

Digital Queensland:

Digital Professional Workforce Action Plan



2020
– 2024

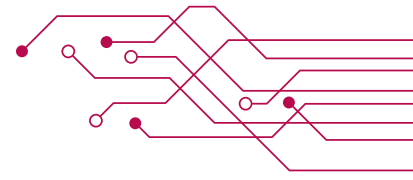


Acknowledgement

The Queensland Government acknowledges the Country and people of Queensland's First Nations. We pay our respect to Elders, past, present and emerging. We acknowledge the continuous living cultures of First Nations Queenslanders – their diverse languages, customs and traditions, knowledges and systems. We acknowledge the deep relationship, connection and responsibility to land, sea and sky Country as an integral element of First Nations identity and culture. This Country is sacred. Everything on the land has meaning and all people are one with it.

We acknowledge First Nations peoples' sacred connection as central to culture and being. First Nations people speak to Country, listen to Country, sing up Country, dance up Country, understand Country and long for Country. We acknowledge and thank First Nations people for the enduring relationship connecting people, Country and ancestors – an unbreakable bond that safely stewarded and protected the land, waters and sky for thousands of generations.





Foreword

There is no doubt the world as we know it has changed. The impact of the COVID-19 pandemic has increased the speed of digital transformation for many people, encouraging us to find new ways of embracing technology.

Here in Queensland, we want to make sure we embrace the opportunities this has created as our economy recovers, and position Queensland with a strong and diverse digital economy.

Industry has indicated it will need an additional 10,000 digital professionals in our state by 2024, and the Queensland Government is investing \$8 million over four years to deliver this Digital Professional Workforce Plan to ensure we can harness the jobs of the future.

Queenslanders are embracing new ways of living, learning, and working. More and more, people are participating in the workplace remotely, and this has provided many positive economic and social benefits for Queenslanders, particularly in our regions.

This plan will help ensure we have the requisite skills and professionalism to design, build and implement the digital outcomes Queensland needs.

It will help Queenslanders access digital and ICT skilling, education, and placements over the next four years to make sure we can meet our digital needs with jobs in our state.

This plan will also help create new opportunities and transform other sectors including agriculture, manufacturing, health and construction, as well as emerging industries like cyber security and hydrogen energy.



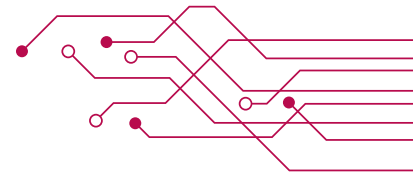
All of this is key to fostering a thriving digital economy for Queensland.

This Digital Professional Workforce Plan is part of the \$200 million Future Skills Fund and the Queensland Government will partner with the state's digital industry, academia, and the Commonwealth as we move forward.

Together, we will ensure Queensland is equipped and positioned to harness the benefits of a strong digital economy.

The Hon. Leeanne Enoch MP

Minister for Communities and Housing
Minister for Digital Economy and
Minister for the Arts



Industry statements

A crisis has the potential to accelerate existing trends and COVID-19 has been no exception. Organisations which had been on a gentle path to digital transformation have found themselves accelerating their transformation at a rate that they never expected. This has further increased the need for skilled digital professionals.

The Council of ICT Associations (CICTA), which brings together 12 professional and industry associations in the Queensland digital economy, found themselves at the forefront of the business disruption that COVID-19 wrought. Not only have the associations had to change their business models to accommodate the social distancing restrictions, but they have also been witness to the dire need in all businesses to be prepared and able to embrace digital disruption.

CICTA has been highlighting the increasing shortage of skilled digital professionals for the past few years. The reality of this shortage is now with us and many organisations are reporting difficulty in recruiting the people and talent that they require. Only in the past few days, CICTA members have reported significant shortages in skills such as cybersecurity, software development, business analysis, project management and many others.

The truth is that we do not have enough people with the requisite digital skills to keep our economy moving down a sustainable growth path. It is worth remembering that this is not just a problem for the ICT industry; slightly more than half of our digitally-skilled talent is employed in non-ICT related industries.

It is an inescapable conclusion that Queensland needs, in the short and long term, to build a steady pipeline of digitally-skilled talent to maintain growth and generate more jobs. The Queensland Government's Digital Professional Workforce Action Plan is a key initiative to ensure that this happens. CICTA has worked collaboratively with the government and individual industry leaders to develop this action plan.

Queensland needs this initiative on a number of levels. Our technology companies must be cutting-edge; other businesses must be capable of embracing new ways of working and many workers displaced by COVID-19 need help in identifying rapid reskilling opportunities. CICTA welcomes this plan as a real contribution to addressing the digital skills shortage and looks forward to working with the government on its implementation.

Dr Nick Tate
Chair, CICTA

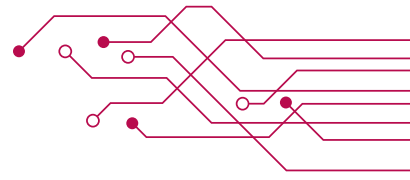
CICTA Members comprise:

- Association of Professional Staffing Companies (APSCo)
- Australian Computer Society (ACS)
- Australian Information Industry Association (AIIA)
- Australian Information Security Association (AISA)
- Australian Institute of Project Management (AIPM)
- International Institute of Business Analysis (IIBA)
- Information Systems Audit and Control Association (ISACA)
- ICT Alliance Gold Coast (ICTGC)
- IT Service Management Forum (ITSMF)
- Queensland Futures Institute (QFI)
- Spatial Industries Business Association (SIBA)
- Women in Technology (WiT)

We know that the power of digital transformation is agnostic to any industry vertical, and will be a vital driver for Queensland's economic recovery and to help improve the lives of everyday Queenslanders into the future.

The Queensland Digital Association is delighted with the news of \$8 million funding for the Digital Professional Workforce Action Plan, and looks forward to facilitating industry and government in the rollout of programs to drive digitisation and innovation across the state.

Fiona Foxon
CEO, Queensland Digital Association



Introduction

Digital technology has changed almost every aspect of the daily life of households, businesses, industries and governments, bringing opportunities and challenges for each. Many traditional industries are being disrupted and some are challenged by new digital economy alternatives.

The COVID-19 pandemic has created an increased need for digital and has also caused a reduction in the number of digital and ICT workers available to Queensland. We have relied on migration to supplement our own skills base for many years. The pandemic has exposed the risk of relying on offshore talent. While this is a challenge to businesses in terms of accessing digital skills, it is also an opportunity for Queenslanders to upskill or change careers to ensure we have a strong and enduring local workforce, and our economic resilience grows.

While it has been suggested for some time that the future is “digital”, the pandemic has demonstrated that digital is already an essential factor for our society and economic growth. The Queensland Government’s *Digital1st Strategy (2017–2021)* highlights the need to harness digital skills and experience to ensure we can keep pace with changing customer expectations and technologies.

Some of the most in-demand roles in the job market are new digital ones – from artificial intelligence analysis, full stack engineers and robotics engineers, to data scientists, service designers and digital product managers¹. Individuals can improve their education, employability and earning potential with access to digital technologies and the right digital skills. Technology workers are earning 47 percent more than the average Australian worker, or workers in non-tech occupations, which provides a significant opportunity for Queenslanders².

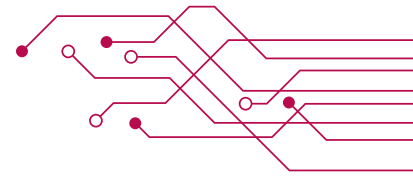
More than half of digital professionals now work in industries outside of the traditional ICT industry³, such as mining, tourism, agriculture and manufacturing, providing an expanding opportunity as the digital economy reaches further to disrupt and transform even the most traditional industries and jobs.

Currently, it is estimated that technology is Australia’s sixth largest industry, contributing \$122 billion each year, and it could generate much more. An estimated \$207 billion per year in gross domestic product (GDP) is predicted if we close the gap on peer countries by 2030⁴. Queensland wants to be part of the step change and reap the economic benefits in order to position the state as a national leader.

Queensland must position itself to take advantage of these opportunities, correct its under-representation in the digital industry, and grow and diversify its future industries and build jobs for future generations.



Some of our new graduates joining the Digital and ICT Graduate Program 2021



Consultation and engagement

In order to develop this plan, the Queensland Government conducted public consultation during a 10-week period in 2019–2020.

The aim was to better understand the issues affecting the labour market, particularly in regional Queensland. We outlined the proposed approach by government and the digital industry to increase the size and skills of the state’s digital and ICT workforce, and listened to the concerns and proposals presented. This resulted in the priorities and actions outlined in the plan.

Consultation activities

5 Ministerial roundtables



Ministerial roundtable meetings

Date	Location	# Attendees
4 Sept 2019	Townsville	19
28 Oct 2019	Rockhampton	20
7 Nov 2019	Cairns	15
18 Nov 2019	Mt Isa	15
29 Nov 2019	Springwood	13

118

Surveys completed

2,700

Website visitors



Key survey results

59.5%

said their organisation is expecting an ICT skills shortage in the next 12 months

78.6%

felt people do not understand the roles available in an ICT career

68.3%

said ICT skills and training does not meet their region’s labour market needs due to:

- quality of graduates
- lack of on-the-job training
- access to the right training, especially in regional locations
- lack of awareness and limited access to affordable professional development.

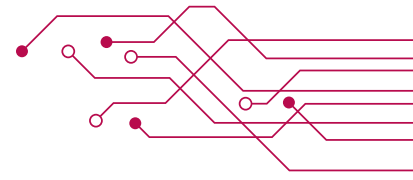
Survey respondents confirmed **career perception is a barrier to uptake** – the **ICT professions contribution is undervalued** and **not understood**.

Key opportunities:

- Improve image of ICT careers
- Improve career and pathway information
- Improving digital education in Queensland schools from P-12
- Stronger industry engagement and partnerships
- Increased graduate/trainee placements
- Subsidise and incentivise education pathways
 - Revise terminology from ICT to digital (contemporary and future jobs)
 - Regional workforce development
 - Promote ICT as an all-ability career.

Key challenges:

- Attracting and retaining quality staff
- Infrastructure and connectivity, particularly in regional Queensland
- Competitive salaries, compared to Sydney and Melbourne
- Graduate skills not always meeting labour market needs.



Vision

Together, the Queensland Government and digital industry will position Queensland as an innovative, digitally-savvy economy by supplying an additional 10,000 digital professionals by 2024 through investing in skilling and reskilling and attracting a broader range of people into digital professions.

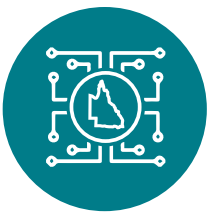
Our four key priorities are to:



develop Queensland's digital professional workforce to support Queensland's economic and social recovery and ensure our future prosperity.



widen the digital workforce pipeline by skilling, reskilling and upskilling Queenslanders entering the workforce and by attracting new and more diverse cohorts into traditional and emerging industries.

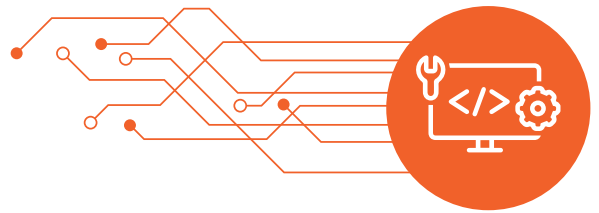


enhance and strengthen regional Queensland's digital professional workforce by ensuring there are adequate educational and professional development opportunities locally and that remote working is promoted and encouraged.



provide collaborative and strategic leadership to ensure Queensland has a workforce of cutting-edge digital professionals to:

- meet the needs of the labour market
- enable businesses to remain competitive
- take advantage of new opportunities offered by the digital economy.



PRIORITY 1

Developing and growing Queensland's digital professional workforce

Current state

The ability to attract talent into Queensland's digital professional pool has become a priority. Preferences for university degrees and vocational education studies in digital and ICT continue a low long-term trend and fail to keep pace with demand⁵. Without an adequate supply of skilled digital professionals, Queensland businesses and organisations will not be able to transform and compete in the digital economy.

Digital skills and literacy have been embedded into the Australian National Curriculum since 2015 and students now graduate with basic digital life skills. However, this uplift in skills has not translated to a pursuit of digital or ICT careers. Our consultation and engagement across the state suggests some negative connotations may still exist around digital careers including the difficulty level, negative stereotypes of ICT workers and insufficient knowledge and information around the scope, breadth and value of digital professional careers.

The constant evolution in technology is reshaping occupations. The new job categories and skills require an agile approach from our education sector to fast-track contemporary training and development. The consultation undertaken to develop this plan for Queensland highlighted that 68.3 percent of respondents felt that digital and ICT skills and training did not meet their region's labour market needs.

Future state

Queensland will create a talent pipeline for digital professionals. School leavers, parents and those seeking to reskill, including older or displaced workers, will have a positive perception of a digital career, will be assisted to navigate career options and understand pathways to get there. Queensland will offer a full range of training and development programs that ensure learners have cutting-edge digital skills. Digital and ICT careers will become a career of choice as people become aware of the benefits of these exciting jobs of the future.

Actions

- Implement a **digital career campaign** aiming to reach 300,000 Queenslanders. The campaign will target people impacted by COVID-19, school students, teachers and parents, and showcase the opportunities possible in a digital career. The aim is to inspire more people to plan for these jobs of the future.
- Build an **online digital industry directory** hosting and promoting digital career opportunities and matching nationally recognised digital career skilling, reskilling and upskilling course information (including subsidies) and a calendar of events and professional associations. The aim is to engage people and help them take action to move into digital professions whether they are leaving school or mid-career.
- Increase awareness and participation in **professional digital education pathways** by:
 - reviewing the **digital traineeships** and higher-level **apprenticeships** that are currently available on the national priority skills list, stimulating demand for these programs particularly for workers who have been impacted by COVID-19
 - identifying any gaps and **co-designing offerings** that could be added to the VET sector and Registered Training Organisations (RTOs) to address in-demand digital skills.
- Enable and promote regular **contemporary technical skills advice** from specialists from the digital and ICT industry **to education, tertiary and registered training providers**. This will ensure that curriculum and graduates meet labour market requirements commencing with high-demand sectors such as cyber security and data science.



Our metrics:

- 300,000 Queenslanders engage with the digital career campaign over four years.
- Positive perception of digital careers after interacting with the digital careers campaign – the aim is for a 10 percent improvement from the baseline measure to be determined prior to commencement of the campaign.
- Visits to the online digital industry portal.

Success looks like:

- ✓ Increased supply of digital professionals in Queensland.
- ✓ Positive perception of digital careers.

// CASE STUDY

Safer work places

Brisbane-based tech business Real Serious Games (RSG) creates engaging ways for businesses to train, upskill and create safer work environments by using extended reality (XR) technology. It works across construction, mining, transport and education industries to ensure the workforce of tomorrow is highly skilled, adaptable and ready.

Its technology takes training beyond the in-house seminar and handbook to show people not just the way tasks and procedures should be carried out, but to understand the implications behind the decisions they make. It creates complex scenarios so people can understand and learn to react wisely.

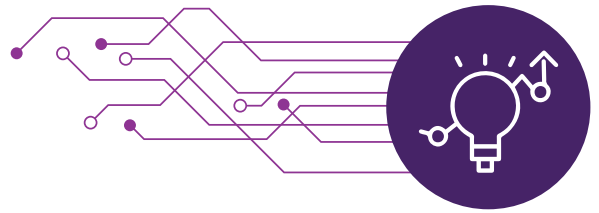
RSG creates world-leading XR products, solutions and experiences developed from a solid base of technical expertise, industry experience, and an understanding of human behaviour across industry, business and education.

Its team of 30 has diversely broad backgrounds - like the research and development manager who leveraged his experience and wide-skill set with game and visualisation industries to ensure the company stays ahead of current trends. A 3D artist ensures the technical concepts are brought to life with detailed architectural visualisation of projects. A civil engineer combines and applies her technical knowledge and experience to the extended reality, custom applications, 4D planning, 3D visualisation or forensic animation.

This type of adaption of industry technical skills and knowledge can open up multiple opportunities for those looking for a career in the digital economy.



Extended reality (XR) technology created by Brisbane based tech business Real Serious Games.



PRIORITY 2

Widening the pipeline

Current state

Through recent consultation, industry indicated it needs an additional 10,000 digital professionals by 2024. More than half of the respondents (59.5 percent) said their organisation was expecting an ICT skills shortage in the next 12 months.

While the pandemic has accelerated the rate of digital transformation across Australia, it has also reduced the number of available ICT and digital workers, due largely to a fall in skilled migration. This presents an opportunity for Queenslanders to upskill or change careers particularly those workers impacted by COVID-19.

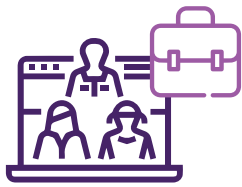
There is a great opportunity to widen the pipeline of talent by attracting and skilling up under-represented cohorts. For instance, women make up less than a third of Australia's current technology workforce and older people less than 15 percent⁶.

Future state

Queensland will widen and grow its professional digital workforce by attracting a wider range of people and enjoy the benefits of an increasingly diverse and inclusive pool of professionals, better reflecting the community. Queenslanders will be supported by pathways and placement options for a digital career and benefit from on-the-job training.

Actions

- Form partnerships between VET, RTOs, tertiary institutions and industry to **accelerate online nationally accredited ICT and digital micro-credentialing and short courses** to support those workers and businesses impacted by COVID-19, to improve their digital capability to rebound more strongly and quickly.
- Establish a **mature-age digital career pathway pilot** to support mature-age workers and job seekers to transition careers or return to the workforce. Through this pilot we will also seek to improve **regional employment opportunities** by promoting remote working for digital professionals. We will target those most impacted during the pandemic.
- Establish a **government and digital industry diversity program** with a commitment to support 100 placements over three years which will lead people into employment. There will be a particular focus on ensuring we have adequate neurodiverse and Aboriginal and Torres Strait Islander placements.
- Further enhance employment opportunities by establishing a **government and industry digital trainee, apprentice and graduate development program** supporting 300 graduates over three years. This will include a targeted diversity campaign to increase representation of women, people with disability, Aboriginal and Torres Strait Islander peoples, people from culturally and linguistically diverse backgrounds, and mature age Queenslanders.



// CASE STUDY

Our metrics:

- People supported through the mature digital career pathway pilot.
- 100 placements over three years through the neurodiverse and Aboriginal and Torres Strait Islander placement program.
- Increased representation of targeted diversity groups through the trainee, apprenticeship and graduate development program.

Success looks like:

- ✓ Reduced digital skills and capability shortage in Queensland.
- ✓ Increased supply of digital professionals in Queensland.
- ✓ Broader pathways to cater for Queensland's future and existing labour market.
- ✓ Increased diversity in Queensland's digital professional workforce.
- ✓ Increased awareness and support of diversity and inclusion initiatives and benefits.

How a digital traineeship can change your outlook

A traineeship was just the opportunity Stephen needed to change tracks and launch a new career in technology following a loss of employment due to COVID-19. A long fascination with science, technology, engineering and mathematics-related subjects coupled with the translatable skills of IT means that Stephen, a proud Mamu and Kullili man from Toowoomba, is now completing an Aboriginal and Torres Strait Islander traineeship in information, digital media and technology with the Queensland Government.

Aboriginal and Torres Strait Islander traineeships are offered by the Department of Communities, Housing and Digital Economy and provide 64 First Nations young people with paid work and training until 2023. Trainees gain valuable skills and can explore a career in government through hands-on learning, with mentoring a key focus of the program.

“I am currently working at the department's service desk managing incidents, service requests and communication issues for users,” Stephen says. “I have opportunities to learn from my peers every day. If I have questions, people will take the time to sit down and fully explain the situation.”

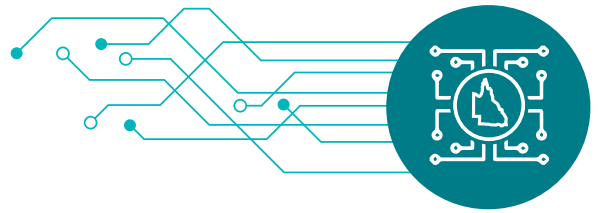
After years of trying different career paths in the hospitality and youth support sectors, Stephen says his mind is now set on his future. “Although I am still zoning in on what I want to specialise in, it will definitely be a career in IT. I am doing something I'm genuinely interested in and am in a very supportive environment.” The traineeship is the encouragement Stephen needed to apply for a Bachelor of Computer Science at university. I am really excited to settle on something I'm sure I want to do. When I graduate, I know the experience I learn during my traineeship will be really helpful.”



Student in Weipa, Queensland



Stephen, a proud Mamu and Kullili man from Toowoomba, completing an Aboriginal and Torres Strait Islander traineeship in information, digital media and technology with the Queensland Government.



PRIORITY 3

Strengthening the regional digital workforce

Current state

Queensland is one of Australia's most decentralised states. Regional labour markets are unique and as such require tailored workforce planning to meet local contexts. It is crucial that local workforces have access to the skills of the future and professional development opportunities to ensure Queensland's regions can equally benefit from the digital economy. Recent consultation and engagement across Queensland's regions to develop this plan revealed that two-thirds of respondents (68.3 percent) felt that in their region there was a general lack of graduates, a lack of quality training, and a lack of affordable training options. Additionally, regional Queensland businesses felt they were not able to attract digital professionals as they were unable to offer competitive salaries (compared to metropolitan areas) and for some, they also lacked the necessary infrastructure and connectivity.

Regional Queensland currently employs approximately 23,600 people in the technology sector, which makes up approximately 22 percent of Queensland's digital professional workforce⁷. The pandemic has fast-tracked better systems and processes and demonstrated an increasing mobility of business operations and the capacity to successfully work from regional locations. In many areas across Australia, there is now a "tree change" real estate boom occurring as professionals successfully negotiate working from home arrangements. This shift presents regional Queensland with a real opportunity to benefit from the growing digital economy.

Future state

Queensland will benefit from an increased regional professional digital workforce. Attraction and retention of this digital talent in the regions will be strengthened through development and training opportunities that meet local and global needs. The attraction and/or retention of digital professionals will ensure that regional communities remain vibrant and have access to knowledge to ensure they remain competitive economically. This shift will create local jobs and improve regional communities' access to the benefits of the digital economy and ensure they are able to service and support market activities across the world.

Actions

- Increase **access and participation in digital skills education in regional locations** to meet the unique labour market requirements and build regional digital professional capability.
- Promote **remote working learnings from COVID-19** to Queensland's businesses to encourage them to access regional Queensland's digital professional talent pool. COVID-19 has shown that digital professionals can work anywhere and still deliver, which will enable businesses to access a broader pool of talent.
- Increase access to **professional development and networking opportunities** across regional Queensland to continue to build skills and opportunities.



Our metrics:

- Participation through digital professional development opportunities previously not available.
- Regional digital education enrolments, previously not available.
- Number of businesses using remote regional workers.

Success looks like:

- ✓ Increased supply of digital professionals in regional Queensland.
- ✓ Increased digital professional education in regional Queensland.
- ✓ Increased professional development and networking opportunities in regional Queensland.
- ✓ Increased supply of digital professionals in Queensland.



DataFarming is a cloud-based platform which includes a satellite imagery crop monitoring tool, using real-time satellite imagery.

// CASE STUDY

Digital farms

Locally-developed cloud platform, DataFarming, is taking precision agriculture to the world with its approach to making farm data technology low cost, simple and easy to access for agronomists and farmers. Precision farming refers to the use of technology to optimise soil quality and productivity. The technology collects data which informs decision making on how to boost production and put corrective actions in place.

Managing Director Tim Neale, his wife Peta and their team in Toowoomba have been developing precision farming products and services since 2002. They launched DataFarming in 2017 – a cloud-based platform which includes a satellite imagery crop monitoring tool, using real-time satellite imagery from the European Space Agency.

The business currently has seven people in its technology team including developers, data scientists, tech support and product owners.

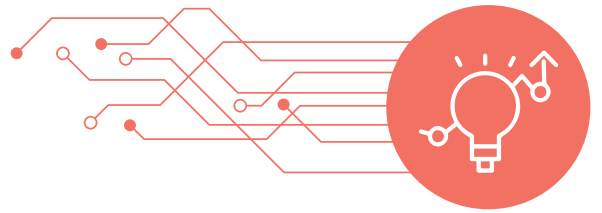
“I have found it hard to get the right people with the right skill sets to support growth of my business,” Tim says. “It would be great to have more access to local digital professionals in Toowoomba and Brisbane.”

DataFarming is now one of the fastest growing agtech companies in Australia, with more than 22,000 farms already using the system and more than 20 million acres of paddock data processed across Australia, the United Kingdom, Africa, the Middle East, South America, and Canada. It has taken a collaborative approach with commercial, government and academic partners, and is an integration partner with six other software companies.

Tim exemplifies what can be done in the digital space and is an inspiration to other Queenslanders wanting to harness the exponential possibilities of technology. Tim was awarded the Pearcey ICT Entrepreneur of the Year (Qld) 2019.

Innovation drivers like DataFarming make digital careers an attractive choice for both current and future workers, especially in our regions. With the plan to provide better access to upskilling and digital skills development, there is more opportunity for place-based education and careers.





PRIORITY 4

Collaborative and strategic leadership to deliver the professional digital workforce Queensland needs

Current state

Positioning Queenslanders to have cutting-edge digital skills in a period of rapid technological advancement is crucial for Queensland's economic and social prosperity. Queensland's key industry sectors, including digital, commerce, mining, construction, agriculture, food and beverage, finance, science and education, all share concerns about the supply of adequately skilled and job-ready digital professionals. Consultation revealed that without clear leadership and a collaborative approach to skilling up Queenslanders, we will not be able to supply business and industry with the workforce they need to be competitive here and abroad. Ultimately this impacts on Queensland's job growth, industry growth and future development.

Queensland small businesses⁸ and community organisations are feeling less confident about their digital readiness than they were prior to the pandemic. Potentially, this is attributable to their confidence in understanding the application of new and emerging technology and capability.

Future state

The Queensland Government, digital industry, education and training providers will have a coordinated approach to digital skill development. This will ensure that Queensland produces and maintains a workforce of digital professionals that meets the needs of industry and businesses.

Small to medium businesses benefit from adoption of the latest technology, thereby improving their productivity and access to new ventures and markets.

Actions

- Promote collaboration across business, academia, and government through a new **digital professional skills roundtable**. This will ensure we have the strategic-thought leadership in place to identify in-demand and future demand digital professional skills for Queensland and that we are designing curriculum which will deliver job-ready digital professionals.
- Promote Queensland as a digital leader by working with industry to **elevate Queensland's digital awards** to recognise the contribution of digital professionals and their businesses who are growing Queensland's digital economy.
- Develop a **"partner affiliation" program** to enable two-way communication between training and education providers and government. By affiliating, education providers will be able to connect with government and advise of any barriers or issues impeding increased intakes for digital courses and credentials. In addition, they will also be able to access contemporary technical skills advice from specialists from the digital and ICT industry to continually enhance their curriculum. This will also allow government to track the success of this plan through reporting on successful course completions.
- **Support Queensland's small to medium businesses and community organisations** to embrace digital transformation by investing in the reskilling and upskilling of their workforce to uplift the digital capability of their businesses.



// CASE STUDY

Our metrics:

- Increased digital capability of small to medium businesses in Queensland through access to digital professionals that meet their needs.
- Increased digital capability of community organisations in Queensland.

Success looks like:

- ✓ A thriving digital professional workforce in Queensland.
- ✓ Cutting-edge curriculum in our learning organisations.

Regional cyber security

Active engagement in digital technologies is being experienced in rural and remote communities enhancing opportunities for increased diversity in the uptake of digital professional pathways. New emerging technologies are enhancing opportunities for prosperity, preservation of culture, and economic independence.

RIoT Solutions mature-aged, Indigenous security engineer, Kirsty Lee Michael is currently in the final stages of her Bachelor of Science degree in Cyber Security. Kristy secured the role with RIoT Solutions through a three-month work-integrated internship as part of her degree.

As a proud Townsville resident, Kristy would like cyber and other digital professions promoted as a career option, particularly in the regions.

She credits her success in securing her role to two things: a love of information and communication technology and the Edith Cowan University (ECU) providing a flexible online course. This study option allowed her, as a primary care giver, to remain in her home town to study a degree she is passionate about. Kirsty is also able to work from Townsville and remotely service RIoT clients across Australia. Kristy was awarded the Lockheed Martin Australia (LMA) Indigenous Student in Computing and Security Award at ECU, in 2020. Her ultimate career goal is becoming a certified penetration tester.



Farmers in Rockhampton, Queensland



Indigenous security engineer, Kirsty Lee Michael

References:

1. *2020 Emerging Jobs Report Australia*, LinkedIn 2019 (https://business.linkedin.com/content/dam/me/business/en-us/talent-solutions/emerging-jobs-report/AUS-TOP-EMERGING-JOBS_compressedRevised.pdf)
2. *Australia's Digital Opportunity*, alphaBeta, September 2019 (<https://digi.org.au/wp-content/uploads/2019/09/Australias-Digital-Opportunity.pdf>)
3. *ACS Australia's Digital Pulse: Unlocking the potential of Australia's technology workforce*, Deloitte; ACS page 59. (<https://www2.deloitte.com/au/en/pages/economics/articles/australias-digital-pulse.html>)
4. *Australia's Digital Opportunity*, alphaBeta, September 2019 (<https://digi.org.au/wp-content/uploads/2019/09/Australias-Digital-Opportunity.pdf>)
5. Department of Education and Training. 2018. Higher Education statistics data cube (uCube), Australian Government, Canberra, Australia
6. *ACS Australia's Digital Pulse: Unlocking the potential of Australia's technology workforce*, Deloitte; ACS (<https://www2.deloitte.com/au/en/pages/economics/articles/australias-digital-pulse.html>)
7. *Australia's Digital Opportunity*, alphaBeta, September 2019 (<https://digi.org.au/wp-content/uploads/2019/09/Australias-Digital-Opportunity.pdf>)
ACS Australia's Digital Pulse: Unlocking the potential of Australia's technology workforce, Deloitte; ACS (<https://www2.deloitte.com/au/en/pages/economics/articles/australias-digital-pulse.html>)
8. *Digital Readiness Report 2020* (<https://www.cciq.com.au/business-voice/digital-readiness-report-2020>)



**Queensland
Government**

 www.qld.gov.au/digital-workforce-plan

 **13 QGOV (13 7468)**

