

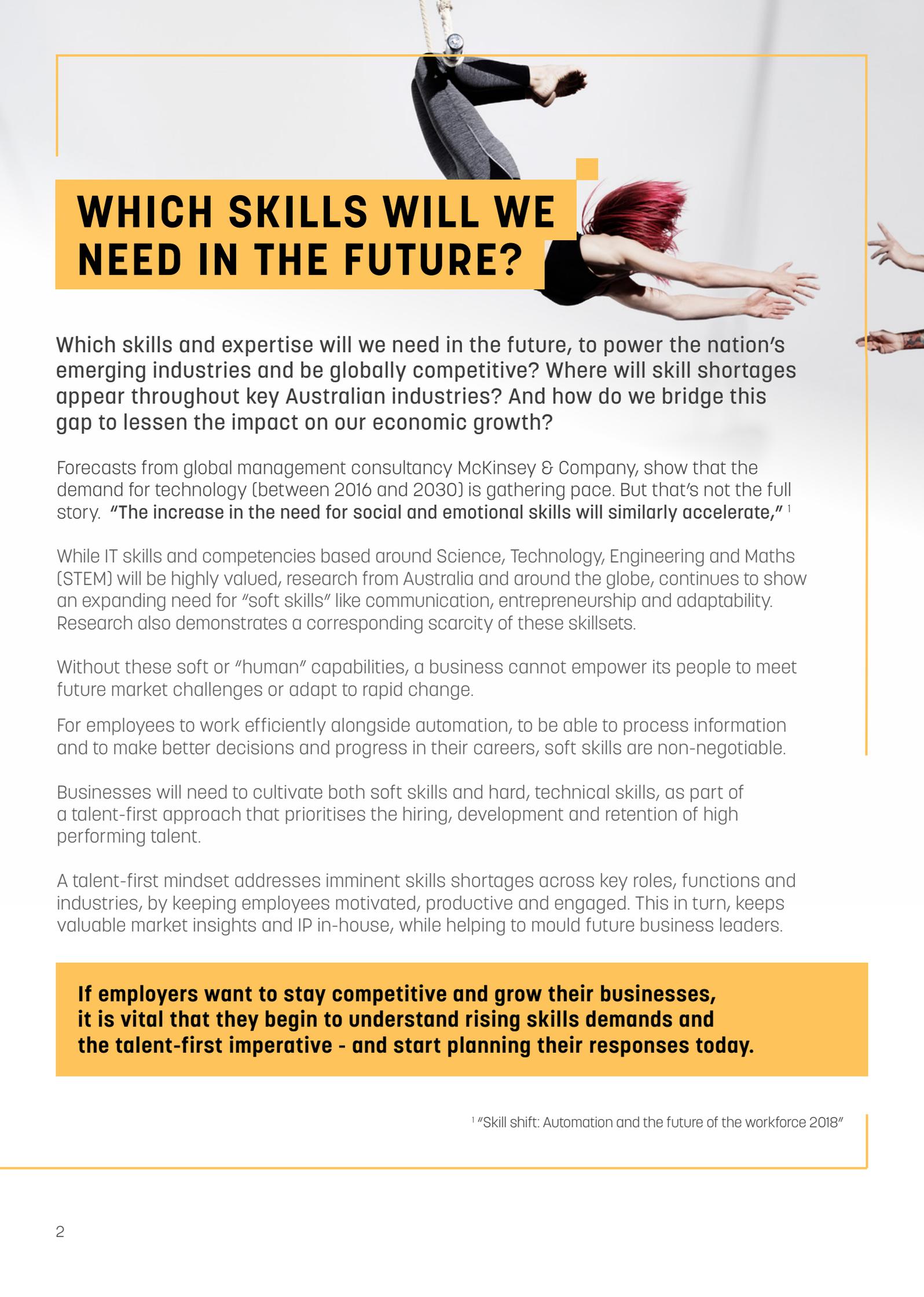
SOFT vs HARD SKILLS

WHY SUCCESSFUL AUSTRALIAN
BUSINESSES NEED BOTH



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WHICH SKILLS WILL WE NEED IN THE FUTURE?

Which skills and expertise will we need in the future, to power the nation's emerging industries and be globally competitive? Where will skill shortages appear throughout key Australian industries? And how do we bridge this gap to lessen the impact on our economic growth?

Forecasts from global management consultancy McKinsey & Company, show that the demand for technology (between 2016 and 2030) is gathering pace. But that's not the full story. **"The increase in the need for social and emotional skills will similarly accelerate,"**¹

While IT skills and competencies based around Science, Technology, Engineering and Maths (STEM) will be highly valued, research from Australia and around the globe, continues to show an expanding need for "soft skills" like communication, entrepreneurship and adaptability. Research also demonstrates a corresponding scarcity of these skillsets.

Without these soft or "human" capabilities, a business cannot empower its people to meet future market challenges or adapt to rapid change.

For employees to work efficiently alongside automation, to be able to process information and to make better decisions and progress in their careers, soft skills are non-negotiable.

Businesses will need to cultivate both soft skills and hard, technical skills, as part of a talent-first approach that prioritises the hiring, development and retention of high performing talent.

A talent-first mindset addresses imminent skills shortages across key roles, functions and industries, by keeping employees motivated, productive and engaged. This in turn, keeps valuable market insights and IP in-house, while helping to mould future business leaders.

If employers want to stay competitive and grow their businesses, it is vital that they begin to understand rising skills demands and the talent-first imperative - and start planning their responses today.

¹ "Skill shift: Automation and the future of the workforce 2018"

A GLOBAL REVOLUTION IN SKILLS

When World Economic Forum executive chairman, Klaus Schwab, coined the term 'Fourth Industrial Revolution', he was describing how a combination of technologies is merging with our physical lives, changing the way we function and interact at home and at work.

Those technologies include robotics, artificial intelligence (AI), nanotechnology, quantum computing, biotechnology, the Internet of Things (IoT), fifth-generation wireless technologies (5G), 3D printing and fully autonomous vehicles, among others.²

The rapid and relentless advance of technology is inevitable, as are the changes that loom in its wake.

The disruption brought on by digitalisation, customer-centric delivery models, big data and automation, when combined with rising customer expectations and social change, are rapidly transforming the talent and skills market.

According to the McKinsey paper, there will be sweeping changes across all industries and job functions between now and 2030.

"While there may be enough work to maintain full employment to 2030 under most scenarios, the transitions will be very challenging, matching or even exceeding the scale of shifts out of agriculture and manufacturing we have seen in the past."¹

²"The Fourth Industrial Revolution, by Klaus Schwab"



The next ten years will see a shake-up of the mix of skills required by the Australian workforce, with workers needing to deepen their existing skill sets, or acquire new ones.

Some jobs will disappear altogether. The displacement of workers by automation is a genuine risk across many industries.

In her role as the TAFE NSW Head of SkillsPoint, Technology and Business Services, Training Operations, Dr. Geethani Nair reports that **“the majority of workers in some industries will have their jobs displaced or significantly transformed, or their roles will simply not exist in the next five years.”**

Of course, new roles will emerge as a result of this transformation, but many will blend existing skillsets, requiring capabilities throughout both hard and soft skills.



Hard skills

Specific, quantifiable knowledge or abilities required for a job. Increasingly the most sought-after will be in AI, cloud computing, Internet of Things, machine learning algorithms, data science, drone piloting, information security, mechatronics and remote equipment management.



Soft skills

Otherwise described as “human”, “social”, “emotional”, “interpersonal”, “people” skills. Includes communication, collaboration, customer service, ethics, creativity, complex problem solving, critical thinking, digital literacy, adaptability/learnability, cognitive flexibility, emotional intelligence, initiative, judgement, decision making, negotiation and persuasion, people management and conflict management.

While basic digital, advanced IT and programming are the high-demand skillsets of tomorrow, analysts predict the demand for “social and emotional skills” will grow significantly across all industries from sizeable bases today.

Forecast demand for skills 2016 - 2030 (US) ¹



40%
Creativity



30%
Interpersonal skills
and empathy



33%
Leadership and
managing others



27%
Advanced
communication and
negotiation skills



24%
Adaptability and
continuous learning



91%
Advanced IT skills
and programming



33%
Entrepreneurship
and initiative



69%
Basic digital skills



WHY ARE SOFT SKILLS SO SOUGHT AFTER?

In this digital, hyper-connected world, information overload and its associated stresses, are the new norm. Soft skills such as creativity, adaptability, time management and collaboration allow employees to process new information better and to make better decisions.

Initiative, persuasion and negotiation also make career progression easier. As TAFE NSW's Dr Nair explains, **"people need the agility to be able to learn as they go, be able to change their tactics, and be in the moment as the technology and role changes."**

"No matter how technical the role, it is the soft skills that will sort the good from the great." ³

43% of APAC employees say soft skills will help them adjust and retrain to keep their roles. ³

Even though hard skills may be easier to measure and teach, soft skills will make people more employable in their chosen industry, and capable of adding value. Soft skills will help employees disrupt their industries and create positive change. No matter how deep a worker's knowledge is - whether in AI, blockchain or machine learning algorithms - the ability to collaborate with colleagues, be resilient, solve problems creatively and empathise with end users will be invaluable.

These skills will only grow in importance as technology gets smarter, more automated, and the nature of jobs transforms. As tech breaks out of its silos, creativity, problem solving, and critical thinking come into their own. ³

New and existing roles will need people who can interpret data and turn it into useful insights and measured decisions. Businesses will need marketers who can understand and sell the new technologies. The distinctly "human" skills of leadership and management, will also be crucial in the future. These skillsets will continue to evolve as leaders are required to drive and support more collaborative environments.

Overall, these soft skills help to expand the application of new technology, and help employees stay nimble enough to navigate more automation and AI in the workplace. ³

³"LinkedIn 2019 Future of Skills APAC "

HOW WIDE IS THE SKILLS GAP?

The gap between a current workforce and a future fit workforce, is vast. 80 percent of CEOs surveyed by PwC are worried about the availability of key skills.⁴

At least five industries – government services, construction, health, professional services and education – are set to face more than two million skills shortages at their peak. According to a 2019 Deloitte report, **two-thirds of jobs created between now and 2030 will be strongly reliant on soft skills.** We already face significant shortages now, and that is forecast to worsen.⁵

89% of executives say it is difficult to find people with soft skills. According to Deloitte, this is especially severe when it comes to customer service skills, the most in-demand skillset in the Australian economy.⁵

Business leaders need to address this now; some already are. In the Software-as-a-Service (SaaS) industry, the new role of Customer Success Manager (CSM) has been designed to reduce customer churn. CSMs use their soft skills to individualise the product and deliver the best outcome for clients based on their particular needs.³

Penguin Random House, Google, Ernst & Young (EY) and PriceWaterhouseCoopers (PwC) have all declared they no longer demand a university degree for all roles. Instead, they're reflecting another trend that demonstrates the perceived value of human skills: recruiting based on a broad range of education, life skills and experiences.

In other areas, hybrid roles are springing up to fill the gaps. A data scientist whose role once involved mining and manipulating data, will now also need strong creativity and social skills. HR managers won't just use their people skills, they'll need data science skills to understand employees better, reduce hiring bias and to help manage attrition. The combination of hard and soft skills also makes the role more resistant to automation.



⁴"The talent challenge: Rebalancing skills for the digital age"

⁵"The path to prosperity: Why the future of work is human"

HOW DOES THIS AFFECT DIFFERENT SECTORS?

Overall, soft skills can be more universally applied than hard, but will differ between fields and sectors.

In infrastructure, for example, the complexity of projects is driving demand for communication, collaboration, problem solving and systems thinking, i.e., the ability to understand the role and interconnected function of different teams across the entire project.

In the public sector, agencies are feeling the pressure to raise customer service standards in answer to consumers' rising expectations and the wealth of choice in products and services. With the recognition that different functions of government need to "break down the silos" and work more collaboratively to drive business outcomes. Demand has grown for agency employees who can communicate and build effective relationships and networks, empathise with multiple perspectives, build trust and broker solutions - a classic soft skill set.

In the health sector, the McKinsey paper says demand for advanced IT and basic digital skills, entrepreneurship, and adaptability will see the largest double-digit cumulative growth amongst industries.

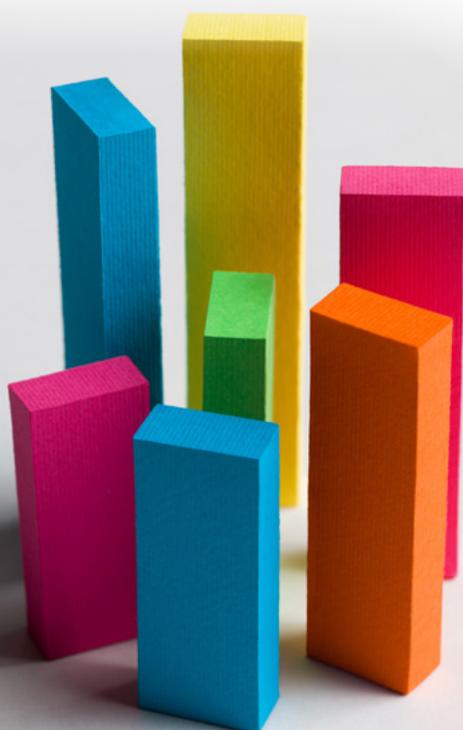
TAFE NSW's Dr Geethani Nair adds that **"workers will require more customer service and people skills including personal care."** Human-centred design, collaboration, listening and responding with empathy are also high on the list. ⁶

In the manufacturing sector, Dr Nair says there will be many jobs that won't survive in their current form. As production functions in factories are disrupted, we'll see businesses seeking out people with social and emotional skills, especially advanced communication and negotiation, leadership, management, and adaptability.

The transport and logistics industries will also see their share of change, with truck drivers increasingly acting as the interface between organisations and consumers, making training in customer service skills even more important.

But the biggest changes with regards to AI and automation, could come in the retail and supply chain industries, with managers increasingly being asked to work with IT, engineering and manufacturing, as well as being capable in collaboration, networking, relationship management, risk management and change leadership.

⁶"Skill shift: Automation and the future of the workforce"



FILLING THE SKILLS GAP

In the future, a strategy based on scouring the market and acquiring skilled individuals or teams of people, might not be an option for all companies: the talent supply simply might not be there.

An alternative solution is to evolve the skills of current employees, to adapt to new roles, redesign work processes, or redeploy workers with specific skills to other tasks or entities within the organisation. ⁶

Many of the world's most successful companies are already learning to adapt. In fact, 55% of leaders from companies with \$1 billion or more in annual revenue said they would laterally move more people into different or brand-new roles than they would release. ⁶

As an example, TAFE NSW was involved in a project that worked with one employer in South Australia's automotive industry at a time when many workers were at risk of losing their jobs.

"The employer recognised that many staff in danger of displacement had great problem-solving skills, great customer service skills," said TAFE NSW's Dr Nair. **"Even though the job-for-life they were trained for no longer existed, they had skillsets that were transferable from one area to another. TAFE NSW helped the employer do a skills analysis, put a plan together and identify the jobs they could put these workers into."**

Training is the other great hope, despite the myth that says soft skills are inherent - "you either have them or you don't". Researchers at US business school, MIT Sloan School of Management, proved that not only can you teach soft skills, but that they can bring a substantial ROI to employers. The MIT team worked with a Bangalore garment manufacturer, to introduce an in-factory soft skills training program. Within eight months of its conclusion, it had returned roughly 250 percent on investment; much of it through improved worker productivity. ⁷

An obvious benefit of training rather than recruiting, is that re-trained employees already have knowledge of in-house processes and an understanding of company culture, and this knowledge is preserved. The choice for companies then becomes whether you use in-house resources and programs tailored to the company, or partner with an educational institution. ⁶

If Australian businesses embrace and invest in on-the-job learning and skills enhancement, and get the approach to the future of work right, we could lift national income by \$36 billion per year from 2030; a figure based on a more highly-skilled workforce achieving an uplift in wages, a less-stressed workforce improving productivity and a more flexible workplace increasing the hours people would be prepared to work. ⁵

⁷"Soft skills training brings substantial returns on investment"

TALENT-FIRST THROUGH TRAINING

Investing in talent requires the same detailed attention as investing in new technology. Rather than thinking of talent as the last step in a business strategy, conversations about talent should be at the core of defining the business strategy.³



Businesses need to be planning and preparing for the future, now. They should start by predicting where their skills gaps will be, determining what skills will be needed and by implementing appropriate training.

Yet, learning and development need not be a complete overhaul of skills, or a prescriptive and extended program. Many organisations recognised that shorter, targeted and achievable courses that equip talent with skills they can use in their work, are typically the most valuable for talent and organisation alike. These might include micro-credentialling, e-learning and on-the-job development such as secondments and job pairing.

What is the change most needed for developing the workforce of the future, as ranked by companies in most sectors? Providing continuous learning options and instilling a culture of lifelong learning.¹⁶

TAFE NSW's Dr Nair describes the micro-learning opportunities already being provided by TAFE Enterprise as "the skillset that is immediately required to do that job or will be, in the immediate future. An example of where a micro-learning opportunity is useful, might be an automotive worker who wants to get retrained in the aged care industry."

Understandably employers are keen for new, less disruptive methods of skills development alongside traditional accreditation, given the high cost of retraining large segments of the workforce, and of having large numbers of staff unavailable at any one time.



YOUR TALENT-FIRST FUTURE LOOKS BRIGHT

Despite the inevitability of widespread automation and the upheaval in jobs and skills, technology will never be a substitute for people.

In many cases, technology's role will be to augment the work people do, and most analysts predict more jobs will be created than lost.

77% of business leaders in the US and Europe, expect no net change in the size of their workforces as a result of adopting automation and AI technologies. More than 17% expect their workforces to grow. ⁵

Increasingly, jobs will need those interpersonal and creative capabilities. "Demand here is set to soar for decades," says Deloitte's David Rumbens. "This is actually a liberating trend. Much of the boring, repetitive work will be taken care of by technology, leaving the more challenging and interesting work for humans."

TAFE NSW's Dr Geethani Nair agrees: "Soft skills learned through work-integrated training are equipping people to retain employment in the future, to be able to think on the go, come up with solutions in their workplace, embrace the opportunities created by automation and technology - and enjoy a rewarding career."





Finding a training partner with the requisite expertise and flexibility, is critical to a talent-first approach. Finding a partner that you can work with to develop a customised training program that drives your strategy forward and align with your industry's future directions is invaluable.

TAFE Enterprise offers on-site, off-site and online training options in leadership and management, business, technology, workplace health and safety and more, helping to make your business future ready.

To transform your business into a leading, talent-first organisation with soft skills firmly on the agenda, visit [tafensw.edu.au/enterprise](https://www.tafensw.edu.au/enterprise) or call **1300 045 737**



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