MINISTER’S FOREWORD

The NSW Digital Government Strategy represents a bold vision for ICT reform and cultural change within the NSW Government. The former ICT Strategy series provided a strong foundation which we have built upon in consultation with industry partners and across government. We look to extend this to a partnership with the community.

This is not just an upgrade; this Strategy provides the backbone for the delivery of next level, improved, user-centric services. It will ensure that the NSW Government is connected, customer-focussed and outcomes driven.

In order to achieve this, departmental Secretaries are required to report performance against the Strategy including the digital priority areas, on a six monthly basis to the Government Chief Information and Digital Officer (GCIDO). This information will inform the GCIDO’s biannual report to Cabinet.

Amongst other things, the NSW Public service will:

- use digital ways of conducting business where previously prohibited by outdated legislation
- co-design services with customers (taking into consideration expectations around protection of privacy) and develop technology solutions in partnership with industry
- adopt a digital by default starting point when designing or reviewing new and existing policies
- partner with industry focussing on technology solutions with a whole of government perspective
- experiment and be innovative in the use of new and game changing technologies that have the potential to drive better service outcomes
- demonstrate how they are using data to inform decision making, including around investments
- optimise the sharing and use of data through the NSW Data Ecosystem, using real time data and user friendly formats for publishing
- use predictive analytics to drive better outcomes across the sector.

The NSW Government is committed to exploring and implementing new and innovative ways of doing things, to achieve the best outcomes for the people of NSW. We recognise the importance of this to ensure NSW remains at the fore of best practice in Australia and beyond.

The Hon. Victor Dominello
Minister for Finance, Services and Property
Digital innovation is transforming the way we work, live and learn. NSW government is harnessing the potential of digital and emerging technologies to improve how government and customers interact, and deliver better outcomes for the state.

The rapid pace of technological change, including the widespread adoption of digital technology, means that citizens’ expectations of government is growing.

Our vision is to transform the lives of the people of NSW by designing policies and services that are smart, simple and seamless. We will develop a data informed and agile public service. We will make government services easy to use, cut complexity and streamline processes. We will respect the community’s desire for maintaining protections for their and their families’ privacy, and personal and health information.

This Strategy defines the next steps to realise this vision. The Strategy outlines three priorities – customer experience, data and digital on the inside.

It sets out four enablers that will support digital innovation across government – technology, cyber security, legislation and delivery capability.

We are continuing our digital transformation, and starting new initiatives that show leadership. We will experiment with new technologies to prepare for the future.

We are only part of the way along our transformation journey towards a truly digital government. The digital transformation will require a mindset shift and cultural change in the public sector to provide customer-centric services in the digital economy.

While there have been a number of reforms implemented since 2012 under the NSW Government ICT Strategy, transformation requires a long term commitment to changing the way government operates. Each reform under the Digital Government Strategy will change the way government considers policy and service delivery design, ensuring a sharp focus on customer needs.

We will set digital standards for each of the priorities and digital enablers, and test our investments against these standards.

The standards will ensure:
- digital innovation and collaboration is rewarded
- data insights are used to improve policy and service design
- a digital by design approach is embedded across the sector
- digital capabilities are built across the sector
- customer trust around lawful use of their data and service security is increased
- new and emerging technology changes the way government operates.
Three digital priorities will be embedded in service design, prioritisation and delivery.

<table>
<thead>
<tr>
<th>EXPERIMENT</th>
<th>START</th>
<th>CONTINUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Be bold - try new ways of delivering</strong></td>
<td><strong>Change the way we think about ICT and digital</strong></td>
<td><strong>Build on what we have to enhance our digital presence</strong></td>
</tr>
<tr>
<td>- Test the use of artificial intelligence (AI) to enhance service accessibility while maintaining algorithmic transparency</td>
<td>- Whole of government service architecture and governance</td>
<td>- Continue migration of transactional services to Service NSW</td>
</tr>
<tr>
<td>- Co-design of services, regulations and policies with customers</td>
<td>- Digital identity for business</td>
<td>- MyServiceNSW customer accounts</td>
</tr>
<tr>
<td>- Design services focussed on customer life events</td>
<td>- Develop whole of government approach to management of digital identity and personal information in alignment with community expectations and privacy law</td>
<td>- Enhance front line digital capabilities</td>
</tr>
<tr>
<td>- Multi-tiered Identity Management Framework</td>
<td>- Real time customer engagement and feedback solutions (Feedback Assist)</td>
<td></td>
</tr>
</tbody>
</table>

| DATA | | |
| - Use predictive self-learning tools to measure data quality | - Enhance and clarify data quality standards | - Building tools and services for sharing and analysis of data by citizens, industry and government |
| - Benchmark data quality across the sector | - Establishment of the NSW Data Ecosystem to optimise lawful data sharing and use | - Continue to open up government data while continuing to protect personal and health information |
| | - Visualisation and mapping tools across all clusters | |
| | - Enhance quality of data assets such as the single cadastre and address data | |

| DigITAL oN THE INSIDE | | |
| - Test AI/cognitive/machine learning for service improvement | - Digital by design all new, and significant review of existing government processes (records management, workflows, eInvoicing and correspondence) | - Modernisation and rationalisation of core operational systems |
| - Test use of bots to remove day to day pain points | - Embed agile approach to process and system re-design | - Elimination of paper based processes |
| - Full automation where appropriate | - Digital transformation of whole of government signature processes | |
| - Simplification of processes to eliminate duplication | | |
Four areas of work underpin the transformation agenda, and support key priorities.

<table>
<thead>
<tr>
<th>EXPERIMENT</th>
<th>START</th>
<th>CONTINUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be bold - try new ways of delivering</td>
<td>Change the way we think about ICT and digital</td>
<td>Build on what we have to enhance our digital presence</td>
</tr>
<tr>
<td>• Innovative partnerships with non-traditional suppliers to improve contestability and commissioning</td>
<td>• Agile, federated delivery model to surface innovation</td>
<td>• ICT Assurance Framework for value for money</td>
</tr>
<tr>
<td></td>
<td>• Proof of concept shared communications/data networks</td>
<td>• Telecommunications Reform</td>
</tr>
<tr>
<td></td>
<td>• Whole of government service-based integration approach</td>
<td>• Software procurement, service management reforms</td>
</tr>
<tr>
<td>TECHNOLOGY</td>
<td></td>
<td>• Complete the GovDC Strategy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Embed whole of government ID Hub</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Transition/replacement of legacy systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Non-negotiable security standards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improved response and risk management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Legislation that is digital by design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Removal of legislative barriers to digital government where relevant</td>
</tr>
<tr>
<td>CYBER SECURITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Use ethical hacker services to attempt to enter NSW Government to expose vulnerability</td>
<td>• Establish Government Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>• Conduct annual cyber event simulations to test NSW Government ability to respond and recover</td>
<td>• Whole of government capability</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Modernisation and capability assessment across whole of government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Strengthened collaboration with other jurisdictions to embed best practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Support for agile ways of working</td>
</tr>
<tr>
<td>LEGISLATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Modernisation and capability assessment across whole of government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Strengthened collaboration with other jurisdictions to embed best practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Incentivise digital transformation through agile funding models</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Modernisation and capability assessment across whole of government</td>
</tr>
<tr>
<td>DELIVERY CAPABILITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Strengthened collaboration with other jurisdictions to embed best practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Support for agile ways of working</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Create networks of excellence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Embed digital in leadership development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Whole of government collaboration tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Modernisation and capability assessment across whole of government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Strengthened collaboration with other jurisdictions to embed best practice</td>
</tr>
</tbody>
</table>
Placing the customer at the centre of what we do is critical to digital government transformation. Since its inception in 2013, Service NSW has simplified access to government services. It has expanded the reach of its digital services so that it now offers more than 970 different types of transactions online. As of May 2017, over 1.5 million customers have registered for a MyServiceNSW account, and over 19 million website visits and 850,000 app downloads have been recorded.

Customers who access online services are consistently more satisfied than those who have used other channels. There is a significant opportunity to redesign our services, from a customer perspective focussed on digital. Redesigning services is more than just increasing the number of services available online. An omni-channel approach to service delivery will provide more simple and seamless access for the citizen, removing the need to understand how government is structured or how it works internally.

The establishment of the Customer Service Commissioner has already brought customers into formulating policy to meet the needs of customers and businesses. Engagement with the Customer Service Commissioner will continue to inform the work priorities as part of this Strategy.

Customers who access online services are consistently more satisfied than those who have used other channels. There is a significant opportunity to redesign our services, from a customer perspective focussed on digital. Redesigning services is more than just increasing the number of services available online. An omni-channel approach to service delivery will provide more simple and seamless access for the citizen, removing the need to understand how government is structured or how it works internally.

The establishment of the Customer Service Commissioner has already brought customers into formulating policy to meet the needs of customers and businesses. Engagement with the Customer Service Commissioner will continue to inform the work priorities as part of this Strategy.

**DIGITAL STANDARD FOR CUSTOMER EXPERIENCE:**

- **Digital by default**
  Government services are digital by default

- **Designed around user needs**
  Agencies design policies and services based on identified customer needs and digital capability

- **Integrated and seamless**
  Agencies collaborate across the sector to design seamless and integrated services, using common standards and platforms where appropriate

- **Accessible**
  Services are accessible and easy to use for all customers and provide for differing levels of digital literacy
There is no asset more critical than usable, accessible data that enables insights and informs decisions. The NSW Government will unlock the full potential of the data it holds while respecting privacy requirements, and use it to drive data-informed change in legislation, policies and processes.

In doing so, important protections relating to privacy and security of customer data will be strengthened. Robust data governance arrangements will continue to be developed.

Data will be made available to the people of NSW, while respecting the privacy and confidentiality of those to whom the data relates. As the digital economy continues to grow in NSW, the government is opening up the data it holds for use and application by industry, the community and research sector in line with exclusionary and de-identification guidelines.

Tools and services for the sharing and analysis of data will be made available to enable innovation by customers, industry and government. A data ecosystem will be established to optimise the sharing and use of data across government.

**DIGITAL STANDARD FOR DATA:**

- **Data-informed decision-making**
  All investment decisions, policies and service delivery models are informed by data insights

- **Open**
  Data is open, collected and shared in a digital format wherever possible. Agencies open their data in a format that can be readily used

- **Real time and spatial**
  Data is published in real time where possible. Visualisation and mapping tools ensure accessible and actionable insights from data

- **Data sharing**
  Legislative provisions for data sharing will be observed, as will protections around personal and health information
While digital transformation is ultimately focused on delivering more customer-centric services, this requires transformation of the operations of government itself. We will embed a digital by design approach and simplify and streamline the way work is executed across government.

The shift away from manual tasks to automated, digitally enabled ways of working continues across the private and government sectors. Digital transactions and processes are generally faster (often real time), more convenient and more efficient than traditional ones.

Moving away from paper-based and face to face processes provides the opportunity to increase productivity and efficiencies.

We will transform the way we work across government to ensure that what we do is smart, simple and seamless.

Digital transformation within government will also require mechanisms to identify systemic business problems (that fall under the IAF threshold). We will test new and emerging technologies, build prototypes, iterate, and showcase success across the sector for others to take up.

**DIGITAL STANDARD FOR DIGITAL ON THE INSIDE:**

- **User-centric**
  Government processes are designed around the needs of users, which can include internal stakeholders and employees, by applying Design Thinking and similar techniques.

- **Eliminate duplication and streamline processes**
  Business processes are streamlined across agencies and within clusters to eliminate duplication, and whole of government platforms are used to increase efficiency.

- **Automated**
  Job tasks which are routine, repetitive, structured and rules-based are fully automated (where appropriate) to free up time for higher-value tasks.
DIGITAL ENABLERS

TECHNOLOGY

Technology is a key enabler of digital government. We will become a more efficient operator and provider of better services to customers by making smarter technology investments; leveraging industry services and cloud platforms; facilitating sharing and integration across agency systems; and promoting a user-centric vision of technology.

Since 2012, a number of reforms have been implemented to improve the value that the NSW government derives from its technology investments. These reforms have focussed on simplifying the procurement system and increasing contestability by encouraging a greater number of suppliers and in particular, small and medium enterprises (SMEs).

The next stage of transformation will also focus on improving collaboration across clusters to drive whole of government value.

This will mean striking the right balance between enabling delivery teams close to the customer to work in a way that best meets those customer needs, and working more effectively across agencies to optimise technology investments, leverage government buying capacity, and share technical solutions to common problems.

Consistency and cost savings can be realised by partnering across clusters and refocussing technology investment approaches and decisions to start with a whole of government perspective every time.

The government’s procurement contracting framework will continue to evolve to reflect broader market shifts towards as-a-service and cloud services, and build strategic partnerships with non-traditional suppliers to foster innovation.

DIGITAL STANDARD FOR TECHNOLOGY:

- **Value for money**
  Technology investments are optimised as a portfolio to deliver best value for NSW, on time and within budget

- **Integrated**
  Technology solutions are mobile and interoperable, supporting multi-channel access to a responsive NSW Government

- **Procurement partnerships**
  Agencies commit to partnering with industry to develop fit for purpose solutions, and leverage whole of government buying power
Effective cyber security, robust risk controls and strong information management are central to maintaining the confidence and trust of our customers. From individual transactions to critical information sharing across agencies, a strong framework for managing information security and cyber risks is a pre-requisite for any modern digital government.

NSW is working with the Australian Government to further develop our cyber security capabilities through a national cyber security centre. We will work with international and state-based partners, including the private sector, to promote and grow cyber security capabilities here in NSW, ensuring our customers and public sector employees are aware of the risks and can take action to minimise them.

DIGITAL STANDARD FOR CYBER SECURITY:

- **Secure**
  Government systems are secure and resilient to evolving cyber incidents. Non-negotiable minimum security standards are applied across the sector.

- **Integrated**
  Agencies coordinate and collaborate with other agencies and jurisdictions within a federated framework.

- **Responsive**
  Strong and agile response teams are embedded across the sector to ensure timely response to cyber threats and incidents. Agency capability is lifted through training and support.
Digital transformation needs to be supported by legislation and regulation that enables innovation to flourish, while ensuring that the appropriate legal and regulatory safeguards are in place to manage the potential risks of digital technology, and protect privacy. Effective legislative and regulatory frameworks are critical to enabling digital identity management; simplifying transactions; improving data collection and custodianship; and enabling the sharing of data to improve decision-making, policy development and service delivery.

As part of the digital transformation journey, there are three areas for the NSW government to focus on. First, existing legislative barriers will be removed where appropriate, respecting privacy considerations. In some cases this requires legislative amendment or clarification to enable the use of digital technology.

Second, frameworks will be established to support new legislation that is digital by design. Legislation that is fit for the digital age does not preclude emerging technology and new digital business models.

In its digital form, it is also easy to access and understand, in order to provide certainty to those who are subject to it. Regulations will also be able to be enforced through digital means.

Finally, existing legislation will be reviewed to support the release of and access to better quality data.

**DIGITAL STANDARD FOR LEGISLATION:**

- **Easy to use**
  It is easy to find out what obligations apply under relevant legislation or regulation

- **Certainty**
  Legislation is simple to interpret and accessible to the public

- **Smart and flexible**
  New legislation, as well as reviews of existing legislation, considers emerging technology and new digital business models, and enables digital compliance methods
The way we are organised and how we do business has a significant impact on our ability to deliver on the Digital Government Strategy. We will embrace more collaborative and agile ways of working that enable teams from across the sector to address our most complex problems, and build an organisational culture that fosters proactive behaviour and greater accountability.

This in turn relies on greater connectivity, flexibility and autonomy in the way we work.

As a digital government we also move towards managing investments as a portfolio to maximise the effective use of resources, and incentivises digital transformation through more agile funding models focusing on modular, program and project-based funding.

**DIGITAL STANDARD FOR DELIVERY CAPABILITY:**

- **Agile**
  Policy is designed in an interdisciplinary way to inform services built by product teams, using iterative and customer-centric methods

- **Governance**
  Digital investments optimised as a portfolio across the whole of government. Agencies provide timely reporting on initiatives to customers, improving transparency and accountability, and assuring customers of our commitment to outcomes

- **Capability**
  Leaders value continuous personal development of employees and support new ways of working to maximise potential; data insights inform business decisions
The Minister for Finance, Services and Property is the responsible Minister with carriage of this Strategy. The Strategy represents a first step in the development of whole of government and agency implementation plans that will ensure coordination in line with NSW digital government priorities and measure progress over time.

Progress towards digital government in NSW will be measured by a range of quantitative and qualitative measures, as well as drawing on a range of existing reporting mechanisms.

The office of the GCIDO will provide regular updates on progress of the Strategy through its existing requirement to report biannually to the Expenditure Review Committee.

The ICT and Digital Leadership Group, comprised of the Chief Information Officers from each cluster, will oversee the delivery of the Strategy and endorse the Digital Government Implementation Plans (DGIPs) and key initiatives, subject to the oversight of the Secretaries Board.

The Strategy, DGIPs and case studies of exemplar digital government projects will also be published on the digital.nsw.gov.au website. This will provide a public view of progress and key milestones in our digital transformation journey in NSW.
Smart, simple, seamless policies and services

www.digital.nsw.gov.au