Is Australia at a technology tipping point?
Eight out of ten Australian businesses are bracing for rapid technology-driven change
by Jane Livesey and Miguel Custodio
Digital culture shock is being felt all around Australia and the world. Organisations, public and private, are not just adopting new technology – they have always done that – they are facing up to a revolution in commerce, industry and society. And it’s only just getting started.

The pace of technology change will increase at an unprecedented rate over the next three years

Australia 43% Global 28%

We are comprehensively investing in Digital technologies as part of our overall business strategy


More than 8 out of 10 (86 percent) Australian businesses expect either rapid or unprecedented technology change in the next three years.

In this sea of change, Australian businesses are anticipating a major swell in the years ahead. Accenture’s recent Technology Vision research found that 43 percent of executives believe the pace of technology change will increase at an unprecedented rate over the next three years. That is far higher than the global proportion (28 percent).

This time last year our research showed 29 percent of Australian organisations were investing comprehensively in digital technology as part of an overall business strategy, lagging behind the global average (35 percent). This year the same metric has leapt 20 points to 49 percent, now equal to the global average for 2016.

These results suggest Australia is at a tipping point in the development and adoption of key technologies, including artificial intelligence, platform ecosystems, and the internet of things. These deeply disruptive advancements are now moving from radical ideas to fruitful pilots and full roll-outs. The catalyst? A compelling set of benefits at a time when many Australian companies need a new impetus. These include the opportunity to re-engage the workforce, drive innovation, reduce costs, attract talent, boost efficiency and thrive in an increasingly global and disruptive competitive landscape – all are driving a surge in interest and investment.
A ‘Liquid Workforce’
– the Unexpected Competitive Edge

Seismic shifts in the technology landscape are requiring organisations to take a new approach to their workforce strategy if they are to prosper in the digital economy. Australian organisations need to focus on enabling a fluid, change-ready workforce with the right balance of skills to harness new technologies in ways that drive growth, efficiency and innovation.

Technology is changing the skillset demands in all departments and at every level. Primary digital skills are, of course, a critical component in this. Hays Australia, a recruitment company, is predicting sustained high demand for skills supporting platforms, data analytics, digital transformation and intelligent systems.1

But technical skills are only half the story. The strongest demand is for agile, business-savvy candidates – those with strong technical skills, but also the acumen and soft skills necessary to drive change. The top characteristic Australian leaders want in a digital environment is the ability to learn new requirements quickly, followed by the ability to “shift gears” at minimal notice – 42 percent and 41 percent respectively named these in their top three most-desirable traits. What is interesting is that both of those ranked higher than more obvious choices, like proficiency with digital technologies (35 percent) and the ability to navigate most computer apps (only 25 percent).2

Teams also increasingly comprise partners, contractors and freelancers. Australian executives are expecting internal permanent positions to make up just 51 percent of their workforce within three years – roughly in line with the global result of 56 percent. A major driver of this is a shift from continuous job functions to transient project-based roles – in our research, 84 percent agreed that the workforce of the future would be structured more around projects than job functions.2 The rise of the millennial generation is wrapped up with this shift too, with ‘born digital’ employees more likely to view work as ‘tours of duty’ rather than life-long campaigns.3

The ideal workforce model is now a fluid, blended and agile portfolio of skill-sets, drawn from inside and outside the business. A critical role will be that of the multi-skilled orchestrators, individuals with vision, agility and the capacity to drive change by integrating internal resources, partner organisations and multiple specialist contractors and freelancers.

Organisations that embrace a liquid workforce model stand the best chance of keeping up with the pace of change in the digital era. Those that do so will have a workforce strategy that not only secures the skills they need, but also adds a significant competitive advantage over more traditional rivals.

Source: Accenture Technology Vision 2016 Survey

#techvision2016
Of course, new technologies have impacted the workforce for decades. Change is often gradual and incremental. But today, the pace of change, and the transformative impact of technology, is unprecedented.

The rise of Intelligent Automation, powered by advances in Artificial Intelligence (AI) are becoming a key driver of this change. AI has been slow to catch up with its own hype but now represents a fundamental shift in computing as we know it. Machines are increasingly trained instead of programmed, relying more on associations and patterns than hard-coded instructions – much like human cognition.

AI came of age in 2015. New applications are now emerging from all corners. Intelligent algorithms identify credit card fraud within seconds, automated farming systems boost crop yields, intelligent transport systems relieve congestion, virtual assistants solve problems for customers – the list grows by the day.

Many Australian organisations fully understand the impact of Intelligent Automation:

• Some 42 percent of executives believe AI will completely transform their industry in the three years, nearly double the global figure of 23 percent, and four times as high as China (9 percent) and Japan (11 percent).

• More than half (54 percent) of executives can already report cost savings of 15 percent or more from automation over the past two years. This is driving greater investment, with 44 percent reporting a mandate to use automation to cut overall costs.

• And compared to two years ago, 81 percent of Australian organisations are making more investments in machine learning - 44 percent reported significantly more investment, far greater than the global average (34 percent).

We have started to see examples of intelligent automation usage emerging across Australia, from Coles supermarkets trialling ordertaking fridge magnets, to Rio Tinto’s driverless trucks and Manly Council’s intelligent surveillance systems. It’s only a matter of time before AI applications emerge across all areas of commerce, industry and government. As they do, businesses will need to evolve their people and culture strategies, ensuring they adapt to the liquid workforce model, as much as they develop digital skills.

Source: Accenture Technology Vision 2016 Survey
43 percent of Australian executives now report that a platform-based business model and engagement with digital ecosystems are very critical to the success of their business – in line with global peers (40 percent).

Platforms, and the ecosystems around them, also continue to transform the business landscape in Australia. Just as Apple’s mobile operating system, iOS, led to a revolution in software innovation and distribution, platforms in other areas are creating common focal points for commercial and collaborative initiatives – spawning new business models in the process.

It isn’t just technology companies driving this trend. Platform models are being applied across almost every industry, from small-scale local initiatives to global ecosystems. In healthcare, for example, Philips has bold plans to roll-out a cloud-driven platform to support an ecosystem of interconnected patients, providers and partners. At maturity, the platform will represent a paradigm shift in healthcare, allowing for more self-directed, decentralised care, while also opening new paths to growth and higher margins. Commonwealth Bank of Australia has released a payments device, “Albert”, and an application development platform, “Pi,” to provide a flexible platform that businesses and developers can build on. Pi and Albert enable businesses to effectively link with their customers, suppliers and partners to deliver business outcomes. Meanwhile poles apart, the National Farmers’ Federation has launched a digital platform that will help to integrate and centralise valuable farming data and insights.

Australia’s platform economy is definitely gaining momentum. Last year’s survey found businesses lacking urgency around platform-based business opportunities compared to their international counterparts. This is no longer the case. Four out of ten (43 percent) Australian executives now report that a platform-based business model and engagement with digital ecosystems are very critical to the success of their business – in line with global peers (40 percent). While 44 percent strongly agree that platform-based business models will become part of their core growth strategy within three years – higher than their global peers at 37 percent.
46 percent of Australian executives believe industry boundaries are being erased and new paradigms are emerging across every industry.

Source: Accenture Technology Vision 2016 Survey
Conclusion

By 2020, Australia’s digital economy is expected to comprise one third (31.9-32.7 percent) of GDP, growing from US$355bn in 2015, up to US$448-482bn in 2020. Digital culture shock and deep disruption is set to continue. So what should companies do about it? The highest level advice is the same for most organisations:

**Build a workforce for the future.**
Determine what skills and training are needed to establish a digital-driven workforce and culture. Experiment with organisational models. Empower people with technology. And above all, ensure your workforce moves at the same speed – and to the same extent – as you evolve your technology. Getting this right is critical, particularly with skills shortages in several key areas and the fact that Australia’s local labour force remains more expensive than many competing nations.

**Start using Intelligent Automation to transform processes and drive innovations.**
Intelligent systems are here, already transforming organisations across Australia. Companies need to figure out the inevitable impacts on the industry. Where could these systems lead to the biggest cost savings? Where could they have the most transformative effect? How could they support new business models? How should the workforce adapt? What opportunities does it provide to enhance the workforce? What training would be required?

**Embrace platforms and ecosystems.**
Look beyond your industry, your traditional partners and beyond Australia, to identify opportunities to connect and create new business models that address customer needs. What data and services are relevant to your clients? What parts of the business would fit a platform model? Which ecosystems offer the best opportunities? Where can you build a competitive advantage in a platform driven global economy?

Finally, it is clear from our research that many organisations already live and breathe these ideas. The vast majority (84 percent) of Australian companies are being pressed to reinvent themselves and evolve their businesses because of disruption from competitors or outside influences. That may sound like a bad thing, but it’s a positive sign. It shows that Australian organisations are as vigilant about threats as they are hungry for opportunities. Both those traits look more important than ever as Australia accelerates towards unprecedented technology-driven change.
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We offer seminars on the Technology Vision, which provide a forum to discuss the trends in greater depth and explore the implications for your organisation’s business.

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