

# Transformation 'tough but fun'

ARION MCGILL

Over the past few decades, the pace at which we have all adopted digital technologies in our day-to-day lives has accelerated rapidly.

Smartphones and tablets have meant we are all connected digitally in our personal lives, while new technologies and practices have disrupted the way we work.

Consequently, companies the world over have recognised and embraced the importance of taking their products, services and processes online, often led by a digital transformation – a complete digital overhaul of the way a business operates.

Of course, companies have been undertaking such transformations since at least the 1980s, introducing Enterprise Resource Planning and Customer Relationship Management systems, shifting data into the cloud, and gradually incorporating machine learning and Artificial Intelligence systems.

Yet since the start of the pandemic, the pace of these transformations has accelerated rapidly, with a raft of digital developments, both internal and external, as companies have come to replace the physical with the virtual, often out of sheer necessity.

So, in the wake of all this change, what does "digital transformation" mean today?

And how has the journey changed over the past 18 months in particular?

At the Reimagination Thought Leaders Summit 2022, the Australian Computer Society's premier tech leadership and networking event, industry experts from leading software, travel and health companies addressed this very question, offering insights into what they have learned from their own digital transformation journeys, including everything from the impacts they have witnessed to the technical challenges they encountered along the way.

Common to all of them was the principle that a successful digital transformation must go hand-in-hand with a concurrent business and cultural transformation.

"At the end of the day, technology is just an enabler," says Michelle Ash, CEO of GEOVIA at Dassault Systems.

"But really, what you're trying to do is change the way that you do things within the organisation at a very fundamental level."

Often, Ash says, a successful digital transformation will be led by a management team that is both aware of the need to change an organisation's culture, and bold enough to make it happen.

"There are some fantastic ex-



Speakers at the Reimagination Thought Leaders Summit included, from left, REST chief information officer Simon Smith, former Covermore CIO Nicki Doble, and Tanya Graham, executive general manager of Strategic Programs, Healthscope

amples of CEOs who have realised that their culture is just not in line with where the organisation has to go into the future," she says, "and have consequently succeeded in reorienting a pivot to that culture, and therefore fundamentally changing the way the organisation operates."

According to Nicki Doble, the former CIO/CSO of the Covermore Group, when setting out on a project of digital transformation it is vital to have a clear sense, first and foremost, of who will benefit from the changes.

"The transformation that you want should be led by the questions 'who is my customer? And how are they going to interact with my technology?'" Doble says.

"Once you've got that mission, then you can start picking the technologies that need to go in... You start with the vision, and you pull everything else away."

Tanya Graham, executive general manager of Strategic Programs at Healthscope, agreed, adding that the successful identification of who the project is in-

tended to benefit has only become more critical since the pandemic began.

"I think now we've realised, and particularly over the last couple of years, that you can't really have a successful digital outcome without actually thinking about who you're designing it for," she says.

"So it's quite interesting to think about who the customer really is, because I do think it does need to be the core focus."

"And then really thinking through what it is that you're actually trying to improve in terms of the activity or the process."

Just as important is to institute proper systems of evaluation to examine and review the project as it goes along, Graham says.

"The process is not engaged at the beginning and then 'set and forget,'" she says, "As with most digital projects, there's an iterative piece. So it's essential to think through how you get to something that's really going to be meaningful and add value, which is probably more critical now than it's ever been."

As well as cultural shifts, digital transformations often involve broad changes to the workplace itself.

Training employees and developing their skills has long been one of the most important factors for a successful digital transformation.

This includes making sure employees' roles are clearly defined so they align with the goals of the transformation, and finding ways to bridge the gap between the traditional and digital parts of the

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TANYA GRAHAM HEALTHSCOPE

business to foster stronger connections between colleagues and bed in new processes.

Since the start of the pandemic, however, a new challenge has emerged for those undertaking a digital transformation: many companies have had to rapidly move vast amounts of their business online and with almost no notice, embrace remote working.

Fortunately, Ash says, this process has been aided by the development of tools and systems that, for many industries, have made working remotely – and therefore collaborating remotely – a lot easier," she says.

"Some of the obvious ones that we're all using at the moment, like video conferencing, but also the sorts of tools that allow for ideation and co-creation of documents, as well as co-creation of products, all from remote places,

or sometimes even across time zones."

Of course, persistence and determination are important.

Research from management consulting firm McKinsey & Company suggests that less than 30 per cent of digital transformation projects are successful.

"It's hard work," Graham says. "And there's a lot of resistance along the way."

"And you've got to have some fantastic people skills to get people on board and get them to understand what it is you're trying to do."

Yet for all the effort, the rewards can be great, Doble added. "Digital transformation always starts with great enthusiasm," she says.

And then there's a very ugly middle, where some people decide they don't have the stomach to keep going. And then there's the glorious, glorious end.

"It's tough and it takes time to do a proper transformation and to change a company's culture."

"It's not for the faint-hearted, but my goodness it's good fun."

## Reimagining the move to new ICT economy

NICK TATE



There is a global shortage of information and communications technology-related skills, including cybersecurity.

This has been made more acute by the pace of digital transformation, which has itself been accelerated by Covid-19. Educational providers, whether they are universities, TAFEs, colleges or private providers are not currently producing enough skilled ICT professionals to meet requirements and this gives rise to a skills gap, which is increasing. However, the Australian Computer Society's Digital Pulse predicts that the requirement for ICT professionals will grow by more than 5 per cent annually between now and 2026; so, the gap will get even larger. In further support for these predictions, a recent employment statistics report showed an increase of 7.3 per cent in ICT job advertisements in the month between January of this year and December last year.

Yet, digital disruption is here to stay. Indeed, according to a recent KPMG Global survey, 67 per cent of organisations indicate they have accelerated their digital transformation strategy as a result of Covid-19 and 63 per cent say they have increased their digital transformation budget.

It is, therefore, good timing that the ACS hosted both the Reimagination Thought Leaders Summit and the ACS Disrupters Awards in Sydney on Wednesday, February 23. Reimagination explores the transformation to a new Australian economy and includes sessions on maintaining and growing ICT talent, the future landscape of work and an eye-opening look at cybersecurity. In the evening we celebrated the outstanding tech talent in the Australian industry, and awarded the very best disrupters.

The increasingly digital and increasingly transformed economy needs even more ICT professionals and much greater digital literacy in the workforce, as the disruption continues apace.

ICT touches all industries and in order for Australian business to compete in the global digital economy, it is essential that the workforce has skills appropriate to the modern workplace. Unfortunately, this shortage of

ICT professionals is causing real problems in the Australian economy today with figures showing that many organisations have been unable to recruit the number of ICT and cybersecurity professionals they need. In fact, Australia's chronic ICT workforce shortages are hampering the nation's aim to be a global digital leader.

Fixing this problem will require government to implement both short-term and long-term measures. In the short term, it will be necessary to support training, cross-skilling and re-skilling people in ICT to help fill the gap as well as provide a lifeline for those whose skills are no longer in demand. This could be achieved through an employee tax credit program for businesses, which would support the provision of technical training for staff.

The longer-term issues are more systemic because they reach back into our education system. Currently all the universities in Australia together produce around 7000 domestic ICT graduates a year and the ACS' 2020-21 Computer Education in Australian Schools survey found more than 50 per cent of primary schools reported 75 per cent or more of their teachers had no prior experience or training to teach the digital technologies curriculum.

Simply put, there is a requirement for a substantially funded program to boost the resources and support for schoolteachers to implement the Australian Curriculum Digital Technologies framework, and this should be a clear priority for all Australian governments.

One thing that could definitely help is boosting the female participation rate in Australia's ICT workforce. Currently, just 29 per cent are female and the Digital Pulse report has estimated that increasing the technology workforce's gender diversity would grow Australia's economy by \$1.8bn each year on average over the next 20 years.

This amounts to an \$11bn opportunity for Australia's economy.

If all businesses are to take full advantage of the digital transformation that is underway, then there must also be a program to enhance digital literacy of the Australian workforce.

Digital disruption is here to stay, and the ACS's Reimagination summit is an excellent opportunity to understand its profound effect on work, skills and the economy.

Dr Nick Tate is president of the Australian Computer Society.

## Upskill and retrain – tech giants look at new ways to retain critical staff

RACHEL WILLIAMSON

Tech titans are counting on upskilling staff and tapping new sources of talent to counter the global technology workforce shortage.

The likes of IBM, Google and Canva – one of Australia's recent ascendants to "unicorn" status – are all investing in retention and attracting new talent from non-tech industries.

"As the tech industry is growing it's really important that we provide onramps to more people into the industry," Canva director of engineering Adam Shuck said during the Competition of the Brains panel at the Australian Computer

Society's Reimagination Thought Leaders Summit. "It's important that we engage with more sectors and bring more people in."

Canva is partnering with OpenLearning to create CS101, a micro-certification that provides computer science training to people with diverse backgrounds who work in other fields.

IBM chief technology officer Amelia Forbes says they're creating new talent channels via university courses and Vocational Education and Training qualifications, and upskilling employees.

The global tech powerhouse is investigating how to help employees develop their skills and create new pathways for advancement, as

well as working on building a talent pipeline, such as an educational partnership with Ballarat's Federation University Australia, particularly in cybersecurity which is desperately short of skilled people.

"We've been in talks about hiring people with VET qualifications in cybersecurity, and we are very much open to looking at those with other qualifications (and from other industries)," Forbes says.

The tech skills shortage was a global problem before the pandemic, but the pace of technological change during the past two years caused by the movement of industries online has caused staffing headaches at talent-hungry technology companies.

In Australia, overseas talent was locked out by border closures just as demand for staff in the rapidly growing tech sector rocketed, and as people began to reconsider what they wanted from their jobs.

"People had a chance to think about how to work very, very differently," says Matt Pancino, director of customer cloud strategy at Google.

"(Today) employers have to be very, very tuned in to what their employees' needs are from a life perspective in order not to have retention issues."

Pancino says Google went from 120,000 employees to 160,000 employees during the pandemic, a "staggering" rate of growth, and he

is focused on retaining staff – given the high hidden costs of replacing experienced people – while Shuck says Canva added 1300 new roles in Australia alone.

Tech Council of Australia chief of staff Tom McMahon says part of the problem is education: only one in 22 international STEM (science, technology, engineering and maths) students stay in Australia, partly because government policies make it difficult for graduates to permanently settle here.

"We have a high level of STEM university places when you look at the OECD, but we also have a high share of international students," he says. "That is one area where the (skills) bucket is leaking. Don't

bring people to Australia, train them at our universities, and say thanks, you can go home now."

Australian universities produced 4595 information technology graduates in 2019, and according to the Australian Bureau of Statistics in 2021, 460,000 people were studying for a non-school qualification in a STEM field.

The federal government has committed almost \$325m over the next six years to training graduates with digital skills.

There is a trick to growing a business during a skills shortage however, and Pancino says it's not hiring for qualifications, but for people's capacity and desire to

learn. "You want to find smart people where you can give them a purpose, give them tools to learn new things, and the opportunity to grow their career," he says, citing Google's "20 per cent time" which gives staff time to run their own projects.

Flexibility and hybrid working are now mantras that companies looking to retain and attract talent are living by.

Forbes says IBM is creating a hybrid model that allows for productivity, includes people who choose to work remotely, and maintains the camaraderie of an office, while Pancino says it's also important to recognise the importance of the human connection that

comes from physical proximity of an office.

At-home and hybrid work is also opening tech doors to people who may not have chosen the sector as a place to work, such as women – who make up almost half of the Australian workforce but only 13 per cent of STEM employees – older people, and those from diverse backgrounds and locations, says McMahon.

It may also be a good way to encourage people to stay. "If you don't retain staff and ensure they have the skills to do their jobs properly, you're going to have to bring in new people and we know the supply of new skills will be constrained into the future," he says.



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