated that industry does not have a strong understanding of VET and tends to prefer employing higher education graduates into FTB.

Six finance occupations are currently in shortage (source: JSA, 2023 Skills Priority List). Finance occupations are increasingly demanding digital skills.

49% of finance occupations are employed in the direct finance sector and 51% employed in other industry sectors across the economy, notably in construction (6% of finance occupations), public administration and safety (5%) and health care and social assistance (4%) (sources: four quarter average (Aug22 –May 23),ABS Detailed Labour Force Survey (Table EQ08);ABS Census 2021 (Employment and Income data) -Tablebuilder; Accenture analysis).

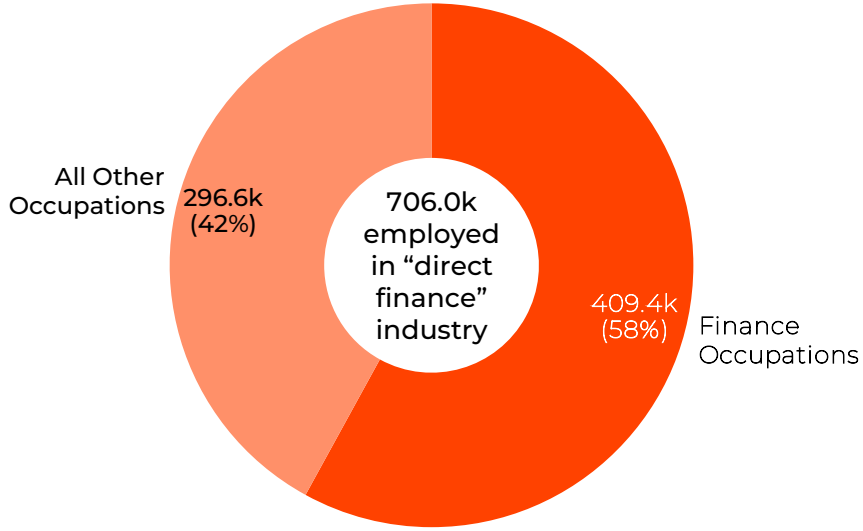
Industry concentration of workers employed in finance occupations

Percentage (%), Australia, FY2023



Occupation concentration of workers employed in the direct finance industry

Percentage (%), Australia, FY2023



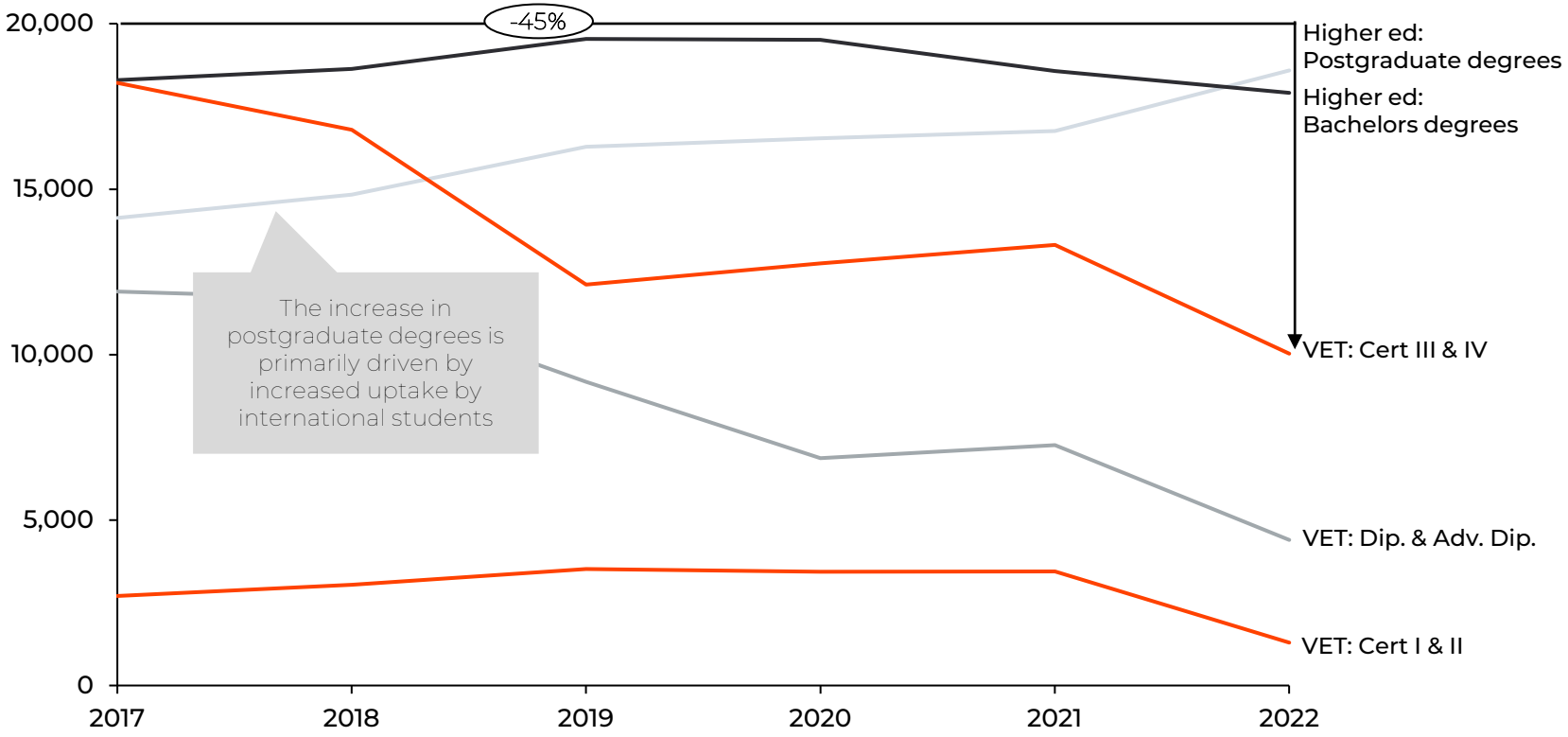
Sources: Four quarter average (Aug 22 – May 23), Detailed Labour Force Survey (Table EQ08), ABS; ABS Census 2021 (Employment and Income data) - Tablebuilder; Accenture analysis

At the same time, supply rates into finance occupations are falling. Financial Services (FNS) training package qualification completions have declined by almost 50% since 2016. Despite this, the FNS training package appears to be meeting industry need although industry feedback indicates a preference for employing university graduates, which may be impacting supply from the VET sector.

Finance occupations have had higher than average changing skills needs driven by increasing demand for digital skills (sources: Lightcastdata; Accenture analysis; stakeholder feedback).

Number of finance course completions

International and domestic students, 2017-2022



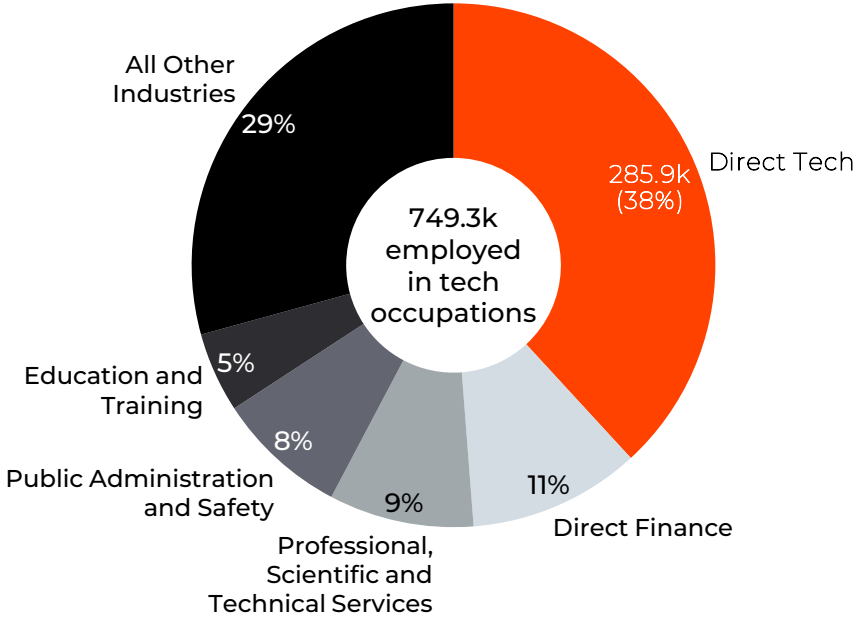
Sources: NCVER Total Student Outcomes, Total Enrolments, Total Completions 2016-2022 – VOCSTATS Database; ABS Census 2016, 2021 (Education and Qualifications data, Employment and Income data) - Tablebuilder; ASIC 2017 Accenture analysis

Tech occupations are found across the economy, demand for tech occupations has grown significantly and skill needs within tech occupations are changing rapidly

The majority (62%) of tech occupations are employed outside the direct tech sector (sources: four quarter average (Aug 22 – May 23), ABS Detailed Labour Force Survey (Table EQ08); ABS Census 2021 (Employment and Income data) - Tablebuilder; Accenture analysis). Tech occupations have grown at least three times faster than other occupations on average (source: ABS Detailed Labour Force Survey, (Table EQ08), trend data 1986-2023; Accenture analysis) resulting in 39 tech occupations currently being in shortage (source: JSA, 2023 Skills Priority List). Demand for tech occupations, particularly Cybersecurity Specialists, is expected to grow further, especially after release of the Government's 2023-2030 Australian Cyber Security Strategy.

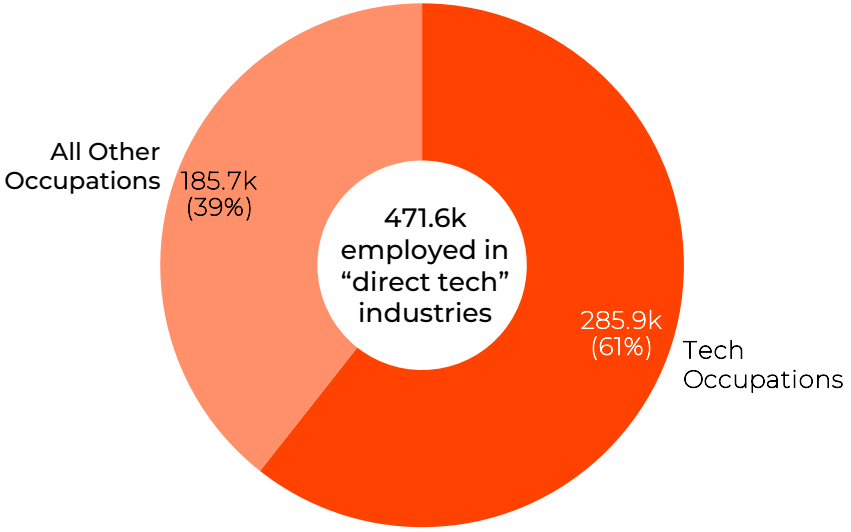
Industry concentration of workers employed in tech occupations

Percentage (%), Australia, FY2023



Occupation concentration of workers employed in the direct tech industry

Percentage (%), Australia, FY2023



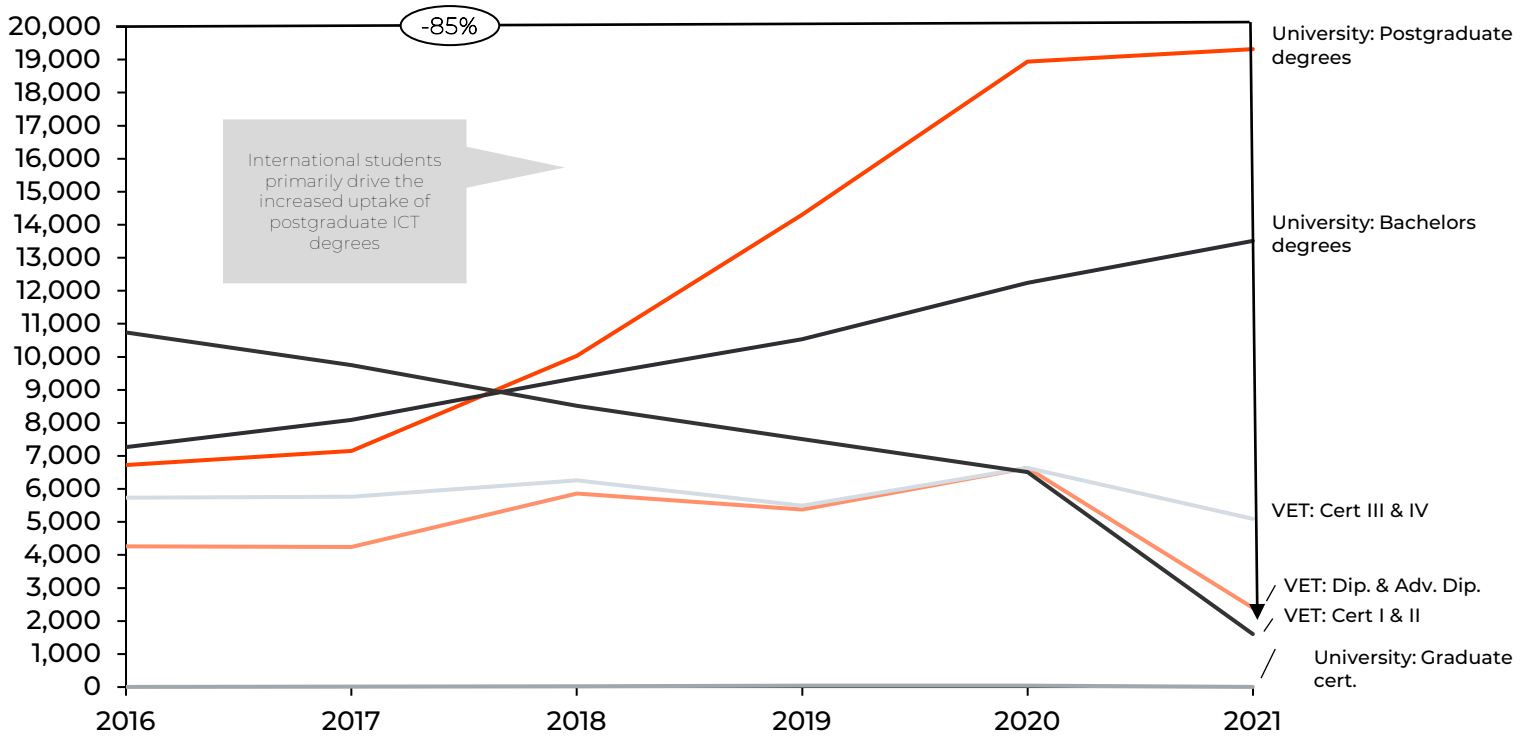
Sources: Four quarter average (Aug 22 – May 23), Detailed Labour Force Survey (Table EQ08), ABS; ABS Census 2021 (Employment and Income data) - Tablebuilder; Accenture analysis

Concurrent to increasing demand, supply rates through the VET sector are declining, including a reduction of ~85% at Certificate I and II levels since 2016 (source: Total VET student outcomes 2016-2022, NCVER VOCSTATS). Of note, for the purposes of this workforce plan, we consider a subset of the tech workforce as defined for the Australian Government's goal of getting to 1.2 million tech workers by 2030. This subset does not include non-tech occupation workers in the tech industry.

Industry reported gaps in the Information and Communications Technology (ICT) training package, with perceptions that qualifications had low relevance to industry needs. This is reflected in learner outcomes, with only around half of completers from the ICT training package finding it relevant to their occupation (source: Total VET student outcomes 2016-2022, NCVER VOCSTATS). To bridge the skills gaps, some tech firms reportedly offer industry-led non-accredited training in partnership with training providers.

Number of ICT course completions

International and domestic students, 2017-2022



Sources: 1. NCVER Total Student Outcomes 2016-2022 - VOCSTATS Database, 2. Lightcast, TCA Getting to 1.2 million; Accenture analysis

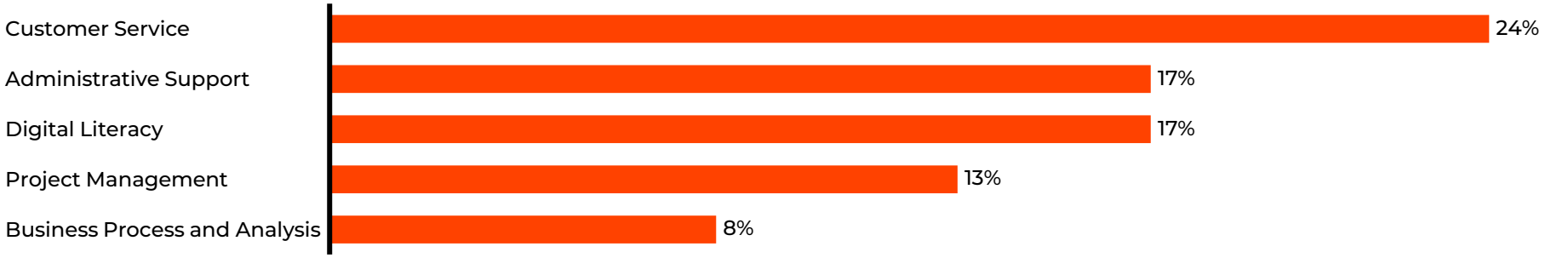
Six business occupations are currently in shortage (source: JSA, 2023 Skills Priority List). Industry expects further changes in the skills required for business occupations

Business occupations constitute around 1.4 million workers across the economy in every industry sector, notably in professional, scientific and technical services (16% of business occupations) and health care and social assistance (14%). (sources: four quarter average (Aug 22 – May 23), ABS Detailed Labour Force Survey (Table EQ08); ABS Census 2021 (Employment and Income data) - Tablebuilder; Accenture analysis)

Completers of qualifications in the Business Services (BSB) training package report high levels of satisfaction with training relevance. However, business occupations are experiencing changing skills requirements, with significantly increasing demand for systems administration, digital literacy and quality assurance and control (sources: Lightcast data; Accenture analysis; stakeholder feedback).

Top 5 required skills in job advertisements for business occupations

Penetration of skills, percentage (%), Australia, FY2019-2023



Sources: 1. Lightcast with business skills mapped to FSO Business Skill Mapping; Accenture analysis

It will be critical that the training system can adapt at the right pace and quality to support workers to gain these new skills and competencies. Stakeholders reported that new technologies such as Generative Artificial Intelligence (GAI), are expected to significantly disrupt the skills required in business occupations and requires consideration during training product development. This issue is explored further in the report on the impact of generative AI on skills in the workplace at page 113 of the full report.

Stakeholders' views were generally consistent with Australian Government data on occupation shortages

Stakeholders across all sectors reported low supply in a range of occupations as well as skill mismatches. On the supply side, it was reported that there was a lack of awareness and attractiveness for certain professions, as well as poorly articulated pathways, which were not understood by industry nor students. Industry stakeholders reported that many workers lacked key foundational skills to perform their current jobs (particularly digital skills) as well as specialist skills to meet emerging occupational demands (particularly in cyber security). Additionally, stakeholders noted that employers faced challenges in upskilling workers in emerging technologies with 90% of respondents to our Collaborator Survey (unpublished) reporting that GAI was a major technological shift impacting their industry. While the increased use of GAI was identified as an emerging challenge, it was also noted as an opportunity for increasing productivity. This has been explored further in the full report Appendix (pages 113 – 129) which details a report to understand the impact of GAI on occupations and its subsequent impact on FTB training packages.

In respect of training needs, we heard demand for more work-based learning and short-form training options to enable workers to transition into and out of occupations, as well as greater alignment between VET and vendor certifications in tech. Industry's view was the BSB and FNS training packages are somewhat meeting their needs. However, there was significant feedback that the ICT training package is not. Stakeholders also highlighted the need and opportunity to support the currency and relevance of VET teachers and trainers, particularly in the delivery of ICT training.

Stakeholders reported a strong desire to shift towards a skills-driven approach to workforce planning, consistently emphasising the importance of skills over job titles. This perspective emerged as a gap in our approach, partly driven by increasing demand for digital capability, a more dynamic workforce, and the impact of AI, and it is anticipated will be a more central focus of next year's Workforce Plan.

A number of labour force dynamics were identified as having an impact on the current FTB workforces and future demand.

On the supply side:

- **Industry perceptions are that graduates from the ICT, FNS and BSB training packages do not have skills suitable for entry** to relevant occupations although qualification packaging rules do not appear to be well understood by industry, resulting in industry not being aware of the breadth of skills that can be delivered.
- **Existing FTB workforces do not have sufficient digital skills** due to increased application of digital tools and technologies which has led to greater expectations that workers will be digitally capable to complete their job.

On the demand side:

- **Changed occupational design is increasing the need for digital skill sets,** especially in finance and business occupations. Occupational descriptions are largely the same but with increasing demands for digital skills. Proficiency in digital skills is already required in many occupations and will grow in importance as new technologies evolve and become even more commonplace.
- **Skills needs are changing rapidly in FTB occupations,** and these changes are expected to accelerate due to the impact of new technologies, especially GAI. There is a strong desire from industry for more short-form training, work-based learning and increased alignment with vendor certifications.
- **Industry appears to prefer university entry pathways into many FTB occupations** likely due to poor perceptions or lack of understanding of the VET sector.

In respect of occupational supply, stakeholders reported that:

- **Supply is too slow into the workforce and the training system is not responsive enough to changing skills needs** which results in training being out of date by the time it is commenced / completed. Industry expressed a preference for short-form training, ideally aligned with vendor certifications in order to maintain currency.

- **A lack of diversity in the FTB workforces exacerbates shortages,** with a very low proportion of First Nations people across FTB and, in tech, a very low proportion of women participating in the workforce.

- **Completion rates have declined significantly in FTB,** particularly at lower levels of VET, likely due to poorly articulated training pathways, students completing only the units they need from subsidised full courses and alternative short-form training being widely available. Stakeholders also identified that additional support is required to enhance VET practitioners' industry relevance and currency.

Overall, stakeholder feedback was consistent with the data: demand for FTB occupations is increasing significantly whilst supply is declining. Given that many FTB occupations are already in shortage, it is anticipated that these shortages will worsen without action. The labour force dynamics exacerbating this situation have been summarised into the key themes below.

Challenges

Training suitability

There is an industry perception that the ICT training package is not meeting industry needs. It appears that the FNS and BSB training packages are meeting learner expectations, but not consistently delivering skills required by industry.

Digital capability gap

There is a gap in foundational digital capability across the workforce as it becomes a critical skill in all roles.

New technologies

Technological change, including GAI, is reshaping finance, tech and business occupations, with implications for skilling and pathways.

Pathways

Industry and students often lack clear understanding of training and skilling pathways into occupations and careers.

Enhancing trainer and teacher currency

Fast-changing skill demands require support for trainers and teachers to deliver training.

Data limitations

Workforce intelligence needs improvement to help inform decision making. Current data gaps limit the ability to identify and track emerging skills and responses to skilling and workforce challenges. This includes the appropriateness of ANZSCO classifications as industry shifts towards defining workers by skill sets rather than increasingly outdated occupation classifications.

A detailed analysis of the labour force dynamics (pages 73-78 of the full report) and current initiatives relevant to the FTB workforce (pages 86-100 of the full report) has resulted in the following potential activities being identified:

	Training suitability	Digital capability gap	New technologies	Job and career pathways	Enhancing trainer and teacher currency
Priority actions	Further assess training suitability through: 1. Job role needs analysis of top employers (large, medium and small) 2. Survey of FTB companies who have employed new entrant workers from VET 3. Survey of FTB employers with experience of VET to upskill existing workforce Compare observations against existing training packages and suggest changes (if any). Expand alignment of vendor certifications to Accredited Training.	1. Agree on a single shared definition of digital capability which can be implemented at scale 2. Develop additional projects to uplift digital capability such as digital confidence for leaders	1. Further assess the impact of new technologies, commencing with GAI, on the FTB workforce 2. Review the impact of new technologies, starting with GAI, on the training system	1. In partnership with government and industry, develop clearly defined national career pathways 2. Activities to increase brand perception and promotion of digital career pathways 3. Identify best practice in achieving employment outcomes in the FTB sectors for students from underrepresented cohorts	1. Related to potential activities on new technologies, specifically assess and address the impact of new technologies and skill requirements on FTB teachers 2. Evaluate technological integration into existing training packages, identify challenges and opportunities through a nationwide data gathering process 3. Explore the use of GAI in supporting training delivery

Data limitations (see pages 61-62 of the full report for further data gaps)

1. Develop a Workforce Plan with a greater focus on skills, not occupations
2. Engage with relevant departments and bodies to build a more detailed and up-to-date dataset of the outflows and inflows of workers in the FTB sectors

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