



THE INSTITUTE FOR
WORKING FUTURES



New Normal Part 2

Rethinking work, skills, and careers:
The next 180 days

16 June 2020 Marcus S. Bowles

CONTENT

Introduction	4
Mindshift One	5
A job is a very unreliable way to define our identity and our talents	
Mindshift Two	7
Full-time, office-based work with one employer will no longer be the norm	
Mindshift Three	8
We need to find our own inner genius	
Mindshift Four	10
Qualifications may not make all your capabilities and future potential visible to an employer	
Mindshift Five	13
Don't just find work, find a career and a growing job neighbourhood	
CONCLUSION	17
A 180-day action plan to future-proof your career	
Working Futures™	19
Want to get in touch	19

“
The world of work has always been evolving. COVID-19 has just brought a giant dose of reality to discussions about what this means for workers, employers, governments and society in general.”

Simon Hann,
Chartered Accountants ANZ Group Executive Education
and Learning



INTRODUCTION

“The future belongs to those who believe in the beauty of their dreams.”

Eleanor Roosevelt

In a mere 90 days, COVID-19 turbo-charged trends we knew were coming and forced us to work in ways we did not expect until 2025. This new work mode is not an experiment; it is an abiding reality. It is a tough challenge we must all face no matter how keen some of us might be to return to a pre-pandemic work culture.

This article suggests how to prepare over the next 180 days for the profound changes in work, skills, and careers heading our way. The post-lockdown labour market will be so transformed that students, workers, and organisations must plan vigorously for the new normal—rather like CEOs who create a 100-day plan when they take over a company.

To plan effectively, we must adjust our thinking in five fundamental ways:

Mindshift One:

A job is a very unreliable way to define our identity and our talents

Mindshift Two:

Full-time, office-based work with one employer will no longer be the norm

Mindshift Three:

We need to find our own inner genius

Mindshift Four:

Qualifications may not make all your capabilities and future potential visible to an employer

Mindshift Five:

Don't just find work, find a career and a growing job neighbourhood

THE ECONOMIC AND EMPLOYMENT AFTERSHOCK OF COVID-19 WILL CONTINUE

Projections over the next 180 days from June 2020 suggest the post-lockdown labour market will be so transformed that every organisation, student and worker—employed or unemployed—should adapt their thinking and plan for the new normal.

MINDSHIFT ONE

A job is a very unreliable way to define our identity and our talents

Without realising it, employers and workers have responded to the shared experience of COVID-19 by engaging in a reinvented sense of work and how we do it. Importantly, the idea that our jobs fix and define who we are is now obsolete. We need to break free from this outmoded belief that a person's traditional job title—often a relic of the industrial age—is a measure of their worth and character.

Humans are social animals. As such, we tend to define ourselves by what we do. Whether we want to or not, we judge a person within 60 seconds of meeting them for the first time. Think about how people introduce themselves. Typically, they state their name and occupation. We then apply social norms and personal stereotypes to judge that person. For instance, why do we intuitively raise the community value of a health professional but lower the community value of a council garbage collector? Why do we mentally rank the farm worker as lower in community value than the software developer? Is it about the qualification level or the income? How could vocationally qualified tradies and miners who dominate Australia's top 10 'richest' postcodes by median annual income not enjoy a significant social status?

So if we continue to confer greater social status upon degree-holding, high-earning professionals, how will society determine the status of those who fill significant new roles that span job families with no income or qualification precedents? For instance, the knowledge architect, cybersecurity analyst, customer advocate, hydrologist, drone operator, or home care therapist.

We need to move beyond our habit of determining inherent worth through archaic job titles tied to income and qualifications. Instead, we need to uncover and nurture a person's innate talents and strengths and use them to determine worth and value.



Image: © Can Stock Photo / felker



MINDSHIFT TWO

Full-time, office-based work with one employer will no longer be the norm

During the pandemic, Australia and New Zealand participated in what some call “the great work-from-home experiment”. I would counter that it is only an experiment in that it confirmed how rapidly we could shift from traditional workplaces to working from home. The real experiment is this: how quickly can we absorb displaced workers in a transformed labour market?

Employer intentions are clear; none of those surveyed, nor any of the current employment data collected, indicate that the new normal will include the same mix and mode of work. The shift is to a more gig-like economy featuring part-time, project-based, and collaborative remote work. Gig workers abandon traditional employment to work independently and sell their skills to multiple employers anywhere in the world, task-by-task or project-to-project. Growth of the gig economy is one of the many trends that delineate the inexorable movement away from a 9-to-5 job at a single employer’s workplace. In April 2019, some 4.7 million workers (38 percent) of the Australian workforce were freelance or contract workers with more than one employer. At the same time in the United States, 57 million workers undertook freelance work and generated over US\$1 trillion.¹ Freelance numbers

in the US have risen by an average of one million for each of the previous five years.

Since the pandemic lockdown, many full-time employees have had to work like small business contractors, consultants, project workers, and freelancers. Global surveys reveal many do not want to return to their pre-COVID-19 commute and a number of organisations are already surveying employees to confirm how many want to continue working remotely.² Remote working improves flexibility and lowers costs for many large employers because it builds global pools of pre-qualified contractors and grafts on the talent as required. Other organisations will use COVID-19 as a reason to restructure and cut costs. Organisations and workers across the globe will use digital platforms for hire and labour exchange.

While trends towards working independently existed prior to the pandemic, the biggest change is the qualified success of working from home as a social experiment. Australia has sustained an estimated 60 to 70 percent of the workforce working from home for over 90 days.³ Undoubtedly, technology, digital platforms, and infrastructure do support remote

work. We have also demolished barriers—such as technology adoption skills, loneliness, cost, and family distractions—that propped up the idea that remote work is less productive than office-based work. While problems do exist, people have overcome enormous challenges. Research shows productivity remains high and work processes are adapting rapidly with collaborative platforms that facilitate altered working conditions.

The most critical finding about remote work and new modes of employer engagement is the need to appreciate each person’s unique capabilities. For example, are they able to interact with other people? Are they able to use automated customer service or logistics processes? More importantly, if short-term contractors can they ‘fit’ into the team and conform to the employer’s culture, values, and risk profile?

*“The future is already here—
it’s just not evenly
distributed.”
William Gibson¹*

MINDSHIFT THREE

We need to find our own inner genius⁴

“Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.”
Albert Einstein

Albert Einstein’s axiom highlights how blind we can be to our own genius; that is, to our unique gifts and strengths. It also highlights how hard it is to apply this insight in a COVID-19 world where jobs will be harder to get and keep. We will grow increasingly anxious if our qualifications and personal attributes fail to meet the explicit needs and requirements for jobs.

We can alleviate this anxiety when we acknowledge each person’s inner genius.

My own situation provides insight here. When I was 15, my father thought my job prospects were so poor he took me to do a battery of intelligence tests. My results revealed an active, analytical brain with very highly developed design, creativity, and spatial reasoning abilities, along with a strong preference for hands-on work. On the other hand, I was a dud when it came to the abilities needed to get a “good” job, scoring mostly in the lower 10th percentile for science, maths, or numerical reasoning. The report gave my father hope, however, and with the psychologist agreed I had all the attributes of a landscape designer.

This experience and resulting insights taught me my first important lesson: *I had to build my own niche because jobs where I could be a genius were yet to be invented.* After a stint in the army (outdoors, hands-on), I progressed my university studies and finished a PhD in a field of public administration that later became known as organisational design and human capital.

The second lesson came from my wife: *we all think differently.* Echoing earlier sanctions from schoolteachers to stop “daydreaming”, my wife (an artist and teacher) found it disconcerting that when I was ‘working’ at home I had my feet on the table, office chair fully reclined, and was looking out the window. The light came on for her at an art opening as she expounded the featured artist’s use of negative space. After explaining that negative space is the space around and between the main images, she acknowledged that the brain and its optic nerve wiring are unique to each person. Amazed, I disappeared into a deep neurological exploration until my wife jolted me back to reality (she thought five minutes staring into the top of the picture frame was a tad weird). We both learnt something that day: she sees the world in shades and relationships; I need to freewheel—to think without thinking. We all process thought differently and attempts to

standardise thinking are doomed to fail.

Recent explorations in neuroscience and neuroplasticity reveal that standardised thinking discourages experiences that develop and re-organise neural connections in the brain. When standardised thinking lords it over creative thinking, the mix of minds available to create new and competitive products is about as deep as a birdbath.



Image: Can Stock Photo29142149

In the mid-to-late 1800s, schools emulated factories to produce people who could fill routine jobs that needed little creativity. These days, personalisation, responsiveness, and customer experience prevail, and as a society we place greater value on innovation, creativity, and collaborative thinking.

Yet our education system is rusted onto principles closer to the first industrial age and neglects to assess and report on our character, personal preferences, and attributes. While some companies test for psychometrics at pre-hire, most fail to test for our inner genius. This behoves us to find valid, third party assessments ourselves that uncover our unique talents and then make them visible to employers.

“There is no fixed agenda for 21st century skills – it depends on who you are, where you work, what you want to do, and where you want to go.”
(Dr Andrea North-Samardzic, Course Director, MBA, Deakin University)

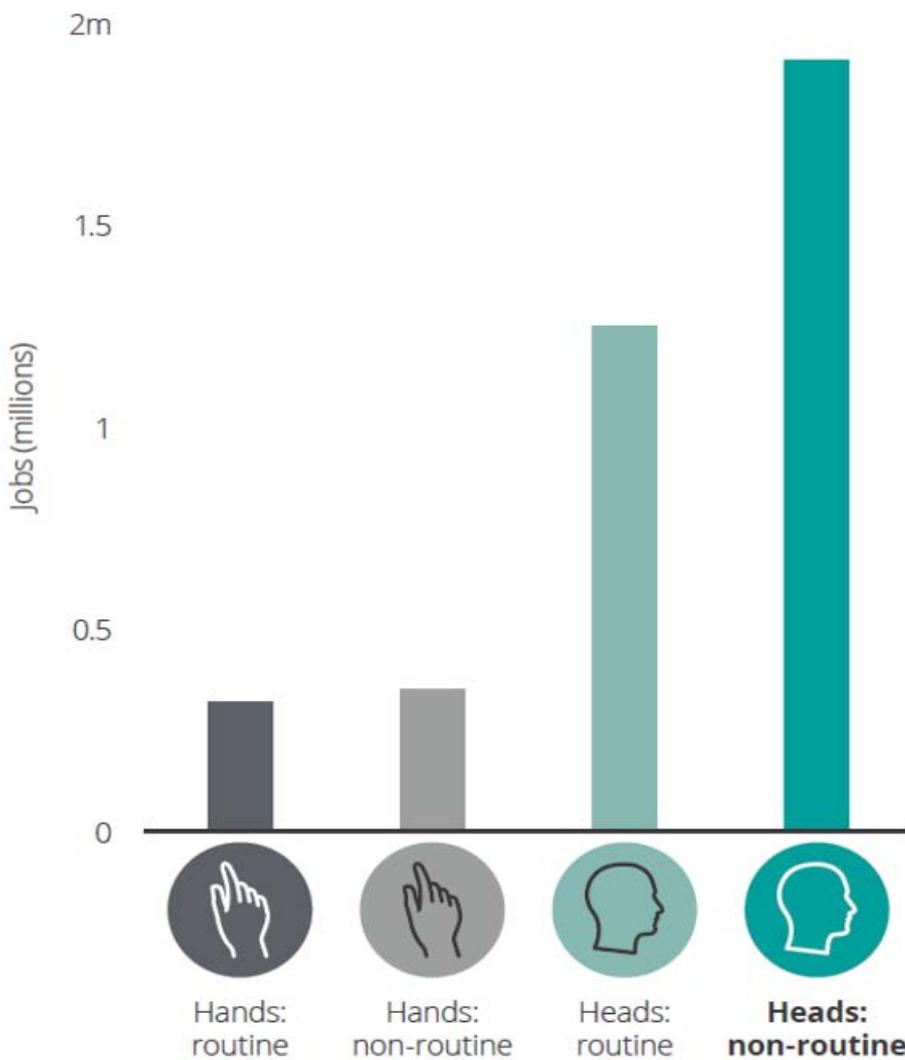


Figure 1: Capabilities innate to humans vastly improves future employability and career prospects

Source: Deloitte (June 2019). *The path to prosperity: Why the future of work is human*, Deloitte Insight, page ii.

MINDSHIFT FOUR

Qualifications may not make all your capabilities and future potential visible to an employer

There is a mismatch between what a graduate's degree says they can do and what many employers value when they hire. This mismatch grows as technology disrupts jobs and universities adhere to tight discipline-based boundaries that no longer reflect business structure and work organisation. With a total outstanding national HECS-HELP student debt of over \$62 billion, neoliberals—along with most everyone else—will demand that taxpayer funds ensure universities provide qualifications that get graduates jobs in a post-pandemic world.

Research confirms that a focus on technical knowledge at the expense of developing a student's innate human capabilities lessens their chance of employment.⁵ This occurred in tightly defined subjects such as business, accounting, and law because job classifications and job families (the disciplines) were changing so rapidly that in the glacial time it took to update curriculum, students were graduating with qualifications that failed to make them job-ready or flexible enough to fill jobs that ignored obsolete job classifications.⁶

We know that our jobs are not a measure of our inherent human worth and that automation and changes to how we work are increasing, not reducing, a person's innate value. For instance, organisational workforce plans that account for human capital have shifted from the number of people holding skills, knowledge and job performance competence, to a person's capability and their potential to underpin an organisation's ability to deliver its core strategic purpose. Thus, future potential is as valuable to the bottom line as past productivity.

The pandemic demands we look beyond tangible job competencies to intangible qualities such as the ability to adapt, learn, fit into company culture, and work collaboratively. The traditional focus on people as mere job fillers must go. Artificial barriers that limit a person's full capabilities must also go. Equally, recruiting graduates with churned-out bachelor degrees that eschew their cognitive or personal attributes will fail to promote either inclusivity or employability. Employers are already broadening their recruitment aperture. They now look beyond resumes and degrees and seek people with social and emotional intelligence—wherever they reside, whatever their ethnicity or backgrounds—who can build an adaptable, innovative,

globally responsive, and customer-focused workforce.



Image: © Austock 000088231

*“To open the talent supply pipeline we [employers] have to become better at identifying and reskilling existing staff with underutilised or underappreciated capability.”
(Stephen Chey, IBM Security)*

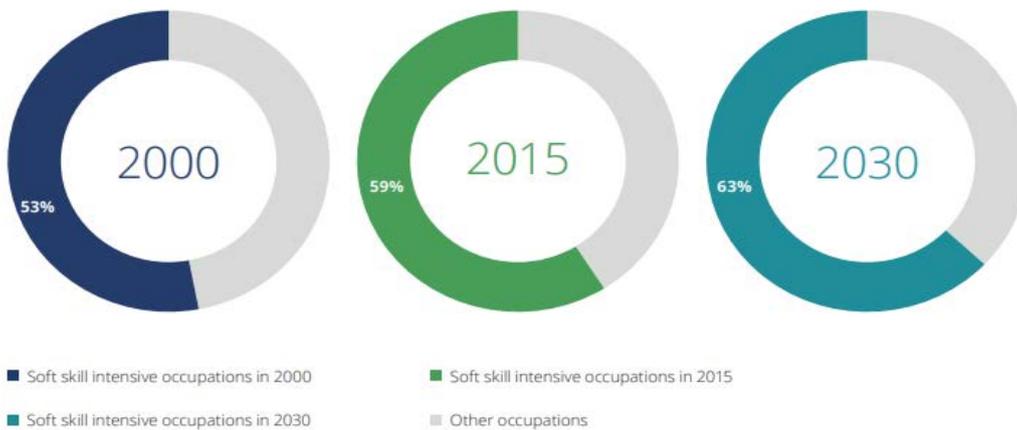


Figure 2: Having soft skill related capabilities vastly improves future employability and careers

Source: Deloitte (2017). *Soft skills for business success*, DeakinCo. & Deloitte Access Economics, page 7.

**New credentialism:
Digital and micro-credentials⁷**

In an effort to attract more students, most universities have tried to use micro-credentials to recognise completion of disaggregated parts of an existing qualification. These are taken to market in short courses, professional or executive programs, or to complement massive online and open course (MOOC) offerings. But tertiary education institutions⁸ as a whole are slow to recognise the full import of micro-credentials. This is in stark contrast to many large companies and professional bodies.

“Digital credentials are the trading currency of the global labour market. They underpin efforts by employers and educators to evolve – to create a learning culture, to reskill workforces, and to ensure graduates are future ready.”

(David Kinsella, Founder, Everitas)

In Australia and New Zealand, organisations used the COVID-19 hiatus to accelerate their focus on one of their major strategic issues: workforce restructuring and skills development. Augmenting these efforts is the decade-long industry investment in corporate training and professional development; an investment that has seen revenues in corporate and professional education segments far outstrip growth in vocational and higher education sectors. This market growth is expected to continue post-pandemic and expand to include clawing back control of online assessment, credentials and professional certification from lethargic public educational providers.⁹

By the end of 2020, efforts to develop future workforce capabilities that will be validated with digital or micro-credentials authorised by respected third parties (e.g., universities, admissions bodies, or global professional alliances), will cover nearly a million Australian employees and professionals. All will focus on technical skills and highly sought after soft-skills

related to human capability that enhance the ability to learn, collaborate and adapt quickly to newly created roles (See Figure 2).

This includes programs being accelerated by companies (e.g., Westpac, Bupa, IBM, BHP Billiton), professional bodies ([Chartered Accountants](#) Australia and New Zealand, Engineers Australia, Property Council Academy, Australian Computer Society), and governments (e.g., Victorian Government’s [Working for Victoria program](#)). While most of these initiatives include relationships with a university to provide pathways into qualifications (for instance [Deakin University](#), [Griffith University](#), and [RMIT](#)), none are reliant on accreditation of the credential, content, delivery, or subjects extracted from standard degree offerings.

“
*Failure to act appears to favour
the present but it certainly
prejudices the future.*”

Barry Jones¹⁰



THE INSTITUTE FOR
WORKING FUTURES

MINDSHIFT FIVE

Don't just find work, find a career and a growing job neighbourhood

The pandemic's most profoundly unsettling fallout is the social and economic cost of unemployment or under-employment. While the end of lockdown will improve employment prospects in some sectors, others will shrink permanently.

The lockdown allowed companies to rollout rapid workforce restructures originally slated for a more leisurely three-to-five-year deployment. The more prepared companies knew that to remain competitive they had to deal with macroeconomic forces such as globalisation, changing demographics, and technology disruption. In a fast-paced competitive environment, the pandemic allowed executives to hit pause and roll forward systems-wide structural transformation. Yes, the future arrived early but its brutal effect on employment will, in the short term, outstrip the positive effects of automation and business restructuring that will eventually create new jobs.

So how can we plan a sustainable career and find jobs in this turbulent post-COVID-19 world?

As with the projected future workforce employment shifts, COVID-19 confirms employability resides not in skilling for a job role, but a career. It is about skills that go beyond the vertical movement within an occupational stream. As automation disrupts our sense of a vocation and the associated career pathways, capabilities will more decide employability—capabilities that enable an individual to move horizontally and to transfer their skills into new or converged jobs where technology augments existing human tasks.

Where a set of common capabilities held by one job is shared or substantially underpins other jobs, these jobs form a *capability cluster* or *job neighbourhood*.¹¹ Instead of focussing on tying skills development to jobs, the aim is to develop workforce capacity by ensuring we assess and nurture people with capabilities that promote movement into and between as many job roles as possible in a cluster (See Figure 3 for system-wide workforce clusters), while ensuring they can fill predicted new work roles. This means we can systematically foresee and develop capabilities people will need before the new job role is created.



Image: © Can Stock Photo 7612940

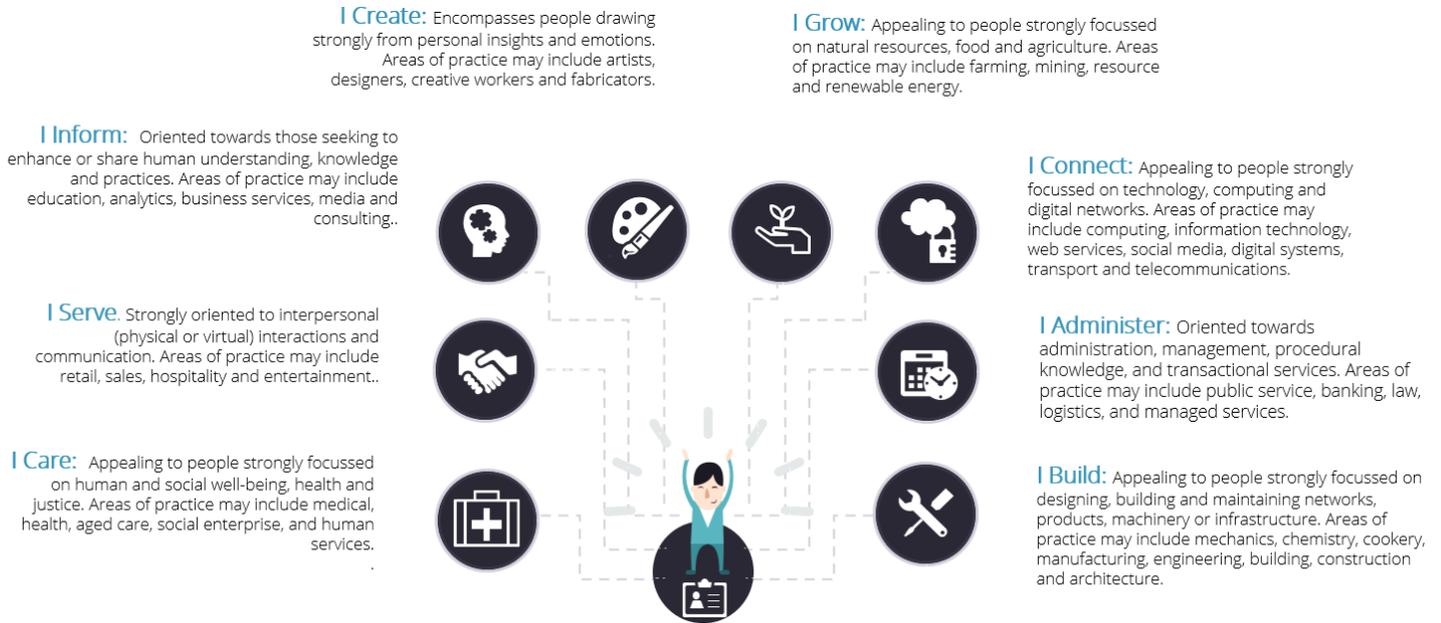


Figure 3: Capability clusters that form macro-level job neighbourhoods

Source: © Working Futures™, 2017.



Image: © Can Stock Photo 53298189

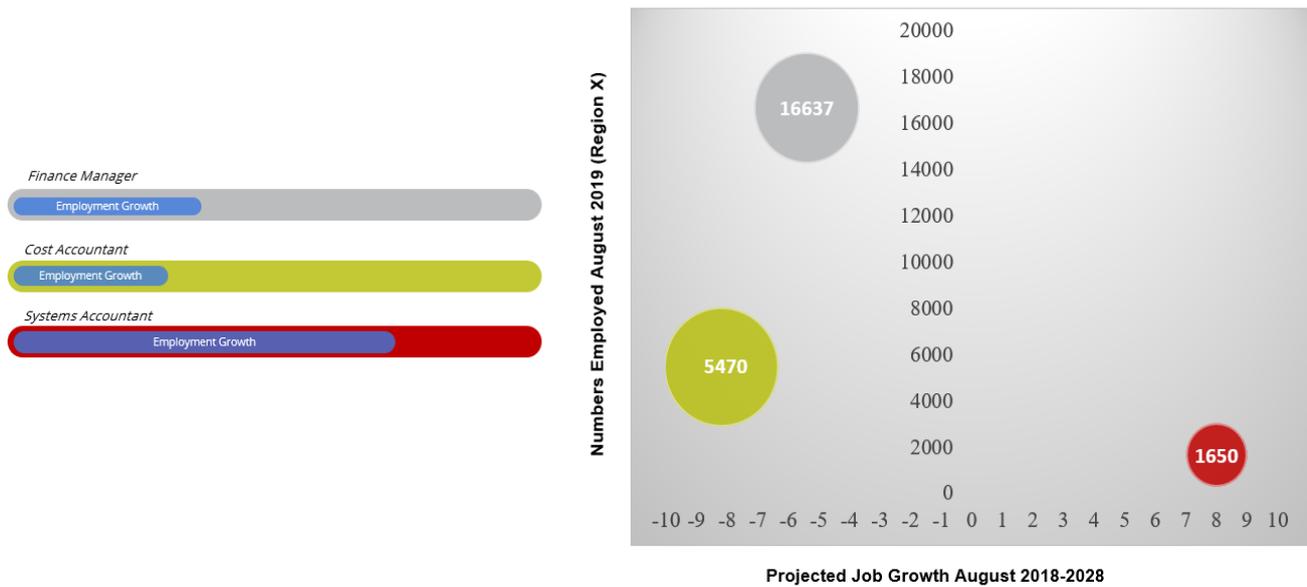


Figure 4: Accounting job neighbourhood snapshot (Region X)

Source: Bowles, M. & Thomas, L. (2019). *Future accountant*, Chartered Accountants ANZ, Sydney.

Capabilities are the currency we use to create a profile for our workforce and to determine requirements for roles at different levels of work.

Job Neighbourhoods tangibly link a worker’s capabilities to their potential range of current and predicted work roles. Most importantly, capabilities provide an enduring currency irrespective of how a job role is described or if it lacks a standard occupational classification in a government system.

A workforce plan must ensure we have the capabilities to perform current work roles and that we are ready to reallocate people and their capabilities in response to work changes. To future-proof their career, it is of critical importance that individuals have all their technical and future capabilities recorded and that they seek a job where these capabilities fall into a large and growing job neighbourhood.

As an example, the World Economic Forum suggested automation and robotic technologies would see professional accountants and auditors, and the associated clerical roles, lose over 40 percent of the current employment numbers by 2025, effectively making global occupation redundant by 2028.¹² However, an analysis of the future accountant and their capabilities confirm they have enhanced employment opportunities once we remove the ‘job’ lenses and focus instead on job neighbourhoods. In the regional example provided above, the **Finance Manager** looks to be a good job given current employment levels. But the indicative 10-year employment growth projections are poor. By comparison, the employment for **Cost Accountants** is comparatively lower today, and the **Systems Accountant** is much lower. But the latter job has much better long-term growth projections.

Nevertheless, the capabilities form a cluster that encompass all these and more job roles (i.e., form a job neighbourhood). A capabilities approach already shows some employers that what they thought was a skill shortage when seeking Systems Accountants was actually more rapidly and affordably addressed by grafting one or two new capabilities onto existing accounting professionals and moving them into this role.

*“When you’re unemployed choosing the job you want is *@!%* difficult. Sorry, but I survive by keeping my eyes on where I want to be, not where I am.”*

Participant, Digital Economy and Regional Futures, Focus Group, N.W. Tasmania

Where are the employment opportunities and future-proof careers?

Is it possible to predict employment opportunities now and in the six months after the pandemic?

Using Australian and global data, let's examine the job status of the top five economic sectors during the first three months of lockdown and the likely job opportunities over the 180 days to the end of 2020.¹³

Employment: Effect of Lockdown

Employment – Hardest hit	Employment - Growth
Restaurants and food services (Hospitality)	Food and beverage Grocery
Accommodation	Nursing and residential care
Tourism	Education (Primary and Secondary)
Air transport	Logistics
Theatres and entertainment venues	

Over the next 180 days, it is possible to anticipate the effect on employment for sectors other than those listed above:

Employment Outlook (180 Days)

Most likely to decline	Most likely to steadily grow
Higher education	Broadcasting and telecommunications
Arts, sports, and museums	Courier and postal services
Public administration and clerical support	Social welfare and counselling
Real Estate sales	Streaming and online entertainment
Automotive dealers	Construction

Here are some of the job titles that require capabilities we know will open larger job neighbourhoods and enduring careers beyond the next 180 days:

- Registered Nurses
- Customer Service Representatives/ Advocates
- Mental Health Counsellors
- Counsellors/ Social Workers
- Logisticians
- Freight Handlers
- Warehouse Workers
- Electrical Battery Technicians
- Information Security Analysts
- Business Intelligence and Research Analysts
- Artificial Intelligence Specialists
- Robotics Engineers (Software)
- Mechatronics Engineers
- Software Engineers
- Full Stack Engineers
- Mathematicians
- Data Scientists
- Data Engineers
- Statisticians
- Service Designers
- Homecare Health Aids
- Homecare Therapists
- Occupational Therapists
- Physiotherapists
- Forest Fire Inspectors and Prevention Specialists

While automation was already occurring at pace in many industries, it accelerated during the lockdown as some jobs were particularly difficult to do remotely. While many may have to take whatever employment they can secure, it is important, at least, to identify jobs that may have limited future prospects. The following are some of the current job titles where good post-lockdown employment prospects may exist but will permanently decline as automation occurs. They also reside in very small job neighbourhoods where the required capabilities may make it difficult to transition to emerging employment opportunities:

- Cashiers
- Retail/sales workers
- Food preparation and service personnel
- Long-haul truck drivers
- Short-haul door-to-door couriers
- Farmers/ Farm hands
- Postal mail sorting workers
- Machine operators
- Call Centre operators
- Data Entry clerks
- Bookkeepers/ Financial clerks¹⁴



Image: © iStock-624853732

CONCLUSION

A 180-day action plan to future-proof your career

The COVID-19 “work-from-home experiment” confirms Australian workers are ready to respond to radically new ways of working. The final data on working-from-home productivity levels is yet to emerge, but it is apparent many wish to continue working from home.¹⁵ Equally, a large number of employers see no compelling reason why they cannot extend the choice of work location to their workers.

Success in a post-COVID-19 world of work, skill development, and careers relies on individuals and organisations understanding and internalising five major mindshifts:

1. A job is a very unreliable way to define our identity and our talents
2. Full-time, office-based work with one employer will no longer be the norm
3. We need to find our own inner genius
4. Qualifications may not make all our capabilities and future potential visible to an employer
5. Don't just find work, find a career and a growing job neighbourhood

These mindshifts encourage thinking that will help us glide more smoothly through the increasing turbulence as the pandemic health crisis recedes and the economic crisis intensifies. While we can plan and prepare for the new world of work (See Figure 5), as a society we must all accept that work will never

return to normal. The gap between how we organise work and government occupational classification systems will widen. Employment, economic reward, and promotion will no longer be solely determined by taking 3 to 4 years to obtain a formal credential (a qualification) in preparation for a profession or vocation. Such chunky, pre-packaged credentials may be less tradable or relevant to emerging job roles as a discrete stack of targeted digital credentials. Our potential may lie less in our skills and knowledge, and more in the way we think, emotionally engage with others, and continually learn, formally and informally.

To succeed, everyone in society must acknowledge and respond to working life's new normal. If nothing else the COVID-19 lockdown should provide all workers and those seek to enter the workforce with a shared experience of work and its reimagining. This will make it easier, one hopes, to convince people that work is transforming and securing entry to a future-proof career makes good sense.

NEW NORMAL, NEW RULES

The game we play to get educated, find a job and stay employed has new rules. Except for those few who foresaw work's future, most of us had little understanding or insight into what an agile, distributed workforce would look like. Now we do.

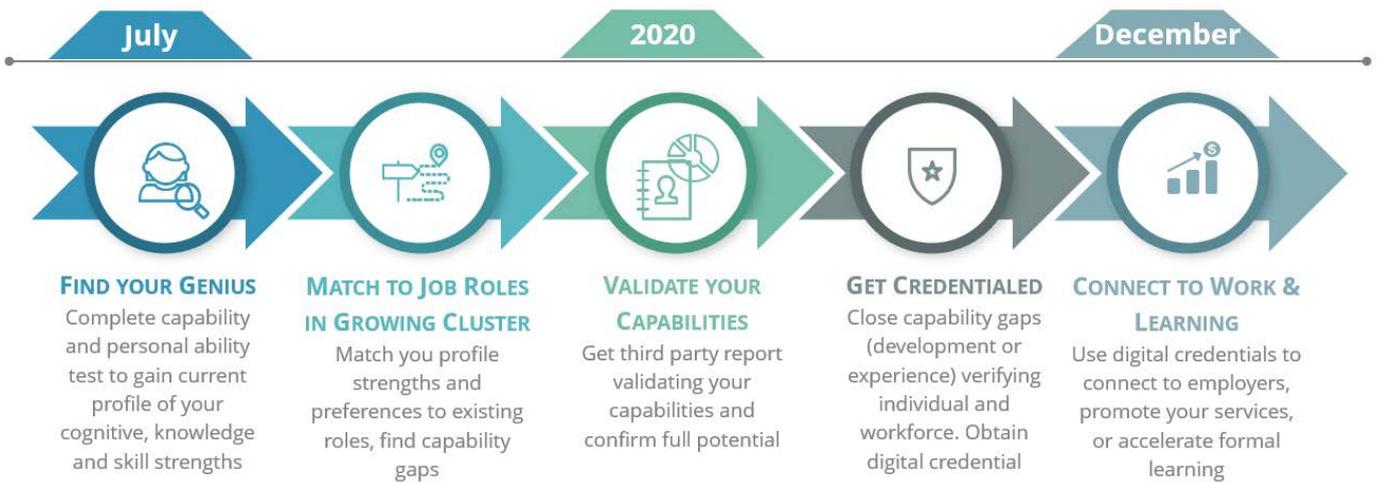


Figure 5: A 180-day post COVID-19 career future-proofing plan



Image: © iStock-1054574144

WORKING FUTURES™



THE INSTITUTE FOR
WORKING FUTURES

Working Futures is a research and consultancy firm committed to investigating the future of work, learning, and the capabilities for successful organisations, professions and individuals.

Capabilities are the whole-of-workforce knowledge, skills and personal attributes required to perform in a role today and the potential to rapidly adapt, learn and respond to future changes.

Working Futures commenced in 1992 and dedicated itself to the vision of developing technologies, system-level insight, and new ways of working to enhance organisational agility, skills development, and the role of education systems in supporting workforce development. Since 1992 Working Futures has expanded our client base across the Australasia region with a passion for assisting how rural, regional and remote communities build future-proof jobs and industries.

Within the past 30 years, we have conducted over 300 engagements with many corporate, university and public sector clients, such as: Woolworths, Commonwealth Bank, Optus, Qantas, BHP Billiton, St George Bank, Westpac, NAB, ANZ, Wesfarmers, Telstra, Santos, Simplot, Siemens, Coles Group, Vodafone, Visionstream, Seven Network, and Sony-Ericsson.

Please visit www.workingfutures.com.au for more information.

WANT TO GET IN TOUCH



DR. MARCUS BOWLES

Managing Director and Chairman for the Institute for Working Futures and Hon. Professor, Centre for Workforce Futures, Macquarie University

Email: marc@marcbowles.com

LinkedIn: <https://www.linkedin.com/in/marcusbowles/>

Website: <http://www.marcbowles.com/>

Marcus is the Managing Director and Chairman for Working Futures™, where he focuses his passion for building the people and strategic capability required to achieve desired futures.

He consults with large organisations, educational bodies, governments, regional communities, and professional bodies in Australasia.

Marcus has an established reputation in the market for not only for his work in education and training reform, but also for his ability to enhance the adoption of capabilities and technologies that deliver shared futures.

¹ Statista, Number of freelance workers in the United States from 2014 to 2019, accessed 4 June 2020 at <https://www.statista.com/statistics/685468/amount-of-people-freelancing-us/>.

² I'm aware of these surveys in organisations as diverse as banks (e.g., ANZ), ports (e.g., Port of Newcastle) and federal government agencies.

³ Beatty, C. (April 2020) Covid-19 and the workforce, *MIT Technology Review Insights*, MIT & Faethm; Brennan, M. (April 3, 2020). US Workers Discovering Affinity for Remote Work. *Gallup*, gallup.com.

⁴ This title owes much to discussions with Denise Leaser at GreatBizTools regarding their MyInnerGenius® platform, <https://trywebassess.com/myinnergenius-assessments/>

⁵ Foundation of Young Australians (July 2017). *New work smarts: Thriving in the new order*, FYA, Canberra.

⁶ Bowles, M., Ghosh, S., & Thomas, L. (January 2020). Future-proofing accounting professionals: Ensuring graduate employability and future readiness. *Journal of Teaching and*

Learning for Graduate Employability, 11(1), 2–23.

⁷ While the language is still evolving, *micro-credentials* should denote mini-qualifications that demonstrate skills, knowledge, and/or experience in a given subject area or against a capability or competency standard. While there are related terms such as nanodegrees or digital credentials, *micro-credentials* should hold a defined relationship with the *macro-credential*, a qualification. Completion should grant an entry score, credit or advanced standing against part of a traditional qualification like a diploma or degree. Terms related to digital credentials is a digital badge. Typically, they do not have a credit relationship with a formal qualification.

⁸ Tertiary institutions included public and private accredited providers including universities in higher education, and registered training organisations operating in technical, adult, vocational education, and training sector.

⁹ Parthenon (May 2020) *Education investments in a COVID-19 era*, EY.

¹⁰ Some forty years earlier the substance of this paper was passionately presented in Barry Jones (1982). *Sleepers, wake!: Technology & the future of work*, OUP, Melbourne.

¹¹ Bowles, Ghosh, & Thomas, 2020.

¹² World Economic Forum [WEF] (September 2018). *Future of Jobs Survey 2018*, Centre for New Economy and Society, Switzerland. Retrieved May 2019 at http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf

¹³ Parthenon, 2020; & Australian Governments Labour Market Information Portal, www.lmip.gov.au

¹⁴ Beatty, 2020: 6.

¹⁵ Non-comparable studies conducted in Ireland, England, Australia, US, and New Zealand in May and June 2020 surveying those working from home during COVID-19 are reporting three consistent findings: over 80% believe their productivity is the same or better, although never working remotely before at least 75% (and up to 83.5%) said they would continue working from home in some form, and at least 40% stated they prefer working from home on a permanent basis.