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Engaging more employers in nationally recognised training to develop their workforce: employer interviews - support document 3

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This document was produced by the author(s) based on their research for the report *Engaging more employers in nationally recognised training to develop their workforce* and is an added resource for further information. The report is available on NCVER’s Portal: <<https://www.ncver.edu.au>>.

### 

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### Publisher’s note

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# Introduction

## The research project

Australian employers’ engagement with the national vocational education and training (VET) system (including employers with jobs that require vocational qualifications, those with apprentices and trainees, and those that use nationally recognised training) had, prior to the onset of the COVID-19 pandemic, trended downwards over 14 years to 2019, from 58% to 51% (NCVER 2019). This downward trend overall masks differences by industry sector. In some sectors, employer use of the VET system remains high, such as the construction industry, with 73% of employers in 2019. In other sectors, it is relatively low, at between 30% and 40% (NCVER 2019).

This NCVER research project aims to deepen understanding of employer approaches to training of their workforce and to arrive particularly at strategies to improve employer use of nationally recognised training.

The project involves three phases:

* Desk research (see support document 1: Literature Review)
* Interviews with representatives of peak stakeholder bodies (see support document 2)
* Interviews with employers in industry sectors with lowest use of nationally recognised training in 2019 (this support document 3).

## This report

This Support Document reports on the outcomes of 35 interviews with employers in five industry sectors with relatively low engagement with the national VET system in 2019. These five sectors are: Agriculture, Retail, Transport, Warehousing and Information Media and Telecommunications (NCVER 2019). The full set of questions that guided the discussions with employers is provided in the appendix. The questions were informed by learnings from phases 1 and 2 of the project involving a literature review and interviews with VET stakeholder peak bodies.

## Methodology for employer interviews

The focus of our interviews with employers was on their use of nationally recognised training *vis-a-vis* other forms of training to develop the skills and knowledge of their workforce (both new and existing). We defined these terms in the interview questionnaire sent to employers prior to the interview, with further clarification of the terms provided at the time of the interview.

### Definitions

Nationally recognised training is defined as:

Training that leads to vocational qualifications and credentials that are recognised across Australia. Only registered training organisations (RTOs) that meet government quality standards such as TAFE, private providers, enterprise registered training organisations, vocational divisions of universities, community RTOs and schools that are RTOs can provide nationally recognised training (Naidu, Stanwick & Frazer 2020).

Nationally recognised training is listed on the National Training Register (training.gov.au) and includes accredited courses, endorsed training package qualifications, training package skill sets and associated subjects (Naidu, Stanwick & Frazer 2020).

Nationally recognised qualifications, from certificate I to graduate diploma, are VET qualifications within the Australian Qualifications Framework (AQF), which is the national policy for regulated qualifications in the Australian education and training system (Naidu, Stanwick & Frazer 2020).

It is important to note that the term ‘accredited’, while loosely used by employers and stakeholders to mean all nationally recognised training, technically specifically refers to a ‘nationally recognised **course** accredited by VET regulators and developed to meet training needs not addressed by existing training packages’ (NCVER Glossary of VET). A ‘statement of attainment’ is issued for completion of an accredited course and also for completion of one or more ‘units of competency’ or modules within an accredited course or part of an AQF qualification, as specified by a nationally endorsed training package (Naidu, Stanwick & Frazer 2020).

A grouping of one or more units of competence can comprise a nationally recognised ‘skill set’ specified in a national training package, which clearly defines the skills and knowledge required to meet a specific industry need or a licensing or regulatory requirement (Naidu, Stanwick & Frazer 2020).

Nationally recognised training can only be delivered by registered training organisations (RTOs), whether public, private, community-based or enterprise-based (ERTOs). RTOs must meet the Standards for RTOs 2015 and state-based Guidelines where applicable, and are registered by the national VET regulator, the Australian Skills Quality Authority (ASQA), or a state registering and accrediting body (i.e., VRQA, WATAC).

## Other forms of training

Other types of training that do not lead to nationally recognised certification are commonly referred to as ‘non-nationally recognised training’. They include structured training typically offered by in-house or external trainers with considerable industry experience and expertise, and vendor training provided by the company that has provided products, machinery or services to an employer (Naidu, Stanwick & Frazer, 2020).

Non-nationally recognised forms of training also include unstructured or informal training, where knowledge and skills are acquired by working alongside expert others, or through mentoring and coaching, or alone through learning by doing. In this report we use the term ‘non-nationally recognised training’ to mean training that does not lead to vocational qualifications and credentials that are recognised across Australia.

**Initial or entry-level VET** (IVET) is training that equips individuals to commence employment. It usually involves whole qualifications training for a particular occupation. **Continuing VET** (CVET) is training that supports workers’ ongoing employability and career development. It often involves specific skills sets training. In this report we focus on the learner. It they are a new entrant to work then they are doing IVET. If they are an existing worker, then they are doing CVET.

### Obtaining a sample of employers

Assistance was obtained from relevant peak industry bodies to compile a list of employers to interview in the five industry sectors. Web searches were also conducted to identify employers, and some limited ‘snowball’ sampling using employer referrals to other businesses.

The aim was to interview at least five employers in each of the five sectors and for employers to be a mix by business size and sub-sector. Employers were contacted via email and/or phone to invite them to participate in the study. Of those who agreed to answer our questions, the majority did so via a phone or Zoom interview with members of the research team. A minority of employers opted to provide written responses in their own time to the emailed interview questionnaire, and to send these responses back to the research team. All employer interviews were completed between February and June 2021.

In summary, the 35 employer interviews were of about one hour each in length, with employers from each of five industry sectors, and with a mix by size and sub-sector of the industry.

## Report structure

This report comprises five chapters, addressing each of the five industry sectors, and in the order of Agriculture, Retail, Transport, Warehousing and Information Media and Telecommunications, covering the following topics:

* Overview of the sector, including impacts of the COVID-19 pandemic
* Trends in sector employer use of nationally recognised training beyond apprenticeships and traineeships
* A brief description of the employers interviewed
* Their use of training, nationally recognised and other forms
* Factors that encourage decision-making about training
* Barriers to using nationally recognised training
* Changes needed to make nationally recognised training more attractive to employers.

## References

Naidu, R, Stanwick, J & Frazer, K 2020, *Glossary of VET*, NCVER, Adelaide.

# Agriculture

## Sector overview

According to the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES 2021), Australian agriculture accounts for around half of Australia’s land use. In 2019–20, Australian agriculture contributed 1.9% of value added gross domestic product (GDP), accounted for 11% of the nation’s goods and services exports and 2.6% of employment.

The range of agricultural activity is shaped by Australia’s climate, the availability of water, soil type and proximity to markets. Livestock grazing is widespread across Australia, while cropping and horticulture are more concentrated in regions closer to the Australian coastline.

Historically, farmers in Australia have achieved strong productivity growth, with agriculture showing stronger growth over the longer term than most other sectors of the Australian economy. This growth is determined mostly by improvements in technology and structural change.

While the number of farms has decreased over time, farm sizes have increased. This is due to improved productivity through several factors:

* The use of better technology
* More flexible use of labour aiding higher labour productivity
* Innovation driven by the improved use of knowledge and new practices.

There were an estimated 90,000 agricultural businesses in Australia in 2018–19, with an estimated average value of operations of more than $40,000 (ABS 2020a).

Significantly, farmers in Australia operate in highly competitive and international markets. This means farmers need to continue to innovate to produce internationally competitive products to stay viable and to be profitable. Asia is the fastest growing export destination for Australian agriculture, fisheries and forestry products.

Labour is a key input in Australian agriculture. However, on-farm employment has fallen by a quarter over the past three decades (ABS 2020b). The largest employers are broadacre farms, followed by fruit, grape and nut farms, vegetable farms and dairy farms (Martin, Randall & Jackson 2020). Unskilled, casual and contract labour is the major labour source of employment throughout the year, peaking around the planting and harvest periods. Horticultural farms use relatively large amounts of casual and contract labour at key times of the year, while broadacre and dairy farms use this kind of labour more consistently throughout the year. The highest proportion of full-time employees are found on dairy farms, almost double the proportions in the three other farm types.

A major and ongoing challenge from the COVID-19 epidemic has been the reduced availability of casual and contract farm workers from overseas. The National Agricultural Workforce Strategy (Azarias, Nettle & Williams 2020) reported that the pandemic has shown the vulnerability of every stage of Australian agriculture (pre-farm, farm, and post-farm) to workforce and skills shortages, from both local and overseas sources. It has again emphasised the importance of the quality of the agricultural workforce at key points of the supply chain. A well-trained workforce that is open to upskilling is critical for the sustained growth and continued productivity of the Australian agricultural sector.

## Trends in employer use of nationally recognised training

Figure 1 below reveals trends over time from 2011 to 2019 of agriculture, forestry and fishing employers’ use of nationally recognised training (excluding apprenticeships and traineeships) (NCVER 2019). As can be seen, agriculture employers’ use of nationally recognised training for either full qualifications or specific subjects or modules has remained steady over recent years up until 2019.

Figure 1 Trends over time in Agriculture, forestry and fishing employers’ use of nationally recognised training (excluding apprenticeships and traineeships) for full qualifications or specific subjects/modules, 2011 to 2019 (%)

Notes: Response value ± margin of error using a confidence interval of 95%.

Source: Employers’ use and views of the VET system (NCVER 2019).

## Employers interviewed

Nine employers were interviewed from across the agricultural sector in Australia. They came from a wide range of sub sectors in the agricultural industry and included very large businesses with a strong international and export focus, to small, family-based operations. The interviewed employers included: small to medium business lobster, fish and honey farmers and producers; farmers running large family stations in remote Australia; a large beef producer that operates Australia’s largest vertically integrated beef supply business to domestic and export markets; a publicly traded agri-business corporation with extensive operations across Western Canada and Australia; a leader in cereal breeding in Australia**,**offering market leading wheat, barley and oat varieties for growers; and a stock exchange listed firm that is leading food and agri-business, supplying food ingredients, feed and fibre worldwide.

## Use of training

### Nationally recognised training

The ‘pure’ use of only nationally recognised training is rare among the employers interviewed. A large business, that covers the whole supply chain from farm gate to delivering products to consumers, storing, handling, transporting, and marketing commodities including grains, oilseeds and cotton, uses nationally recognised training to meet national industry standards. They utilise two units from a certificate IV for safety and internal training, and units in a certificate III in grain classification, and are attempting to hire new apprentices.

Others interviewed are using nationally recognised training frequently around workplace health and safety, driver training (e.g., forklifts, truck driving, other machinery) and for grievance and management training. A fish production farm is using a certificate III in partnership with a regional university and has decided not to use non-nationally recognised training as they seek ‘a national seal of approval’.

### A mix of training types

The majority of agricultural employers interviewed adopt a mixed model. The mix of training between nationally recognised and non-nationally recognised training was best shown in a beef business that, being vertically integrated, breeds, feeds and processes cattle for production, and packs and markets meat for retail and distribution. They use a wide variety of nationally recognised training to ensure that they ‘are on par with industry standards and using best practice’. They use apprenticeships and traineeships, industry accredited short courses, and standard generic industry courses. They also make use of non-nationally recognised online modules in their internal learning management system, accessing multiple topics including leadership, communication, safety, emotional intelligence, and Microsoft suites.

Another large international firm that manages the agricultural commodity supply chain from farmer to consumer has used their own trainers to design a suite of internal non-nationally recognised training to meet their needs. They aim to design high quality modules aligned with the Australian Qualifications Framework (AQF) training requirements. Several modules are designed around ensuring that employees understand safety requirements and have a sound knowledge of the business and its operational practices. As they described:

We do a lot internally. We access subject matter experts with trained trainers and assessors working together. A recent good example is how we did this to develop what we wanted around appropriate mental health training with our operations staff.

Another employer in fisheries uses both VET and higher education providers, across a wide range of qualifications. These range from fork lift and elevator lift training for over 25 employees, to supporting higher education among their employees at a Master of Science level with majors in water toxicology, artificial intelligence, probiotics and water, and other forms of water research. This same business with over 60 staff is using non-nationally recognised training on site to upskill their staff, who range from tradespersons and trade assistants to scientists with university qualifications in marine, science, agricultural science and marine biology. As the interviewee explained:

Over 95% of our staff, including the university graduates, never had a full-time job until commencing with us. They come with their TAFE or university qualifications but then our focus is on upskilling them using a variety of in-house modules, workshops, mentoring and talks about industry experts. It works for us.

Another smaller employer in honey production reported that:

We need more hands on. The certificate III only reinforces with a qualification what we can teach them in real life on the ground using our own approach to training based on 30 years of on the ground experience. There is nothing really for our niche industry apart from the basic training.

Most employers interviewed were impacted by the COVID-19 pandemic, with training ceasing in many cases or being severely reduced. A large beef producer ceased training in their food production facility as external parties could not come on site. The interviewee reported that, ‘currently we are having to reimagine how we train our workforce’.

An organisation needing skilled staff for parks and gardens maintenance had now moved from a ‘hesitancy’ about using online delivery to a more ‘accepting’ use of online platforms to access both nationally recognised and non-nationally recognised training modules. Discussion groups, mentoring and the growth in the development of more in-house resources were emerging as training staff became more aware of the online resources available that matched identified training needs.

### Factors that encourage decision-making about training

Major drivers for training among the agricultural employers included requirements around employee safety, legislative requirements, responding to a noted skills shortage and availability, and available budget. As one employer put it:

We are regional, and generally do not have RTOs within our region that can deliver the training that we require or what you might call the other ‘nice to have’ training. We look local first, then at price, while selection of content is first by necessity (legislation, regulations, licensing requirements), then by upskilling. In our case, a key one is the Certificate III in Horticulture for our parks and gardens labourers. Then it is professional development, including extensions of the qualifications and the additional soft skills training that is also required.

A large beef producer uses nationally recognised training to meet industry standards, and to do so they source external providers. The employer reported:

We base most of our training on nationally recognised training to ensure that we are maintaining industry standards. There is a lot of AQTF (i.e. nationally recognised) training that matches what we do as an industry. This training is developed in conjunction with industry groups, so it is very much around what industry wants and needs. Our employees know that the training leads to a qualification and higher job roles.

Many of the larger businesses talked about responding to the skills needs of their staff, with a large grain producer seeking out training for different employment levels (manager, supervisor, irrigation controller, maintenance controller).

Employers seek out nationally recognised and non-nationally recognised training most often by looking locally, word-of-mouth, online searches, and by using ex-staff who bring experience and knowledge of the business.

A key factor is the skills of either the registered training organisation (RTO) or the provider of non-nationally recognised training such as an industry expert. Both types of training provider were mentioned frequently as being highly effective in designing and delivering training. As a fish farming operator advised:

We generally approach both types and both have done a good job for us. They are rather good at building and tailoring something to fit around either a nationally recognised training skill set that we require or additional in-house or vendor training that we want.

### Barriers to using nationally recognised training

Interviewees listed several key barriers that they felt restricted their access to nationally recognised training delivery. A major factor is the culture of the agriculture sector that is more positive about hands-on and on-the-job learning than more structured and formal training, including the use of apprenticeships. Until there is a major cultural shift in attitudes, some employers believed that there will not be a dramatic change in views about the value-adding gained from education and training. As one interviewee reflected about the slow rate of change in their sector of agriculture:

Aquaculture is new and very hard, and recirculating aquaculture is even harder. Hence you have many businesses that are not reinventing, think the oceans are the same yet they are not, not agile to change, and do not support research and change that will create jobs.

Across the employer interviews, there was an apparent ambivalence about the value of existing forms of nationally recognised training. Many employers talked about the reliance upon farmers in having home grown and hands-on skills, while prior reports about the agricultural sector referred to farming as an ‘inherited’ career based on the handing down of knowledge among family members. The national VET sector is seen by some of those interviewed as not doing a sound job in meeting the needs of industry and as being too complex and too distant from understanding the training needs and priorities of those working in the agricultural community.

However, many of the employers were optimistic about changes in attitudes about the value of education and training. They hoped that the impact and value of nationally recognised training will grow as the sector is impacted even more than now by the need to adopt new technologies, to adopt new assumptions about crop and animal production, and to innovate through growth in new areas of agricultural production. A related driver is that agriculture is losing out to social and demographic change. That is, the workforce in agriculture is declining and employees are gaining higher pay with more guaranteed career paths by moving into other industry sectors or they are moving to city locations.

A related factor is the lack of confidence among many agriculture workers about enrolling in a nationally recognised VET program. Public and private RTOs that deliver qualifications are seen to have failed to win over those with real concerns about ‘being exposed as dummies or will fail, especially when most of those doing this type of work have had bad experiences at school anyway’. Associated with this reflection is what some interviewees judged to be a lack of recognition among these individuals of a recognition of their prior learning. The owner of a large cattle station put it:

TAFE training is a silo. Their TAFE training does not link with their other training and life experiences. It needs to provide better linkages with their training and better recognition of prior learning.

Like many industries, agriculture has numerous niche businesses. For example, our interviews with employers in fish farming and bee keeping often cited this factor for their greater use of non-nationally recognised training. Comments included: ‘Our industry is small and unique, and not easily replicated in a general TAFE course’. Another reported: ‘Accredited training is good to have but not essential in our industry. It is of more value to the employee than the employer. VET training is not an integral part of our business’.

Another related factor at work is the view that in agriculture there is a lack of understanding of the nationally recognised VET system. It was felt that employer knowledge among the majority was low, and as to be expected, best among those larger enterprises that had gained more detailed experience of the VET system. As one Human Resources Director of Operations put it:

Knowledge is not high really. I have personally a good understanding through links with the Industry Skills Council, but again, not coming from information from government bodies, but from me doing something.

In addition, the farming community is widely dispersed, with large distances to be overcome to design and to deliver training. These factors add to the costs of training delivery, and the challenges of its day-to-day management. The variety of the agriculture business types (e.g., broadacre, vegetable, fruit) means that many qualifications need to be established, but the actual uptake can be at the lower end.

Employers interviewed believed that they were able to play a larger role for the agricultural industry in the nationally recognised VET system, beyond, for example, the input into what units might need to be included in the development of a training package. All parts of the agricultural sector, from small, to medium, to the large enterprises interviewed, emphasised the need for the agricultural sector to be even more engaged in the national VET sector. Roles mentioned included:

* More opportunity for engagement in identifying new qualifications as the industry continues to respond to technological and cultural change.
* Sharing in efforts to define and to develop careers and career paths.
* Identifying more successfully those shared skills and skill sets across the many and varied parts of the agricultural industry.
* Allowing the possible removal of training packages not frequently used.
* Developing more collaborative efforts to design qualifications and transferable skills that are more cross-industry, thereby allowing career paths within, but also across, the sub-sectors of this large and varied industry.

A major barrier cited was the amount of time taken to develop new qualifications. A large lead time was perceived to exist between the identification of skills and training needs, and the actual training being approved, designed, and delivered, often around quite specialist topics.

A few respondents asked for more cooperation between RTOs located in the regional locations. For example, operating in partnerships, groups of education and training organisations jointly design nationally recognised training, working with industry partners to build in exposure to new technologies, new agricultural practices, and with hands-on experiential teaching delivered by RTOs and industry.

Training package design and approval was judged to be too slow, with years being required rather than months. For example, digital skills are increasing in importance with the access to new technologies, artificial intelligence and big data, and the value being seen in using data to make better decisions along the many parts of the agricultural supply chain. The slow pace of training package approval around digital skills and artificial intelligence currently was being managed by instead accessing non-nationally recognised and vendor training, using skilled and experienced industry experts who design and deliver tailored training to best match employer training needs.

Some criticism was also made about the nature of assessment in the training packages for the industry. As a beef producer summarised their views:

Within some qualifications it feels more about the assessment than the actual learning. I find that the assessment criteria are so hard to nail down in the real world – it often feels like the people who write the assessment have never set foot in our industry.

Finally, there was a view among a few respondents that, despite the contributions of agriculture to the Australian economy, the education and training sectors had not been given the appropriate degree of government funding and investment to allow for changes to meet changing agriculture industry requirements. A Director of Operations in a large agribusiness reflected upon this example:

We do not get anything from government, yet we employ a lot of people in the regions of our state. If we wanted to work with an agricultural high school, we would need to fund $700 per student to have them do a certificate III subject with us. Not a good selling point to our managers to spend their limited budgets.

## Changes to make nationally recognised training more attractive to employers

Employers raised many issues about nationally recognised training, many of which are well known from other consultations with those in the agricultural industry. Changes called for included efforts to continue to review, revise and streamline current training package arrangements. There was also frequent mention of the need to widen the delivery options, including to ‘make it more blended, online’; ‘more innovative thinking is required as to how nationally recognised training is linked with people in rural and remote settings’; ‘show more evidence and examples to employers around the impact of accredited training’, ‘better access to RTOs in the regions’ and ‘bring the training into today’s reality’. As one employer in a large cotton business reflected:

The whole TAFE (i.e., VET) system was designed for a different era when a TAFE certificate through an apprenticeship was the only way to get qualified to be, say, a diesel mechanic. Today you can just get as skilled by watching YouTube videos, accessing online short ‘how to’ modules, as information is everywhere.

The owner of a large beef cattle station remarked:

I want to see more flexibility about who can deliver the training, making more use of the industry person. For example, I am a better horse person than the RTO trainer, but I cannot teach or assess according to the VET system.

Linked to this was the need for even better promotion of apprenticeships and traineeships, including ways to better reflect the hands-on nature of the industry around more on-the-job training, and improving the levels of current government and industry support for apprenticeships and traineeships.

To drive innovation, it was suggested that greater opportunity was needed to allow regional TAFEs to investigate and design pilots of more innovative models of teaching. For instance, some mention was made of the new industry skills organisations being piloted in three areas[[1]](#footnote-2). The pilots do not include the agricultural sector which our interviewed employers considered to be ‘unfortunate’ and a ‘major oversight’. For example, the development of an agri-food skills organisation pilot was perceived as one strategy to help grow levels of employer and broader industry engagement, promoting more focus upon strategies for improvements in the performance of education and training pathways in agriculture.

Training structures, training packages and forms of delivery will need to continue to change as employers adopt new technologies that require different and more specialist skills. To illustrate, mention was made of the need for more skills around the development of new and emerging food sources, green agriculture, sustainability and sustainable food system, farm operations to pursue new opportunities for growth, and increased productivity by developing more flexible business processes and farming practices.

It was reported by employers that it was government that had to work more with industry to prepare for the rapid changes occurring, particularly in agricultural production. Technology is shaping the type and use of machinery, with even more tasks that were managed manually being moved to machinery. Examples were given across multiple industries. New technology in cotton machinery has reduced the size of picking fleets and labour and support staff. For over a decade the CP690 Cotton Picker has allowed non-stop round module making and significantly reduced the labour force. In dairy production, the impacts of automatic milking in reducing labour are well known, while packing of harvested agricultural products using sensors and automation has reduced the reliance on labour in major ways. Overall, while some jobs will disappear, new ones will emerge.

There was very frequent mention of the need for the creation of more industry-led nationally recognised training that allowed the co-development of new training. This training should not only reflect the massive levels of technological change impacting upon the agricultural industry, but also support attempts to transition the industry to a more professional image with the stronger evidence of career paths and long-term career opportunities. Interviewees remarked that there is still the view that education and training are not essential requirements to progress the industry, with productivity being the number one priority. The peak bodies, government, and the sector as a whole need to improve the impacts of their messaging that education and training are not secondary or peripheral to productivity, while the right vocational education and training will only add value to the industry.

### Examples of best practices in nationally recognised training

Innovative programs cited as exemplars to be considered for how to grow the uptake of training generally, and nationally recognised training more specifically in agriculture, include AgSkilled and AgFood Connect.

The representative employer from the cotton industry cited the example of AgSkilled, a partnership between Cotton Australia, the Grains Research and Development Corporation and the NSW Government. Grain and cotton growers are accessing industry-led, regionally focused training that aims to develop and grow the agricultural workforce for the future. The cotton industry faces major difficulties in attracting and retaining staff, and the impact of unavailable labour and unskilled labour can be dramatic as there is yield loss and lower quality when crop management and operations are not timely.

Access to relevant, industry-specific training is seen to be a key means to upskill the future generation of cotton farm employees and to assist in the industry’s recovery from one of the worst droughts on record. Funding was made available to on-farm staff and industry professionals, including for nationally recognised full qualifications (i.e., Certificate I – Advanced Diploma Agriculture). The AgSkilled program is now operating as AgSkilled 2.0 with courses including advanced spray training, precision agronomy and work health and safety. Cotton Australia reports that almost 800 courses had been conducted for industry across over 140 locations in regional New South Wales, delivered flexibly to meet the needs of industry. Evaluations of the training have been positive, showing changes in agricultural practices.

The AgFood Connect Pilot (a Youth Jobs PaTH Industry Pilot Project) was cited as another example of a new approach to training. It is being promoted as an innovative pilot project that will create employment opportunities in the food and agribusiness industries and supply chains in various regions. It aims to create full-time traineeships, and full-time jobs for young people aged 17 to 24 years, from multiple casual or part-time positions. The project aims to empower jobseekers, with AgFood Connect supporting young people to find apprenticeships, traineeships or full-time, part-time, casual, contract and seasonal jobs, and in the longer term to see careers and career paths in agriculture and other industries. It accesses existing group training for apprentice and trainee employment and labour hire structures, while young people are hosted by two or more employers to gain assistance to develop employment opportunities.

## Summary

The interviews confirmed that the large and diverse agricultural sector operates in a highly competitive and changing international marketplace. The sector is focused upon driving productivity growth through a combination of the application of more advanced technology and innovation, shaped by the improved use of knowledge and new practices and through having access to a more flexible and skilled workforce.

Skills development is achieved through a mix of nationally recognised training, especially through certificate III and certificate IV qualifications, and non-nationally recognised training that includes online delivery, face-to-face training by experienced industry experts or in larger businesses the use of internally developed training materials that best suit the needs of the business.

The next leap forward to achieve even higher levels of training, nationally recognised and non-nationally recognised, will be associated with further cultural change in the industry to continue the transition towards a more professionalised industry with established careers and career paths. This transition, however, needs the continued engagement of many parties to be successful, including, in particular, government, peak bodies and the sector, that continue to promote the story about the importance of a skilled agricultural workforce where both nationally recognised and non-nationally recognised training will only add value to the sector.

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# Retail

## Sector overview

The retail sector involves predominantly the sale of goods to the public. The goods exchanged can span various other industries such as food and beverage, clothing, footwear and personal accessories, recreational goods, hardware and garden supplies, pharmaceuticals, cosmetics and toiletries. Retail sales activities can also overlap with other industries such as automotive (parts) and hospitality. Retail trading is widespread across Australia, covering metropolitan, regional and rural locations, either in the form of bricks-and-mortar establishments, multi-channel operations or purely online shopping options that can involve warehousing operations (warehousing is discussed separately in this document).

Retail trade’s economic contribution to Australia is substantial. According to the Australian Bureau of Statistics (ABS, 2018), it generated annual Gross Value Added (GVA) of $77.7 billion in 2017-2018. This contribution was significantly higher than Australia’s traditional industries, such as agriculture, forestry and fishing ($45.5 billion) and energy ($44.7 billion; Wholesale and Retail Industry Reference Committee 2019).

The retail industry is predominantly comprised of small-to-medium businesses, with nearly all (96%) representing businesses with a workforce size of fewer than 20 employees (Wholesale and Retail Industry Reference Committee 2019). Nevertheless, according to ABS data large firms with 200 or more staff employ the majority of the workforce, although their share declined from 47% to 44% between 2005–06 and 2011–12 (Australian Workforce and Productivity Agency and Service Skills Australia 2014).

The retail sector’s contribution to employment is also substantial. It accounts for 10.2% of the total Australian workforce and stands at approximately 1 322 000 persons (seasonally adjusted data, ABS 2021).

There are multi-level job roles in retail: from checkout operator through sales/retail customer service assistant or representative to sales team leader/supervisor/manager; and on to manager of store/area/department/small business manager and also visual merchandiser; retail buyer; merchandise manager; merchandise planner (Wholesale and Retail Industry Reference Committee 2019). Retailers also employ significant numbers of logistics, supply chain and warehouse people ‘behind the scenes’.

The retail sector is characterised by:

* lower skilled jobs, suitable for new entrants to the workforce: only 49.7% of workers employed in retail require higher than a secondary education attainment, compared with 84.4% across all industries (DESE nd).
* a relatively young workforce (30.8% are aged 15 to 24 years, compared with 15.1% across all industries), but with the share of workers aged 55 years and over having increased over the past 20 years from 7.9% to 15.8% in keeping with the general ageing of the overall workforce. The median age for workers is 32 years (DESE nd).
* a high share of female employment, 56.3%, compared with 47.3% across all industries (DESE nd).
* a high share of part-time employment (49.9%, compared with 31.7% across all industries), but casualisation rates vary considerably by worker role. For example, in 2021, 82% of retail managers and 70% of retail supervisors are full-time workers compared with 28% and 14% of retail assistants and checkout operators respectively (Australian Labour Market Information Portal, Retail, accessed 16 June 2021).
* employment growth, of 3.1% over the past five years and projected 4.1% over the next 5 years (June 2021 data) (Australian Labour Market Information Portal, accessed 16 June 2021).

Workforce challenges and opportunities impacting retail (and wholesale) identified in the latest Skills Forecast of the Wholesale and Retail Industry Reference Committee (IRC) of 2019 include:

* Staff retention – high and increasing rates of staff turnover with businesses facing the ongoing financial and operational burdens of re-recruitment and re-training, while ensuring sales and services continue with reduced staff numbers. This high turnover can impact business ability to focus on future planning and innovation.
* Career progression – the issue of staff turnover can, in part, be linked to a perceived lack of opportunities for career progression. Retail employers are attempting to counteract this by investing in training and development of staff to make occupational transitions, as depicted in figure 3.
* Staff sources - government policy changes to visa eligibility conditions in 2018 (IRC 2019) have reduced access to overseas workers which means employers need to use alternative channels for filling vacancies, including training pools of local employees with the right skills. This has been exacerbated by COVID-19 restrictions on international students and immigration.
* Innovation and technology – significant advancements in technology have largely changed the way in which consumers and retail businesses interact. Developments include but are not limited to: social media and online platforms to provide new channels for sales; advertising, promotion and customer engagement; automated checkout systems and mobile payments; online shopping; drone delivery. The shift to digital technology has been relatively slow within the retail industry, but it is rapidly gaining in momentum.

The immediate impacts of the COVID-19 pandemic in early 2020, are mixed for retail. A report from the Department of Education, Skills and Employment (2020) describes short-term increased demand for non-discretionary spending (e.g., supermarkets), while many retailers reliant on the sale of discretionary items from bricks and mortar stores have had to close stores and stand down staff or switch to online shopping and remote delivery. Figures released by the ABS showed an increase of 8.2% in retail turnover in March 2020. However, this increase was followed by a decline of 17.9% in April, reflecting the impact of social distancing restrictions and a decline in the stockpiling activities that occurred in March 2020. Identified COVID-19 impacts on training reported by the retail employers interviewed are reported in later sections.

## Trends in employer use of nationally recognised training

The retail (and wholesale) industry training package (Retail Services Training Package release 6.0) includes a full range of nationally recognised VET qualifications, from the certificate I to diploma levels. Having these formal qualifications is not essential, however, to work in retail except for some mandated units, for example, Responsible Service of Alcohol in bottle shops, and First Aid and OHS for positions requiring these under some company policies.

Figure 2 shows trends in retail employers’ use of nationally recognised training (excluding apprenticeships and traineeships) from 2011 to 2019 (NCVER 2019). As can be seen, retail employers’ use of nationally recognised training for either full qualifications or specific subjects or modules has remained steady over recent years up until 2019.

Figure 2 Trends over time in Retail employers’ use of nationally recognised training (excluding apprenticeships or traineeships) for full qualifications or specific subjects/modules, 2011 to 2019 (%)

Note: Response value ± margin of error using a confidence interval of 95%.

Source: Survey of employers’ use and views of the VET system (NCVER 2019).

## Employers interviewed

Seven retail employers were interviewed or provided written responses to our questions. They ranged from one of Australia’s largest national retail conglomerates (food, hardware, stationary, fashion, toys and homeware) and three other large national retailers in different sectors (food, affordable stores, and furniture); to the manager of a boutique bottle shop in one city, a small grocery group, and a chain of remote Indigenous stores. All seven businesses were primarily bricks and mortar, but with increasing use of technology and automation. A couple of the employers also had growing online (multi-channel) sales. Respondents for the employers included two HR managers, two managers of the enterprise RTO with their learning and development counterparts, another the manager of a business that also ran an associated RTO and the owner/employers themselves.

The staff numbers of the seven retail businesses ranged from 15, to hundreds, to thousands (e.g., 45,000). Staff were reported to be largely casual, young and customer facing, and others with more permanency in fewer positions as team leaders, managers or in specialised positions (e.g., visual merchandising). The larger operations also employed stores, logistics, and administration people, and IT people whose advanced skills are becoming increasingly sought after for online merchandising.

## Use of training

All seven retail employers interviewed engage in nationally recognised training, or as they referred to it, ‘VET, TAFE, RTO, or traineeships/apprenticeships training’. The extent of the engagement varied widely though, and from most active nationally recognised full qualifications training for entry level jobs to minimal and ‘only when it is mandated’. For employee continuing learning, all seven retail employers used mainly non-nationally recognised training.

One of the large national retail chain employers (food) is most active and puts its entry level staff, both in-house and in franchisees, through the Certificate II in Retail traineeships (can be school-based in some jurisdictions) provided by the chain’s enterprise RTO. This enterprise registered training organisation (ERTO) also has the Certificate III in Retail on scope, which staff can apply for via Recognition of Prior Learning (RPL), following completion of the internal manager’s designed and delivered course. Thereon, staff progress through the organisation’s leadership and management structures, by taking non-nationally recognised programs designed and delivered by its learning and development team.

A similar model is used by the smaller scale remote store chain, with the addition of a compulsory Certificate III in Retail for all store managers, using its ERTO to satisfactorily tailor the nationally recognised training to their business needs, whilst maintaining quality training standards and registration.

The national furniture company also offers nationally recognised programs specifically designed for its needs. A Certificate III in Retail is delivered through in-store coaching, workplace practice and its e-learning platform to new recruits. ‘This qualification creates a firm basis of competence for customer-facing sales staff.’ To date, 275 staff have completed the qualification. Of their current staff of 984, 236 are enrolled in the Certificate III in Retail. The company also actively seeks talent from within for promotion through their non-nationally recognised development program for emerging leaders. Participants customise it by setting their own project objectives and aligning them to practical business outcomes. The leaders’ training program is highly impactful for career development, with 119 of the 157 program leadership participants still employed in the business.

A small retail business owner uses an external associated RTO to provide its entry level nationally recognised training required by the jurisdiction, for licences in OHS and Responsible Service of Alcohol. This is matched with non-nationally recognised on the job learning in the business culture and practices (e.g. working in teams, customer service) overseen by the store supervisor. For this small business owner, who competes with big chains nearby, product knowledge is its differentiating factor and so staff are paid to attend tastings and to take highly valued industry accredited courses, in wine for example.

The connection with nationally recognised training was more limited for the other employers interviewed. The grocer is stepping further into nationally recognised training in partnership with TAFE for tailored short courses to improve skill levels of some staff (recognised in statements of attainment). They might possibly take on baker and butcher apprentices where they are struggling to recruit because of skills shortages. However, these developments are happening ‘somewhat warily and with some frustration’.

In contrast, the large national employer with a chain of stores uses very little nationally recognised training and is not likely to change this, stating that:

… organisational culture, practices and product knowledge are best learnt at entry level through a mix of on-the-job experience and face-to face, paired with brief online modules designed and provided in-house and accessed in the workplace. Most of the entry level staff are casuals.

For leadership and specialist training this employer’s learning and development team seek out, and cultivate, training partnerships with RTOs that are acknowledged subject matter experts. One partner is a public RTO, valued for its expertise, not primarily for nationally recognised programs. There is awareness of how RPL and statements of attainment may be used, but it is up to the student to follow up with the RTO. This employer has a growing reach in Asia and New Zealand, and they focus on developing and using consistent training products and outcomes across all their stores.

The final respondent has a learning and development team that is well versed in the national VET system and clear-headedly able to inform colleagues across all operational units about the pros and cons to them of various training responses, including nationally recognised programs. One of the main considerations cited by this large national employer is return on investment. They have found that using government subsidies and formal (strictly by the training package rules) competency assessment with nationally recognised training may add unnecessary complexity to arrangements. They perceive it to be easier and cheaper to purchase what is needed from established external partners, or design and deliver it in-house, incorporating relevant holistic assessment approaches. This may include adapting training package units (even from differing training packages) into a bespoke non-nationally recognised course. Occasionally nationally recognised training is justified. This organisation has no intention of becoming an ERTO.

### A mix of training types

Overall, most of the employers we interviewed judiciously use nationally recognised training for entry level jobs that they tailor to their business needs. They complement this with non-nationally recognised business culture oriented modular training designed and delivered internally in small chunks. Where externally mandated, nationally recognised training is utilised in the form of specified units or skill sets (chunks of a qualification(s) selected by the employer). Once a retail worker is ensconced in a job, non- nationally recognised programs (usually developed and delivered in-house) are utilised for further learning, staff development and a career pathway within the business. These programs cover leading teams, specialised functions like visual merchandising, and may be delivered internally or with a contracted external partner. The large retail employers interviewed have sophisticated and clear progression pathways through the business supported by curated in-house training programs.

### Impacts of COVID-19

Most of the employers interviewed have felt the impacts of the COVID-19 pandemic. They spoke specifically about impacts associated with workforce training. Some impacts were fleeting, such as delayed training sessions due to distancing and travel. Others reported training and recruitment were curtailed or increased or changed in mode, such as shifting online. For several respondents, the pandemic provided opportunities for welcome changes in training approaches and showed that online learning was sustainable, if not essential. For example:

Because of COVID we grabbed opportunities for blended learning that were always there. We can’t take face to face for granted anymore. We were on the cusp and were able to quickly re-align to more flexible virtual learning especially in the regions. Instead of face to face we used engaging live webinars, quizzes and polls. And we are more consultative - using feedback on the blended approach (on-the-job with virtual) because we had to experiment.

COVID accelerated our shift to online - it’s here to stay and becoming mainstream. It’s been central to our planning and much more training was achieved over the period. It was sustained by upskilling in data and digital transformation in the company.

The COVID-19 pandemic was seen and used as a lever to shift away from the traditional classroom training (time, place and often travel or capacity bound) into virtual learning (anywhere, anytime, any number of students) and in shorter chunks. On- and off-the-floor learning was enhanced by mixing supervised experiential learning with short online chunks that can be accessed several times as needed. The pandemic reduced staff resistance to online learning. Many found they could do it. Others struggled due to their lack of digital skills. Our employers realised they had to invest in ‘fit for purpose’ learning management systems, equipment and technology, as well as professional development for RTO and other learning and development staff.

For one small business, the pandemic justified putting on a trainee because the manager had more time to interview candidates sent by a Job Network (around 20, mostly unsuitable) and to do the induction and orientation. This trainee can work across the retail and hospitality aspects of the business because of the structure of the Tourism, Travel and Hospitality Training Package (release 1.2).

For another employer, the pandemic highlighted issues with trainers travelling to sites and the recruitment of managers. They maintained the same delivery model with most training done on the job, but the focus shifted to streamlining and building capacity of local team members to deliver and assess training into the future.

For a large retailer, the pandemic provided a timely intervention and transition opportunity. This retailer, which is expanding globally and has stores across the three Australian time zones, was already shifting towards more virtual learning, especially for career development programs. The employer is keen on self-paced online options, but staff favour the use of classroom learning. The strategy is based on investing in sustainable partnerships with external experts in niche areas to provide content for the virtual components. Their iterative praxis model is built around ‘learn online, apply in the workplace, learn more online and apply and so on.

### Factors that encourage decision-making about training

In considering a training solution in the retail industry, the seven interviewees offered the following as key considerations: legislative requirements; employee safety requirements; effective customer service including product knowledge; team building and leadership; employee career opportunities and pathways supported by training programs; skills gaps filling; and staff turnover. Key questions asked by retailers in deciding about a training strategy include:

* What are the needs of employees?
* How satisfied are my customers?
* How well will the training improve staff service and advice to customers?
* Are there any compliance requirements?
* Is it cost effective?

One respondent noted that sometimes decisions about training were made a long time ago and not revisited. Our interview had prompted them to think again about engaging more with nationally recognised training.

Another large retailer had decided, based on past experience, that the available nationally recognised training doesn’t suit them and there is no reason to use it for regulatory or quality reasons. Non-nationally recognised training works for them and their largely part-time staff, many of whom are tertiary students:

We have a highly casualised in-store workforce, many of them are studying courses at TAFE or University and while they are happy to learn the job and do in-store training and modules, they are not looking for a career in retail and do not want to DO more formal training and assessment.

For this business, their in-store non-nationally recognised training is readily available, relevant and high quality because they control it, so it’s ‘on time, on topic and flexibly delivered to suit business needs and cycles, and at a reasonable cost’. This company is expanding in overseas markets, giving it another reason to design and deliver holistic training programs that suit its own culture and standards.

On the other hand, an employer of a different national chain has a long history of providing traineeships through an enterprise RTO for entry level workers. They find they can tailor the nationally recognised qualifications to their business model and their staff’s particular training needs. However, they eschew nationally recognised training for those employees at higher levels, in leadership, management or specialist positions within their outlets and in corporate office positions, for much the same reasons as the previous example.

Large national chains have the scale to be discerning purchasers of training, both nationally recognised and non-nationally recognised, and to mix the two to get what they want. A few of the interviewees talked about forming an ‘academy’ within the company to promote and strategically manage training, learning and development programs including ensuring the quality of learning throughout the organisation. By and large, employers say they are not very concerned about employees’ portability and transferability of skills and qualifications.

The picture is different for medium and smaller sized retail employer respondents’ perspectives. They lack the scale to develop their own online programs and, in most circumstances, to contextualise and customise training to their needs. By and large, according to one respondent of a small to medium business, they depend on recruiting qualified and/or experienced people in the first place.

### Barriers to using nationally recognised training

Most of the respondents thought they had a good, if qualified, understanding of the VET system and felt that information was sufficient and available. For example, ‘if you knew where to find it and the right questions to ask, but you have to work your way through it’. It was part of the job of most respondents to explain or ‘translate’ the nationally recognised VET system succinctly to people in their organisation at higher and more strategic levels, who they felt didn’t understand the nuances of the system. It was suggested that ‘VET speak’ is a specialised language.

One respondent pointed out that the term used in this research; ‘nationally recognised training’, is poorly understood and is somewhat old fashioned as employers are not concerned about portability and transferability. Our two respondents with Human Resources job titles said they didn’t understand VET well and needed to ask others in the organisation.

Some respondents had used nationally recognised training more in the past but dropped it because: it is not required for retailing jobs; lacks the flexibility to suit the employers’ immediate skilling requirements; and it is of little perceived benefit with return on investment not justified, given compliance and communication issues and the additional administration work.

One respondent, who had infrequently used traineeships, offered this list of reasons:

* Reluctance to engage due to cost, time, and risk of losing staff once qualified
* Complexity of getting staff signed up for training contracts
* Having to partner with an RTO and find a reliable broker
* Complexity around the funding makes it difficult
* A lot of retailers have quite specific processes unique to their business and therefore may think the training is too generic.

Another interviewee said, ‘we always assume it’s just not that good.’ Yet another respondent elaborated on this theme, saying they would have greater trust in RTOs ‘if cowboys were eliminated as well as those with a heavy unsolicited marketing approach which is all about price not quality’. This approach to businesses was reported to have put some retail learning and development and human resources staff off-side with the use of accredited trainers and nationally recognised training. One respondent summed up their attitude as follows:

Every now and then the higher ups get quite excited about VET, but we have to explain the complexities, the associated high admin costs, and the negotiations with RTOs. When you have scale and no requirements for qualified positions, it’s neater and more effective to stick with non-accredited training. Accredited may suit smaller enterprises better who don’t have an internal learning and development team.

Also, it is proposed that for a small retail business, there is generally no time to put a traineeship in place, especially if a Job Network provider sends 20 applicants for a traineeship. It was reported that some didn’t even know what they are being interviewed for. Another barrier mentioned for regional and remote employers is lack of relevant face-to-face training.

## Changes to make nationally recognised training more attractive to employers

The representatives of retail employers interviewed think that nationally recognised training might be more attractive to employers if it could be more adaptable and tailored to specific requirements of the employer. One summed up quality training as ‘fit-for-purpose and at a reasonable price’.

Employers in the retail industry with an ERTO seem to be able to achieve this tailoring and to maintain their RTO registration. For example, the interviewee for the chain of remote stores reported:

Nationally recognised training meets many of the skills required but often, due to our unique settings, some of this is not relevant. Our customised Certificate III in Retail contains quite a bit of additional non-accredited training to ensure that the training meets the needs of the job rather than just the training package.

Those interviewees, whose employers do consistently use the national VET system, were more likely to be engaged in the development of national training products to ensure that they are more likely to meet their needs. However, they reported that this takes time, and the timetables for training product review are too short so that it is difficult to give their considered and consulted expert view.

Interviewees’ ideas as to what constituted best practice in nationally recognised training included:

* ‘Small employers using nationally recognised training to bring in young school leavers through apprenticeships and skilling them up to grow their business and future proof themselves is a good example of how a business can benefit from this training.’
* ‘Accredited training can work well when it is customised and contextualised to the business practices, ethos and culture.’
* ‘Judicious partnerships between the business and an RTO focussed on the skills needs of the business and the learner.’
* ‘Fast track RPL process for the Certificate III in Retail mapped to the requirements of their job for experienced store managers with some skills and knowledge gaps.’
* ‘Operations need to work side by side with company learning and development staff for entry   
  level accredited training qualifications through to non-accredited learning programs for management progression.’
* ‘Because we understand the VET system and nationally recognised training concept, we have invested heavily in contextualising resources and are known as an industry leader in our jurisdiction. Nationally recognised training is an integral part of our operations’.

Government funding did not come up as a major consideration. A respondent from a large national retailer bemoaned that those operating nationally are frustrated by the differences from state to state in funding and contracts, then listed some changes that would make nationally recognised training more attractive. These changes were: national harmonisation of funding; access to better funding and enrolment information for trainees; and reconciling the different licensing requirements state to state that involve training.

Respondents generally agreed that changes should be made by a coalition of the bodies mentioned in the interview questions namely: employers, employer advisory bodies, industry peak bodies, training providers and governments. As one concluded, ‘all of the above, otherwise, it doesn’t work’. Other comments included: ‘industry and employers are important players but can’t do it on their own’ and ‘government needs as much help as they can get’.

## Summary

The interviews highlighted that retail employers define quality training as training that is relevant to their workplace. Retail employers look for training providers who will work with them to satisfy their workforce training needs. Retail employers appear willing to engage in nationally recognised training and might even increase this engagement. However, for this to happen RTOs must be willing to customise and contextualise nationally recognised training to business practices, ethos and culture; to combine this with non-nationally recognised training as required to meet their full training requirements; and to widen the delivery options to include more blended and online options.

In addition, it was expressed that there was a need to regain the trust of retail employers who have had negative previous experiences with some RTOs ‘just looking for a dollar’.

Retail employers and their staff are being impacted by technology, especially the trend to online shopping and purchasing of goods. These changes in technology effectively by-pass person to person sales, with people buying products and services based on a website description. In turn, warehouses fulfil the order and make its delivery. This warehousing function, which is growing within the retail industry, is discussed in another section of this paper.

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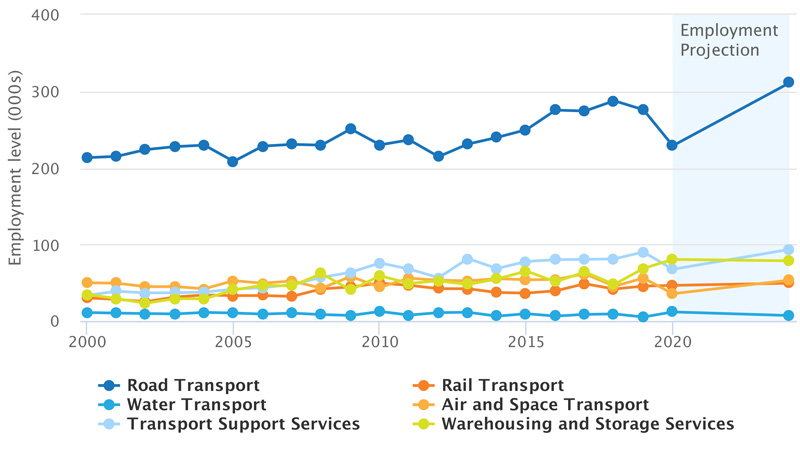
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# Transport

## Overview

Transport is a subsector of the Transport, Postal and Warehousing industry. This broader industry employed approximately 673 000 persons at the end of June 2020 (ABS 2021), which accounts for 5.2% of the total workforce. The workforce has the second highest proportion of older workers aged 50 and over, after Agriculture, Forestry and Fishing. Employment has increased by 6.6% over the past five years. Employment over the next five years is expected to increase in road transport particularly (see figure 3, DESE 2021).

Figure 3 Transport, Postal and Warehousing: Employment levels 2000-2020 and projections to 2024

Source: <https://nationalindustryinsights.aisc.net.au/industries/transport>, viewed 17 June 2021

Transport alone consists of four subsectors: road, rail, aviation and maritime. A brief overview of each of these subsectors is provided below. Warehousing, and to a degree, supply chains logistics, are covered separately in this paper. Postal was not included in this study.

### Road transport

Road transport covers road freight and road passenger transport. Truck drivers hauling road freight is the single largest VET-related occupational group (33%) of road transport workers, followed by bus and coach drivers (14%), automobile drivers (12%), delivery drivers (2%), and transport and despatch clerks. Aside from requiring the relevant vehicle driver’s license, few of these road transport occupations have a mandated qualification. However, under the National Heavy Vehicle Accreditation Scheme (NHVAS), a person who is a driver of a fatigue-regulated heavy vehicle, is a scheduler or a supervisor or manager of drivers or schedulers, must complete fatigue units of competency (2-3) offered by a National Heavy Vehicle Regulator (NHVR) approved RTO.

Truck driver instructors are required in most states to have a Certificate IV in Transport and Logistics (Road Transport - Heavy Vehicle Driving Instruction), as part of meeting requirements for certification as a Heavy Vehicle Driving Instructor. There are nationally recognised qualifications for these occupations in the Transport and Logistics Training Package that are under continual review due to new technologies changing driving operations, for example, developments include autonomous vehicles; devices, sensors and cameras which generate data; fatigue management technologies to warn drivers; protocols for interoperability; and zero emissions technology. For road transport, there is no mandated qualification other than a relevant vehicle driver’s license to drive a general truck.

Mental health and fatigue issues are more prominent in the COVID-19 era with drivers working to keep the supply chain flowing. Improving workers’ mental health can assist in reducing the rate of incidents on the road and in warehouses. Initiatives have been implemented to raise awareness and improve the lives of workers across the whole sector (Transport and Logistics IRC 2021).

### Aviation

Aviation consists of domestic commercial aviation, international commercial aviation, general aviation, air-freight transport and aviation support infrastructure. Of the over 2000 enterprises in aviation, most are small operations but there are some significantly large enterprises employing thousands of people.

In aviation, many operations and occupations are highly regulated for public safety reasons. There are nationally recognised qualifications for occupations involved in: aerodrome operations; airport safety; ground operations; cargo services; customer service; aviation transport Security Protection; Aviation Search and Rescue; Management and Supervision; Air Traffic Control; flight operations (pilots – aeroplane, helicopter, commercial, military, remote and pilot in command); and flight Instruction (Aviation IRC 2021).

The COVID-19 pandemic has caused substantial declines in domestic and international passengers, with airlines requiring government support to enable the industry to maintain operations and to recover. On the other hand, drone technology has been a growth area for the industry during the pandemic. Technological advances in air traffic control operations will help the industry to safely integrate drone operations with more conventional flight operations. Control towers are rapidly becoming more digitalised to enhance service delivery and improve safety outcomes (Aviation IRC 2021).

### Rail

Rail provides mobility to millions of passengers, and vital freight services across Australia. There are around 90 enterprises engaged in rail services, of which 16 are characterised as large, 8 medium and 66 as small. Rail employs people across private and public operators, passenger and freight operators, track owners and managers, manufacturers, infrastructure maintenance and suppliers. Many operations and occupations in rail are highly regulated for public safety reasons.

Nationally recognised qualifications cover occupations involved in rail infrastructure; track protection; shunting; rail track vehicle driving; tram or light rail infrastructure; customer service; rail driving; rail track surfacing; signalling; electric passenger train guard; track protection; heritage locomotive assistant or steam locomotive fireman; train driving; safety investigation; network control; safety management; tram/light rail control; and rail operations management.

The pandemic has caused declines in rail passenger numbers in 2020/21. Notwithstanding, it is expected there will be a 16% growth in passenger rail services by 2026. The pandemic also has highlighted the need to be compliant in changing circumstances to ensure the health and safety of the workforce and passengers and to maintain recertification programs.

Rail is trending towards automation and digitisation including automated driverless trains and advanced train management systems. Asset maintenance is also being enhanced and disrupted by new technologies, including wearable devices, requiring a workforce with digital literacy, data manipulation and analysis skills. In turn, this is requiring prevention and risk mitigation capabilities in digitally evolved environments, mindful of digital literacy, emotional intelligence and people management skills, and cybersecurity strategies and digital skills to combat cyberthreats.Customer service is also changing in a digital age: providing customers with flexibility and real-time travel information; omnichannel ticketing leveraging data to inform and improve practices and understand customer behaviours and expectations; and more interface between digital systems and customers (Rail IRC 2021).

### Maritime

The maritime industry is a key part of the Australian economy especially in the import and export of goods. Some 80% of Australia’s imports and exports are carried by sea. Australia is the fifth largest user of shipping services in the world (Maritime IRC 2021). There are currently 66,000 domestic seafarers licensed and registered with the Australian Maritime Association (AMSA) and more than 28 000 uncertificated crew and volunteers. They service the tourism industry, fishing/aquaculture, defence/navy, oil and gas industry, scientific services, search and rescue and many other endeavours. There are 1476 enterprises in the maritime industry and the vast majority are small. Many operations and occupations in maritime are highly regulated for safety reasons (Maritime IRC 2021).

The Maritime IRC represents all commercial seafarers issued with certificates of competency by AMSA; it oversees nationally recognised qualifications. The Maritime Training Package consists of 18 qualifications, 36 skill sets and 179 units of competency delivered by 61 RTOs. The occupations covered include general purpose hands, coxswains, marine engine drivers, marine engineers, marine surveyors, cooks, integrated ratings, deck officers, ship’s masters and marina operations.

Automation is gaining pace in the maritime sector. It is expected that autonomous technology will reshape the industry’s technology-based operational systems and necessitate new skills and training. E-navigation and digital developments in communication and information systems are creating new opportunities to improve the navigation of vessels and improve safety and efficiency. Changes in technology such as dynamic positioning contribute to more effective decision-making, enhanced safety, better environmental protection, and improved marine traffic management. The maritime industry is highly exposed to cyberattacks, so also needs a robust strategy, awareness and training to protect against attacks and re-instate systems, including compliance with regulatory requirements (Maritime IRC 2021).

The maritime industry has been impacted by the COVID-19 pandemic, with disruptions to supply chains, vessel operations and vessels’ passenger capacity. The pandemic has adversely impacted the cruise industry with the subsequent loss of revenue and jobs. Domestically, employment opportunities are now limited, with many qualified crew members leaving regional areas in search of other employment in other industries, which will contribute to a future skills shortage (Maritime IRC 2021).

### Summary

The transport sector provides valuable services to the Australian economy, providing mobility to millions of passengers, and vital freight services across the country. Other industry sectors depend on transport. New technology and digitalisation are reshaping all four sub-sectors of transport (for a detailed account see TAFE NSW 2020), necessitating new training to enable reskilling and upskilling of existing workers and skilling of additional workers to fill new jobs. The IRC for transport is reviewing qualifications in training packages and undertaking skill sets development to enable upskilling of existing workers and career pathways provision. Creating awareness of job opportunities and pathways in the new digitalised transport sector is important (Transport and Logistics IRC 2021).

## Trends in employer use of nationally recognised training

The data we have on trends in employer use of nationally recognised training is for transport, postal and warehousing. As Figure 4 below reveals, transport employers’ use of nationally recognised training (excluding apprenticeships and traineeships) has remained largely steady over the period 2011 to 2019 (NCVER 2019). What is notable, is that in 2015, training for specific subjects or modules was greater than for full qualifications.

Figure 4 Trends over time in Transport, postal and warehousing employers’ use of nationally recognised training (excluding apprenticeships and traineeships) for full qualifications or specific subjects/modules, 2011 to 2019 (%)

Note: Response value ± margin of error using a confidence interval of 95%.

Source: Employers’ use and views of the VET system (NCVER 2019).

## Employers interviewed

Eight employers were interviewed. They were from all four sub-sectors of transport and are operators from around Australia including: two in aviation, one of which is an arm of defence and the other runs aviation charter operations; one remote coastal maritime operator that services communities, mining, mother ships and also runs tugs; two public transport rail operators, one the authority operating a state-wide system, the other running the electrified train system in a metropolitan area under a franchising arrangement with a state government; and three trucking companies, two operate both local and multistate routes with one regionally based, the third specialises in fuel transport and is expanding to interstate routes.

## Use of training and factors affecting decisions on training

### Road

The road trucking company, regionally based, hires licensed drivers then organises for them to undertake the Certificate III in Transport Operations and HC (heavy combination) after which they can upgrade to multi combination (MC) trucks. For the certificate III, the company uses external trainers from local RTOs who are also approved by the NHVR to offer training in fatigue management. This company wishes to do more training with their local RTOs now that relationships have been established. This regional trucking company also uses a lot of internal training through their training unit. This unit has developed an internal driver team to induct and refresh other drivers using online quizzes, observation of drivers in the cab and from outside (restricted by the COVID-19 pandemic), and to check slow speed manoeuvring. This internal team of 5-7 trained drivers delivers all internal training that is non-nationally recognised. From this company’s point of view, the benefits of this training include its flexibility, quality assurance and focus on building strong internal cultures.

Another of the road companies has driver instructors who must have a Certificate IV in Training and Assessment to enhance their skills as trainers in addition to the Certificate IV in Transport and Logistics (Road Transport - Heavy Vehicle Driving Instruction). These qualifications are delivered by an external RTO which also delivers the units in fatigue management.

This same employer undertakes training needs and cost-benefit analyses and makes decisions about training based on risk assessments (i.e., licensing, regulatory or insurance requirements). The employer has an internal training team of university educated training and learning developers, which the company director works with ‘to get the language right for drivers,’ especially for the new online training programs. Training is run in-house wherever possible, partly because of a lack of confidence in RTOs and training package competencies as the employer feels that industry standards are insufficient. The employer has a capable learning and development team, who focus on compliance with their own business standards. The team designs and writes training materials (increasingly delivered online) that are matched to regulations and legislation. Their internal driver trainer program has full specifications and levels akin to endorsed training packages. They make and use their own ‘training package’, like an RTO. They don’t reference the nationally recognised training package. This company is always experimenting to raise themselves from the base-level and be ‘the employer of choice’. It is building discernible pathways within the business for employees to move forward, sideways or even backwards into roles in an informed way and with appropriate training and support from the company. As reported, they have an ‘Our plan (employer) plus your plan (employee)’ approach to training.

The third road transport company interviewed supports staff to do nationally recognised training on a case-by-case basis to suit their job role. Training opportunities have only been offered to employees in the past two years, due to growth in the business and the Director’s interest in achieving loyal employees by investing in them: ‘We want to continue to offer training, to upskill longer term employees. The business is looking to go interstate; therefore, we want to grow the staff with the business.’ The training offered is role-based and courses are offered to employees based on work performance and potential for growth. Some of the training is nationally recognised (e.g., Diploma in Work Health and Safety and Certificate IV in Human Resources). Otherwise, the training is non-nationally recognised. Some day-to-day operations such as customer service operations need tailored training due to the programs and portals used. As the employer summarised: ‘There are roles that need nationally recognised training but there is still so much to be learnt on the job especially in the fuel industry’. They also do in-house training depending on the team and/or changes/new programs implemented within the business.

All three road employers reported that the COVID-19 pandemic has in general restricted face-to-face training during lockdowns, including observations of drivers in the cab. For one of these employers, the pandemic has accelerated the move to more online training, especially for knowledge or theory-based components, although this industry is mostly focussed on experiential learning. Some online modules are completed in the cabin whilst drivers are waiting for loads, thus saving time for the driver and the employer. Face-to-face training was put on hold, with the focus being on ‘getting the job done’ and being ‘COVID-safe’. However, injuries and incidences increased due to pressure workloads, and so skills enhancement has been increased. In the longer term, the pandemic has shown that online learning could be increased, especially to keep up with new technology in vehicles for tracking and interactivity.

### Aviation

One of the two aviation employers interviewed trains primarily to ensure a capable workforce. If the capability required is a strong match with nationally recognised training, then that is utilised particularly to enable departing members to have their skills and knowledge recognised to assist them in gaining employment post service. One of the main barriers to using more nationally recognised training by this employer is that the training products do not clearly align with the work, as it is highly specialised. All training is selected to meet requirements for work roles at the required standard and level. Training available is benchmarked against outcomes wanted, to ensure it is what is needed and of sufficient quality. The employer reported that they ask: ‘Does the training already exist, even in other countries, or do we need to develop bespoke training?’ An increased use of virtual learning opportunities was reported during COVID-19 given the restrictions that applied.

The other aviation company provides little training. People are employed who already have the required qualifications. The company employs licensed pilots, ground operation staff and administration staff who have undertaken nationally recognised training prior to employment. The limited extra training offered is non- nationally recognised, tailored to their specific needs and run by the company. The employer reported a good understanding of nationally recognised training, but commitment to it was limited within the company based on cost and access to training providers. In addition, there was also concern of management that employees will take the skills gained and leave before the company can get a return on its investment. It was suggested that the promotion of nationally recognised training to employer needs was needed to emphasise the strategic benefit to the whole of industry, as well as to the company and individuals.

### Rail

The two public rail organisations involved in the interviews have between them over 10,000 employees and contractors. Both move hundreds of thousands of customers daily. They have some highly regulated jobs where worker and public safety are paramount through to ‘less risky’ jobs (e.g., customer service). However, they still largely train using nationally recognised qualifications or relevant units of competency thereof: ‘Accredited initial training confirms competency, as a starting point, as the Rail Safety National Law ONRSR[[2]](#footnote-3) stipulates requirements for nationally recognised training in the rail industry.’

Both rail organisations are ERTOs and make use of traineeships to provide train driving and selected other occupations such as authorised officers and station assistants. Signals staff must have a Certificate IV in Signal Maintenance or be an A grade electrician. They both also engage other RTOs to deliver other courses. Courses include registration for rail infrastructure, first aid, manual handling, firefighting, project management and various units of competency relevant to work roles. Where a part qualification is required to do the job, a statement of attainment is issued.

One of the companies has built into its contract the requirement that 5.2% of its workforce be classified as a trainee/apprentice/cadet. They generally exceed this proportion. At any one time, they may have up to 5000 employees needing various levels of training. In this business, all essential training is continuing as normal during the COVID-19 pandemic.

### Maritime

All marine crew require nationally recognised qualifications and certificates of competency to work onboard vessels at sea. Many RTOs around Australia are utilised for training and from First Aid to Engineering and Deck Officer qualifications. RTOs may deliver courses and qualifications for the issue of a domestic or international certificate of competency. For some activities, an RTO requires approval by the Australian Marine Safety Authority (AMSA). Most marine certifications are revalidated every five years.

The one maritime employer in our sample prefers to source crew with qualifications rather than train themselves for the job as there is a shortage of suitable training providers where they are located in the Northern Territory. The maritime employer has a register of core skills for employee positions onboard vessels and the qualifications required from a regulatory and a risk management view. Training needs of its workers individually, and for groups, is anticipated from this register and sourced from various RTOs around Australia as there is limited locally available. During COVID-19 many marine training providers cancelled courses, but AMSA allowed most seafarers to extend the validity of their certificates.

## Barriers to using nationally recognised training

### Road

Knowledge of the nationally recognised training system and how it works, varied amongst the three road operations employers interviewed. One employer was quite confident about being across most aspects of nationally recognised training, readily able to explain clearly to others in the organisation the benefits and drawbacks of nationally recognised training, and whether it was or wasn’t mandated by standards or regulation. The other two interviewees learnt about the system on the job, as did those in different roles. For example, fatigue management, work health and safety and first aid were cited as essential areas of training, and it was important that their finance and HR people understood this.

The collective view was that nationally recognised training needs to be better communicated and promoted to road transport employers. However, the view was that as long as a license is the starting point to drive a truck (general, not a Heavy Vehicle), few will undertake full qualifications training such as the Certificate III in Transport Operations (i.e. a traineeship) until the industry mandates it. As one employer put it: ‘Accredited training is available, but we have men driving massive missiles down the road. It is hard to be totally confident in their skills, knowledge, and abilities currently. We need to ask, is that what we want?’ It was considered the role of the peak road bodies and heavy vehicle regulators to do more to professionalise the workforce and to create safer workplaces.

### Aviation

For one of the aviation employers, the major barriers to the use of nationally recognised training are cost; access to training providers; and access to courses that meet specific needs rather than generalist needs. Time required off by employees to complete the course away from the workplace was also a barrier.

For the other employer the main barrier to using more nationally recognised training was that it does not always align well with the work that is highly specialised.

### Rail

No barriers were mentioned by the rail employers.

### Maritime

The main barrier to the use of nationally recognised training (and that mandated) for our interviewed employer is that there is a lack of training providers locally, while the costs imposed by RTOs accredited by the regulator and the regulators who stipulate the certification are judged to be high. They also report that no financial incentives are available for either employers or employees. Funding is generally borne by the employer as all crew must have the certification to work on board or the vessel cannot go to sea. One of the highest costs is travel interstate and accommodation and this cost is considerable as some qualifications take months to complete.

## Changes to make nationally recognised training more attractive to employers

Respondents offered the following suggestions to make nationally recognised training more attractive to employers:

* Greater advocacy of the benefits for industries to use nationally recognised training
* Mandated qualifications for specific occupations
* Mature age traineeships
* Courses that meet specific industry needs, along with flexibility in the timing of delivery as many occupations in transport are not ‘9 to 5’.

Most respondents were of the view that all of the stakeholders mentioned in the interview questions need to be involved in making change: employers, employer advisory bodies, industry peak bodies, training providers, and governments.

## Summary

Transport and logistics is a large, complex and distributed service sector focussed on moving people and goods around. It enables the broader Australian economy, and our defence forces, to operate effectively and efficiently. Our interviews showed that compliance, safety and reliability are key factors in employer decision-making about the training of their workforce. Employers generally rely on taking on people who already hold the prescribed or mandated qualifications, skill sets, required licenses or tickets for the specific job, particularly in the more heavily regulated occupations in the various sub-sectors. Otherwise, nationally recognised training is provided by the employer largely at entry level, and often through traineeship, apprenticeship and cadetship schemes.

After gaining entry to the industry, the vast majority of training is non-nationally recognised; designed in-house to meet industry and the employer standards as well as identified employee needs; delivered in-house or by carefully selected external training providers who understand the company culture; and delivered as flexibly as possible. Price and funding do not seem to be major criteria for most employers, except for those in more remote areas where they are major barriers to any form of training. There is an increased use of online delivery, both for nationally recognised and non-nationally recognised training, and use of more flexible forms of training are growing within the transport sector, stimulated by COVID-19 experiences, and the application of new technologies to facilitate training delivery.

The various sub-sectors indicated a good knowledge, and selective utilisation, of nationally recognised training to recruit and to develop their workforce, especially where it was mandated. Most employers are satisfied with the non-nationally recognised training programs they use. Few are concerned about the benefits of the national VET system from the employee perspective. Road freight stands out as the transport sub-sector that struggles with introducing a more systematic approach to driver training. Dominated by small to medium enterprises with embedded traditional attitudes and practices, they see the need for training to be hands on, and to be at quite basic levels of skill development.

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# Warehousing

## Sector overview

Warehousing is a function within the transport and logistics industry that in turn is relevant to other industry sectors. For example, warehousing is a growing function within the retail industry with the surge in online purchasing of goods, which effectively by-passes person to person sales. In economic data collections, warehousing often is not discretely identified, as it is included in transport and logistics data and increasingly also in retail sector data. The size of warehousing businesses again is tangled with transport and retail, but the pattern appears to be that warehousing businesses include mostly small, many medium and some large corporates, especially in retail.

Warehousing is more identifiable in employment descriptions detailed on the government’s Job Outlook website. Employment opportunities in warehousing include:

* Warehouse assistants also known as stores assistant or store persons, and in which specialisations can include chiller hand, manufacturing store person, operator supply (Army), order picker/assembler, stores despatch hand, and stores naval (Navy). To work as a warehouse worker, in the majority of cases there is no need for formal qualifications, with on-the-job training being the main training mechanism. Average age is 38 years.
* Forklift drivers who operate forklifts to move bulk materials, containers, crates, and palletised goods, cartons and bales. Also known as forklift operator or fork truck operator. A forklift licence to operate a forklift truck is required. Average age is 42 years.
* Purchasing and supply logistics clerks, who prepare and process orders for goods and services, monitor stock levels and supply sources and maintain stock and inventory levels. Related positions are warehouse administrators, production, purchase, stock and order clerks. Average age is 41 years.
* Warehouse administrator is a sub-category of purchasing and supply logistics clerks who administer and coordinate storage and distribution operations within organisations. Average age is 42 years.

Warehousing operations are being rapidly transformed by new technologies and automation:

Few warehouses today are simply storage spaces, but instead host multiple value-adding processes, such as just-in-time packaging, assembly, product customisation, and in some cases, customer collection services (Transport and Logistics IRC 2020, p.16).

Automation is helping logistics and warehousing operations to meet increasingly volatile product demands, seasonal peaks and changing consumer delivery expectations. The adoption of robotics is enabling the industry to meet the growing demand for same-day delivery. [The Evolution of Skills in Transport and Logistics](https://www.tafensw.edu.au/evolution-of-skills/transport-and-logistics) (TAFE NSW 2020) report provided a detailed account of the technological transformations taking place in logistics and warehousing operations. This report identified that those working in this industry will require more training to allow them to join what will involve more omni-channel retailing, jobs that have an integration with transport and logistics work, and influenced by more digital transformation, the use of robotics and cobots (collaborative robots). It noted:

The changes are placing pressure on logistics businesses to improve their warehousing, fulfilment and distribution capabilities, including uplifts in customer service, as what was once a B2B industry becomes more consumer-facing. One outcome is an increase in soft skills training to boost customer service levels (TAFE NSW 2020, p3).

The Transport and Logistics Industry Reference Committee (IRC) is reviewing and amalgamating qualifications in training packages in logistics and warehouse operations at the certificate I and IV levels to address current and future skills needs of entry-level workers and team leaders/supervisors, respectively. Changes will enable more flexible career pathways and workforce mobility across multiple sectors of the transport and logistics industry and enable the operators to gain the necessary new skills and knowledge to apply the new technologies.

## Trends in employer use of nationally recognised training

We have no data on trends in employer use of nationally recognised training in warehousing alone. It is within the data for transport, postal and warehousing presented in Figure 4 in the preceding section. During 2019, a high proportion of enrolments in nationally recognised training in transport and logistics were in warehousing operations (34%). and for the main intended occupation of store person, followed by a small degree of warehouse administrators (Australian Industry and Skills Commission 2020).

## Employers interviewed

We were unable to engage any employers whose main business is warehousing and logistics. At least 11 companies were invited, and some also with freight operations. Our solution was to include warehousing and logistics training in interviews with employers in transport or retailing. This proved somewhat effective as supply and distribution chain jobs in warehousing and logistics are integral to each of those business/industry areas. Our five respondents who focused on warehousing jobs did so in the context variously of:

* a well-established supplier, distributor and manufacturer of packaging, warehousing, safety and site supplies to 60 000 Australian businesses around Australia
* a large national furniture manufacturer, importer and retailer who largely run their own supply chain operations for 83 stores and online sales. This enterprise employs 1333 people overall, and 64 are in logistics/warehousing
* a medium sized state-based trucking company
* another large national chain retailer
* a small retailer.

## Employer use of training and factors involved

The five respondents were aware that in warehouses, forklift drivers are required to have a forklift and/or high-risk work license, some are also required to have a First Aid Certificate. These licenses or tickets are nationally recognised. The first step to a forklift licence is completion of the Unit of Competence *TLILIC0003 - Licence to operate a forklift truck* at an RTO, the license is subsequently issued by a state authority.

The trucking company we interviewed summed up the typical training approach for employees in warehousing: ‘We use and accept RTO forklift qualifications and license and pair it with their own probation and induction processes’. All respondents said that access to training, whether nationally recognised or non-nationally recognised, for warehousing staff is based on the same company principles and criteria, as for all employees.

Aside from the forklift license, our respondents expressed little interest in nationally recognised training for warehouse workers. As the trucking company said: ‘Other (than the forklift license) everything else is similar to our drivers’ processes’. Another employer commented:

We take account of our business needs, of where we’re going to be most productive and profitable. There’s very little invested in training at present due to the older less skilled nature of the staff, though we’ll do more training in warehousing when we see the old guard moving out and retiring over time.

The large furniture company uses labour hire companies for 70-80% of on the floor positions to ensure agile responses to work volumes. Their employed team leaders are responsible for providing company inductions. This company relies on the labour hire companies to provide capable workers in the first instance.

The distribution company summed up their approach succinctly:

Our courses need to be responsive to our business needs and not critical to be competency based and nationally accredited, but to meet our business needs. A blended mix of internal and external providers works well for us. We have a 70-20-10 rule where 70% is on-the-job training, 20% internal [informal] training, and 10% formal. This is the rule we apply throughout, from warehousing training of less skilled staff to leadership development of our graduates.

The furniture company goes by the same rule in deciding how, where and what kind of training is rolled out to all employees from new migrants who are manufacturing couches, to team leaders in the warehouses, and to executive roles. What is important is that:

… people need to be able to do their stuff, we teach them and check they can do it the way we want them to do it. Substantial on the job training means they get the right information at the right time in a way that is useful to them, and they can still do their job. Fundamentally the whole of company strategy is informed by three key behaviours - we are all learners, collaborators and change makers -it’s OK to ask someone.

Other respondents indicated overwhelmingly that warehouse staff were generally trained on the job specifically in any plant or machinery that they use. In addition, they are trained in non-nationally recognised programs that are available to staff generally, such as the enterprise’s safety management system including high reach, and First Aid (nationally recognised training if the position requires it). Staff are expected to maintain their own required licenses. For example, a fork-lift license must be renewed every five years for a fee.

Training needs are determined by observation and work performance reviews that are used to identify workers’ needs from which on the job training solutions are devised. Two respondents mentioned referencing industry standards in training packages to design suitable training but added: ‘First we ask, can we do it in-house?’ One employer has pulled together a team leader program combining units suitable to their needs from two different training packages.

All employers interviewed had in-house learning and development teams covering staff development requirements across all functions and operations. For example, the large supply and distribution company has:

Our own dedicated team that sets up online courses. So, we have, for example, our own internal learning teams in sales skills, who also set up warehouse in-house training. For example, we have a seven-step internal training process, like we have with sales. We also access some external short course providers for leadership courses, for example. These are designed more to meet our business needs not around an AQF or national qualification.

### COVID-19 impacts

Some respondents noted that training was curtailed due to rapid growth in business during the COVID-19 pandemic. For the majority of others, during the pandemic decision-making was more about training centred on the mode of delivery, whether face-to face or online, rather than content. An employer explained: ‘Most of our courses were delivered online because trainers couldn’t travel to sites’. Consequently, greater use was made of online team sessions, and it was expected that this would continue. In general, the pandemic has led to greater use of online technology both in warehousing and in training, and to some extent changed the mix of internal and external training provision. The pandemic, in particular, had the effect of overcoming any remaining hesitancy about the utility of more online training.

One enterprise had a model to open-up more to technology and digital training. They were able to roll it out quickly without missing a step during the pandemic, so training didn’t have to be suspended with people, pivoting to video and online training. This further validated the model. The company is now planning a greater manufacturing effort on shore.

## Barriers to using nationally recognised training

One barrier rests with the nature of warehousing jobs and the attitudes of the employees themselves. They are seen to be disinterested in training, but happy with learning on the job. One respondent said:

With our warehousing, logistics and packaging group, most of the staff are unskilled. They tend to be long-standing employees with very little interest in training. But increasing automation and digitalisation of supply chain functions may well challenge this attitude. These employees will need to become more skilled around automation and the company would like to professionalise this part of their business more and use more national standards.

From our interviewees’ perspective, a major barrier to using nationally recognised training in warehousing is that there is no mandated requirement for a qualification or recognised skill set other than the forklift license and/or high-risk ticket. Also, almost by convention, organisational culture or habit, there is little support for using nationally recognised or externally subsidised training for warehousing. As the distribution respondent said echoing other interviewees:

As a private company we do not have a tradition of seeking out subsidised training in warehousing or other areas. We seek what we want, make sure it best meets our business needs and use it. Training partners whether RTO or non-accredited, are engaged based on their agility, quality and affordability. Effective partnerships are mutually cultivated with clear and honest communication.

## Changes to make nationally recognised training more attractive to employers

One respondent indicated that the status quo of long-standing unskilled staff in the packaging and logistics group, who have little interest in formal training, may be challenged as warehousing becomes more automated, as already outlined above. In the view of this respondent, given the increased volume of items purchased online (e.g., click and collect), alongside forecast developments in technology and digitisation in the sector, there could be a renewed interested in nationally recognised training. Training products would need to keep pace with these changes to be relevant to employers in a fast-changing world and to keep the pool of qualified workers topped up. Looking forward, other respondents offered these suggestions:

* Standards for warehousing with requirements for nationally recognised training beyond forklift driving, for example, the addition of straddle stacking and other safety practices could make training more attractive to employers
* Change is needed in training packages to ensure that the requirements around performance outcomes are met ‘making them easier to use, up-to-date, and relevant to teaching what you need to know’.

## Summary

Our employer respondents did not see warehouse workers or store persons as front of mind in their operations nor in their training strategies. The interviews showed that there is little interest now by employers in the warehousing sector in nationally recognised training beyond the required licenses that are mostly a pre-condition of employment, if required for the specific job.

Non-nationally recognised on the job and internal training in company procedures, processes and practices, especially around safety and customer service, appears sufficient and is generally preferred by employers. Sometimes this training is supplemented by programs provided by external contractors on teamwork and leadership that is designed for the broader workforce.

Two of our respondents mentioned projections by the Australian Industry Standards Service Skills Organisation (SSO) about areas for change that are influenced by rapid transformation due to new technologies and automation, including more automated logistics and warehouses. As such, they believe that the interest of employers in nationally recognised training in the warehousing sector is likely to increase in the future.

To support the increased use of next technologies, employers emphasise that the national VET system needs to offer what the industry needs. Employers will most likely need to use more external accredited training as their current internal systems may not cope or will not be agile enough. It is also possible that employers will look to employ people who already have qualifications in warehousing, that include digitisation and automation, rather than look to training them entirely on the job. Besides more advanced technologies impacting on the industry, there will be a large generational turnover in the type of staff, with a more skilled group of employees being attracted to work in a very different industry from the one we have today. It could leave many existing employees (of average age about 40 years) without jobs in the future if they cannot be coaxed to upskill in formal training to keep pace with technological changes in the nature of their jobs.

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# Information, Media and Communications Technology

## Overview

The Information, Media and Communications Technology (ICT) industry in Australia comprises   
three areas:

1. Information technology, including the processing, manipulating, and managing of information
2. Telecommunications technology, including the cabling, wireless, switching, transmission, radio frequency, and optical communications media and internet protocol networks
3. Digital media and services provision around the design and production of multimedia and games for various platforms.

In its examination of the structure of the ICT workforce, the former Department of Education, Employment and Workplace Relations (DEEWR 2011) identified three central ICT occupational groups:

1. ICT professionals who are employees, typically with university qualifications, who comprise most of the workforce, and have specialised technical skills in software and applications programming, electronics engineering, ICT business and systems analysis, web development, and a range of other activities
2. ICT support technicians who are employees with nationally recognised training qualifications who provide support around the maintenance of computer infrastructure, web technology, and the diagnosis and resolution of technical problems
3. ICT managers who are employees with a variety of VET and university level qualifications who plan, organise, budget, and control the acquisition, development, maintenance and use of computer and telecommunication systems within organisations.

Significantly, people employed in jobs in ICT work across many industries, making it challenging to define the total employment by industry. The ICT industry is becoming increasingly important to many other industry sectors in the Australian economy. For example, the 2018 report Australia’s Digital Pulse (from Deloitte Access Economics for the Australian Computer Society) reported that of Australia’s ICT workforce, an estimated 51% of ICT workers are employed outside of ICT specific industries. The largest sector is Computer System Design and Related Services with strong growth over recent decades. The employment level is projected to grow to 287 400 by 2024. The other large sector is Telecommunications Services that has shown more stable employment numbers over time, while Internet Service Providers, Web Search Portals and Data Processing Services is projected to continue to increase as a sector up to 2024.

Looking at actual and potential skills gaps, the Australian Industry and Skills Committee (PwC 2019) reports that businesses and the economy are confronting both major challenges, but also significant opportunities, due to growth in emerging technologies. These applied technologies include increased use of advanced data science, artificial intelligence, augmented and virtual reality and block chain. Employers are wanting employees with such skills to meet the requirements of in-demand jobs like artificial intelligence specialists, block chain solution architects and robotics software engineers. Each of these areas was ranked in the top 15 emerging jobs in LinkedIn’s Emerging Jobs Report Australia (LinkedIn 2019).

Others like the Australian Industry Group (Ai Group) in various reports (e.g., Ai Group 2021) highlight that this applied technological skills evolution will continue at pace, driven by advances in artificial intelligence, automation and new technologies. They identify digital roles among the most challenging to fill. These include roles such as digital experts, software engineer, solutions architect, and SAP business analyst. The growth of new technologies is reshaping current industry sectors, while also growing new ones. Prior to COVID, but now accelerating from the impacts of the pandemic, new forms of working will emerge. These forms will allow remote work arrangements supported by new technologies and more supportive workplace cultures around working from home. These developments will further support the growing roles of technologies, data science and new forms of ICT in shaping the nature of how we design many work roles. According to the Information and Communications Technology IRC’s 2019 Skills Forecast (PwC 2019), the priority skills for the Information and Communications Technology industry are: work health and safety; teamwork and communication; problem solving; and technical skills to keep pace with consistent change and evolution or technology in the sector.

Despite the health and economic crisis associated with COVID, the technology workforce in Australia had 33 400 more workers in 2020 compared to 2019, reaching a new peak of 805,525 workers. This growth represented a 4.3% increase in a year (Deloitte Access Economics 2021). By comparison, employment in professional industries grew by 1.3%, while the overall number of employed people shrank by 1.7%. Post-COVID-19 surveys reveal some interesting challenges for Australian business and how ICT enterprises will likely play key roles. Omdia’s Future of Work survey reported the opinions of leaders in different industries operating in CIO, CTO, CFO, and HR Director roles (Omdia 2020). They concluded that Australian businesses will need to continue to adapt and change in response to continued uncertainty. This adaptation will include different employee expectations and workstyles, and the use of more open and fluid workspaces. Further, continued digital transformation will change how businesses relate to and deliver value to their customers.

Similarly, in a report for the Australian Computer Society, Priddis, Miller and George (2020) emphasised the continued and significant impact of new technologies on the Australian workforce in the next 15 years, with technological capabilities transforming the workforce and redefining jobs. They reported that 2.7 million Australian jobs are at risk from automation over the next 15 years. However, change also brings opportunity with estimates that more than twice as many jobs can be developed if the right investment occurs in the skills development of our workforce. Priddis, Miller and George argued that education and re-skilling of the Australian workforce will be essential, including both front-end training and access to continuous learning. Significantly, they identified numerous re-skilling pathways that are available to transition at-risk workers to less automatable careers. They reminded us that many at-risk professionals have transferrable skills, and that these individuals will need to focus on skill and knowledge gaps to transition to new, lower risk occupations.

Finally, the World Economic Forum (Schwab & Zahidi 2020) identified that many other economies have similar skills deficits in these and many other areas.

In Australia, the Committee for the Economic Development of Australia reported that there is a national imperative to create a workforce with digital capabilities, a core requirement of the government’s objective to be a world-leading digital economy by 2030, supported by world class digital training and agile qualifications (CEDA 2021). A new Digital Skills Organisation has been set up to take an evidence-based and industry-led approach to achieve this aim[[3]](#footnote-4). Its first pilot project aims to train 100 data analysts and, with the completion of the pilot, adopt lessons learned to train and employ a further 1000 data analysts.

## Trends in employers’ use of nationally recognised training

Figure 5 below shows trends over time in ICT employers’ use of nationally recognised training from 2011 to 2019 (NCVER 2019). As can be seen, the percentage of employers using either full qualifications or specific subject or modules has remained steady over time, but a considerably higher proportion are using specific subjects or modules than full qualifications.

Figure 5 Trends over time in Information media and telecommunications employers’ use of nationally recognised training (excluding apprenticeships and traineeships) for full qualifications or specific subjects/modules, 2011 to 2019 (%)

Note: Response value ± margin of error using a confidence interval of 95%.

Source: Employers’ use and views of the VET system (NCVER 2019).

## Employers interviewed

The views that follow are based on interviews with employers in six enterprises. These private sector businesses ranged from small to medium size businesses, to two large international firms. The businesses covered a range of products and services, including digital software, digital marketing, technical support, software and development and custom enterprise software solutions.

## Factors influencing training

The ICT industry, like other industry sectors, is part of a changing workplace where the nature of work, aided by technology, is also evolving. Major factors shaping choices about training in the industry that emerged from the interviews included:

* The need for highly specialised skill sets to respond to growing challenges facing business
* The continued importance of credentials, not only from nationally recognised sources (i.e., RTOs, universities) but also in the form of non-nationally recognised training
* The importance of completing training provided by ICT vendors, such as software firms and other providers, that is recognised nationally and globally
* Completion of vendor training that allows more support to firms and their employees using those vendor products
* Short, sharp training experiences that are modularised and deepen rather than broaden skills   
  and knowledge
* Learning that is immediately useful to the required skills at work, with the learning not being separate from on-the-job activities
* Increased demand for soft skills training, not only to support those in technical roles who need to work in teams, but also to support technical staff making the transition from technical specialist   
  to managerial roles.

### COVID-19 impacts

Interestingly, according to those interviewed, the pandemic was not seen to have had any major negative impacts upon the nature of decisions about training in their ICT businesses. Training was, as one interviewee put it, ‘business as usual’. The major reason given for this by almost all employers was that they were already heavily reliant upon flexible and online delivery modes and internet-based training products. Training approaches were not expected to alter any time soon; the structures, use of technologies and cultures of ICT firms are seen to be already accommodating what a post COVID-19 future might look like. For instance, ICT firms pre-COVID had organisational cultures that allowed a large range of differences in work styles, including considerable flexibility and remote working. The use of flat organisational structures and management teams, with workers being geographically dispersed, was further aided by the technologies used by their businesses.

### Use of nationally recognised training

Overall, the firms interviewed were aware of the nationally recognised qualifications being offered, through TAFE in particular. The training packages provide credentials that are attractive to employers and having these nationally recognised qualifications did influence the selection of new staff to join their firms. As a software development employer explained:

I’ve always found TAFE to be a great way to get people with the right skills, because you have a mix of practical and theory. I think the IT industry would be better off if we could work with TAFE to make sure they have the right skills.

However, despite the knowledge and understanding of these courses and qualifications, those interviewed made little use currently of nationally recognised forms of training with existing staff. As an employer explained:

There is no standard or accreditation required in IT unlike plumbing or electrical. But a standard for ICT might sort out the cowboys in the industry. We align in my business especially with Microsoft products, we use their qualification platform, and that determines our continued training. We get bonuses from them, and the more staff trained, the higher the levels of support there are.

Where employers encouraged training that accessed nationally recognised training through a training package, they sought the completion of modules or skill sets that allowed skills development in specialised technical areas. However, the short online courses offered by major ICT enterprises were judged to better meet those needs. Interviewees identified their industry as one with major skills shortages, and in response, the industry looked to short, tailored vendor certifications ahead of any major engagement with full nationally recognised qualifications in the ICT Training Package.

A minority, however, were using traineeships that had their basis in a partnership between TAFE and an IT business. Some mention was made about TAFE/Microsoft partnerships for trainees (Microsoft Traineeship Program) that were proving to be quite successful in attracting students and in meeting industry needs. Mutual funding made the program attractive to employers. Trainees were enrolled in this Certificate IV in Information Technology gaining paid on-the-job experience within the Microsoft Australia network, industry-recognised Microsoft Certifications, including a specialisation in cloud skills as part of the Azure Administrator Certification Track. The program aims to fill an IT skills shortage, providing students with a nationally recognised qualification, as well as globally recognised Microsoft certifications.

Reflecting upon the Microsoft Traineeship Program, firms interviewed believed that there was a major opportunity for more design of training that combined vendor certifications with vocational training.

### Barriers to using nationally recognised training

There was the view among interviewees that nationally recognised qualifications are not meeting the higher and rapidly changing levels of skills required in the industry today. University level qualifications in ICT are favoured for specialised and higher-level roles. Also, it was suggested that the move to higher education qualifications was in response to concerns about job losses at lower skill levels due to outsourcing and offshoring. Having VET rather than university qualifications in ICT might have consequences for job security and longer-term career pathways in the ICT industry.

An ICT support services business employer explained:

Many in the industry who own companies do not value full VET qualifications of a potential employee as highly as someone with a degree. There is a misconception that their training would not be as superior, which I disagree with, but it definitely is an obstacle.

Another employer built upon this positive view of VET qualifications although with a caveat: ‘For us, a certificate III is more valuable than a university degree, but hands-on experience gained with us is better than either.’

It was also argued that the industry itself needed to communicate more effectively the benefits of ICT careers and pathways to attract new entrants into the sector. The rapid levels of change around the technologies and roles required, were described by one employer, as ‘muddying the waters and causing confusion about what qualifications were needed and were valued in the longer term.’ As another put it:

I got my programming knowledge eight years ago at university. My knowledge was cutting edge. That language is no longer in use. Its product life is dead. TAFE accreditation is just too far behind for me to use it for my staff.

Finally, at least among the group of employers interviewed, a poor level of knowledge was reported about what training was available from their local public or private RTO. The owner of a Software Development Business reported: ‘I don’t really understand what is available in the VET system locally, or why they would be useful to us in the IT industry.’

### Opportunities for using nationally recognised training

Those employers with the more positive views about accessing and using nationally recognised training believed that the current ICT Training Package had considerable potential for growth and change, especially around the continued development of even more flexible and transferable package components, including more development of modules in new skill set areas. These topics included opportunities to take the core skills existing within the ICT Training Package and to build more skill set components around cyber security, managing cyber threats, advanced skills in data analytics, software engineering, cloud computing and big data. In addition, the courses needed to allow deeper rather than wider skill development. An employer noted:

These days a generic TAFE certificate or even a university degree in marketing is useless. You need Facebook marketing, Google marketing and so on.

There was frequent mention of the need to access the soft skills component of training packages, to improve the communication skills, management and leadership abilities, conflict management, managing poor performance and teamwork of staff, especially for those moving to more managerial and sales roles in the industry. As an employer summarised their views:

There is a great need for more life skills or soft skills training in the ICT industry. I went to TAFE then university and that taught me how to think and how to code. But it is professional development programs that help us connect with industry, our employees and our clients.

Another employer described the example of how the hard (technical) and soft (people) skills are both required in today’s ICT worker. A specialist in cyber security, for example, will need very advanced skills in the management of big data. At the same time, they will need good people skills to work with others in less technical roles to determine how data privacy is managed securely and clients are satisfied with how these steps are communicated to them. This combination of soft and hard skills is also linked to the view, held by a few of those interviewed, of the need for more ‘T-shaped’ ICT professionals who demonstrate skill sets that have high level technical skills, as well as soft skills. These skill sets are especially in demand for those moving to management and leadership roles in the ICT sector.

### Use of other forms of training

Vendor certifications, such as those provided through Microsoft, Amazon, Cisco and others, are judged to be the industry standard across many ICT job roles. Those who are graduates with vendor certifications are highly sought after in the industry. This type of training was referred to across various interviews as ‘focused and tailored’, ‘cutting edge’, ‘very relevant’, ‘highly flexible’, ‘great value for money’, ‘has national and international standing as forms of vendor training’. One employer gave the following example:

Microsoft and Cisco offer respected courses and some, that when you’ve completed, have such a reputation that anyone with that qualification could get a job immediately. For example, there is an information security course called ‘Offensive Security Web Expert’ which is about how to deal with hackers. They make the training so difficult to get that it’s valuable to the IT industry. Make the training very difficult to get, then it’d be respected.

In addition, there are high levels of satisfaction with the quality of vendor and other forms of non-nationally recognised training. There is the use of in-house training, often linked to the products of companies. Microsoft products, for example, come with web sites and their own training packages. Accreditations gained online include the use of Microsoft, Scrum courses via Scrumology, Udemy (that provides a MOOC and an online provider), Plurasight, Amazon Web Services (AWS), Salesforce, YouTube and Magneto. All were very frequently cited sources for access to online training materials and modules by interviewees.

One employer summarised their view about the use of non-nationally recognised training as follows:

We use Udemy and other companies that offer either $20-$30 courses in programming languages. With 20-30 hours of video content. One of these had 99 000 people sign up. Another software company Pluralsight offers $200 a month for unlimited access to training. Why would we use TAFE?

Another described their choices about training as follows:

I seek out an online provider. These courses are recorded once. They charge only $20 and get nearly 100,000 students and they make millions. You can even rate them like Uber. Why go to TAFE?

A technical development manager remarked:

TAFE isn’t something that we look for from our employees. We’re all about technical accreditations from Microsoft or similar. TAFE and university education is great to see, but it’s not high on our dependency list when we hire. Experience in existing roles and certifications for skills we need are what we look for.

In addition, the fast rate of change in the ICT sector puts a focus on the need for workers to access lifelong learning to stay relevant in their skills in this sector. Employers emphasised the transition away from a reliance on ‘front loaded’ education to continuous skills acquisition through on-the-job learning and training. In particular, they reported that their enterprises supported ongoing reskilling and upskilling by their employees, either by paying for their access to short online vendor training or leaving the responsibility to the employees themselves. They supported employees to complete ongoing training online so that the business had an adequate skills supply at the appropriate levels to meet new trends in the industry. As one employer reported:

As a small company we cannot afford the cost to continually train our employees. We encourage them to study by themselves in their spare time, but we will help them to decide about what, and their future career direction.

## Changes to make nationally recognised training more attractive to employers

A widely held view among ICT employers was that the constant level of fast-paced change meant that aligning any nationally recognised training framework to what employers needed will always be a major, and possibly impossible, challenge to meet successfully. For example, the regulatory landscape is changing and uncertain, with the regulatory environment around cyber security being put up as one good case of where the Federal Government is playing a role.

In addition, there are also challenges about the suitability of several qualifications in the ICT Training Package that may not be fit for purpose for the industry, with industry consultations occurring to determine changes so that the training package best meets industry requirements.

Employers cited the role of the government, peak bodies and possibly new entities that might better represent what the industry needs. One employer reflected:

I’ve thought about this. Not training providers because they are only interested in lining their own pockets. We’d need something like a Software Development Association, and there isn’t one. Or a Digital Marketing Institute, and again there isn’t one.

There was the view that the employers themselves must play a more active role in determining the nature of nationally recognised VET qualifications on offer to those wanting to join the industry, and in assisting with the development of learning packages. Employers who were positive about the role of nationally recognised qualifications, and the role of the Australian Qualifications Framework, noted their role needed to be even more active in identifying with RTOs the type of future qualifications required, especially more specialised credentials to meet future skill needs (e.g., big data, cloud services).

### Examples of best practices in nationally recognised training

One employer, who was a strong advocate for the ICT industry making greater use of nationally recognised training, returned to earlier comments about the growing importance of having more advanced, and often specialised, skills if a person is to have a long-term career in the ICT industry. They cited the need for more diploma-level traineeships in technical occupations and management skills, as well as more partnerships between TAFEs and universities for transitions from VET to higher education qualifications.

In our peak body interviews (support document 2), Ai Group highlighted the Victorian Government-funded Digital ICT Apprenticeships program that is supporting one year of customised training and paid employment to suit the products and services of ICT firms. Learners complete certificate IVs and diplomas in ICT, qualifications that are recognised nationally by employers in the industry. Job roles linked to successful completion include IT support technician, software engineer and cyber security analyst.

A second case cited was the P-TECH program that provides students with the skills and support required to transition from school to work or university. P-TECH in association with IBM Australia matches students with mentors at IBM locally. Students will leave Federation College (Federation University, Ballarat, Victoria) with vocational skills for jobs or further education. The P-TECH model is based on a partnership between education and STEM industry sectors to provide opportunities and support to students with an industry mentor; hands-on workplace experience; defined pathways to achieving a vocational and university qualifications; and links to ICT jobs via the Technology Park.

## Summary

The industry is one of rapid change with existing skills shortages reported by many of the larger businesses. Demand for their products and services, as one employer explained, is ‘going through the roof’. However, companies are unable to meet this demand due to skills shortages, while hiring was also reduced due to the closure of borders to skilled ICT migrants during the pandemic.

While nationally recognised qualifications are valued among new recruits in particular, they are seen to be less adaptable over time to meet the strong demand for tech talent. There is a strong focus upon the value of vendor qualifications and accreditations that advantage the individual’s career, and the company’s profile, while there is a strong focus upon micro skills, micro credentials, and allowing employees to transition their careers to different parts of the ICT industry. Software vendors, for example, offer Microsoft qualifications (becoming Microsoft Certified Professionals) that are locally and internationally recognised for careers and career development.

In conclusion, a vital and skilled ICT sector is essential to support the skilling and re-skilling of the Australian workforce as it responds to more technological change and automation. Nationally recognised qualifications are initially attractive to ICT employers, but once employed and more experienced, employers are promoting the use of non-nationally recognised and vendor training that is proving to be better in meeting the training needs and skills required in this fast-paced industry.

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# Appendix

## Interview Questions with Employers

##### Theme 1: Current use of forms of workforce training

Q. Please tell me a little about the core activities of your business and your current role?

Q. How is your organisation currently using accredited forms of training?

Q. How is your organisation currently using non-accredited forms of training?

Q. Has the way you train your workforce changed from previously? If so How? We will get to why shortly.

Q. How has COVID-19 impacted upon your training of your workforce in 2020-21?

Q. What is the longer- term impact for how your organisation will use training to build employee skills?

##### Theme 2: Factors that influence employers’ decision making on training of their workforces

Q. How do you choose training for your workforce? What factors do you take account of?

Q. How do you find relevant training for your workforce?

Q. How do you make sure the training for your employees is of sufficient quality?

Q. When you look at the skill needs of your business

1. how well does the available nationally recognised training match? When does nationally recognised training suit you and your workforce’s skills needs?
2. how good a match is the available non-accredited training? When does non accredited training suit you and your workforce’s skills needs?

##### Theme 3: Nationally recognised VET

Q. Do you think it has been satisfactorily explained to you and other employers in your sector what nationally recognised training is?

Q. Do you think that employers in your industry have a good understanding of promoted advantages of nationally recognised training - such as the gaining of knowledge and skills that are linked to nationally recognised qualifications that are portable, transferable, meeting industry licensing requirements etc.?

Q. Do you think current information available on accredited training helps you make good decisions about the most appropriate form of accredited training for your business?

Q. Can you provide examples of employers’ good use of nationally recognised training to develop their workforces?

Q. What do you think are the major barriers for you as an employer to using nationally recognised training options to develop your workforce?

Q. What changes are needed to make nationally recognised VET more attractive to employers?

Q. Who needs to make these changes- employers themselves, employer advisory bodies, industry peak bodies, training providers, governments?

Theme 4: Other matters you wish to raise about employers training of their workforces

Q. Do you have additional comments you would like to make that you think will help this research project; or put another way Is there something that you thought that we would be talking about,   
but we did not, and if so what might that be?

Q. Do you know of other employers in your industry who also might be willing to share their opinions   
with us?

**END –** Many thanks for sharing your insights

1. Skills Organisation Pilots have been established to test new ways to make the VET system more responsive to the skills needs for three selected industries. This includes identifying skills needs, developing qualifications and improving the quality of training delivery and assessment. The selected industries are: Human Services; Digital; and Mining. See <https://www.dese.gov.au/skills-organisations> for further information. [↑](#footnote-ref-2)
2. Office of the National Rail Safety Regulator (ONRSR) [↑](#footnote-ref-3)
3. The ICT industry is part of one of three industry-led Skills Organisation pilots designed to inform broader improvements to the national VET system (refer to https://www.dese.gov.au/skills-organisations). [↑](#footnote-ref-4)