



New world.

New skills.

Future of Digital Skills for WA



# Introduction

At the World Economic Forum in Davos in January 2020, there was universal agreement that upskilling for a digital world drives economic growth and helps to reduce poverty. This is felt across the world, including Australia and even more so here in Western Australia where our resources, services, construction and agriculture sectors all seek to digitise and transition to new world demands. However, Australia is only ranked at 23rd globally for its digital skills, which is well below our potential and highlights a skill gap that could grow even larger as change accelerates.

Current world events, including COVID19 have brought digital to the forefront of our minds. Upskilling for the digital world has accelerated and become a priority for society, organisations and governments. The world is at an inflection point. We need to act now, collectively, to tackle this major issue before we risk excluding parts of society from the workplace, by building new skills, capabilities and business models.

The use of technology has never been more important with many people thrust into new areas with a steep learning curve — embracing a “new normal”. Long term societal impacts of COVID-19 are unclear, but we know that change is here. Digital is increasingly enabling channels of communication, commerce and productivity in the workforce. However, we have the opportunity to further enhance community engagement and service delivery of essential services over digital channels.

The McGowan Government’s announcement in May 2020 to conduct an urgent review of skills, training and workforce development needs for WA was timely and a golden opportunity for industry, community and workforce to come together to design priority skills and capabilities for the future of WA.



# Call to Action

**We have an opportunity in Western Australia to help our community, priority industries and workforce embrace Digital upskilling.**

Recent events have demonstrated the importance of having strong Digital fluency. It has also highlighted some of the challenges prohibiting many organisations and Government services adopting digital ways of working.

As WA embarks on its next phase of growth and recovery, we know that in all sectors, the jobs we do and the way we do them are evolving with an increased use of Data, AI and Automation technologies. Many jobs are changing in WA and some roles are disappearing altogether. The discrepancy between the skills people have and those needed for jobs in our digital world is growing.

The need to upskill is a complex problem that will require decision-makers — educators, state and local government administrators and business leaders — to come together. The question is, what skills do we need and how do we rapidly develop them to capture new sources of value for our community, industry and our workforce?

To make this most relevant for Western Australia we have taken a local lens and distilled concepts into three focus areas: **Our Communities, Our Workforces and Our Industries.**





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# Where does WA sit and what are the trends?



At the recent Australian Financial Review Business Summit, Prime Minister Scott Morrison said that *“whatever we thought 2020 was going to be about, think again. Take the opportunity to invest in the skills of your workforce... to emerge stronger and more productive on the other side”*. This was echoed by CEO of Atlassian, Mike Cannon-Brookes, who stated that *“our people are everything and, in times like this, we do need to look after them”*. There is a shift for organisations to move to new models of communication and trust in their employees.

Sitting at 23rd in the global scale on Digital skills, Australia has plenty of scope to improve. From our recent CEO Study for 2019, 86% of Australian CEOs have concerns over the workforce and the need for changing skills, in particular the need for increased Digital fluency and skills across all levels.



For reference Australia's technology industry contributes approximately AU\$122 billion to the Nation's GDP, roughly 6.6 percent but it is ranked second last amongst OECD countries in relative terms. A report by Data61 estimates that improvements to existing industries and growth of new ones could be worth AU\$315 billion to the Australian economy over the next decade.

WA has been somewhat insulated from the economic and social impact of global disruption with reliance on a thriving resources industry underpinning the economy. This sector is leading and vital for the global economy. However, to guarantee jobs for the future and continue to thrive, WA should be on the cutting edge and develop the digital workforce skills required to reshape the operations, supply chain, culture and technology footprint.



# Where does WA sit and what are the trends?

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We have an opportunity to rapidly develop a local workforce with skills to build WA industries' future. This will require a unified approach from our industries, educators and government, particularly as industries such as Natural Resources become more automated, digitalised and technologically advanced.

Across the board in our non-resources industries, WA's Services, Tourism, Construction, Agriculture, Manufacturing, Retail and Healthcare Services sectors are being disrupted, transformed and digitally enabled requiring new skills and capabilities to prosper and grow.

This opportunity for growth will increase if we have the right mindset and skills. It is widely recognised that while there are some iconic Digital success stories coming out of WA, our industries lack key skills across the digital spectrum.

As a result, organisations are often forced to engage digital skills from outside the state, leading to higher resource cost, less income flowing into the local economy and less employment opportunities for the workforce.

WA has not traditionally been seen as a technology hub, with those honours going to Singapore, San Francisco and other jurisdictions. WA has an opportunity with our time zone to become a Digital Hub of ASEANZ (Australia, New Zealand and South East Asia) and a global leader in technology enabled resources.

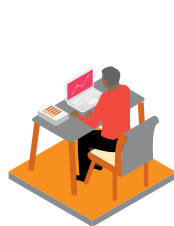
The opportunity to develop WA's digital acumen for our Community, Workforce and Industry will drive increased state productivity, job creation and societal benefit.



# Spotlight on our Resources Sector

**Natural Resources is a significant employer and economic powerhouse for WA, increasingly utilising Digital and operational technologies to drive value. Outlined in PwC's Mine 2020 Report, technology is now a critical differentiator for leading miners. Automation and digitisation continue to gain momentum, as organisations are focused on harnessing technology to:**

Deliver **improved safety** outcomes across the **value chain**



Drive new sources of **value** from existing and new assets



Reduce the cost of production and **deliver more automation**



Build **digital supply networks (DSN)** to interlink their supply chains, beyond **pit-to-port**



Prioritise **green** and **customer-centric** strategies



Recent events have shown that automation and digital operations can do more than reduce costs and drive efficiencies. Resources companies operating remotely or autonomously have found that technology also helps to manage the risks and impacts of disruption. They can better support remote workforces, reduce on-site presence, and monitor and control operations from outside the mine site setting.

The untapped potential for automation of equipment and decisions is the next frontier in productivity, safety and quality improvements for resources companies. A key component of this is raising the workforce's Digital IQ and shifting cultural perceptions of how work gets conducted. Thinking about technology in the context of the whole value chain not only demonstrates responsibility but begins to build a culture of innovation.

The resources professional of the future and the skills they require will be very different to

the professionals and skills of today where we are seeing a merging of Digital, Cyber Security and Operational Technology capabilities with creative design thinking to drive value.

There is a balance to be struck between efficiencies from automation and where new technology investment drives higher demand and more employment. Now more than ever resources organisations are seeking new sources of value and a different outcome from their workforce.

The opportunity to reimagine the resources value chain was highlighted at the inaugural Resources Technology forum in WA in November 2019 — where a number of leading organisations showcased new and exciting projects in convergence of digital and operational technologies.

In WA we are seeing some industry leaders investing in Vocational Educational Training, working with TAFEs and Universities. However, we can do more, for example how can the resources industry attract, develop and retain the talent pools that exist in the likes of Uber or Google? How do we engage our existing workforce to reimagine the future of work?

The sector in WA understands the need to reskill the existing workforce and attract new sources of talent — but requires a new approach to accelerate the development of these skills and capabilities to remain competitive.





# Why act now?



Our economic future is uncertain. To secure jobs for WA we need to accelerate the growth of our digital skills and capabilities.

The World Economic Forum predicts that by 2022, no fewer than 54% of all employees will need significant upskilling.

Since the end of the “boom” in 2013, net migration to Western Australia has declined. This is reflected in the projected age structure and the growth rate for Western Australia to 2031. The reduction in net migration and shift in demographic structure will have significant implications on infrastructure, service delivery, and the labour market.

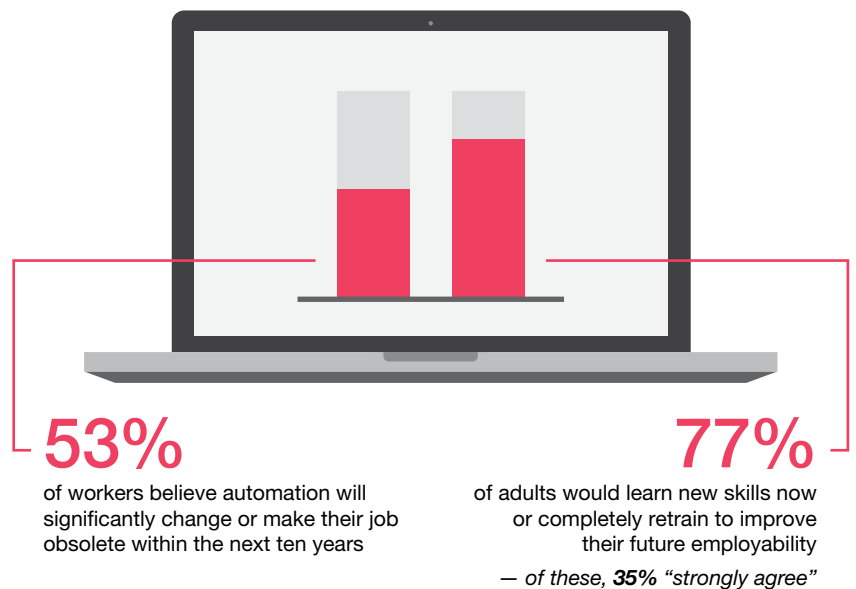
We need to find new ways to keep older workers engaged, retain critical knowledge and develop people’s skills to keep them relevant in the changing workplace.

Notwithstanding, more than one in three roles will be automated by the mid-2030s – there has been a lack of progress made by educators, governments and businesses when it comes to finding a solution to the skills gap.

In a recent survey from the Committee for Perth on residents’ perception of living and working in Perth:



Workers know AI and automation will change their jobs and want to develop new skills to improve their employability. A recent PwC survey indicated.





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# What can we do in WA?

At PwC our purpose is to build trust and solve important problems facing our clients and communities. We believe there are a couple of practical critical actions required to capture the opportunities associated with New Digital Skills:

01

## Establish empowered Committees at Industry level for Digital Skills development in WA

The committees should work with peak bodies and educators to identify priority skills gaps, building a skills development strategy for the State, laying the cultural foundations for change and evaluating outcomes and return on investment.

02

## Identify Senior Digital Champions across key industry sector peak bodies and within key organisations, State Government and academic institutions.

Improving digital fluency through the workforce starts with increasing digital fluency at senior leadership and executive levels in order to sponsor meaningful change and lead from the front. It is not practical to upskill everyone at once, so create a group of people who can receive intense training and be there to assist others.

03

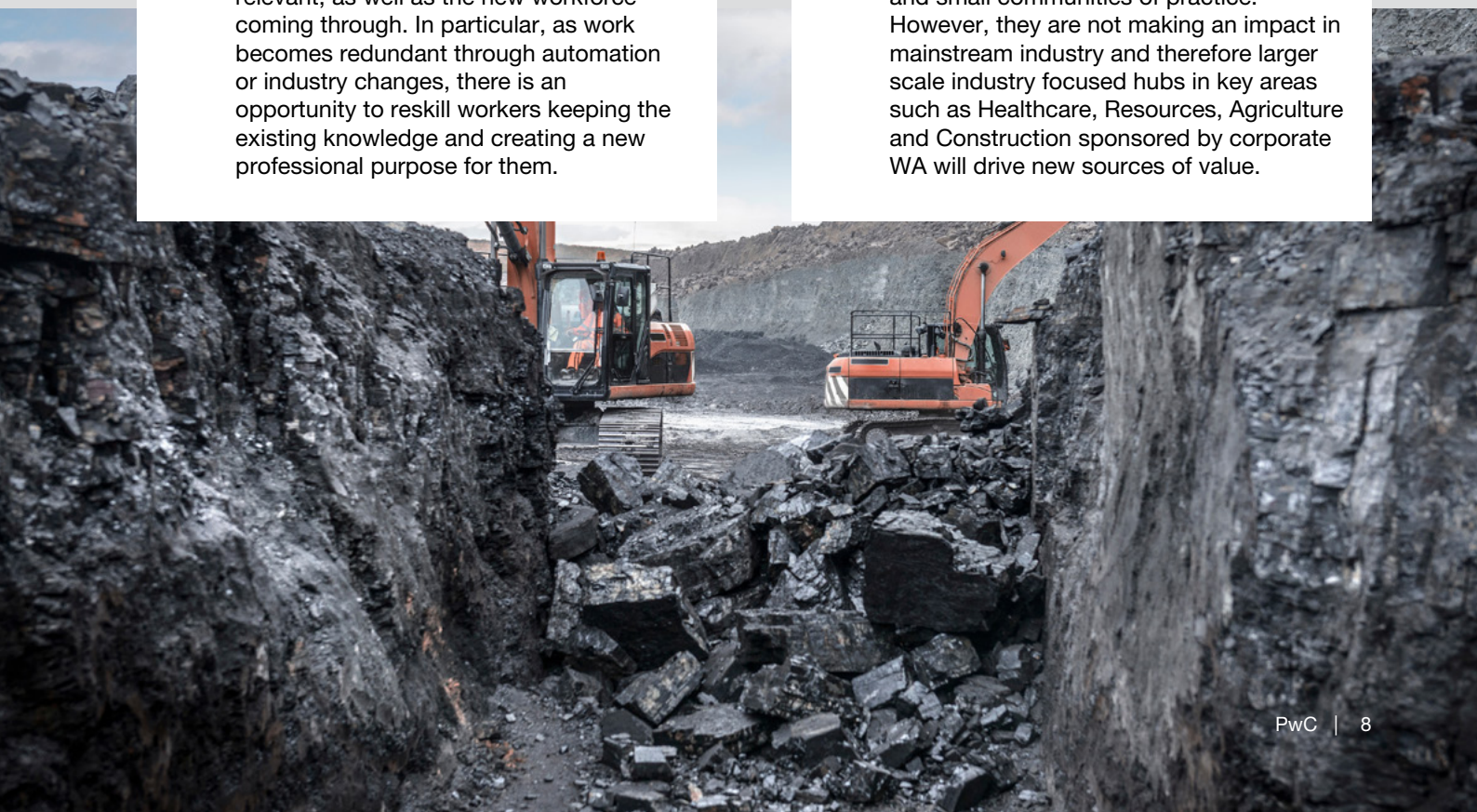
## Enable Digital Academies and Virtual Learning Hubs

Establish New Digital Academies with micro credentialing options. We need to upskill our existing workforce to stay relevant, as well as the new workforce coming through. In particular, as work becomes redundant through automation or industry changes, there is an opportunity to reskill workers keeping the existing knowledge and creating a new professional purpose for them.

04

## Create Industry based Digital Hubs and Centre's of Competence

The existing hubs drive innovation and bring together people with skills in similar areas for example at Spacecubed, Flux and small communities of practice. However, they are not making an impact in mainstream industry and therefore larger scale industry focused hubs in key areas such as Healthcare, Resources, Agriculture and Construction sponsored by corporate WA will drive new sources of value.





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# What can we do in WA?

05

## Bridging the gap and empowering our Indigenous communities to upskill

As part of State Government Services redesign goals, put our indigenous community at the centre and identify ways to deliver services through digital channels and uplift Digital fluency in the community. Listen to these communities and ensure they are included in a way that works for them.

06

## Attract Big Tech Players to WA to create jobs and growth

We have a chance to incentivise and attract 'Big Tech' players such as Google, Amazon, Microsoft, Salesforce, 'Scale Up Tech' players such as Canva, DesignCrowd and Freelancer and grow our scale with OEMs such as Caterpillar and other major providers to create more direct jobs in the technology industry.



To discuss these initiatives and be part of the solution for Western Australia, please contact us.



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