



Closing Australia's Skills Gap

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"We should remember that intellectual complacency is not our friend and that learning - not just new things but new ways of thinking - is a lifelong endeavour" Blair Sheppard (PwC's Global Leader for Leadership and Strategy).

We know that many jobs are undergoing major changes because of automation, digitization or augmentation. These shifts have resulted in a gap between the skills needed by employers and the skills available in the labour market. The skills gap has only widened as a result of the unprecedented disruption caused by the coronavirus, or COVID-19, outbreak.

The disruption from the COVID-19 outbreak is likely to have a significant impact on the world economy. Yet, the present situation also provides an opportunity to envisage what a post-coronavirus world could look like, beyond a return to "business as usual" approach.

Closing the global skills gap could add US\$11.5 trillion to global GDP by 2028¹. Moreover, increasing the skills base of the workforce can help individuals improve their career mobility,

ultimately helping them to find more fulfilling work. In Australia, while 78% of CEOs believe

that the availability of key skills is a top threat to growth, only 23% of employees say that upskilling is happening in their workplace (PwC, 2020)².

To address this skills gap, and support the post-coronavirus social and economic recovery effort, a collective effort is required across government, industry, educators and individuals.

We cannot rely only on the small number of employers reportedly upskilling their employees to effect systemic change.

The changing nature of work

Work is changing. Fast. New ways of work are emerging, cognitive technology is advancing, global delivery models are the norm, and demographic shifts are changing the expectations of workplaces. These have profound implications on the skills that organisations need, and create a gap based on the skills that employees have.

As routine tasks become automated – with some reports suggesting that employers are taking advantage of the pandemic to accelerate automation³ – employees are increasingly dedicating more time to tasks requiring creative, complex cognitive thinking and interpersonal skills.

¹ World Economic Forum, 2020, <https://www.weforum.org/projects/closing-the-skills-gap-accelerators>.

² PwC, 2020, <https://www.pwc.com.au/ceo-agenda/ceo-survey/addressing-australias-skills-shortages-for-future-growth.html>.

³ The Guardian, 2020, <https://www.theguardian.com/world/2020/mar/30/bosses-speed-up-automation-as-virus-keeps-workers-home>.

The economic imperative

There is a significant skills gap in Australia- a country that is ranked eighteenth in global innovation capability, twenty-ninth in ICT adoption (World Economic Forum, 2019)⁴, and a jaw-dropping ninety-third in terms of economic complexity according to the Harvard Growth Lab. Australia is also outside the top quartile in software engineering and machine learning, and ranks comparatively poor in data skills (Coursera, 2019)⁵. This is being driven by low levels of government funding, insufficient investment from the big end of town, and a less diverse economy that exacerbates these challenges.

Broadening the skill base of Australians is vital for economic growth and prosperity, particularly as 80% of Australian CEO's are concerned about economic growth, and 78% say that availability of key skills is a top threat to organisational growth⁶. However, this is not purely an economic issue, but a social issue as well. McKinsey estimates that income inequality in Australia will increase by 27% and employment by up to 1.2% if the skills gap is not properly addressed⁷.

The skills of the future

The skills needed over the coming years will be vastly different to today. An analysis of the top fifteen emerging jobs on LinkedIn can be defined by two categories- those requiring specialist technical skills and those requiring sophisticated people skills⁸.

Naturally, technology is driving a fundamental need for deep technical specialisms, such as advanced data science and engineering, artificial intelligence and machine learning, cloud computing and network and information security. This will be driven by an increased focus on improved STEM (science, technology, engineering, math) skills, allowing people to perform the new roles and tasks that will arise out of AI and robotics. There is an equally pressing need to look beyond pure technology-driven specialisations to building foundational digital literacy for employees across all industries. This extends to understanding societal changes and adapting to new ways of working, and most importantly in the COVID-19 environment, competently working in a digital environment to realise an overarching organisational return on significant technology investments. The need for employers to build digital literacy is obvious. The presence of digital skills in job advertisements increased by 212% between 2015 and 2017 (FYA, 2017)⁹, while entry level jobs requiring digital skills had a \$8,300 premium attached to them (FYA, 2017)¹⁰.

However, with more jobs getting automated and a greater adoption of cognitive computing, our "humanness" becomes more important than ever. These human skills, which have also been termed "soft skills" or enterprise skills¹¹, refer to complementary interpersonal skills, behaviours, and attributes that are occupationally agnostic. Some of the most in-demand human skills include empathy, developing rapport, storytelling, and creative enquiry. The increased importance of

⁴ World Economic Forum, 2019, http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf.

⁵ Coursera, 2019, <https://www.coursera.org/gsi>.

⁶ PwC, 2020, <https://www.pwc.com.au/ceo-agenda/ceo-survey.html>.

⁷ McKinsey, 2019, <https://www.mckinsey.com/~media/McKinsey/Featured%20sights/Future%20of%20Organizations/Australias%20automatio n%20opportunity%20Reigniting%20productivity%20and%20incl usive%20income%20growth/Australia-automation-opportunity-vF.ashx>.

⁸ Business Insider, 2020, <https://www.businessinsider.com.au/top-emerging-jobs-australia-linkedin-2020-2019-12>.

⁹ Foundation for Young Australians, 2017, <https://www.fya.org.au/report/the-new-work-smarts/>.

¹⁰ *ibid*.

¹¹ Foundation for Young Australians, 2016, https://www.fya.org.au/wp-content/uploads/2015/11/Enterprise-skills-and-careers-education-why-Australia-needs-a-national-strategy_April2016.pdf.

these skills has been quantified by AlphaBeta, who estimate that the average Australian will use an extra 1 hour and 20 minutes of work time for job-related activities involving interpersonal skills by 2030¹².

Governments, businesses, and education institutions will need to work together to help their people adjust to the disruptive impact of new technologies. A culture of adaptability and lifelong learning will be crucial to spreading the benefits of AI and related technologies widely through society.

The impact of COVID-19

“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” Prime Minister Scott Morrison at the 2020 Australian Financial Review Summit.

The global skills landscape has been flipped on its head with COVID-19. There has been mass labour market displacement with job losses predicted to far exceed the Global Financial Crisis, and unemployment forecasted to be at its highest since the Great Depression. Many organisations have been forced to stand down staff while others have become insolvent. However, it has also seen the emergence of new business models. The local café now sells gourmet ingredients, businesses have ramped up their online presence including gyms offering virtual classes, drones are out walking dogs, classes are being taught on cloud-based collaboration platforms, and there has been a significant uptake in telehealth and other virtual healthcare delivery models. Irrespective of whether there be challenge or opportunity, it nods to a looming and significant skills shortage and a huge mindset shift.

There are four key ways in which the COVID-19 induced skills shortage can be addressed. Each are identified below, along with a hypothetical persona to highlight the application.

- **Capability building:** Use ‘unproductive’ time to upskill the workforce. In the current environment, focus on building digital literacy, virtual collaboration, building rapport, displaying empathy, and impactful communications. For example, Penny is still employed but her workload has decreased, giving her more time to spend on other activities.
- **Community learning:** Support displaced individuals, or those with spare capacity, through the provision of open and community-accessible low-cost education. For example, Mike is unemployed and, while social distancing, would like to use the time to develop some new skills.
- **Cross-sector mobilisation:** Upskill individuals who can apply similar skills into a new environment, prioritized to an in-demand area. For example, Jess is a nurse in the private hospital system, though looking to be temporarily deployed into intensive care in a public hospital.
- **Career shifting:** Re-skill individuals and cohorts who are temporarily shifting into a completely new roles. For example, Joan is a flight attendant who is temporarily suspended from work and, in light of offshore call centers closing down and being stood up onshore, is looking to leverage her customer service skills to take on a

¹² AlphaBeta, 2017, <https://www.alphabeta.com/wp-content/uploads/2017/08/The-Automation-Advantage.pdf>.

casual virtual call center operator role with a telecommunications provider.

A frame to assess the impact of COVID-19 on the skills agenda is to ascertain whether the critical skills identified in a pre-coronavirus environment are still as critical. Largely, the answer is yes. If anything, the move towards new ways of working has accelerated the Future of Work agenda within organisations and therefore reinforced the importance of developing these key skills. The requirement for digital literacy is obvious and of heightened importance, particularly in ensuring individuals are able to leverage the technology available to optimise productivity via remote working.

Other skills such as building rapport and displaying empathy, effective communication, teamwork, problem solving and creativity are still just as relevant as they were before, albeit with greater inherent complexity in a more virtual environment.

Similarly, there is a heightened focus on resilience and navigating ambiguity to support one's mental health.

Another skill, which draws on the Australian spirit, is that of entrepreneurship. Many start-ups have been hit hard with the market crash. Investment, along with consumer confidence, has weakened amid uncertainty. But new market conditions create new opportunities. On a micro scale, this could be the aforementioned diversification of business models. But one must also remember that some of the most iconic brands of today, such as Uber, Airbnb, Slack, and WhatsApp were formed during the Global Financial Crisis. To this end, individuals must continue developing core entrepreneurial skills, which will also support with the economic recovery effort. Similarly, organisations need to consider what

it means to not just operate virtually but be a virtual business.

Finally, the COVID-19 environment has highlighted to need to give specific attention to developing leadership skills, enabling leaders to drive change and steer the ship amidst uncertainty. More than ever, this includes being able to influence and effect change in a virtual environment.

Employees are up for the challenge

Irrespective of industry or role, organisations must upskill their workers. The good news is that, according to Swinburne University's 2019 National Survey, three in four Australia workers are motivated to learn new skills¹³.

The employee's reskilling pathway requires a mindset grounded in lifelong learning. On average, when an individual trains or works in one job, they acquire transferrable skills for thirteen (13) other roles (Foundation for Young Australians, 2019)¹⁴. This is because employers demand similar skills across multiple jobs. By demonstrating the skills and capabilities that will be most portable and in demand in the new economy, employees can readily equip themselves to close the skills gap.

A collaborative approach

One of the biggest questions when it comes to closing the skills gap is understanding the various stakeholders and responsibilities. The fact is, everyone is responsible and each with a different role to play across. Governments worldwide are under increasing pressure to find solutions to closing the skills gap. Australia, however, has traditionally not leveraged private sector actors to reform education and training

¹³ Swinburne University, 2019, <https://www.swinburne.edu.au/media/swinburne-uau/centre-for-the-new-workforce/cnew-national-survey-report.pdf>

¹⁴ Foundation for Young Australians, 2019, <https://www.fya.org.au/wp-content/uploads/2016/11/The-New-Work-Mindset.pdf>.

systems, nor provided the required investment. Similarly, there is an apparent need for the education sector to increase and sustain virtually-delivered offerings, while supporting the socioeconomic agenda by increasing access to courses. For example, TAFE NSW announced it would offer free courses to residents. Given that the labour market is no longer clearly delineated along traditional lines between supply (education), demand (industry), and supported by policy (government), the respective parties must cooperate and collaborate to drive a concerted skills agenda.

Ultimately, however, it is up to the individual to take control of their own reskilling and upskilling effort. This must be underpinned by a broader attitude towards self-directed and life-long learning, for the most successful employee in the Future of Work will not be the smartest person, but the individual who can find out what they need to know, when they need it, and from who.