Rethinking the digital dividend: Government needs to deliver better citizen digital experiences
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Executive Summary

Australian government agencies are making the transition to digital experience platforms. These platforms enhance the citizen experience – firstly, a shift towards digital channels give citizens greater control over their interactions with government, enabling them to complete transactions online at a time and place that suits them – on their computer, tablet or phone, and at home, on the train, or even out in the field on a farm.

By some measures, Australia is performing well on this front, and digital channel share of citizen transactions with federal and state governments has risen from 60% to 74% over the past four years. This is faster than anticipated, but in many cases the move to digital has only been a first step, and digital experience platforms can offer government and citizens much more.

Citizen benefits

Today, the average Australian still spends the equivalent of one working day every year waiting in queues, waiting on-hold or mailing forms to complete government transactions via traditional channels. The potential dividend here is impressive – if government agencies made the most of digital experience platforms and new ways of delivering services to improve the efficiency of citizen transactions, it could effectively give back one day to every adult every year.

Improved digital experiences have higher levels of satisfaction and can improve perceptions of government effectiveness and trust. This is important because trust in the Federal Government has been declining – from 49% in 2015 to just 42% in 2019. And while trust can wax and wane over time for a variety of reasons, Australia currently sits within the ranks of 16 national governments worldwide that are more distrusted than trusted (Edelman, 2019).

New analysis for this report finds that countries with better digital interaction and service delivery performance enjoy higher perceptions of government effectiveness. This reinforces the findings of international research that indicates that getting citizen experiences right can narrow the trust gap that has opened up in recent years.

Rethinking government benefits

Digital experience platforms will provide government agencies with more data to drive decision making and improve government service delivery.

On the financial front, the potential benefits for government can be compelling. In 2015, Deloitte Access Economics estimated that governments could save $17.9 billion over a decade by shifting transactions to digital.

Some government agencies have achieved savings on individual initiatives, but overall, governments have struggled to realise the full benefits. Levels of government employees in traditional roles have fallen, but not by much. Estimates of transactions through traditional channels such as shopfronts, call centres and mail rooms are as high as four years ago. Rapid growth in touch points between government and citizens – from 40 transactions per year for each person aged over 15 years up to 55 transactions – with increased service delivery and options for accessing services also adds to costs.

Next steps

Governments need to renew their commitment to digital transformation – not with more ‘IT projects’ – but by focusing on improving and simplifying citizen experiences of government services, though better use of data and build digital platforms that support it. Governments also need to rethink what the digital dividend is and better measure it for more robust business cases.
The digital dividend

1. Create a shared sense of commitment to improving government services.

2. Simplify the number and complexity of services for targeted citizen and business groups.

3. Build and operate the digital platforms that support unification and harmonisation of services.

4. Securely measure and analyse the data that citizens share to improve their experiences.

5. Review business case guidance with a view to releasing systematic processes on measuring and including the return on investment for citizen experience.

6. Put customers at the core of decision making and progress open data initiatives which can support citizen trust, transparency and user control.

- **Time savings for citizens**
  
  8.4 hours currently spent per adult per year waiting in queues, on the phone, or mailing forms to complete government transactions

- **Increased citizen satisfaction**
  
  Digital experiences have higher levels of satisfaction and can improve perceptions of government effectiveness and trust

- **Service delivery and data benefits**
  
  Digital experience platforms can provide government agencies with more data to securely drive decision making and improve government service delivery

- **Cost savings for government**
  
  Governments need to ensure reallocated employees are contributing value, follow through on cost saving objectives, or lower expectations on reducing cost
Purpose of the report

Governments around Australia are working towards an ambition of consistent citizen-centric digital experiences, similar to those experienced in people's everyday as customers of banks and entertainment companies. However, there is an ongoing need to modernise that ambition, consistently articulate the benefits for citizens and government and provide a perspective on how to make the next steps in transition.

Drawing on recent Australian and global examples, case studies, and insights from ten government sector leaders contacted for this research, Deloitte and Adobe have collaborated to report on the benefits of digital experience platforms for government.

This research updates the Digital Government Transformation report commissioned by Adobe in 2015. This report includes research on digital government transformation, presents a concise summary of the case for digital experience platforms, and explores the impacts above and beyond financial savings to government, including meeting citizen needs and building trust in government.

Deloitte and Adobe have collaborated on this research, combining technical and change management expertise. Embracing digital experience platforms involves much more than just increasing an agency's digital expenditure, it also requires a fundamental transformation to a citizen-centric operating model. It's not just making the case for change, but enabling the government sector to achieve its digital experience platform potential.

This analysis presents a new ‘citizen engagement dividend’ exploring the link between digital experience platforms and citizen outcomes and the factors underpinning a ‘great citizen experience’ and the barriers to achieving this.

The digital government challenge

The pace of change in the private sector is driving the demand for digital government. Citizens expect that government services can be provided to them in the same way that they enjoy in their personal lives such as banking and entertainment.

The expectation is for a good digital experience. Citizens take for granted that governments will have digitised forms and channels. These need to not just exist, but, but to be easy to engage with, personalised, and enable them to transact with government at a time and place that suits their needs. Through their private sector experiences, they are coming to expect multi-channel communication that resolves the situation, respects their time and which provides a consistent experience across each.

But governments, both domestically and overseas, are facing a number of challenges in making this happen. Forrester Consulting (2018) research for Adobe found that while 94% of surveyed governments recognise the need to consider citizens’ needs as top priority in all digital initiatives, only 15% are always doing so.

Australia’s Digital Transformation Strategy outlines an ambition to be one of the top three countries in the world for digital government, delivering world-leading digital services for the benefit of all Australians. This includes a focus on building a government that is easy to deal with, informed by citizens and fit for the digital age.

State agencies are also driving change. Service NSW was established in 2013 and in the last two years, there has been an accelerated push towards digital in other big states – Victoria, Queensland, Western Australia and South Australia.

Citizen-centricity is the cornerstone of government’s ability to more effectively anticipate and respond to consumer demand. This involves a shift from a delivery mindset to an enablement mindset, with digital experience platforms enabling more relevant and meaningful interactions with citizens.

While there have been some notable successes in improving digital experiences for citizens, investment has been ad-hoc and progress has not been consistent across agencies. And while the benefits are implicitly understood, government has struggled to quantify or measure them in a consistent way.

Indeed, measures of effectiveness for agencies often focus on service delivery rather than citizen experiences. This poses a challenge in implementing digital experience platforms to improve customer experiences because there is no agreed framework for measuring benefits or including these in business cases for investment.

Agencies can also better target investment in digital experiences by aligning to citizen priorities. For example, Australian citizens using online government services, such as lodging tax returns, applying for benefits or pensions, or accessing weather data, are most likely to say they are easy to use, functional, efficient and multi-channel. In contrast, these citizens place the highest priorities on online services being enjoyable, attractive and easy to use (Adobe and WPP, 2017).

A focus on digital experiences is required to adapt to changing demands and prioritise the areas that matter most to citizens. This will need to be done while ensuring a structured approach to delivering the right services, providing consistent end-to-end citizen experiences across channels, and ensuring platform security.

NSW Government Customer Commitments (2019)
Case study: Heathrow Airport

Heathrow Airport has pulled together data from across mobile, websites, and other channels to give insight into digital engagement and build detailed customer profiles. The Airport then feeds data into multichannel campaign management, testing, and personalization solution. This has raised revenue by promoting products and services before, during, and after travel by engaging 78 million customers with more personalised one-on-one content.

Source: Adobe

Case study: Singapore Government

Singapore Government identified a need to track and understand user journeys across various agency sites. This tracking is essential to derive insights and ensure good performance of digital service delivery and identify gaps for improvement. The use of Adobe Analytics enables real-time monitoring of website and digital service performance, conveniently and cost effectively. A central dashboard that depicts the overall health status of government websites and digital services also track metrics like downloads, number of clicks, bounce rate, and abandonment rate to better understand user behaviour.

Source: Adobe
Government services need to meet **new citizen expectations**

Citizen expectations relate to convenience, time sensitivity and personalisation.

These are now the norm in service industries be that ordering food, booking tourism experiences or shopping for retail goods, and are expected to flow through to transactions with government agencies.
Citizens expect information and transactions to be relevant – data, and AI can enable proactive and predictive transactions.

Services personalized to individuals using AI and data holdings to predict and target citizen needs.

Citizens interact with government when and where it suits them, online and offline, 24/7.

Data shared with government often feels like a ‘black box’, with no visibility of how or why it is being used.

Citizens are kept waiting too long before an update or resolution.

Agencies and departments have limited communication and data sharing between them.

Citizens reach out to government to receive services, update or access information.

Old

New

Expectations of security and privacy in any exchange of data. Digital identities, ID verification (including voice and facial recognition) support this happening.

Citizens control how they complete tasks.

Citizens move across government easily and tasks across departments and jurisdictions fit together neatly.

Agencies and departments offer inconsistent experiences and brands.

Citizens often feel like a number, with limited personalization of services and communications.

Source: Deloitte
Digital experience platforms provide citizens with easy and consistent interactions

A digital experience platform is an integrated set of technologies, based on a common platform, that provides a broad range of audiences with consistent, secure and personalised access to information and applications across many digital touchpoints.

- Gartner 2018

Digital experience platforms have the ability to change the way people interact with government. Content plays a role in building experiences and delivering across multiple digital touchpoints. Data enables a greater understanding of citizens, allowing the content to be adapted, providing relevant rather than generic information.

This gives rise to the potential to deliver a more seamless, personalised experience to enable governments to serve their citizens better.

There are many definitions of digital experience platforms and descriptions of their features. The research by Adobe and WPP1 presents these categories tied back to their importance to citizens, namely:

- Design – visual appeal and ease of navigation
- Relationship – the experience creates a relationship with the citizen
- Relevance – tailored content and functionality, enabled by analytics
- Mobile – optimised across mobile devices
- Citizen journey – a seamless, efficient and complete journey.

These can be enabled by a suite of digital experience platform features, ranging from content management, to search and navigation, customisation, analytics and security.

The government sector is investing in using digital experience platforms, but with different service delivery models across agencies, faces challenges in aligning efforts to provide consistency across ‘one platform’.

What are transactions?

Transactions are the main way in which citizens engage with government, and can vary widely across different levels of government and across government agencies.

These can include payments (including welfare payments, taxes, levies, fines and licence fees), applications and registrations (such as for Medicare cards, passports, driver licences and vehicle registration) and complaints and resolution (in relation to government policy or procedures or clarifications of complex situations).

These three types of transactions are the focus of this report and analysis. These transactions are typically conducted via four main channels – in person, phone, mail and online. But there is a move towards omni-channel transactions underpinned by data and insights.

Further detail on the definition of transactions is available in the Appendix.

Digital experience platforms connect across channels and technologies to deliver these citizen experiences

Digital experience platforms aim to deliver a world-leading experience. Critical features include consistent content across channels, informed by a data layer and context on the citizen and identity.

<table>
<thead>
<tr>
<th>Media</th>
<th>Digital Channels</th>
<th>Offline Channels</th>
<th>Internal/External Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Primarily owned/earned)</td>
<td>Targeted outreach and education</td>
<td>Paperless enrolment &amp; onboarding</td>
<td>Personalised communication</td>
</tr>
</tbody>
</table>

- **Data**
  - Unified customer profile
  - Ongoing measurement and insights

- **Content**
  - Content, brand and policy management

- **Delivery**
  - Targeted outreach and education

- **SEO**
  - Paperless enrolment & onboarding

- **Social/Posts**
  - Personalised communication

- **Strategic/Enterprise/Communications**
  - Paperless enrolment & onboarding

- **Web**
  - Personalised communication

- **Connected Devices**
  - Paperless enrolment & onboarding

- **Mobile**
  - Paperless enrolment & onboarding

- **Call Centres**
  - Paperless enrolment & onboarding

- **Kiosks**
  - Paperless enrolment & onboarding

- **Facilities**
  - Paperless enrolment & onboarding

- **Email/Direct Mail**
  - Paperless enrolment & onboarding

- **SMS/Texts**
  - Paperless enrolment & onboarding

- **Social/Forums/Communities**
  - Paperless enrolment & onboarding

**Powered by Intelligent Services** (Machine Learning and AI)

Source: Adobe
Rethinking the digital dividend

Enabling a more citizen-centric approach to service delivery is the main reason for digital transformation. All of the government sector leaders contacted for this research agreed that improving the customer experience was a key reason for using digital experience platforms, and the majority agreed that this is more important than reducing government costs.

Digital transformation is more than just getting government services online or digitising the 'as is' processes. Digital experience platforms help achieve a more citizen-centric approach by enabling agencies to respond faster to citizen needs and to meet the expectations of the performance of government in the digital age.

A shift towards digital channels is less about the channel itself, and more about citizens’ ability to complete transactions online at a time and place that suits them – in their living room on a tablet, on their phone in the train, or out in the field on a farm.

Data that citizens choose to share may be securely leveraged to better understand the agency’s citizen base, predict behaviours using machine learning and ultimately improve services.

For example, platforms provide the ability to more quickly and easily build and iterate services, refining them based on research and customer feedback. Experience-driven governments can use insights shared by citizens to deliver experiences that will increase both engagement and trust (Stewart-Weeks and Cooper, 2019).

Deloitte’s client work with government agencies that are focused on citizen service suggests similar benefits, such as:
• an uplift in compliance
• an uplift in patriotism and pride
• increased government efficiencies
• savings from re-usable platforms and tools
• reduction in black economy impacts by reduction in fraudulent claims.

A shared digital infrastructure can also be leveraged by multiple agencies, rather than requiring each to build from scratch, and can significantly reduce software spending and maintenance costs (Harvard Kennedy School, 2018).

The business case for digital has often relied upon cost savings for government, driven by lower channel costs for digital relative to traditional channels (such as in-person, mail or phone).

The following analysis considers the benefits to government, and notes that despite the strong case for transformation, the government has not realised all of the expected benefits for a number of reasons.

Instead, this analysis finds that the real benefits of digital transformation, and specifically digital experience platforms, are being achieved by citizens, through more streamlined interactions with government. Digital experience platforms are reducing the frictions involved with citizen-government interactions, such as waiting in queues at government services centres, or filling in the same information in different government forms.

Benefits to agencies from digital experience platforms

Case study: NSW Department of Education

Because its existing website solution was too complicated for non-technical users, the NSW Department of Education wanted to give the state’s public schools a tool that could simplify local web content creation, while allowing the state to centrally manage the platform, and provide enhanced educational opportunities to students. The department standardizes on Adobe Experience Manager to provide schools with industry-best tools to manage their school websites, showcase their own creativity, and lay a foundation for new vocational training opportunities.

Source: Adobe

Case study: Sydney Opera House

The Sydney Opera House become the first performing arts centre in the world to implement cloud solutions to better serve its attendees. After adopting a suite of Adobe solutions, the iconic Opera House saved about 1,000 hours of work per year on email campaigns – and the venue is enjoying its the highest email open rate ever. In addition, with electronic ticket delivery, the Opera House reduced printing costs and wait times for an estimated 50,000 customers. There has also been a 150 percent increase in online donations which can be used to fund the Opera House’s various philanthropic initiatives.

Source: Adobe

Chart source: Deloitte Access Economics survey of government sector digital transformation leaders, May 2019
Getting a day back through improving the citizen experience: an example

Each year, citizens transact many times with government agencies. In the four years since 2014, there has been rapid growth in the aggregate number of touch points between government and citizens – from 40 per year per person aged over 15 years, up to 55 transactions – including, but not limited to: receiving government payments, lodging tax returns, applying for government allowances, school enrolments, renewing a driver licence, changing an address or registering births, deaths and marriages.

Digital experience platforms can provide an improved experience for citizens as they complete these government transactions. Importantly, they can also contribute to significant time savings relative to transactions conducted via phone, mail or in person.

In 2018, there were around 293 million government transactions conducted via traditional channels. If the government made the most of digital experience platforms to improve the efficiency of citizen transactions, it could effectively give back one day to every adult every year.

While 8 hours is the national average time saving, there will be some Australians who stand to experience even greater benefits from a move to government digital experience platforms. For example, regional Australians often have to travel further to complete in-person transactions. If their travel time is double that of those in metropolitan areas, their in-person transactions make up one-quarter of their non-digital transactions, and adequate connectivity to enable digital transactions is available, regional Australians could save around 14 hours each per year.

For those Australians who need to interact with government more often, such as those on a government pension, those with higher health needs or experiencing major life events, the annual time saving could also be greater. For citizens who interact with government twice a month via traditional channels, moving these transactions to digital channels could save each person around 13 hours a year.
These estimates consider:

**Phone:** calls involve an average of 15 minutes waiting time plus call duration, based on 2017 estimates of Centrelink’s average call waiting time, but public reports note significantly longer or multiple wait times for some transactions. We assume a transaction via phone could take around 30 minutes.

**In-person:** transactions involve an average wait plus serve time of 15 minutes based on Queensland Government estimates for the Department of Transport and Main Roads and Service NSW estimates. Previous Deloitte Access Economics research estimated travel times to and from government service centres between 20 and 44 minutes each way based on whether the citizen lives in a metropolitan or regional area. We assume an in-person transaction could take around 60 minutes.

**Mail:** IDC (2018) estimates it takes over 13 minutes to complete standard digital forms. With additional time required for printing and mailing of the form to the government agency, we assume a mail transaction could take around 30 minutes.

If digital experience platforms streamline government transactions so that these transactions via traditional channels are replaced by digital transactions taking on average 5 minutes (IDC, 2018), this could result in a significant time saving for citizens. For example, if it is estimated that the weighted average time saved completing these transactions via traditional channels relative to digital channels is around 33 minutes per transaction, this could equate to a national time saving of over 163 million hours per year.

The Australian Bureau of Statistics estimated the adult population in Australia in June 2018 to be 19.4 million people. This would suggest a potential time saving time saving of 8.4 hours per adult in Australia – approximately one working day in time saved.
Digital experience platforms deliver a citizen engagement dividend

Improving the citizen experience is one of the main drivers for government in adopting digital experience platforms. In fact, all of the government sector leaders contacted for this research agreed this was a key reason for using digital experience platforms - and six out of ten agreed that this is more important than reducing government costs. This highlights the importance of measurable benefits – for example Service NSW’s performance measures and results show positive and cost effective service, but a lack of baseline measures from its business case means it is not possible to track these benefits and savings.

Citizen engagement is another key benefit of digital experience platforms. And a focus on citizen experience is important - between 2004 and 2016, there was, on average, a decline in the perception of government effectiveness across the Organisation for Economic Co-operation and Development (OECD) countries.

In Australia, trust in the Federal Government has declined from 49% in 2015 to just 42% in 2019. While across years trust can increase and decrease, for a variety of reasons, Australia currently sits within the ranks of 16 governments worldwide are more distrusted than trusted (Edelman, 2019).

Digital can increase citizen engagement and trust

It is clear that citizens want to interact digitally. As noted in the 2015 research, several surveys indicate preferences for interaction via digital channels over phone and post, with differences in satisfaction rates of over 20% between the most and least popular channels. 2016 research also found that 65% of Victorians stated a preference to deal with the state government electronically, compared with traditional channels.

Citizens value government transparency, accountability, and the ability to have a say in shaping policy making and service provision. Digital tools can play a role in making this happen, enabling what the World Bank Group (2016) has referred to as Digital Citizen Engagement (DCE).

Technology such as digital experience platforms bring opportunities for government interaction with citizens, such as enabling them to provide input into government decision making processes. They enable seamless, intuitive, personalised and well-designed experiences that meet citizen needs.

Deloitte has identified a number key benefits, including:

- reduced stress and/or financial implications from forgotten tasks
- reduced time and effort filling out forms
- reduced repetition and frustration of updating details with individual services
- increased transparency of government processes and transactions
- greater awareness of what a person is eligible for
- increased self-service and accessibility.

Similarly, the top three benefits cited by digital government leaders contacted for this research were improved citizen engagement, improved quality of service delivery and improvement management of the customer journey across different channels. Forrester (2017) analysis of the experience in the United States suggests that a 1-point increase in the customer experience index results in a range of benefits for government, including:

- 2.8% more citizens trust government
- 2.7% more citizens are willing to forgive the agency when it makes mistakes
- 4.4% more citizens will say positive things about the organisation.

The Institute for Public Policy Research (2004) notes that on one hand, the data collected by and underpinning digital engagement platforms can raise citizens privacy and security concerns. But if well managed, e-government can increase trust through improving service quality of services, perceptions of government’s competence in leveraging these platforms and willingness to use these tools to improve government service delivery. Further, insights collected from government sector digital leaders for this research indicated that eight out of ten agreed or strongly agreed that better digital experiences can help rebuild citizens’ trust in government.
Correlation analysis shows that there is a fairly strong positive relationship (correlation coefficient of 0.71) between digital government progress and citizens’ perceptions of government effectiveness. As such, one way that governments can improve the perception of their effectiveness is through investing in improving their online services, such as through use of digital experience platforms.

To estimate a country’s progress in digital transformation, we use the United Nations’ e-government development index (UN EGDI), which measures how well-positioned or prepared a country is to have e-government established. In 2018, Australia was ranked second on this index (behind Denmark) in e-government performance and effective delivery of public services.

The online services index (OSI) is one of three components of the UN EGDI, alongside variables relating to human capital and telecommunications infrastructure. The OSI is an assessment of each country’s national website in the native language, including the national portal, e-services portal and e-participation portal, as well as the websites of the related ministries of education, labour, social services, health, finance and environment as applicable.

The OSI is a measure of how advanced a country’s digital government is.

To estimate the benefits of becoming a digital leader, Deloitte Access Economics has estimated the correlations between ‘lagged’ OSI and government effectiveness, with the ‘lag’ representing a comparison of the 2014 OSI value with the 2016 value for perceptions of government effectiveness, as its influence is not expected to be immediate, but expected to take time to be realised in other domains.

The ‘perception of government effectiveness’ measure, as estimated by the World Bank, captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies.

The analysis shows that progress in digital government is associated with improvements in how citizens view the effectiveness of government, which is linked to citizen engagement.
Citizens’ digital transactions generate huge volumes of data on the use of government services. Big data analytics and machine learning can generate insights on use patterns and demand for services and the relationships between services.

Customer-driven decision making can have productivity benefits. Data analytics, and securely leveraging the data shared by citizens, can enable governments to more efficiently and effectively allocate public resources including staff, assets and funding, while also providing public services that are more relevant and responsive to citizens’ needs.

Digital experience platforms can provide governments with new opportunities to make the most of the data shared by citizens, monitor changes, and compare performance. Agencies should consider the outcomes valued by citizens, link these to measurable factors, and appropriately use data on these factors to generate relevant insights to inform decision making.

Case study: Tourism Australia

Tourism Australia sought to re-platform 130 websites into a single consumer facing national brand site. The challenge included improving content management with integrated solutions, to ultimately increase its site traffic and improve engagement for over 8 million visitors to Australia. It has automated the process of finding, moderating, storing and organising content. Analytics helps Tourism Australia understand customer journeys, make decision based on data, personalize experiences, and drive marketing efficiencies. This has supported over 270,000 Australian businesses with site experiences.

Source: Adobe
The move towards digital channels has not reduced agency employment

In 2015, it was expected that government would achieve productivity and efficiency benefits from digital transformation from a shift in citizen transactions from more expensive and labour-intensive traditional channels to digital channels, and time saved from the cost of jobs associated with tasks connected with traditional channels.

In fact, there is evidence that governments are not making cost savings from a shift to digital channels. This can be considered through the changes in government sector staff employed in traditional, as opposed to ICT-related roles.

Staff time used for traditional activities were identified using the Australian and New Zealand Standard Classification of Occupations (ANZSCO) group codes from the Australian Bureau of Statistics. These occupations were responsible for traditional activities such as data entry, shop front customer service and mail sorting – activities which could be supported by digital technology, resulting in time savings from these job duties over time.

The 2015 analysis has been updated through inclusion of additional categories of traditional occupations such as archivists, curators and records managers, general clerks, customs and immigration officers, and checkout operators and office cashiers. When comparing these updated cohorts in 2018, we find that that there has been a decline in the number of staff in these roles (equivalent to around 2,600 staff).

The decline in traditional staff has been small, and this could reflect the fact that more complex transactions are still likely to require support from government staff, whether this be in-person or over the phone.

Transactions can quickly become multi-channel when a transaction can be initiated online, permitting self-service up to a point, then requiring staff to help finalise transactions or help resolve issues. As such, these traditional channels need to stay available, and labour savings are not as readily achieved.

There may also be evidence of job scope creep for employees in traditional roles. For example, regulatory compliance officers may do less form-related work, but it is not clear whether there is value or productivity uplift from their updated roles.

Even where digital channels can almost completely replace transactions conducted via traditional channels, the government will likely keep traditional channels open for accessibility reasons, so traditional roles are unlikely to ever be completely replaced.

Over the period from 2014 to 2018, the number of ICT-related roles (including roles not directly related to digital transactions) increased by 3.8% per annum (or around 6,400 staff). As average wages for ICT-related roles tend to be higher than for traditional roles, there has been an increase in the wages bill for government for these roles.

It is important to recognise this increased spending also reflects higher volumes of digital transactions and increased government service offerings.

This demonstrates that the benefits for government from a labour resourcing perspective have not been realised as expected in the years to 2018.

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Wage</th>
<th>Number of staff</th>
<th>Government spending ($)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Average Wage (Traditional roles)</td>
<td>$54,474</td>
<td>105,300</td>
<td>5,437</td>
</tr>
<tr>
<td>2018</td>
<td>Average Wage (ICT-related roles)</td>
<td>$95,700</td>
<td>54,300</td>
<td>4,991</td>
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<tr>
<td>2014</td>
<td>Average Wage (ICT-related roles)</td>
<td>$59,917</td>
<td>102,700</td>
<td>5,500</td>
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<tr>
<td>2018</td>
<td>Average Wage (Traditional roles)</td>
<td>$97,720</td>
<td>60,700</td>
<td>5,927</td>
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<tr>
<td>Change</td>
<td>Average Wage (% p.a.)</td>
<td>3.3%</td>
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<td>Change</td>
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<td>-2,600</td>
<td>63</td>
<td></td>
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<tr>
<td>Change</td>
<td>Government spending ($m)</td>
<td>63</td>
<td>936</td>
<td></td>
</tr>
</tbody>
</table>
Growth in digital channels but traditional transactions remain high

Where the benefits to government have not been realised through reduced headcount, they are also difficult to see through the shift of federal and state government transactions from traditional to digital channels. Aspirations of achieving 80% of transactions via digital channels are being progressed faster than anticipated - it is estimated that 74% of transactions are now going through digital channels rather than in-person, phone and through the mail. But in many cases it represents an initial step – a shift of channel but not yet a consistent digital experience.

In fact, the progress to date has mostly been achieved through a dramatic increase in the number of digital transactions – they have been easier and cheaper for both citizens and government, and so have almost doubled from 473 million to 825 million in around 4 years. The total number of transactions via traditional channels has remained steady from 290 million in 2014 to 293 million in 2018, noting differences in data sources makes it challenging to track changes in the volume of these transactions over time.\(^1\)

It is difficult to estimate the overall cost impact because of the many factors that affect channel costs. It is possible that there are fixed costs of transactions conducted via phone, mail and in-person, but the cost per transaction may have increased, if the transactions that are still being conducted by these channels are the more complex ones – requiring more time and resources to address than other more straightforward transactions. For digital transactions, the higher volume of transactions could reduce costs on a per-unit basis, though innovation and new digital channels such as chatbots or virtual assistants may increase digital costs, with the net impact being challenging to measure.

Noting the challenges in estimating the change in costs, the expected savings to government may not have been realised for a number of reasons:

- Digital transactions have made many more transactions possible – vastly increasing the number of transactions (and services delivered).
- Government agencies are proactively supporting citizens accessing services aligned with their circumstances, primarily via digital channels.
- The definition of ‘digital transactions’ has expanded – chatbots and virtual assistants, for example, are enabling more transactions to be completed via digital channels, which adds to the costs of delivery.
- Many transactions have been linked by multiple channels. For example, people may call an information line but complete the transaction via self-service or help from a digital assistant, or a citizen may attend a service centre and then complete the transaction via digital platforms.
- Government agencies have made expensive, custom, one-off digital builds, rather than purchasing existing products, which could operate as a more integrated service delivery option.

The challenges in realising cost savings are echoed in the insights from government sector leaders collected for this research. In practice, only five out of ten of government sector digital leaders had experienced reduced service delivery costs as a result of using digital experience platforms.

### Number of transactions (million)

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-person</td>
<td>73</td>
<td>82</td>
<td>↑9</td>
</tr>
<tr>
<td>Phone</td>
<td>123</td>
<td>119</td>
<td>↓4</td>
</tr>
<tr>
<td>Mail</td>
<td>94</td>
<td>92</td>
<td>↓2</td>
</tr>
<tr>
<td>Digital</td>
<td>473</td>
<td>825</td>
<td>↑352</td>
</tr>
<tr>
<td>Total</td>
<td>763</td>
<td>1,118</td>
<td>↑355</td>
</tr>
</tbody>
</table>

\(^1\)Transaction volumes were estimated based on two agencies’ activities as noted in their Annual Reports; the Department of Human Services and the Australian Taxation Office. State-based estimates have been extrapolated from NSW data (Service NSW Annual Report) and published 2017 and 2018 data on transaction volumes in Victoria, Queensland and Western Australia.


In Hawaii officials wanted to provide 1.4 million Hawaiian citizens with faster and efficient government services. The state also wanted to reduce costs and the environmental impact of thousands of paper documents produced by the government daily. Citizens and employees can now sign documents from almost any device, including a laptop, tablet, and mobile phone, without needing to log in to an app. This approach has delivered $5 million in savings whilst saving the printing of 24,000 documents daily.

Source: Adobe
Digital strategies and progress

State governments have been driving digital change for quite some time, however, strategies have accelerated in the past two years.

In NSW, the 2017 NSW Digital Government Strategy presents a ‘smart, simple and seamless’ vision to designing policies and services, with three key priorities – customer experience, data and digital on the inside.

The Service NSW ‘one-stop shop’ has been in operation since 2013. Service NSW has consolidated over 100 call centres, 400 physical shop fronts, 1,000 websites and more than 8,000 phone numbers to just one website, one phone number, one shop front (though available in multiple locations) and one mobile app, which handles more than 2,000 citizen transactions across 15 agencies.

Recently introduced Service NSW offerings – from the One-Click Energy Switch, to the Cost of Living service covering over 40 rebates and savings, and the Easy to do Business service streamlining business licences and permits – also look to improve the citizen experience by directly targeting cohorts with the financial savings available to in their specific situations.

The Victorian Government Information Technology Strategy 2016-2020 presents a plan for delivering efficient and cohesive access to government services and information.

The vic.gov.au website launched in early 2019 presents a single entry point into government, making government information more easily accessible for citizens, rather than being structured around government departments.

Service Victoria, a dedicated customer service delivery agency served more than 40,000 citizens in its first six months of operation in 2017-18, with 90% rating their experience on the platform as ‘good’ or ‘great’. Its long-term goal is to become the core transaction platform for all Victorian departments and agencies, improving customer experience and protecting customer data.

The Queensland Government’s Digital1st Strategy 2017-2021 presents an ambition to position Queensland as a leader in digital government – not just following the individual or private sector experience but leading the way. The strategy looks to make the most of opportunities and innovation from digital technology but not consider these as ends in themselves.

The Digital WA: State ICT Strategy 2016 – 2020 provides a whole of government vision and road map for the WA public sector, noting the role of digital services in influencing innovation in the wider economy and the importance of this for economic competitiveness.

The South Australian State Government’s ICT Strategy 2018-2021 focusses on delivering better digital services to citizens through new digital technologies.

In Tasmania, the Digital Strategy and Services division within the Department of Premier and Cabinet, is responsible for leading the digital transformation of the Tasmanian Government.

The Northern Territory Government’s 2018 Digital Territory Strategy and Action Plan identifies the tasks for government, business and the community to make the most of digital opportunities.

The purpose of the ACT Government Digital Strategy 2016-2019 is to articulate the Government’s intentions and renew the vision and approach to technology.

Sources
- NSW Digital Government Strategy
- Queensland’s Digital1st Strategy 2017-2021
- Tasmanian Government Department of Premier and Cabinet
- Digital Territory Strategy
- ACT Government Digital Strategy
Overcoming barriers to realising benefits

Based on Adobe and Deloitte experience, government agencies face a number of barriers to successful digital transactions. However, leading agencies provide learnings that other agencies can benefit from.

**FROM**

- **Government-centric**
  - Focused on adhering to internal government standards, processes, and needs, with limited reliance on data

- **This is how we work**

- **Budget pressures**
  - Concern around high IT investment costs. No clear way to value citizen experience in business case.

- **Multiple systems and suppliers**
  - Managing legacy contracts with a number of big IT providers, and a mix of suppliers / contractors

- **Insufficient in-house skills**
  - Staff and leadership don't have the understanding to make the case for, or implement digital experience platforms.

- **Cyber concerns**
  - Concerns with taking on new technology and the cyber risk of accessing platform-based solutions

**TO**

- **Citizen centric**
  - Focused on using data and identifying citizen needs, and tailoring government standards and processes around them to deliver consistent experiences

- **Experimentation culture**
  - Fail-fast, learn faster model. Be willing to experiment. Reimagining how you want to work, with an integrated view of where digital delivers across the business.

- **Citizen dividend**
  - Investment in digital experience platforms enabled by demonstrating the importance of citizen experiences in business cases.

- **Ready for integration**
  - Digital experience platforms include several features, with the ability to expand over time without being limited by legacy systems

- **Leveraging in-house and external skills**
  - Making the most of existing solutions and avoiding the expense or need to build custom solutions.

- **Using trusted platforms**
  - Understanding risks and mitigations to best make use of existing available options rather than custom building solutions

Sources: Deloitte, consultation with government sector leaders, Stewart-Weeks and Cooper (2019)
Recommendations

Create a shared sense of commitment to improving services including service accuracy, cost, quality and availability as well as the delivery of transformational change (e.g. new technology) and new government priorities (e.g. new initiatives or more opening more channels).

Simplify the number and complexity of services for targeted citizen and business groups to reduce the administrative burden through simplification and automation of activity.

Build and operate the digital platforms that support unification and harmonisation of services including the engineering to incorporate pre-existing platforms.

These initiatives leverage the success so far to bring more services into the tent and make a big impact to the quality and perception of how effectively government services are being delivered.

Securely measure and analyse the data that citizens share to improve their experiences.

Review business case guidance with a view to releasing systematic processes on measuring and including the return on investment for citizen experience. This will enable the real value of citizen experience benefits to be baselined and measured to justify investment across the system of government.

Put customers at the core of decision making and progress open data initiatives which can support citizen trust, transparency and user control.
Appendix – transactions definition

A range of information flows between government and citizens. This could be mail notices of government activities such as construction works, or websites with information about local parks or administrative reasons for citizens such as updating contact information.

Citizens pay governments and governments pay citizens for a range of reasons including tax, levies, fines and licence fees; and reimbursement of health or education expenses, tax returns or social security.

A large number of citizen transactions result from people applying for things such as Medicare cards, passports, unemployment benefits, drivers licences, and vehicle registration. A wider definition of these transactions might include customs and border security checks, where citizens provide information and receive passage rights.

Citizens interact with government about many of the above items but the interaction is more two way, such as when citizens are complaining or clarifying government policy or procedures, or need to clarify a complicated situation.

Citizens receive a range of services from government and its agencies such as education, health, law and order, protection from natural disasters etc. Digital transformation has a role to play here as well, but they are supported by more bespoke technologies.

Customer transactions

Appendix – assumptions and analysis

**Government transaction volumes – assumptions**

Transaction volumes were estimated based on multiple agencies’ activities; the Department of Human Services, the Australian Taxation Office and State government agencies, including NSW, Victoria, Queensland and Western Australia. State based transaction volumes were extrapolated to reflect services across Australia. All transaction volumes are based on publicly available data, primarily the 2017-18 annual reports of the agencies or other publicly available data.

**Department of Human Services transactions**
- Phone volumes reflect phone services across functions including Medicare, Health and Aged Care, Support Services and Smart Centres.
- Online volumes reflect Medicare transactions and self services online, the Payment and Service Finder, SMS, emails and other e-services. MyGov logins, letters sent through MyGov and social media messages were excluded, to avoid transaction duplication.
- Mail volumes were adjusted from the 2014 estimate using the rate of mail growth across government services using IBIS World data.

**Australian Taxation Office transactions**
- Online volumes reflect tax returns lodged and payments processed online.
- Mail volumes were adjusted from the 2014 estimate using the rate of mail growth across government services using IBIS World data.
- In person volumes were adjusted from the 2014 estimate using the average rate of growth experienced by the DHS and Service NSW.

**State Government transactions**
- The analysis was based on total number of transactions for NSW and Victoria. Volumes were extrapolated from these states to all Australian states based on population statistics, where NSW represents 32% of Australia and Victoria represents 26% of Australia.
- The proportion of transactions held through digital channels was estimated for NSW, Victoria, Queensland and Western Australia. The weighted average of these proportions was applied to the remaining Australian states.
- Online volumes reflect online interactions, including account logins, registrations, renewals or enquiries.

**Government employment analysis - assumptions**
- Annual wages for 2015 were based on an average of 2014 and 2016 values available from the Australian Bureau of Statistics.
- For Call and Contact Centre Information Managers, Mail Sorters, Graphic and Web Designers and Illustrators, Electrical engineering draftspersons and technicians and Electronics trade workers; the percentage of workers employed by the Public Administration and Safety industry was unknown. The percentage of workers in the smallest industry listed was applied to the Public Administration and Safety industry, thus overestimating the total cost of these workers to the government.
- ANZSCO codes for traditional employees are: 1492, 2242, 5311, 5321, 5411, 5412, 5613, 5614, 5616, 6311 and 5995 (immigration and customs officers only).
- ANZSCO codes for ICT-related employees are: 1351, 2232, 2247, 2249, 2324, 2611, 2612, 2613, 2621, 2631, 2632, 2633, 3123, 3124, 3131, 3132 and 3423.

**Correlation analysis**

Pearson’s correlation coefficient ($r$) is a measure of the strength and direction of the association between two variables. A scatter plot of the variables is developed to check for linearity, with the nearer the scatter points to a straight line, the higher the strength of the association between the variables.

The value of the correlation coefficient is always between +1 and -1, with interpretation ranging from a perfect positive linear relationship to a perfect negative linear relationship between the variables respectively. The greater the absolute value of the correlation coefficient, the stronger the relationship. A coefficient of zero represents no linear relationship – as one variable increases, there is no tendency in the other variable to either increase or decrease.
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