



Driving service excellence in state government through digital transformation

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Introduction – context

The first two decades of the current century have seen enormous technological changes in almost every field. These days most people, even in developing countries, carry a smart phone, yet they didn't even exist prior to 2005. And as much as ordinary citizens have had to adapt to these transformations, the public and private sectors have also had to change their practices and operations. Digital technology continues to have a disruptive impact on businesses and the economy, and it is not an exaggeration to say that any organisation or sector that doesn't keep up with the pace of digital transformation will be left behind.¹ This is as true for the public sector as it is in the private sector. Government's role is to set the national agenda with policy frameworks including technology, so for public sector organisations, embracing digital transformation is critical at all levels.

Digitisation however is not only about the use of technology. It is about being able to work seamlessly in the digital age. This means having the right policy, legislative and process settings to ensure that citizens have access to the best services, and that these services are truly inclusive. At a federal level, the Digital Transformation Agency (DTA) was set up in 2016 to coordinate the digital transformation of all of the 188 federal agencies under their stewardship, in all jurisdictions. The DTA has released two strategies in consultation with the states,² and is working with all their partner agencies to uplift the technologies of those agencies. Though for many of them it is not just about technology; it has been about changing mindsets and ensuring that everyone has a role to play in the digitisation of government services. Speaking in a public forum in March 2021, Scott Cass-Dunbar, the Chief Strategy Officer at DTA, said that "so much of what we do is about talking to individuals and listening. Then we go out and design approaches, making sure that we design for everybody so that no-one is left behind."

At a state level, the process to digitise is often more complicated because there is not an equivalent transformation agency in each state, and because state priorities are often different to those of the federal government. As such, whilst the need to digitise has

been in the pipelines of many agencies for several years, some are much more advanced than others. Every challenge presents an opportunity, and, in this case, it offers a platform for state government agencies to share learnings and leverage skills by forming a taskforce to collaborate and deliver a structured approach towards this initiative.

The global pandemic that impacted Australia in March 2020 changed the lives and interactions of most citizens, as well as the priorities of government. COVID-19 is leading to long-term lifestyle change in population demographics as people work remotely and move to regional areas. This is driving a need to be agile and adapt to changing needs for services across the community. For many agencies, it was the catalyst they needed to transform their operations, particularly in line with the health orders mandating remote work. The challenge now, as vaccines are rolled out and the country begins to think about life after the devastation of COVID-19, is how to continue the digital transformation process, and what it will take to keep up the momentum.



¹ <https://www.bcg.com/en-au/publications/2021/digital-transformation-in-australia>

² For the purposes of this paper, the term 'states' refers to the 6 Australian states as well as the ACT and NT

Why is transformation necessary?

The world is changing at a rapid pace, and digitisation is part of it. Globally, the majority of the top companies by share of market capitalisation, are digital native, meaning they were designed to be digital from the outset and didn't have to transition from legacy systems or old ways of working.³ These include companies like Microsoft, Apple, Facebook and Amazon. Working digitally and having the technology and culture to work in the digital age is built into their DNA. They however are the exception, not the rule. Most companies, particularly public sector institutions, are not digitally native, in large part because they existed before the digital age. Nonetheless, it is clear and obvious that in order to remain relevant, digital transformation is required.

“Every business in Australia is now a digital business. The tradesman or woman who seeks work through AirTasker. The landscaper who finds most of their new business through search engine placement and social media. The farmer who keeps track of their herd with electronic tags or drones. The local Thai restaurant that sells through UberEats, MenuLog, Deliveroo, or any one of half a dozen different food apps. The gym

where members book their classes through an app.”

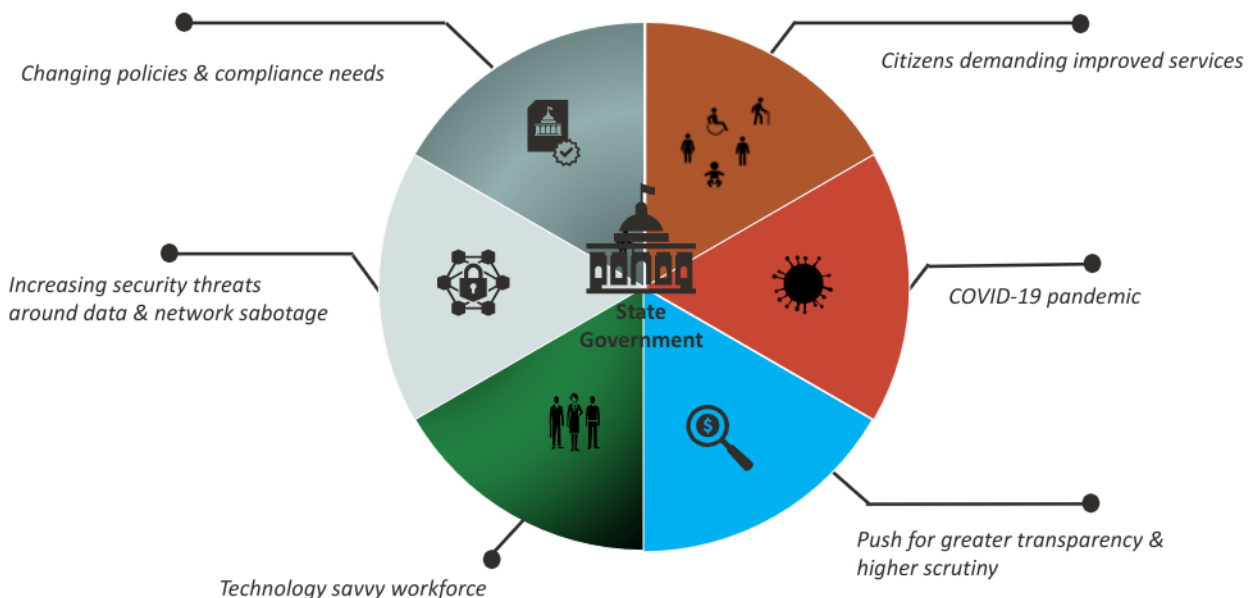
Prime Minister Scott Morrison⁴

The transformation that led to this began mostly in the last decade, as the digital natives (particularly the Millennials) demanded a digital customer experience/interaction. As is often the case, the private sector was ahead of the curve, but the public sector has also embraced the digital world, in part because they know that working digitally is very likely to increase their revenue and productivity quite significantly.⁵ On top of that, customers expect all agencies – in the private or public sector – to operate appropriately in the digital world. Prior to the pandemic, Australians in particular had some of the world's highest consumer expectations,⁶ and this is only increasing as a result of recent world events.

Across the country therefore, some of the drivers that are impacting state governments to change (as depicted in Figure 1) are citizen demands, changing policies, increasing security threats, a tech savvy workforce, a push for greater transparency, and of course the COVID-19 pandemic.

Though each of these factors is not necessarily given equal measure, all of them are contributing

Figure 1: Drivers impacting the public sector to change



³ https://www.ey.com/en_au/workforce/how-digital-natives-are-influencing-traditional-organizational-design

⁴ <https://www.pm.gov.au/media/modern-digital-economy-secure-australias-future>

⁵ <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-digital-government-transformation-230715.pdf>

⁶ <https://which-50.com/australians-have-the-highest-experience-expectations-concerned-about-privacy-and-automation-adobe-study/>

to the current push within state governments. Moreover, customers see what the private sector is able to deliver and how seamless some of their interactions are with banks or other services, and expect the government to be able deliver services in the same way.

“When people talk to me about innovation in government, they’re talking about how customer expectations have really changed. What people experience outside of their transactions with government is now their baseline. Customers expect government services to be on par with their other digital services. This is a change that has really accelerated over the last 18 months”

William Murphy,

Deputy Secretary, Customer, Delivery and Transformation,

NSW Department of Customer Service

Yet as 2020 was just beginning, many agencies, both state and federal, were entirely unprepared for the emerging events that were not even on their radar, let alone for their current circumstances. For instance, Jonathan Coleman, the Chief Technology Officer of the Australian Federal Police (AFP), says that “historically across the AFP, technology was quite undervalued, there was a preference for quite traditional operations, and a lot of time was wasted in communication and administration.” Overall, the IT operations in particular were not serving the needs of their customers and there were some frustrations amongst staff and stakeholders. There were also internal constraints and rising costs, which ultimately was the main “driver for a significant uplift in capability, which started with technology and digitalisation to support frontline operations.”

However, even as late as March 2021, some agencies are still not quite ready to transform. A national survey conducted by the Public Sector Network⁷ as part of a digital government roadshow across state and federal government, found that 43% of respondents (n = 116) said they have a moderately low level of digital maturity, as depicted in Figure 2 (left).

In general, before the pandemic, many agencies felt the need to transform because of internal factors, but also due to external factors. For instance, consumers of government services

now expect to only deal with one agency when interacting with government, and in NSW in particular, Service NSW (part of the Department of Customer Service), according to their website is designed to be a “one-stop-shop for services for customers, businesses and our partner agencies.”⁸ In many ways, it is the gold standard for similar agencies across the country. It is highly regarded by customers and service providers alike, with a customer satisfaction score of 98%, and the eighth best place to work in Australia – the only public service agency in the top ten.⁹ Andrew Scarr, the Director of Business Development and Growth at Services NSW, says that “Service NSW is an agency that can be trusted and cares about people.” The challenge of course is for the rest of the public service across the country to follow suit, and to keep up with ever-changing and rising demand.

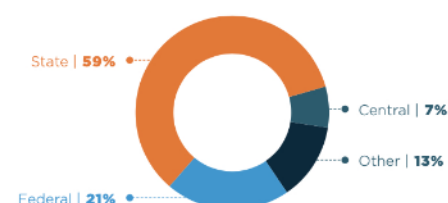
One of the reasons why the NSW Department of Customer Service (DCS) has been successful is because they launched their Beyond Digital strategy in late 2019.¹⁰ Greg Wells, the Government Chief Information Digital Officer at the NSW DCS, says that the intention before the pandemic was to set up “virtual care for patients, and opportunities for students to learn remotely and public servants to work remotely.” Having these visions then, is now seen as almost prophetic, and was partly the reason why the state was better prepared than most to face the pandemic.

Figure 2: Digital government survey

DIGITAL GOVERNMENT & CITIZEN EXPERIENCE ROADSHOW SURVEY 2021

A snapshot of trends happening in the Australian Public Sector

116 ATTENDEES PARTICIPATED IN THIS SURVEY



What is your current digital maturity level?

43%

said Moderately low with few digitally enabled processes and disparate data sources

What is the top challenge you face in your digital transformation efforts?

50%

said Enterprise-wide buy-in and collaboration

Where are you focusing your digital transformation efforts?

45%

said Process improvement and workplace automation

⁷ <https://publicsectornetwork.co/>

⁸ <https://www.service.nsw.gov.au/about-us>

⁹ <https://www.service.nsw.gov.au/news/service-nsw-celebrates-top-ten-listing-great-place-work-australia>

¹⁰ <https://www.digital.nsw.gov.au/article/beyond-digital-our-new-nsw-customer-digital-strategy>

The impact of COVID-19

Rarely if ever has there been a worldwide event that has affected virtually everyone in some way, and caused drastic changes to the way people interact and live their lives. In general, businesses and government agencies tend to make fundamental changes because of an external factor. In some ways, before the pandemic, Australia was behind parts of the rest of the world in this area because Australia didn't suffer the ill effects of the global financial crisis of 2007-8 like much of Europe or the United States.¹¹ In those regions, though the crisis had negative impacts, it also acted as the facilitator they needed to spur them into action. Australia for the most part had to wait till the global pandemic to be prompted into action.

Though the ravages of COVID-19 are not yet over – and are worse in some parts of the world than they are in others – for those of us not affected by the disease itself, we are fortunate that this pandemic is happening now and not 10 or 15 years ago, before the advent of the smartphone, social media, movies on demand and mobile video conferencing technology.¹² In fact, it has been the need to adapt to remote work that has proven to be the ultimate catalyst that so many organisations and departments were inadvertently seeking to change their ways and transform their processes.

In October 2020, as Victorians were ready to emerge from their extended lockdown, a study found that 60% of days worked by Victorians in the first week of September were from home, with the rest of the states not far behind.¹³ Overall, the Australian Bureau of Statistics estimates that in February 2021, up to 41% of employees were working from home at least once a week, compared to 24% a year earlier. The expectation is that these numbers will either stabilise or increase,¹⁴ with the implication being that remote work in some form or another is here to stay. A study by the Australia Institute's Centre for Future Work, contends that about 30% of all Australian workers, or somewhere in the range of 4

¹¹ <https://www.contino.io/insights/the-current-state-of-digital-transformation-in-australia-revealed>

¹² <https://www.bbc.com/news/technology-52052502>

¹³ <https://www.sydney.edu.au/news-opinion/news/2020/09/09/most-victorians-working-from-home-since-lockdown-new-data.html>

¹⁴ <https://www.abs.gov.au/media-centre/media-releases/year-covid-19-and-australians-work-home-more>

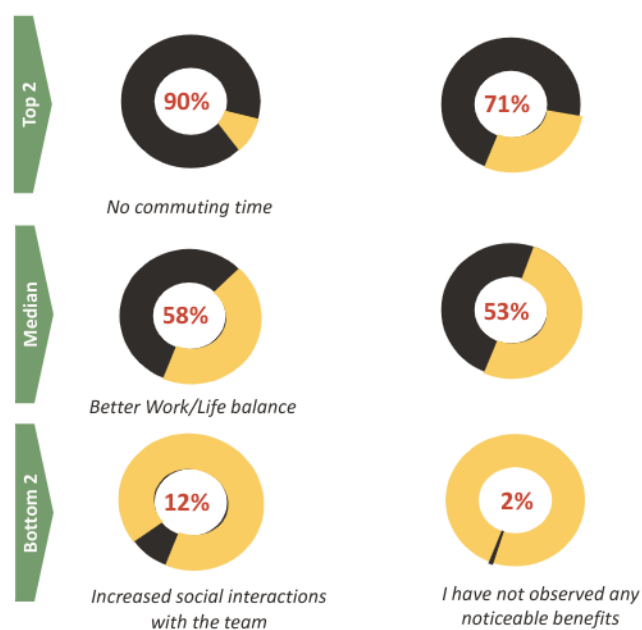


million people, can work from outside of the office on a permanent basis, but it will take some time to get there.¹⁵ It is also expected that commuting to and from work will drop by 25-30%, and the majority of employees expect their remote work arrangements to remain in place – in full or in part – even after the pandemic completely disappears.¹⁶

One of the key trends that we have observed in recent times as a result of the pandemic is, a significant change in demographics where people are moving out of cities into regional areas due to reasons such as lower impacts of infectious spread in the regional communities, better living experience, possibly a lower cost of living and other such matters. This in turn has been driving demand for new services and changing demographics of the community and ways of working in the regional areas which thereby triggers a change in the way state governments would need to react to support the citizen needs.

Figure 3 (below) shows that according to the Victorian Public Sector Commission ‘people matter survey’ – which is conducted across the entire public sector in the state – not commuting to work and having greater flexibility were the top two benefits of working from home.

Figure 3: Key Highlights of Working from Home (2020)¹⁷



In other states, though similar annual surveys are also carried out, the questions in 2020 were not as specific, whilst the surveys for 2021 have not yet been completed. In NSW however, the people matter employee survey (PMES) always asked a question about flexible work. In 2019, 17% of employees reported that they worked from home at least some of the time. By 2020 unsurprisingly this figure rose to 62%,¹⁸ and it will probably be even higher in 2021.

Examples of remote work

Yet despite the prevalence of remote work by the end of 2020, before the pandemic began the majority of agencies were unprepared for it, at least not in vast numbers. The Residential Tenancies Authority, a state government statutory agency in Brisbane, was a “very traditional workplace” according to Natalie Townsend, the Chief People Officer, with the “majority of people working in the office five days a week.” Remote working was rarely considered, though in January 2020, for tech support reasons, “we implemented laptops within our business, which was a blessing for us in terms of timing.” Overall, “we were pretty basic” in terms of technology, with “aging systems and policies.” In fact, when COVID-19 hit, “we didn’t have a telephone system or appropriate technology that could support remote working.” The IT team worked with the archaic systems and developed everything that was needed to work remotely. As such, “we got to a point where 90% of employees started working remotely within two weeks, which was pretty phenomenal.”

Another example comes from HealthShare NSW, a government shared service organisation involved in providing clinical transport and hospital meals across the state. One of the main duties of the organisation, according to Fifi Spechler, the Quality Assurance Manager, is to conduct audits on behalf of the NSW Food Authority. This had always been a face-to-face process, but when the pandemic hit, the audits needed to continue for compliance purposes, but had to be conducted in a new and innovative way. It wasn’t so much about remote working, rather than about remote audits. Staff in the kitchens were considered essential workers so they were still there in person, but “the auditor,

¹⁵ https://www.futurework.org.au/working_from_home_in_a_pandemic_opportunities_and_risks

¹⁶ <https://www.sydneysydney.edu.au/news-opinion/news/2020/09/28/australians-want-to-work-from-home-more-post-covid.html>

¹⁷ <https://vpvc.vic.gov.au/data-and-research/people-matter-survey/responding-to-the-impacts-of-the-coronavirus-covid-19/>

¹⁸ <https://www.psc.nsw.gov.au/reports-and-data/people-matter-employee-survey/pmes-2020#reports-and-data>

the quality assurance representative and the food service site representative were potentially in their own homes, simultaneously connected to the audit using Skype for Business.” A kitchen representative then held the tablet “with the camera enabled and physically walked through the site.” All of this technology had to be rapidly deployed and accessed in real-time. It is very likely that remote auditing, at least in some format, is here to stay, so HealthShare NSW is already working on securing the next generation smart technology.

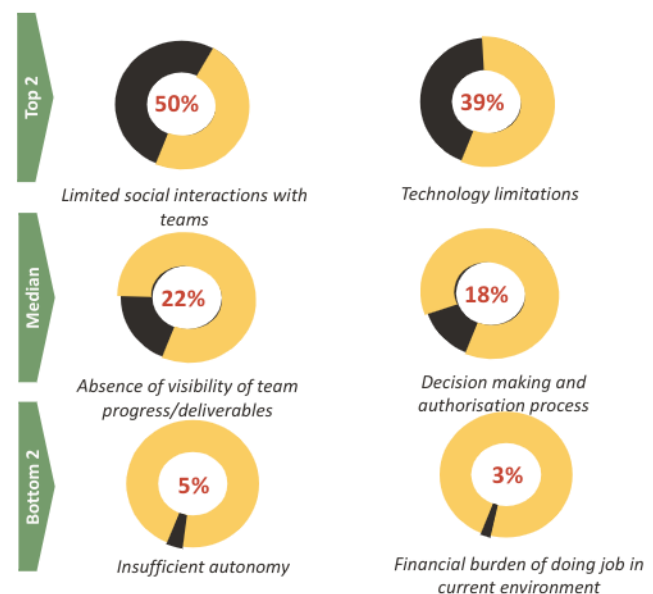
“Our remote auditing process has focussed on keeping our people and patients safe during the COVID-19 pandemic. It came about as a result of necessity and has been a success because we have been sustainable in terms of reducing our travel and introducing technologies that will continue beyond the pandemic and will reduce our requirements for paper.”

Fifi Spechler,

Quality Assurance Manager,
HealthShare NSW

These examples are typical of many institutions in the public sector all around the country. Generally they didn't have the technology and weren't prepared for the necessity to work from home or conduct their business remotely. In fact, the same Victorian Public Sector Commission 'people matter survey' conducted in 2020 (as depicted in Figure 4) shows that on top of technology limitations, the other major barrier towards remote work is limited social interaction, not to mention lack of engagement.

Figure 4: Top Barriers of Working from Home (2020)¹⁹



Responding quickly

Despite these and other barriers, most agencies shifted their focus and set themselves up to abide by the changing circumstances almost immediately, when required. Businesses across the country also had to adapt to the new reality, but the advantage that the public sector has is that government departments are usually large enough and have quick access to funds to allow them to adapt quickly when needed. The public sector also didn't shut down when businesses around them were forced to close during various lockdowns. In fact, though many of the staff were forced to work from home, the public sector institutions themselves worked harder and more productively than before to support their communities. Generally, government takes its time to deliberate and go through numerous approval channels before undertaking any kind of project, especially a large-scale effort.²⁰ But a McKinsey report says that during the pandemic, “government bureaucracy was forced to operate in a far more agile and iterative manner, adjusting its response during implementation.”²¹ This was true across federal and state governments.

In NSW for instance, the DCS set up the initial state-wide QR codes, a version of which has now become mandatory nationwide. A rollout of such magnitude would generally take months if not years, but with the urgency of the pandemic, it

¹⁹ Victorian Public Sector Commission – people matter survey 2020, <https://vpssc.vic.gov.au/data-and-research/people-matter-survey/responding-to-the-impacts-of-the-coronavirus-covid-19/>

²⁰ <https://grattan.edu.au/wp-content/uploads/2021/07/Gridlock-Grattan-Report.pdf>

²¹ <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/collaboration-in-crisis-reflecting-on-australias-covid-19-response#>

was initially developed and delivered in a matter of weeks. The Hon Victor Dominello MP, the NSW Minister for Customer Services, says that when the pandemic hit, representatives from all the government departments in NSW came together for the first time and started to share ideas and even data. “The collaboration that we got from them has been transformational. Where we are now compared to where we were is a world away, because of COVID and collaboration.” In fact, “we have demonstrated in NSW during this pandemic that we can move mountains at speed to help serve the people of our state.” The first version of the app may not have been perfect, but since the DCS has such a high trust threshold within the community, they were able to deploy it anyway. Then when things went wrong, they owned the mistakes and created the next iteration. It was particularly complicated to develop the first version because the whole department had to change their focus.

“When the pandemic hit, we had a major pivot from everything that we normally do, to everything COVID. One of our biggest challenges is just balancing priorities, because on a daily or a weekly

basis we have products coming from all directions. We tend to balance pretty much every iteration of every product in a way that allows us to deliver a little piece of value, not just for the short-term and what’s urgent, but also something that contributes towards the medium-term and the longer term goals. It means being really agile to deliver the next thing, but also having the persistence and stamina to keep your eye on the bigger, more strategic goal.”

Rahul Dutta,

Director, Digital Service, Service NSW,
NSW Department of Customer Service

As a result of their dedication and agility, the Service NSW app, which includes the QR code check-in feature, has a 94% satisfaction rate, and has been downloaded by over 4 million NSW citizens.²² The expectation of citizens across the country is that this kind of agility should be replicated even in ‘normal times’ without the spectre of a global pandemic acting as the spark.

²² <https://www.nsw.gov.au/media-releases/four-million-citizens-using-service-nsw-app>



Towards digital transformation

To meet customer expectations, to plan for a future beyond the pandemic and to really grab the opportunity that the pandemic has presented, all organisations need to change their approach when it comes to how they operate and serve their community. In a broad sense, this means transforming their operations to become more technologically savvy and digital. To start the process, in May 2021 the federal government announced a \$1.2 billion investment into digital transformation, and released the Digital Economy Strategy, which focuses on digital skills, initiatives, services and incentives.²³ From an economic perspective, Treasurer Josh Frydenberg said “greater digital adoption will improve our competitiveness and lift our productivity – driving job creation and higher wages.”²⁴

This is a lesson that all states have also adopted. For instance, in its 2021-2022 budget, the Victorian government announced that it will invest \$180 million into digital service delivery, which includes \$70 million into developing digital and online services for Service Victoria, as well as \$51 million to enhance cybersecurity in the public sector.²⁵ South Australia in the meantime has developed their own Digital Transformation Strategy, which is about “rethinking services for the digital age,” rather than “doing the same things that we’ve done in the past and just putting them online.”²⁶ The strategy comes with a toolkit and a new way of thinking. Western Australia too, which has had few COVID-19 cases due to hard border restrictions, nonetheless is also using the opportunity of the pandemic to develop a Digital Strategy for the Western Australian Government 2021-2025, which according to Minister Don Punch MLA, aims to put “people, businesses and communities at its centre and sets the vision for a government that provides convenient and secure online services informed by quality data insights. It also recognises that as government delivers more services online and better leverages data to inform its operations, excellent cybersecurity capabilities are more important than ever.”²⁷

Large technology companies are often successful

because they think of every day as the first day, meaning they look at each day as a pathway towards the future they want to create, and then go out and make it happen. This is what public sector institution needs to do if they are to embrace the opportunities that the pandemic has presented them.

In NSW, Andrew Scarr, the Director of Business Development and Growth at Services NSW, says that the NSW government is a citizen-centric government, which means that the government thinks about how they interact with citizens and “it’s not about the government telling citizens what to do.” As part of that, the Minister of Customer Service is heavily invested in the products that the agency develops. In fact, it is not uncommon for Minister Dominello, the NSW Minister for Customer Services, to look at his Service NSW app or dashboard on his phone in the midst of a presentation and to give live updates about things like the number of patients in hospitals or the number of people in NSW jails. Real-time updates are possible because the system was set up to provide them.

“Digital transformation is about a re-imagination of existing services. Agencies need to want to go on the transformation journey.”

Andrew Scarr,
Director, Business Development and Growth,
Services NSW

Despite all the money and momentum that digital transformation currently has, one of the biggest obstacles to a true transformation is the fact that public sector institutions in particular have a tremendous amount of legacy systems and processes, including large data warehouses and aging hardware. Many departments are hesitant to move away from these systems, or don’t quite know how to do so. Yet, as much as new systems are challenging, expensive and uncertain, they are generally cheaper in the long-term and likely to be significantly more efficient. For instance, a study in 2017 found that IT departments in state government agencies had 31% of their technologies in legacy systems, but it cost up to 80% of the IT budget to maintain them.²⁸ On top of that, the older the systems get, the harder they are to use

²³ <https://www.pm.gov.au/media/modern-digital-economy-secure-australias-future>

²⁴ Ibid, 6 May 2021

²⁵ <https://www.innovationaus.com/victorian-govt-provides-180m-for-digital-services/>

²⁶ <https://www.dpc.sa.gov.au/responsibilities/ict-digital-cyber-security/digital-government>

²⁷ <https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/digital-strategy-the-western-australian-government-2021-2025>

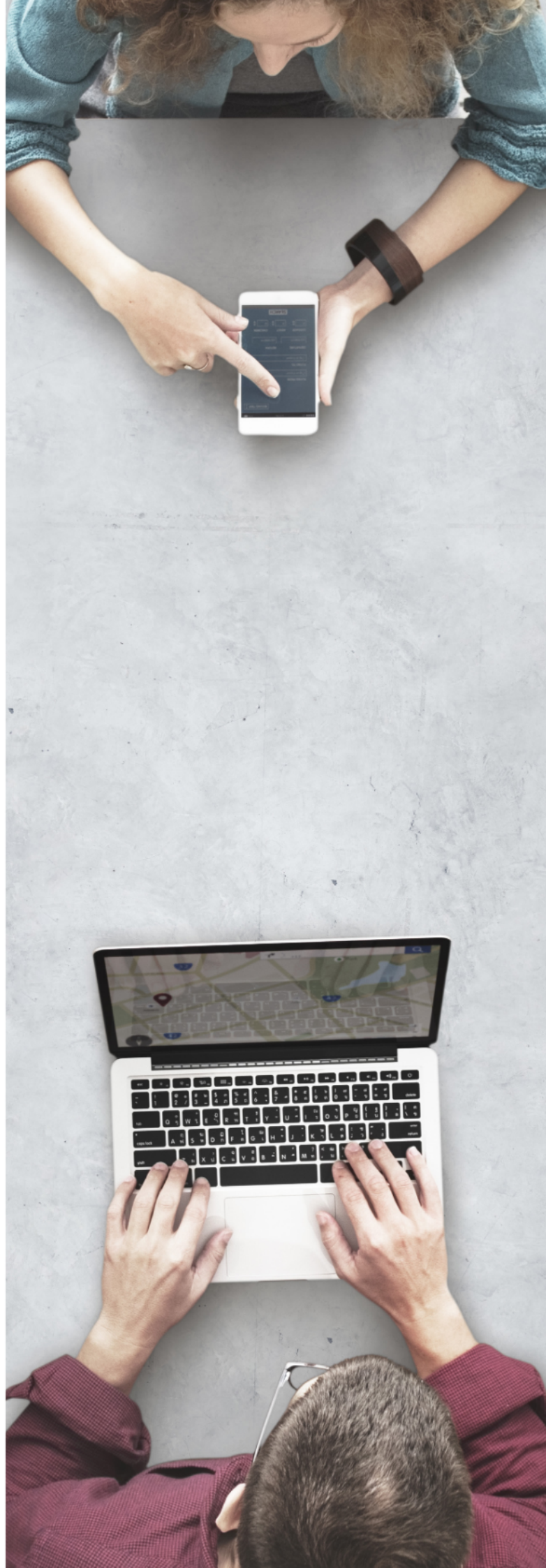
²⁸ <https://www.itnews.com.au/feature/signs-your-department-is-ready-to-modernise-legacy-apps-558146>

and develop in a way that the public expects. Though it is also important to make changes incrementally so that systems and personnel can keep up, and so that nothing is lost during any transformation. It is critical therefore to do appropriate research, to procure bespoke new systems, and to ensure that staff are appropriately skilled at using the new systems.

The pandemic has given the whole world and particularly government departments a chance to regroup and reassess. “Change one thing at a time,” says a Victorian CIO, “but also look at how we can digitise processes rather than just change them from manual. We need to actually be agile, and not just say that we are. We need to be able to pivot and move as we need to.” The pandemic has exacerbated that.

Before the pandemic, many of the agencies that began their digital transformation journeys still relied on their legacy operating models. The pandemic and its reliance on remote working technology showed many of them what was possible and how they could adapt. The true measure of a digital transformation is when digital technologies, like AI and cloud, become part of the DNA of an organisation to elevate the human experience and improve operations and delivery.²⁹

²⁹ <https://www2.deloitte.com/us/en/insights/industry/public-sector/government-digital-transformation-strategy.html>

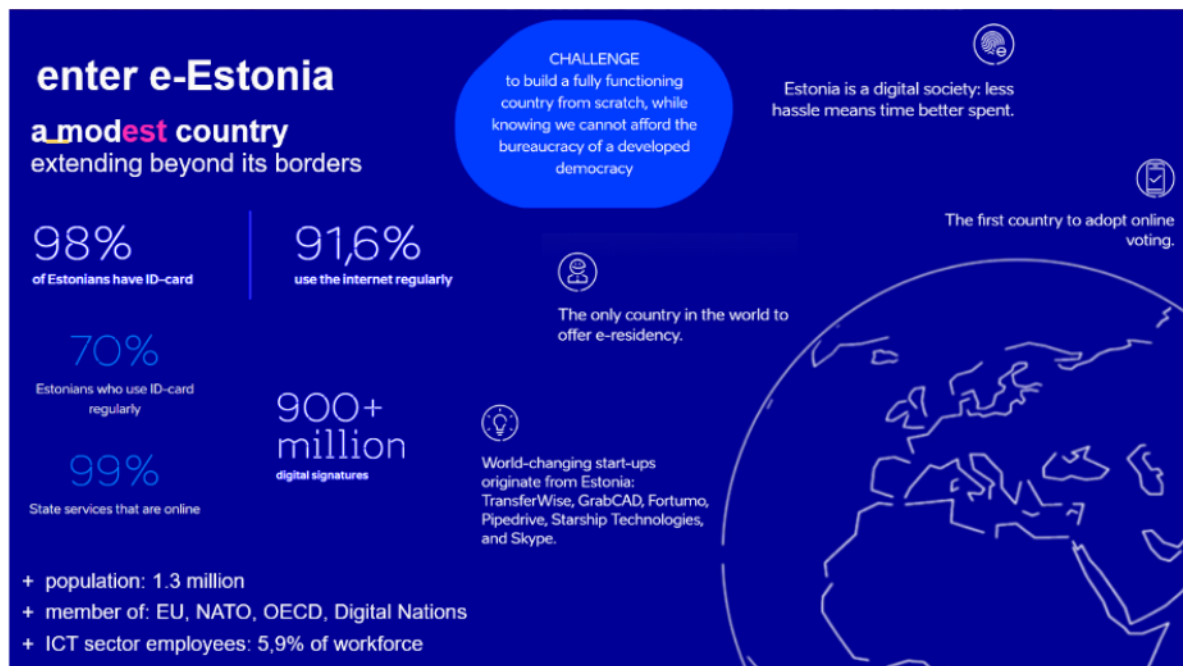


A case study from overseas

The ultimate goal of any digital transformation within the public sector is for government services to be available to all citizens digitally, and for there to be a seamless integration between what the citizens expect and what the government can deliver. One of the only places in the world where this has been achieved to a great extent is in Estonia, a tiny country of only 1.3 million people and a former member of the Soviet Union. Soon after gaining independence in 1991, the government of the day made the very progressive decision to invest in technology and by 2000, it made a decision to digitally transform the whole society. At the time, just under 29% of the population was connected to the internet.³⁰ A year later, the parliament became paperless and computers had been rolled out into every school. In fact, having access to the internet was declared a human right.³¹ Using the internet as a communication tool became so important to Estonians that though Skype was invented in Sweden, the technology behind it was created in Estonia, and it was popularised, particularly as a business tool in Estonia.³²

Over the years, not only has internet access improved – it is now at over 92% of the population – but more importantly, 99% of all government services are now online.³³ As part of this, every citizen has a state-issued digital identity card which they receive at birth (or at citizenship). Over two thirds of the population use the cards regularly, but even those that don't, have access to the technology that it provides.³⁴ For instance, rather than spend time, money and effort completing complicated tax returns, all tax information is automated and calculated for anyone with a digital ID. Citizens can of course make changes and can add anything that wasn't accounted for, but then with the tap of a button on their mobile phones, it can be submitted easily, with any money owed to citizens deposited into their bank account, because the banks are all also connected. Unless there are significant changes required (which is rare) the whole tax return process takes most people just a few minutes. This is just one example, but shows the connectedness and ease of access that Estonians experience because of digital investment and policies enacted by their successive governments. As Figure 5 (below) shows, Estonia decided to an e-country essentially from scratch and has managed to succeed.

Figure 5: Estonia - a digital society³⁵



³⁰ <https://en.unesco.org/courier/2017-april-june/global-lessons-estonia-s-tech-savvy-government>

³¹ <https://emerging-europe.com/voices/estonia-how-20-years-of-digital-transformation-be-a-model-for-preparing-for-international-crises/>

³² <https://www.microsoft.com/en-us/stories/skype/skype-chapter-2-welcome-to-estonia.aspx>

³³ <https://e-estonia.com/>

³⁴ <https://e-estonia.com/solutions/e-identity/id-card/>

³⁵ <https://e-estonia.com/>

Indeed, since 2007 Estonia has been at the forefront of sharing their technological exploits with the rest of Europe and the world. Estonia chairs a NATO-led cyber defence initiative and a number of other leading digital programs. Moreover, because of the digital investment that the country has made, remote working mandated by the pandemic was much less of a hassle for Estonians than for the residents of most other places. The country already had e-learning platforms that served them well for remote learning, and most businesses were already largely operating online.³⁶ The real key to their success has been the thirst for innovation. This has been led from the top, with all recent Estonian presidents championing the digital age. The country also has a data exchange process that allows all systems to work together and talk to each other, as well as a legal framework for the administration of all the digital systems. It is so comprehensive that the government isn't legally allowed to ask citizens to provide any information more than once.³⁷ Due to the inter-connectedness of all the systems, institutions then share and reuse the data many times. This further reduces duplication and unnecessary administration.

³⁶ <https://emerging-europe.com/voices/estonia-how-20-years-of-digital-transformation-be-a-model-for-preparing-for-international-crises/>

³⁷ <https://digitalid.design/evaluation-framework-case-studies/estonia.html>

Technology and leadership as transformation enablers

The example from Estonia shows what happens when there is leadership with long-term vision and a population that is willing to share in that vision. Though it hasn't always worked smoothly, for the most part the people have embraced the digitisation of the country because they have seen the benefits of that process. It has however been a journey of more than 20 years and is constantly evolving. It is nonetheless an example that has direct ramifications for Australia.

First and foremost, the people embrace the technology because it works, and even more importantly, there is a tangible sense of interoperability.³⁸ In other words, it is clear to all that government agencies share information, work together, understand the needs of the citizens and are determined to ensure the seamlessness of all operations. This is certainly not yet the case in Australia. In fact, many agencies across all Australian states are hesitant to share information across agencies and sometime even within agencies. A Deloitte study on digital government transformation in Australia in 2015, found that privacy and security was one of the main barriers to change, along with policy bottlenecks or bureaucratic inertia; budget and capability constraints; lack of competition; transitioning government staff to new roles; and the digital divide and exclusion.³⁹

On that last point, the most recent Australian Digital Inclusion Index (ADII) from 2020 found that overall, Australia had an ADII score – comprised of access to the internet, affordability and digital ability – of 63.0 in 2020.⁴⁰ Though it is steadily and incrementally rising (from 54.0 in 2014 when the score first began to be calculated), the increase is slow and not universal. The ACT has been the highest performing territory since 2014, which is probably unsurprising, whilst Tasmania has consistently been the lowest. According to the report, “Australians with lower levels of income, employment, and education are significantly less digitally included.” Plus, “the ADII reveals substantial differences between Australians living in rural and urban areas,” and “although internet infrastructure is available to almost all Australians, more than 2.5 million remain offline.”⁴¹ Furthermore, overall Australia has the skills and technology to be a digital nation. Australia ranks second in the OECD for ICT skills in the workplace, but lags behind other countries in terms of the size of the ICT sector and the adoption and innovation of digital technologies.⁴² If Australia is ever to be comparable to Estonia in its digital journey, these measures need to change quickly, inspired by an enabling of technology, a push from the top and a change in overall mindset.

On the notion of leadership, one of the reasons why Australia has fared relatively well during the pandemic – even with the constant threat of extended lockdowns – is because when COVID-19 first arrived in Australia, governments across the nation took it seriously and political

³⁸ <https://e-estonia.com/why-theres-no-digital-transformation-without-interoperability/>

³⁹ <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-digital-government-transformation-230715.pdf>

⁴⁰ https://digitalinclusionindex.org.au/wp-content/uploads/2020/10/TLS_ADII_Report-2020_WebU.pdf

⁴¹ *ibid*, p5-6

⁴² <https://digi.org.au/wp-content/uploads/2019/09/Australias-Digital-Opportunity.pdf>





differences were put aside. The former Council of Australian Governments (COAG) became the 'National Cabinet', which is an intergovernmental forum comprising the prime minister and each of the state and territory leaders. It was designed to coordinate and deliver a consistent national response during the global pandemic, and was modelled on the 'war cabinet' created by Winston Churchill during World War II. The process came out of the 'National Partnership on Covid-19 Response' agreement,⁴³ and has for the most part been very effective. It has caused some divisions, and some state leaders have been more cautious or determined than others, but mostly this has been based on geography, personality or advice rather than political stripes. As such, it has become clear to the public that governments can work in a bi-partisan and collegial manner when there is an existential threat.⁴⁴ The problem for digital transformation is that it is not seen as issue that seems to require the same form of enlightened leadership, despite the financial investments and strategies discussed earlier.

Due to Estonia's success, their Ministry of Economic Affairs and Communications along with other stakeholders, came up with their 10 commandments or "basic principles for developing digital services",⁴⁵ which are:

- Identify the user's actual problem and need – do not assume you know
- Involve innovative people who have varied knowledge in the team – people with

leadership and different competencies

- Play through the possible solutions and choose the best one – and test it with users
- When considering solutions, look to the future, and think about change management
- Create a necessary and easy service – don't just copy the current state into a digital state
- Develop the service with users and other parties – feedback is critical
- Ensure interoperability, reuse existing data, and open your creation to others
- Work agilely – be adaptable and flexible, and make changes gradually
- Create and keep the service secure and transparent
- Run your own service – service management is a cyclical activity that is never complete until the end of the lifecycle of the service

Of course these come from the experiences of one jurisdiction and may not be entirely applicable to all Australian states or agencies. Nonetheless, they come from decades of practice and have been widely shared, and are wide-ranging enough to be at least somewhat applicable across the board. After all, digital transformation is in many ways about a change of mindset and culture, and it is therefore unsurprising that having innovative people as part of the team, is one of the principles. It is not until states or agencies decide to make changes that transformation will actually occur.

⁴³ <https://www.coag.gov.au/sites/default/files/communique/covid19-npa.pdf>

⁴⁴ <https://www.forbes.com/sites/williamhaseltine/2021/03/24/what-can-we-learn-from-australias-covid-19-response/?sh=7de2ac4a3a01>

⁴⁵ <https://e-estonia.com/how-to-create-the-best-digital-state/>

Making the transition – a whole-of-government response

One way to make the transition to a digital process is through shared services. As noted, individual departments may be hesitant to take the leap on their own, so working together with others as a whole-of-government approach not only breaks down silos and creates greater transparency (one of Estonia's principles), but allows agencies to work together, feed off each other and have consistency of services. Across the Australian government, "shared service models help governments and organisations drive productivity increases by reducing system duplication, enabling improved data collation and providing consistent customer experiences."⁴⁶ Shared services also assist with bulk procurement, and produce other process and financial benefits. From a digital transformation perspective across the whole of the country, the strategies released by the DTA are designed to bring business, industry and the states together. To ensure that the transformations occur as planned, the federal government is determined to engage with the states through various fora to push Australia's tech agenda forward.⁴⁷

Michelle Graham, the Assistant Secretary at the DTA, says that the pandemic has forced them to redefine the word 'user'. "For us, it's anybody who interacts with the federal government." A user used to be just a citizen, but the pandemic has shown that people now interact with government in different way, and for the purposes of digitisation, "it's also about how public servants interact with other agencies. It's about the internal staff as well." And since the DTA is rewriting policies, they are also "going out there and actually asking our staff." They have a survey that goes "all the way from Prime Minister down," asking users if there are any roadblocks, and in light of the pandemic, what they would like to see as part of their revised digital strategy. It also takes into account people who have not embraced technology and connect to government or other services in different ways.

“Ultimately government is for citizens. We have a holistic view and are asking questions to hopefully find ways of solving problems. If what we're doing is

actually getting in the way, we need to think about it and we need to make better decisions. COVID-19 has really taught us that government can switch overnight if required, so we can adapt and interpret what has always been done.”

Michelle Graham,
Assistant Secretary,
Digital Transformation Agency

In state governments across the country, shared services are key to delivering some of the priorities of government in an efficient manner. One digitisation example comes from eHealth NSW, which is part of Health NSW. Andrew Pedrazzini, the Director of Digital Health Facilities / Health Grade Enterprise Network at eHealth NSW, says that the vision of the department is to be "a sustainable health system that delivers outcomes that matter to patients, is personalised, invests in wellness, and is digitally-enabled." In particular, eHealth NSW has "undertaken significant central and local investment towards ICT infrastructure, though the responsibility for ICT service delivery



⁴⁶ <https://www.finance.gov.au/government/shared-services-transformation-initiative>

⁴⁷ <https://www.industry.gov.au/sites/default/files/2018-12/australias-tech-future.pdf>

is shared. That is one of its great strengths. We are about full collaboration across the health system. NSW Health has the buying power to ensure ICT consistency. It's not strictly about technology. It's about building a new operating model and transitioning to new commercial processes."

Another example comes from Victoria, where Cenitex – a state-owned IT enterprise – has been providing shared IT services since 2008. It currently services eight state government departments, a number of independent state agencies, and supports more than 46,000 public servants.⁴⁸ In many ways, for Cenitex the digital transformation journey started some years ago but is constant and evolving whether there is a pandemic or not, since state government tech solutions always need to be innovative and relevant.

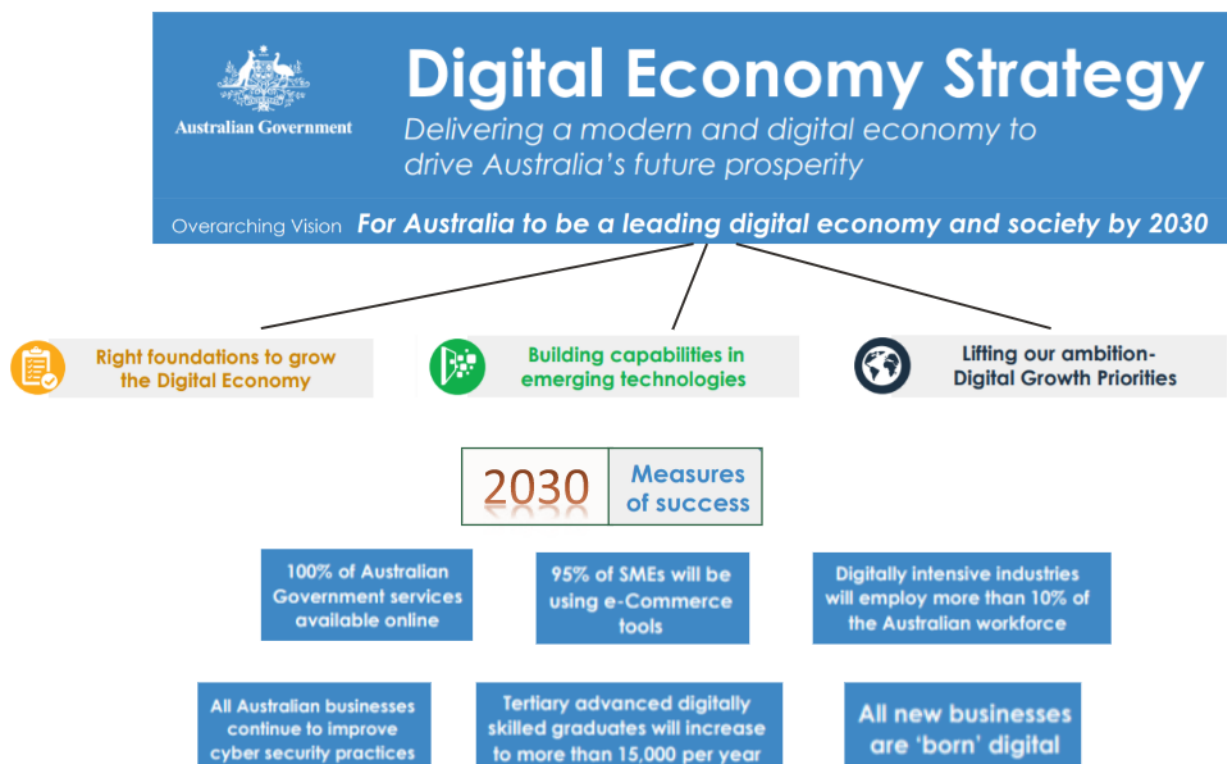
"We regularly upgrade and enhance our own technologies to keep pace with industry practice. We started down the digitisation pathway to automate manual tasks and to ultimately improve the

customer experience... This is really only the beginning for us. It's about leveraging what we have and then generating business intelligence to support our ongoing decision-making. We'll do this together with passionate leaders, staff who feel engaged and consulted, and good vendor partners who are willing to invest in the relationship."

Catherine Ho,
Executive Director of Finance and Business Services,
Cenitex (Vic)

Part of Australia's digital economy strategy is for the country to be a leading digital economy and society, as shown in Figure 6 (below) and one of the measures of success by 2030 is for 100% of government services to be available online. Even Estonia only has 99% of services online, so this is an ambitious proposal, but working together over the next decade, it is one that is within reach.

Figure 6: Australia's Digital Economy Strategy⁴⁹



⁴⁸ <https://www.cenitex.vic.gov.au/>

⁴⁹ <https://digitaleconomy.pmc.gov.au/sites/default/files/2021-05/digital-economy-strategy-on-a-page.pdf>

Leveraging lessons learnt

It is the investment in the relationship that is the key to success. Public sector institutions and companies all around the country will be successful when they ensure that there is access, affordability and the ability to use the various tools and technologies.⁵⁰ Some institutions will need to provide greater access to data, while others will need to address the knowledge-base and access of their employees. Even if all government departments change their practices and become digital immediately, the effort will be for naught if the public doesn't embrace the movement and come along on the journey. Therefore, in the same way that government agencies set up appropriate channels and reached out to look after those who were socially isolated or negatively impacted by the pandemic, they need to similarly come together to ensure that the gap between those who are digitally connected and those who are not, is eventually bridged so that everyone has equal access to the digital offerings.⁵¹

As part of Australia's COVID-19 vaccination efforts, this was recently shown to work in Tasmania. Being an island, the state Department of Health has an ambitious intention to reach all of the 541,000 residents of the state. After 20% of the population was already inoculated, they needed a technology and data partner who could assist them to administer the remainder, and who could work with all of the stakeholders including the government, GPs and the aged care sector. The Oracle Health Management System⁵² was selected which allows users to book their appointments online or through a telephone hotline. They then receive a QR code to confirm their identity and to speed up the process at check-in. The system also records the type of vaccine administered, and reminds users to schedule a second dose, if required, which they can do through the system.

All of the data is stored securely on the Oracle cloud and only authorised personnel are able to access the data, including the number of people who have already booked, what percentage has still not booked, and how much inventory is remaining or required. Cherie Ryan, the Vice President and Regional Managing Director of Oracle in Australia and New Zealand, says that "in this complex and fast-moving fight against COVID-19, there is a critical role for data to play,

now and in the longer term." In fact, since the pandemic began, Oracle has been providing similar systems across the world and "created the cloud-based Health Management System specifically for this task." Tasmania is the first state in Australia to use the system, but the opportunities to work across the whole state are clear, and with the right technology partners and the right appetite for engagement, many more states can employ similar systems.

State-based Public Sector Commissions (PSCs) are also at the forefront of such challenges, and Kathrina Lo, the Commissioner of the NSW PSC says that they began a project "to better understand the impact of emerging technologies such as automation on our workforce," but when the pandemic struck, this was repurposed "to analyse the proportion of our workforce with higher physical interactions, and to assess the impact of remote working." Pulse surveys combined with sentiment data "helped inform the shape of the public service, including in relation to how we might reopen offices." The goal now is to ensure that everything that has been learned from this past year can inform better decisions in the future. For instance, the NSW PSC is now looking at a "whole range of things including flexible work, digital capabilities and tools, rethinking the purpose of the office, looking at establishing cross-agency hubs, and building on staff mobility. We are also ensuring our industrial settings support new and smarter ways of working." It is hoped that these 'new and smarter ways of working' will then translate into better measures for the digital transformation of the whole state.

In NSW this is particularly possible because as Mark Lenzner, the Executive Director of ICT and Digital Sourcing at the Department of Customer Service, says that the NSW Government "has placed ICT and digital 'front and centre' in stimulating the economy, driving productivity growth and supporting regional communities." As part of that, "our investments in digitisation will enable us to improve the quality of interactions with government, deliver innovative digital models and shared services, and better leverage data to improve the services we deliver to our citizens."

In Queensland, Neil Scales, the Director General of the Department of Transport and Main Roads, says that once the pandemic hit and non-essential staff began to work from home, there were "some interesting effects, like decreased sick leave and carers leave." Even amongst the

⁵⁰ https://www.csi.edu.au/media/uploads/csi-covid_factsheet_digitalinclusion.pdf

⁵¹ *ibid*

⁵² <https://docs.oracle.com/en/industries/health-sciences/health-management/dmsug/oracle-health-management-system1.html>

staff who were deemed to be essential and stayed in the office or on the job, the effects were felt by them too, and they “were buoyed by them” and the efforts from the executive to keep in touch and keep things going.

“The last year has taught us to be adaptable, agile and nimble. We can’t plan for things the way we have always planned for them. We need to prepare and protect, but not just the critical infrastructure. It’s about the software systems and people as well, and we need to keep building. We want to not waste a good crisis and capture everything we’ve learned from COVID-19 to build back better.”

Neil Scales,
Director General,
Department of Transport and Main Roads (QLD)

Ultimately, building back better means leveraging the lessons of the past year so that state government agencies in particular, emerge from the current crisis more resilient and better prepared to tackle the challenges of the future. Sarah Cruickshank, the Deputy Secretary for Transformation at the NSW Department of Premier and Cabinet, says “innovation comes down to attitude.” Often, departments or the people within them have ideas, but they are “stymied by process or by extensive deliberation.” Senior leaders often look for “reasons not to do something.” But the pandemic in particular has shown that “the best driver of innovation is adversity. People have embraced the opportunity to be a positive agent of change, and that is what we do best as a public sector.”

Digital transformation is not only a whole-of-government process, but should take a holistic approach that includes technology, processes, people, policy and relationships,⁵³ and as mentioned earlier, a cultural or mindset shift. Together, these are about ensuring better services for the public, better internal processes, greater value for money, and “better use of data for evidence-based decision making.”⁵⁴ All of these things now need to be considered in light of the pandemic, but COVID-19 showed what the government can do, and that quick wins and rapid deployments are possible. It is now up to those same governments to take the lessons of the pandemic and turn them into long-term benefits.

⁵³ <https://www.dta.gov.au/digital-transformation-strategy/digital-transformation-strategy-refresh>

⁵⁴ *ibid*



How Oracle can help

While there are many technology providers and system integrators in the market, none have the full breadth of applications and technology, than Oracle, which also has expertise in ensuring the digital transformation is successful. Moreover, Oracle Consulting, the expert global consulting team, excel in public sector transformations, providing the expertise and know-how to transition public sector organisations. They consider the pillars mentioned above, namely people, processes, technology and governance, and achieve the true benefits that digital transformation is designed to provide. As the example from Tasmania shows, governments need a partner with the right skills and industry experience, and as Figure 7 shows (below), Oracle has more than 44 years of experience.

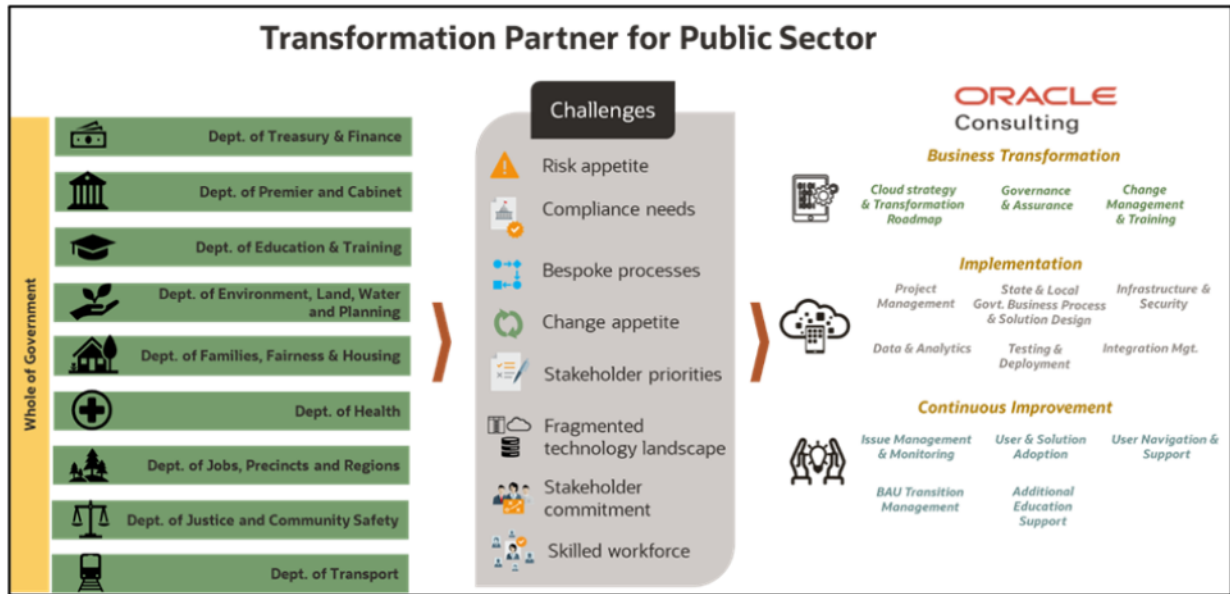
Oracle Consulting has also developed a Cloud Adoption Service, aligned to Oracle's implementation methodology, in order to assist agencies with the change management planning and execution, to provide the guidance and support agencies need to deliver a successful transformation. This approach has seen great digital transformation success for government agencies in Australia and around the world. Figure 8 (below) shows why Oracle is a trusted transformation partner, and below that are snippets form Oracle Consulting, (displayed as part of Figure 9) showing how Australian agencies have been enabled through their transformational journey.

Figure 7: Oracle is a leader of managing data⁵⁵



⁵⁵ <https://www.oracle.com/index.html>

Figure 8: Oracle – trusted transformation partner



Figures 9: Snippets form Oracle Consulting – Australian transformational journeys

VIC Government Department

Operational Model: Single Platform

Service Offering: Implementation Services, Cloud Adoption Services

Technology Footprint: Financials, Budgeting, Expense Mgmt., Timesheet, Reporting, Integration, Security, Procurement, Supplier Portal, Supplier Qualification, Project Portfolio Mgmt., Contract Mgmt., Data Mgmt.

Business Challenge:

- ✓ Become self-sufficient running their own finance platform after the MoG changes came into effect
- ✓ Integrating 3 new agencies within this department
- ✓ Challenges around project based reporting
- ✓ Disparate business processes within the department for across business functions
- ✓ Highly customised system landscape
- ✓ Lack of visibility over lifecycle of a contract

Engagement Outcome:

- ✓ Successfully streamlined & standardised business processes across a fully integrated department
- ✓ Single, unified platform supporting Finance, Procurement, Contract Management & Project business functions
- ✓ Complete control & visibility over contract lifecycle
- ✓ Fully compliant FES budgeting solution
- ✓ Mission critical operational & management reporting delivered

ACT Government Department

Operational Model: Staged Co-Existence

Service Offering: Implementation Services, Cloud Adoption Services

Technology Footprint: Procurement


Business Challenge:

- ✓ Significantly high spending on direct & indirect purchases
- ✓ Existing processes were not conducive to a shared service operating model
- ✓ Highly customised system landscape
- ✓ Disparate business processes within the agency for a given business process
- ✓ Fairly large turnaround time for procuring goods & services

Engagement Outcome:


- ✓ Achieved a better control over spend
- ✓ Increased transparency and offered better controls through the new procurement process
- ✓ Streamlined and Standardised the business process across the agency
- ✓ Current solution aligns with the Shared Service operating model
- ✓ Reduced the turn around time for procuring goods & services

VIC Government Department




Operational Model	Single Platform
Service Offering	Implementation Services
Technology Footprint	Reporting
Business Challenge	<ul style="list-style-type: none"> Disparate reporting tools & solutions Lack of real time reporting capability Ageing and End of support reporting tools
Engagement Outcome	<ul style="list-style-type: none"> Single reporting platform delivered Mission critical cross functional area reporting for business Real time reporting for business stakeholders Longer turnaround time involved in operational & management reporting Significant reduction in turnaround time for reporting Supports data driven decision making

VIC Government Department

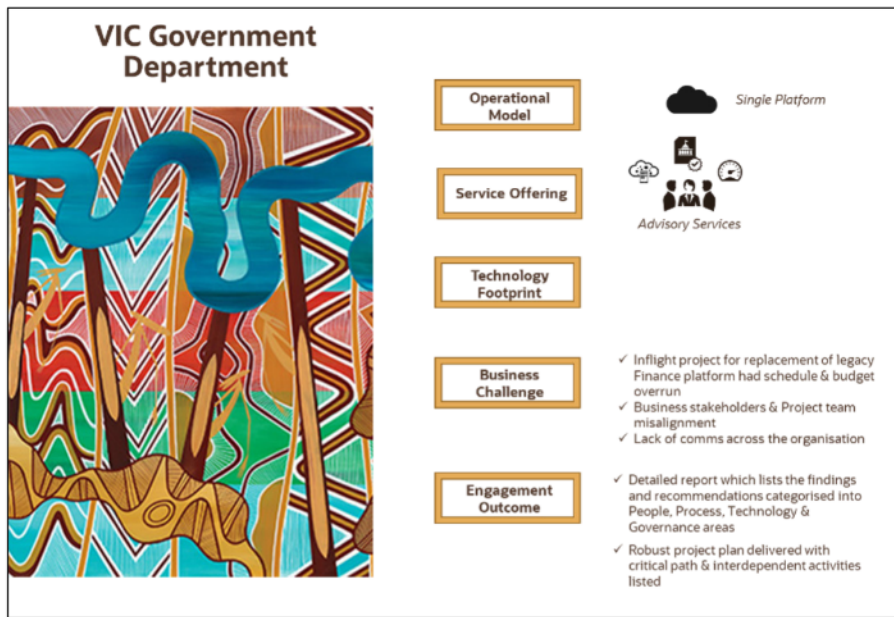


Operational Model	Single Platform
Service Offering	Advisory Services, Implementation Services, Cloud Adoption Services
Technology Footprint	Security
Business Challenge	<ul style="list-style-type: none"> Inflight project for replacement of legacy Finance platform had schedule & budget overrun Business stakeholders & Project team misalignment Lack of comms across the organisation Absence of mission critical Single Sign On secure access compliant with the Vic Gov Identity Management solution
Engagement Outcome	<ul style="list-style-type: none"> Detailed report which lists the findings and recommendations categorised into People, Process, Technology & Governance areas Robust project plan delivered with critical path & interdependent activities listed Cloud Adoption Services delivered the crucial training plan, communication strategy & readiness plan for the revised Go Live Golden template for Single Sign On solution for Vic Gov was delivered

VIC Government Department



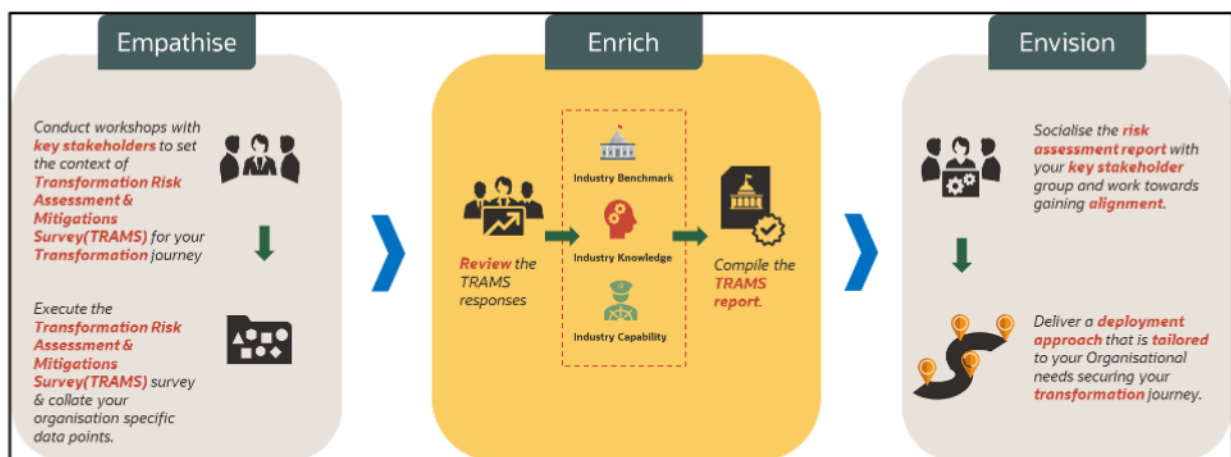
Operational Model	Single Platform
Service Offering	Advisory Services, Implementation Services
Technology Footprint	Account Reconciliation, Reporting
Business Challenge	<ul style="list-style-type: none"> Inflight project for replacement of legacy Finance platform had schedule & budget overrun Business stakeholders & Project team misalignment Lack of comms across the organisation Absence of mission critical account reconciliation reporting capability Disparate reporting tools & solutions Lack of real time reporting capability Ageing and End of support reporting tools
Engagement Outcome	<ul style="list-style-type: none"> Detailed report which lists the findings and recommendations categorised into People, Process, Technology & Governance areas Robust project plan delivered with critical path & interdependent activities listed Mission critical cross functional area reporting for business Real time reporting for business stakeholders Significant reduction in turnaround time for reporting Supports data driven decision making



To get started on this journey, Oracle Consulting offers a Transformation Risk Assessment & Mitigations Survey (TRAMS) to agencies at no cost. The objective of the TRAMS is to evaluate the risk profile for your agency in relation to a transformation journey, comparing that with the industry benchmarks for state government in the region, as well as globally, and thereby offering a risk assessment report tailored for you. The Maturity Assessment, as shown in Figure 10, is also about empathising, embellishing and empower agencies.

Oracle Consulting is available whether you are exploring options or are already in the midst of your transformation journey, or you have completed the transformation journey and are exploring avenues to improve operating efficiencies. For more information please contact your local Oracle Consulting team at: stategovernment_au_grp@oracle.com.

Figure 10: Oracle Consulting’s Transformation Risk Assessment





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