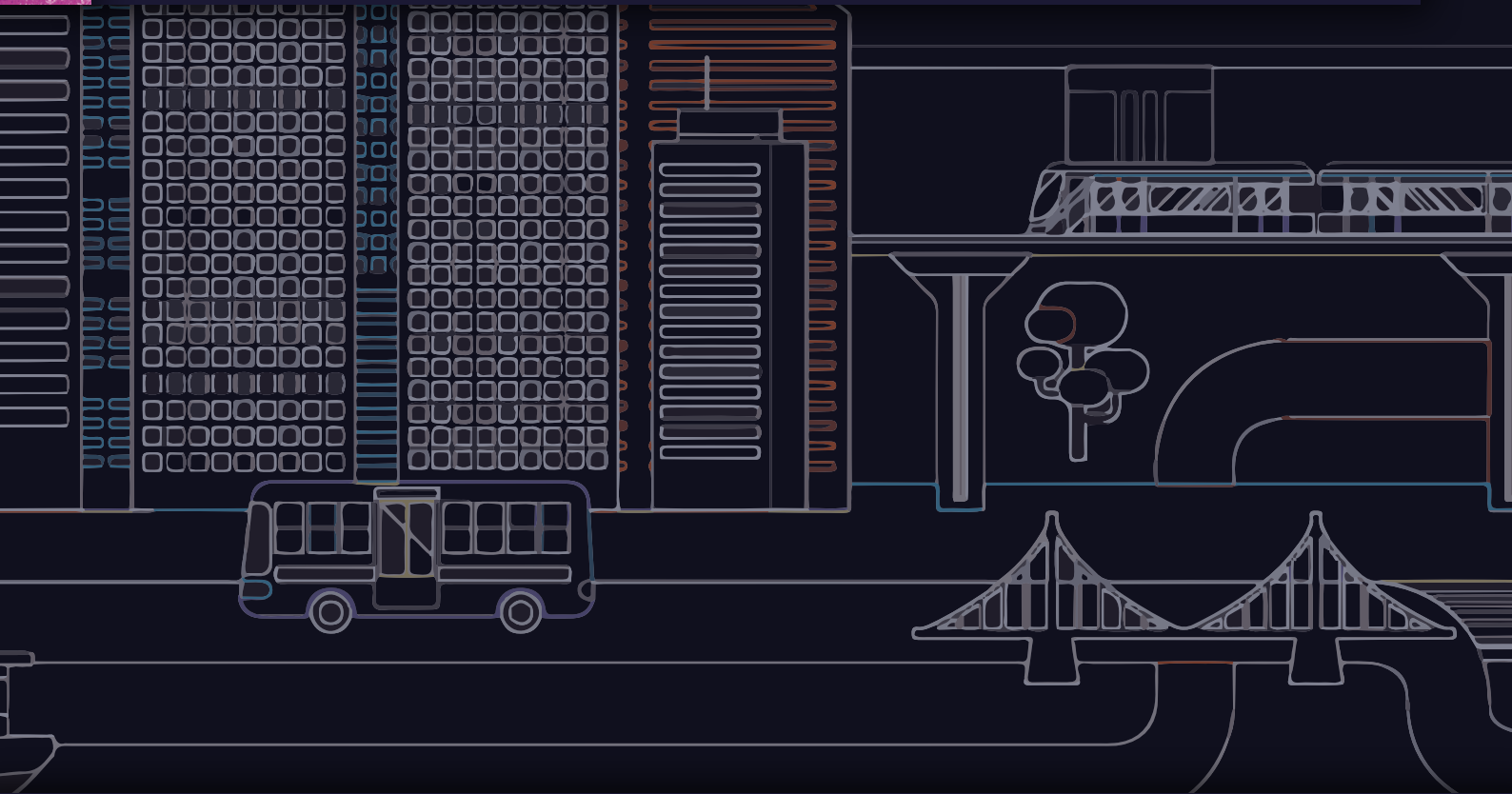


# Government 5.0

The future of public services



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Chair in  
Digital Economy.

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The Chair in Digital Economy, founded by QUT, Queensland Government, Brisbane Marketing, and PwC, provides industry-relevant, academically grounded research to help organisations reimagine their value in the digital economy.

### Disclaimer:

This publication does not necessarily reflect the views of the founding partners of the QUT Chair in Digital Economy, including PwC, Brisbane City Council, or the Queensland Government.

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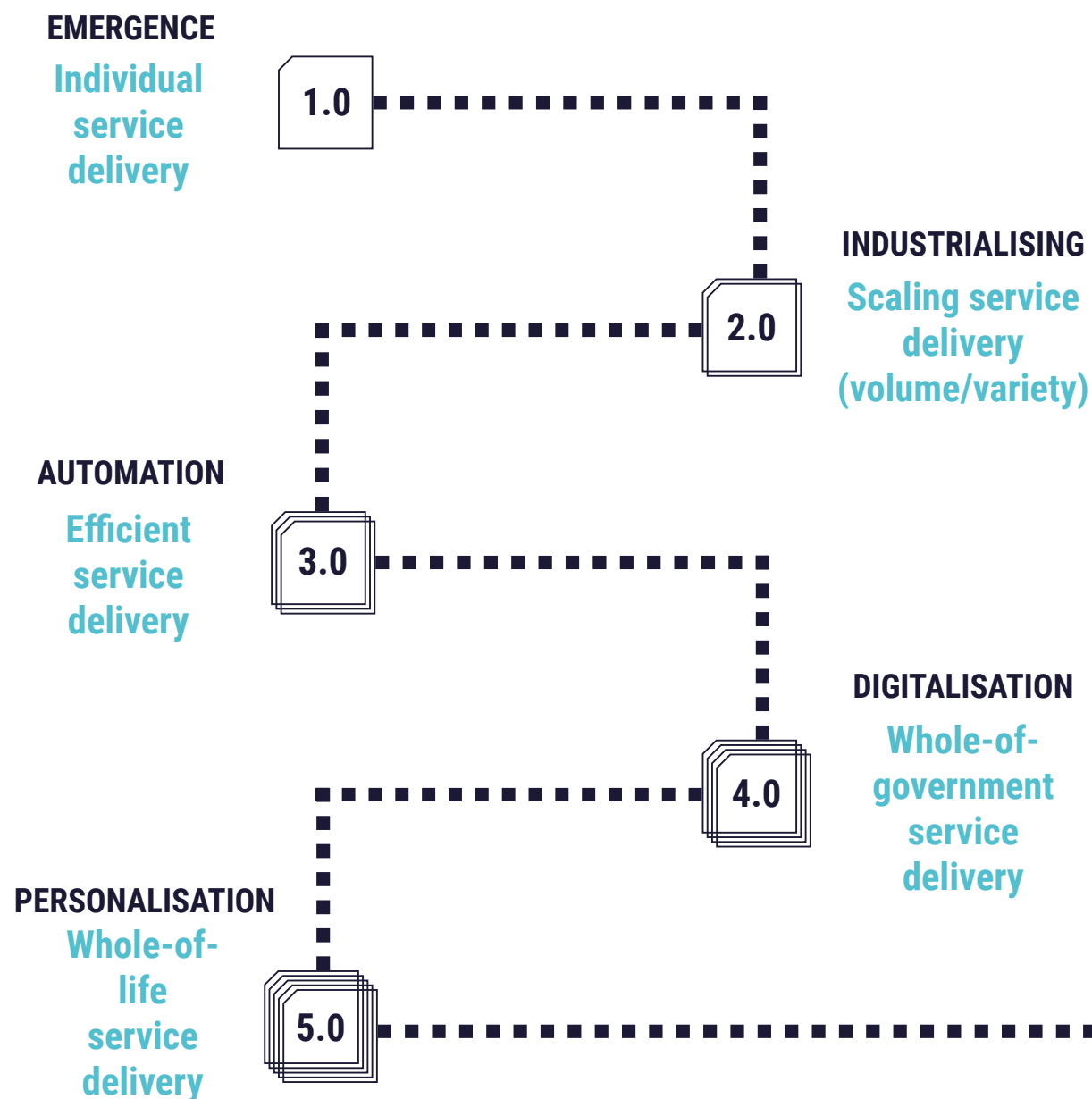
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# Government 5.0

In the public sector, the future of government services goes well beyond citizen centric services, or whole-of-government approaches to service delivery and gravitates toward whole-of-life service delivery. Understanding the citizen model, not through a government lens, but holistically, is the focus. In 5.0, public service providers are asking where they can fit in their customers’ lives, rather than the other way around of “where do customers fit in providers’ processes”. The focus is on genuinely understanding customers (not just citizens!) of the public sector, ensuring the wellbeing of the customers, and delivering seamless interactions with the public sector.

## The evolution of government services



## Major trends and recommended responses

  
**Digital Sanitisation**  
 Human face of the machine

  
**Demise of Industries**  
 Department of life events

  
**Digital Twinning**  
 Mass policy simulation

**SOCIAL TRENDS**

  
**Right to Explanation**  
 Human checksum

**BUSINESS TRENDS**

  
**Entropy on the Rise**  
 Loonshot incubation

**DIGITAL TRENDS**

  
**Trust Paradox**  
 Deliver on the ART of digital\*

\*ART of Digital: ASPIRATIONAL, RESPONSIBLE, TRUSTED

# Introduction

The digital transformation undertaken in the private sector has exceeded the pace of transformation of government-citizen service delivery and associated policymaking ([OECD OPSI and MBRCGI, 2019](#)). With increasing pressure to deliver solutions for complex social problems like climate change, poverty, migration, and inequality, and the decreasing economic resources, governments are increasingly expected to do more with less.

Public sector organisations have high potential for initiating and delivering transformational digital initiatives. The abundance of data, as well as experience in large scale transformational projects, should make digital transformation easy. However, there are challenges posed by large-scale digital transformation projects: a need for a holistic perspective, challenges in managing sensitive data, and a tendency to stick to well-known approaches rather than experimenting with new ones. Failing to overcome these challenges may lead to failed or misdirected digital transformation initiatives.

While some countries assess the success of technology through the lens of citizen wellbeing, such as [New Zealand's 2019 Wellbeing Budget](#), listing *Thriving in the Digital Age* as one of its five key areas (NZ Treasury, 2019), other countries are using technology for surveillance and control of its citizens (such as [China's social credit system](#)) (Xu & Xiao, 2018), which has seen an erosion of trust in institutions (Edelman, 2019). An absence of trust then has an impact on economic performance (Kamers, 2015).

Based on these challenges and changing social expectations of government services, opportunities emerge for whole-of-life service delivery, using methods such as:

- innovation sprints (a rapid method for developing solutions to wicked problems),
- citizen-controlled digital identity solutions (addressing some challenges of managing sensitive data),
- regulatory sandboxes (a place to allow for the testing of new approaches),
- rules as code (helping regain trust through equitable treatment), and
- new ways of measuring the impact of government services (to ensure the right direction of digital transformation).

In this report, we capture the evolution of government services and predict a possible future direction of their evolution. For simplicity, we capture these under labels “Government 1.0” to “Government 5.0”. We identify six major social, business, and digital trends shaping citizen experiences and service delivery of the future, and offer recommendations to address these trends to enable value resilience<sup>1</sup> in a Government 5.0 world.

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<sup>1</sup> The concept of revenue resilience, well-known in the business world, can be applied in government scenarios, with a focus on value resilience as well as relevance resilience, instead of pure revenue resilience.

# Evolution of government services

While the progression of public services seems to be moving at a slower pace than other sectors, it would be misleading to assume that government service delivery does not evolve. The QUT Chair in Digital Economy team (CDE) has analysed several sectors and digital economy phenomena to apply a “5.0” framework (see our reports on retail (Kowalkiewicz, Rosemann & Dootson, 2017), health (Kowalkiewicz, 2017a), and employment (Kowalkiewicz and Dootson, 2019)). Here, we apply this framework to the government sector.

in early 2019, the Reserve Bank of India launched an [ombudsman service for digital payments](#) (Bhakta, 2019), a move in response to a dramatic growth in cashless transactions in India, due to the introduction of Unified Payments Interface. Public service providers recognise the uniqueness of the services they can offer and start to focus on providing consistent access to them.

While selective, these individual services pave a way for new value propositions in the public

Evolution	1.0	2.0	3.0	4.0	5.0
Title	EMERGENCE	INDUSTRIALISING	AUTOMATION	DIGITALISATION	PERSONALISATION
Description	Individual service delivery	Scaling service delivery (volume/variety)	Efficient service delivery	Whole-of-government service delivery	Whole-of-Life service delivery
Focus	Service access	Value chain	Operating model	Business model	Citizen model
KPI	Quality	Equitability	Practicality	Connectivity	Desirability
Enablers	Service designers	Operating officers (volume) Service designers (variety)	Operating officers	Cross-department teams Whole-of-government experience designers	Cross-government teams and partnerships

## Government 1.0: Emergence

In Government 1.0, new individual services are being offered. This often follows a particular social need, triggered by social, business, or digital trends. For instance,

sector. **Service design** teams are important in deploying such new services, focusing on ensuring proper **access** to the services, through various channels, and **quality** of experience for service users.



## Government 2.0: Industrialising

In Government 2.0, the focus shifts toward creating an ecosystem of partners to allow for **scaling the volume and variety** of services. Scaling the volume allows the public sector to reach higher numbers of service users cost effectively. This may require partnering with other organisations to jointly deliver the services or developing efficient internal service delivery models (Deloitte, 2015). The [Digital Brisbane 2.0](#) strategy provides examples of a government scaling not only via partnerships to deliver services but also as advocate, facilitator, and funder, as well as regulator or provider (Brisbane Marketing, 2017). Scaling the variety of services follows a common lesson that the initial version of a service (developed in Government 1.0) might not be used by some citizen groups. Government 2.0's attention to **equitability** compels the providers to design additional varieties of a service to make it available to other potentially underserved groups.

Effective scaling of services, both in volume and variety, requires a focus on the **value chain**, as well as continued focus on service experience. **Service designers** remain critical in this stage to ensure scaling the variety, and **operating officers** join them in enabling volume scaling.

### Examples of QUT Chair in Digital Economy projects

#### Queensland Government, Department of Communities

##### Youth homelessness

This project explored the economic value of proactively addressing youth homelessness.

We designed a mobile-first platform that uses a chat-interface to quickly guide the user towards a set of services that best fit their need and eligibility and are located near them.

#### Queensland Government, One-Stop Shop Strategy and Implementation Office

##### Youth unemployment

This project sought to assist Queensland youth job seekers find information about the supports and services to help them find training and employment opportunities.

We designed a 'digital guidance counsellor' service.

## Government 3.0: Automation

As the volume and variety of service delivery reaches satisfactory levels, the focus shifts toward **efficiency of the delivery**. The **operating model** becomes the focus, and efficiency gains are sought, allowing for a more efficient allocation of public funds (Australian Productivity Commission and New Zealand Productivity Commission, 2019). **Practicality**, or ability to deliver services at a “reasonable” cost, becomes the KPI. The third stage of Government focuses on automation of its activities — seeking productivity gains, improving efficiency and throughput, and cutting cost and waste (Australian Productivity Commission and New Zealand Productivity Commission, 2019). This might lead to reduction in the delivery of some services developed in Government 2.0, due to purely economic considerations.

Ensuring efficiency of service delivery is the goal of **operating officers**, and Government 3.0 is driven by the ambition to create a very efficient, lean, public service delivery operation. The cost of service (the lower, the better) and the efficiency (the higher, the better) become the strategic differentiators in the third stage of evolution.

### Examples of QUT Chair in Digital Economy projects

#### Queensland State Archives

##### **Automating recordkeeping and appraisal**

This project sought to develop an automated solution to the manual, cumbersome process of recordkeeping and record appraisal.

#### Queensland Government, One-Stop Shop Strategy and Implementation Office

##### **Grant finder** **(Queensland Government, 2019)**

This project sought to improve awareness of and access to information about grants that were relevant to a specific business or sector.



## Government 4.0: Digitalisation

The fourth stage of evolution is digitalisation. Beyond simple automation (where some aspects of the Government are merely *digitised*), digitalisation explores completely new business models and new types of customer engagement (Kowalkiewicz, 2017b).

In Government 4.0, institutions focus on their **business model** and try to become attractive to their customers. Since the concept of value proposition is an important component of a business model, Government 4.0 initiatives introduce new and unique value propositions for customers. These novel value propositions are often only possible due to improvements achieved in Government 2.0 and 3.0. With new value propositions, new and better business models emerge in this stage. Service delivery shifts from individual departments to whole-of-government orchestrators.

The new strategic differentiator in Government 4.0 is the **connectivity** of services provided.

### Examples of QUT Chair in Digital Economy projects

#### Queensland Treasury, Office of State Revenue

##### Process transformation

This project sought to optimise the tax collection processes across revenue lines, offering a “single client view”, that connects departments, delivering a more proactive service.

#### Queensland State Archives

##### Hindsight-insight-foresight

This project sought to unlock the benefits of a digitised recordkeeping world, whereby records could offer more than hindsight, they also offer insight for daily business decisions and foresight for future decisions.

## Government 5.0: Personalisation

The fifth stage recognises the core role of citizens and flips the government's operational model. It is a mindset shift: from *citizen relationship management* to *citizen managed relationships*. Or, as the Future of Public Sector Outsourcing puts it, “from governing *for* citizens to governing *with* citizens” (ISS, 2014, p. 11). Such an approach is based on higher levels of citizen engagement and requires a shift in public service skills towards flexibility, co-creation, and co-venturing (PwC, 2013).

In the public sector, the Government 5.0 goes well beyond citizen centric services, or whole-of-government approaches to service delivery and gravitates toward whole-of-life service delivery. Understanding the **citizen model**, not through a government lens, but holistically, is the focus. In 5.0, public service providers are asking where they can fit into their customers' lives, rather than the other way around of “*where do citizens fit in providers' processes?*”.

The strategic attention introduced in Government 5.0 is **desirability**, expressed as focus on ensuring the wellbeing of the customers and seamless interactions with the public sector. Desirability from design thinking asks strategic questions, such as: will the solution fill a need, fit into people's lives, appeal to them, and will they want it? (Lamp, 2014).

**Government 5.0 cannot be achieved by individual institutions** (departments or government levels) but can only result from overcoming the barriers between them. Cross-government teams, and partnerships with

other participants in the ecosystem that impact citizens' lives, are critical. Participants of the ecosystem will move away from just delivering services, to maintaining lifelong partnerships with citizens, where government interventions are an exception rather than the norm.

### Examples of QUT Chair in Digital Economy projects

#### Queensland Government, Department of Science, Information Technology, and Innovation

##### Opening a café

This project sought to create a virtual assistant to proactively deliver relevant, timely information surrounding timeframe, steps to take and costs for starting and running a café, using an easy to understand language.



This could be you!

# The six trends impacting Government 5.0

In our research we have observed six social, business, and digital trends impacting the evolution of public services in Government 5.0. The trends apply either to citizen experience—outside-in perspective—or to service delivery—inside-out perspective. In this section we explain each of the six trends, and since they apply in other sectors too, we translate them to the government context before highlighting what needs to be done. We also suggest some questions for you to consider when addressing these trends in your organisation.

## SOCIAL TRENDS

Social trends encompass **changing citizen behaviour** and the way communities are shaping the “why”, “how” and “what” of government services.

## BUSINESS TRENDS

Business trends capture the shifts in **how business practice is developing, delivering value for customers**, and addressing risks and opportunities in the market.

## DIGITAL TRENDS

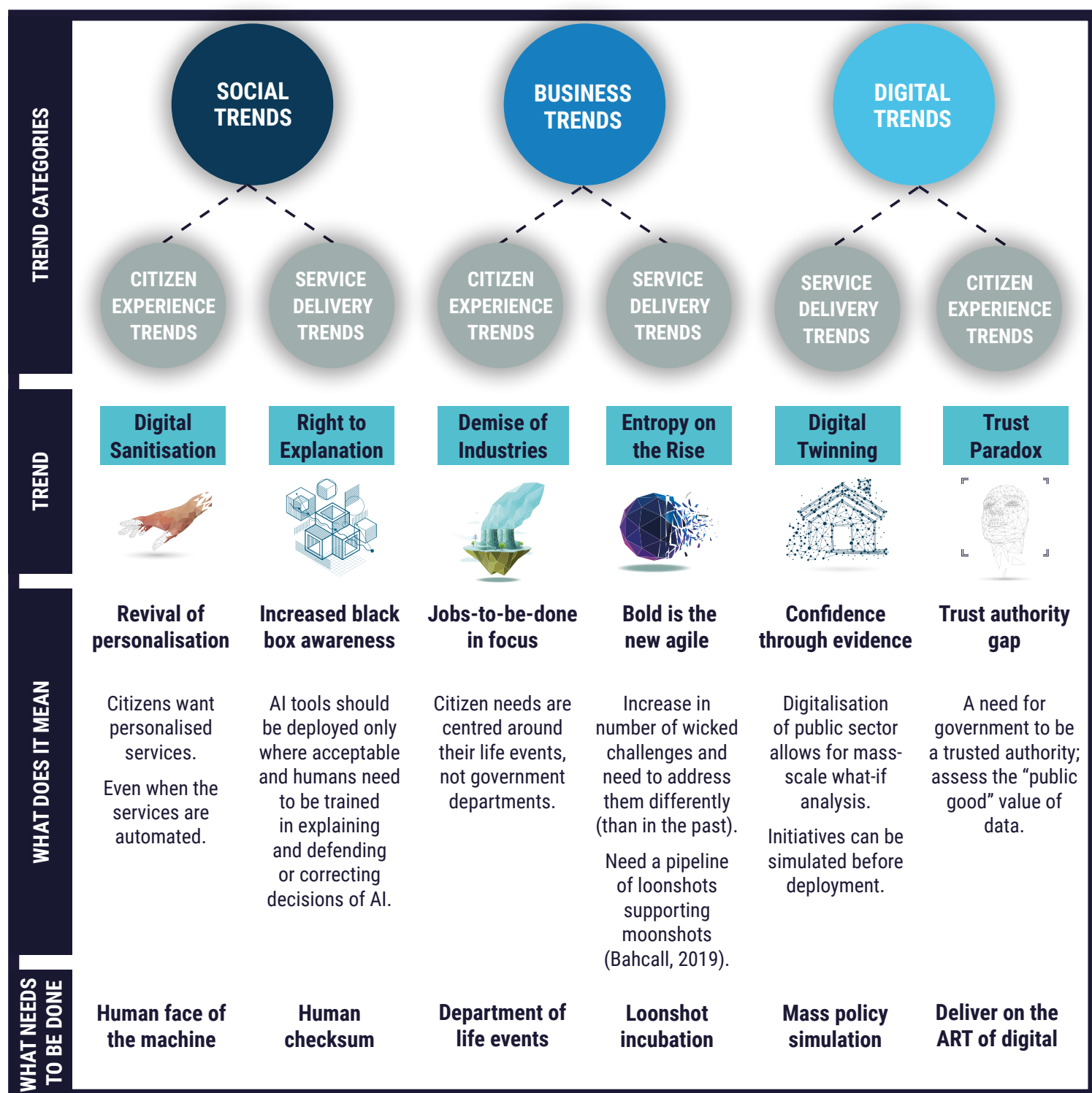
Digital trends capture the way in which **technology and associated capabilities are evolving**, including the changing ways in which we create, store, use, manage, and secure information.

Citizen experience trends highlight expectations of the users of public services, their changing attitudes and other **developments in social norms impacting the demand for public services**.

## CITIZEN EXPERIENCE TRENDS

Service delivery trends, in turn, reflect the impact on the supply—or delivery—of public services: **the changing regulatory environments, business environment evolution, and new developments in the technology space**.

## SERVICE DELIVERY TRENDS



## Digital sanitisation

### What is it?

The Government 3.0 and Government 4.0 focus on automation and digitalisation leads to a changed nature of service delivery. The use of artificial intelligence and robotics in services is an evolving field of research, exploring how these technologies in different service industries can impact customer experience,

engagement, value, and satisfaction (Huang & Rust, 2018; Wirtz et al., 2018). *Mobile first*, *online first*, and *digital first* approaches turn human-to-human interactions in service delivery from commonplace activities into exceptional cases. While the *technology first* developments are driven by well justified needs to improve practicality or connectivity of services, the goals of 4.0 and 5.0, they may also result in lower citizen satisfaction.

## What does it mean?

**Revival of personalisation.** Recent reports (Mulesoft, 2018) indicate that citizens are expecting a more “human touch” in delivery of services. Since most recent initiatives in public sector transformation focused on automation of service delivery, it becomes apparent that digital sanitisation – the removal of human interactions from services where they are not crucial – is not welcome by citizens. Other sectors, such as banking or insurance, have started to re-implement personalisation, bringing back the human touch where it is expected, with positive outcomes. The focus on delivering efficient, responsive, or proactive public services risks overlooking the role of the human touch. Government 5.0 needs to find the right balance between efficiency, effectiveness, and *affectiveness*.

## What needs to be done?

**Human face of the machine.** While implementing digital transformation initiatives, Government 5.0 leaders need to focus on ensuring that the technology “feels human”. More human-like characteristics, such as voice, ability to express emotions, eye-contact, will encourage people to engage longer with the technology (Holtgraves et al., 2007), building trust and desire for future interactions (Mann et al., 2015). Simply analysing transaction efficiency, number of clicks to reach the goal, or measuring conversion of service users is not enough to assess the value of digital public services. The analysis needs to also consider the sentiment of citizens, politeness of interactions, and emotional impact of these services. Where *affectiveness* of services is vital, but technology does not allow for

achieving it, humans may need to be re-introduced in service delivery: either as sole providers or supporting the technology to provide the “human face of the machine”.

## Questions to think about for Government 5.0 leaders

- Can you augment your digital services with human interactions? (for instance, chatbot interactions observed and enhanced by real humans)
- Can you augment your human-delivered services with digital support? (for instance, call centre workers teaming up with voice processing algorithms providing relevant data)
- Do you measure *affectiveness* of your services (as opposed to their efficiency and effectiveness)?

## Right to explanation

### What is it?

Artificial intelligence algorithms are increasingly being used to support and—in some cases—perform government decision-making. In response to this use, several governments introduced regulations aimed at ensuring the *right to explanation* for citizens. The right to explanation means that whenever a decision is made by an algorithm, the subjects of the decision have the right to request a full justification for that decision. Traditionally, if a government decision challenged a citizen’s fundamental rights, citizens are owed notice and a chance to be heard to contest those decisions, under the principles of natural justice (Hogan-Doran, 2017, p. 2). Where a decision cannot be explained, “public law’s



mandates of transparency, fairness, and accuracy” cannot be guaranteed (Hogan-Doran, 2017, p. 2). This becomes problematic for assessing whether the legislation a government organisation operates under has been executed appropriately. For Government 5.0, fully focusing on personalisation and desirability means there is simply no place for “[black box](#)” decision making (Rao & Golbin, 2018). Providing explanations of algorithm-made decisions is an important capability to be developed.

## What does it mean?

**Increased black box awareness.** Public sector organisations need to implement clear rules for application of algorithms, and especially black-box algorithms, in decision making. Where black-box algorithms are deployed, they either need to be deployed in scenarios where explanation is not expected to be required, or where it is possible for humans to provide satisfactory explanations of the output of the algorithms. “The governance of technology needs as much new thinking, energy, and investment as technological innovation does” (Bernholz, 2019, p. 10).

As more government organisations use automated tools for decisions about welfare, tax, and health, staff need to be able to explain and defend, or correct those decisions. Centerlink’s [robodebt](#) and the [ATO case](#) offer high profile examples of what can go wrong (Huggins, 2019), with potential flow-on consequences for public trust and confidence in government decision making (Huggins, 2018). More needs to be done in the area of algorithmic accountability for these powerful tools to serve the public good (Caplan,

Donovan, Hanson, & Matthews, 2018).

## What needs to be done?

**Human checksum.** Just as computer systems have been used to verify and validate human actions, for instance book-keeping systems confirming the correctness of transactions entered, the public sector needs to implement the human checksum: individuals validating that decisions made by algorithms are appropriate. For more information about this concept, see: [The human checksum](#) (Kowalkiewicz, 2019).

**New T-shaped workforce capability.** A new workforce capability of T-shaped public servants, following the concept of [T-shaped people](#) (Yip, 2018) needs to be developed. T-shaped public servants possess a depth of skills and knowledge in at least one area but can collaborate with other experts outside their domain to translate their insights. This new capability will ensure that system, policy, and operational changes are understood, so if decisions are automated, the T-shaped public servants can interpret and explain the outputs.

## Questions to think about for Government 5.0 leaders

- Are you transparent in your processes, outputs and outcomes? If not, can they be explained if a citizen requests it?
- Are the appropriate systems in place to ensure that the right people are being held accountable for actions taken and decisions made?
- Is your team able to work with algorithmic decision-makers to interpret and explain the outputs?



## Rules-as-code

Algorithmic decision-making is often implemented as a rules-as-code in practice. Here are examples of initiatives in this space.

- CSIRO Data61's [Regulation as a Platform project](#) – development of a logic system to turn human-readable text into machine-readable versions of current laws, acts, policies and other regulatory documents.
- [Mes Aides](#) – a social benefits simulator to inform French citizens on their eligibility for 32 social benefits and [LexImpact](#) – a tool to simulate the impact of tax reforms on the French government's budget and on the population's standard of living.
- Denmark's implementation of [mandatory principles](#) for digital-ready legislation.
- Apps and tools to help citizens and businesses understand their rights and obligations in relation to government services and benefits – for example the New Zealand [SmartStart](#) guide providing parents with step-by-step information and support in accessing family services and benefits.



For more information about rules as code activities, see: <https://medium.com/qut-cde/rules-as-code-7af29023db11>

## The demise of industries

### What is it?

Globally, we are observing continuous shifts within and across industries. Digital leaders of the markets continuously reimagine themselves—from information provision, to advertising; from hardware manufacturing to entertainment services; from media streaming to media production. It is no longer sustainable to look at one's organisation through an industry lens. *Industries are dead.* What lives

on is the organisations' focus on serving their customers to help them achieve their goals, as their needs evolve. This is an important observation for the public sector, which is largely unchanged when it comes to the types of services offered and its own perception of what is "right" for citizens.

### What does it mean?

**Jobs-to-be-done in focus.** Government 1.0, 2.0, and 3.0's approach to delivering required services (1.0) at scale (2.0) and efficiently

(3.0) missed an important consideration: *effective and efficient* or *seamless* have a different meaning for service customers and service suppliers. Government 4.0 introduced a *seamless* consideration but limited it to seamless interaction with other services of the same government. However, citizens expect to achieve specific goals in their lives, not interact with individual departments, however seamless. Government 5.0 turns the expectation that citizens will adapt their processes to government's (optimised and seamless) processes on its head. Government 5.0 adapts its processes to citizens' lives. Following the jobs-to-be-done approach (Christensen, Hall, Dillon & Duncan, 2016), public services need to focus on addressing the actual needs of the citizens. The biggest roadblock to achieving the goals of Government 5.0 is the current structure of most governments. *Departments are the biggest roadblocks to innovation.*

## What needs to be done?

**Department of Life Events.** Citizen needs are increasingly differential and complex (Bernholz, 2019). In our research, time and time again, we have seen that when true citizen centricity is introduced, individual departments are unable to comprehensively address a citizen need. Even cross-departmental or whole-of-government solutions fail, often due to inability of individual departments to collaborate effectively in responding to a citizen's life event, shifting the burden of orchestration to the citizen. Government 5.0 transformation leaders need to take on this responsibility. While recognising this is a major transformational initiative, we recommend redesigning departments around citizens' jobs

to be done (e.g. mobility). This will require development of a matrix organisational structure within the government and a highly efficient collaboration with other levels of government, leading to a whole-of-life, rather than whole-of-government approach.

## Questions to think about for Government 5.0 leaders

- What are the life events of citizens that traditional departments could be combined around to deliver value on?
- What other departments and government levels do your service customers need to interact with to achieve their goals?
- Does your department provide programmatic access (API) to your services, to allow for integration of your services with services of others?

## Entropy on the rise

### What is it?

Fuelled by the rapid pace of innovation, the complexity of the world that public sector institutions need to deal with is continuously increasing. For instance, in mobility space, gone are the days when cars could be classified by the number of cylinders (most electric cars do not have combustion engines). Recent disruptions to the market cannot be dealt with using the standard policymaking tools, and many digital transformation projects fail, [unable to deal with the complexity of the real-world](#) (Moore, 2013). According to World Economic Forum's "Our Shared Digital Future", only 1% of digital transformation efforts in 2018 were going to achieve their goals, with more than US\$1.2 trillion spent on these efforts (World

Economic Forum, 2018). More optimistic estimates suggest that [84% of organisations fail at digital transformation](#) (Rogers, 2016). The increasing complexity, or *rising entropy*, of the world is one of the reasons behind these disappointing success rates. However, it doesn't have to be. Embracing disorder – or entropy – could provide the resilience needed to respond to such circumstances (see [Entrepreneurial Entropy](#): Myers, 2017).

## What does it mean?

**Bold is the new agile.** If the failure rates remain so high, the only approach to increasing the number of successful initiatives is to accept the probability of success and increase the number of trials, to increase odds overall. Truly successful digital giants understand this and invest in large numbers of experiments. Take Google as an example. Google Wave, Google Buzz, Google+, Google Answers, Dodgeball, Orkut, Google Hangouts on Air, Google Notebook, Google Page Creator, Google Catalog Search, Google Glass and Google Video are just some of the many failed experiments. Yet, Google's parent company, Alphabet, remains one of the largest and most successful businesses in the world. Why are governments not as bold to test new ideas and quickly pull out if they are not successful? While the government has largely been responsible for the major innovations in society such as the internet, smartphone, and GPS tracking (Mazzucato, 2015), the entrepreneurial traits of government are usually constrained to domains like DARPA and NASA (Drake, 2017). Government 5.0 needs to bring back the bold approach.

## What needs to be done?

**Loonshot incubation.** Create structural change around the systems, designs, and incentives for innovation in your organisation (Bahcall, 2019). Government 5.0 leaders should support 'loonshots': "seemingly crazy ideas that are easily dismissed, but actually possess important potential" (ibid.). Many and frequent loonshots are required to address society's moonshots, which are goals to solve wicked problems such as poverty, hunger, education, inequality, justice, and well-being (United Nations, 2015), but also increase the number of successful ideas. The right culture of innovation will follow these structural changes, changing behaviour of those working in government.

**Co-create and crowdsource solutions with citizens.** Supporting citizen scientists to offer grassroots solutions to problems and opportunities that deliver public good, such as [Zika Mozzie Seeker](#), a technology solution that empowers thousands of Queenslanders to detect the presence of mosquitoes that can carry the Zika virus ([OECD OPSI and MBRCGL, 2019](#)). Designing co-creation processes and incentivising crowdsourcing initiatives will allow for greater citizen-driven engagement (Deloitte, 2015).

## Questions to think about for Government 5.0 leaders

- How can you design and implement institutional structures that incentivise innovation in the public sector?
- How do you moderate non-standard (or deviant, outlier) behaviour while fostering creativity and innovation?

- How can you convince decision-makers and citizens that loonshots are a wise way of spending taxpayers' money?

## Digital twinning

### What is it?

Industry 4.0 introduced and popularised the concept of digital twins. Digital twins replicate a physical entity in a digital way. They keep being updated to maintain their currency as the physical entity changes. For instance, buildings can have their digital twins, created based on blueprints, digital images, and continuously updated as data from sensors (temperature, humidity, people in the building) are captured. Large geo-spatial twins are being created at the state level (for instance in [New South Wales](#) (Digital NSW, 2019)), to capture and manage environmental information. This concept could be extended to include information about the economy, to create a true digital twin of a government's jurisdiction.

### What does it mean?

**Confidence through evidence.** A lot of public sector decisions, not unlike the private sector, are being made with very limited information. A properly designed and built system, like digital twins in the private sector, can give public servants access to most current and reliable information, improving the quality of decisions. Leaders of Government 5.0 can better understand the circumstances of the citizens and design and deliver services that follow the whole-of-life principle. The evidence provided by such a digital twin of the economy can help reach high confidence in decision making.

## What needs to be done?

**Mass policy simulation:** Government 5.0 leaders need to develop digital twins of their jurisdictions. These twins will allow them to not only access most current information. Well-designed digital twins will allow for asking what-if questions. Such simulations at scale will move away from risk assessments to opportunity assessments. Such twins need to go well beyond considering spatial and temporal information, like the [NSW digital twin proof of concept](#) (Crozier, 2019). Digital twins in Government 5.0 need to also include business data. Such systems will allow for testing policy decisions before they are implemented and allow policy makers to understand the full scope of impact of their decisions. In the legislation space, digital twins have the potential of supporting the implementation of “rules as code” initiatives, allowing for digitalisation of law.

### Questions to think about for Government 5.0 leaders

- Who, in public sector, should initiate the build of the digital twin of a jurisdiction?
- How can multiple levels of government and various departments access the digital twin without breaching any data access restrictions?
- What minimum level of detail in digital twin is acceptable for it to be useful for decision makers?

# The trust paradox

## What is it?

The age of anticipating digital pervasiveness is over (Bernholz, 2019). Citizens are now dependent on these systems to live, work, and play. Yet, a paradox emerges where on the one hand lots of data enable the delivery of better services, but on the other hand lots of data can be perceived as (and used for) spying on citizens. Society is facing a critical moment where trust in institutions, including government, is at an all-time low (Elderman, 2019). Digital was promoted to be “the great equaliser”, but unfortunately there are too many examples of digital technologies being used to further divide us.

## What does it mean?

**Trust authority gap.** Given the lack of trusted authorities in society, especially in the space of digital technologies, there is an urgent need for governments to be a trusted authority. Governments are among the few institutions that have the potential of being trusted to assess the *public good* value of data and algorithms before they are used.

There are many opportunities for the public sector to become the trusted authority. Society needs to have confidence that services delivered by governments will empower citizens to achieve their goals. There is a need to confirm that governments will serve society’s evolving and specific needs, and—a new opportunity that has emerged—that governments can lead society in the fair and transparent use of data. For all the trends outlined in this report to deliver value to citizens, Government 5.0 requires significant data collection, secure retention, and maintenance of privacy. Moving

into the future there is an expectation for government services to be delivered in a transparent way using data that citizens have consented to have used. Our report on Digital Identity 3.0 explored opportunities for citizens to be fully involved in managing data about them (Mertens and Rosemann, 2015).

## What needs to be done?

**Deliver on the ART of Digital.** Find a balance between being aspirational, delivering grand ideas and innovation solutions that are also responsible and trusted; see our report on the ART of Digital (Rosemann and Kowalkiewicz, 2018). One such focus should be on accessible-by-design services, to avoid high profile failures like [EFTPOS machines inaccessible for the blind](#) (Farrell, 2019). Another area warranting focus is in the collection, retention, analysis, and use of citizen data. Taking lessons from private sector technologies used by Snapchat and [ProtonMail](#) (Raphael, 2019), or the U.S. National Science Foundation funded initiative [Vanish](#) (Vanish, 2019), explore the possibility of “self-destructing data”. Citizens could provide data to organisations to access services and can choose for it to self-destruct to maintain privacy and security.

## Questions to think about for Government 5.0 leaders

- How are today’s decisions about data regulation and governance going to shape civil society in the coming decades?
- How are citizens being included in these policy decisions?
- Does your institution focus only on being trusted, or also explores opportunities to be responsible and aspirational?



## **Strategic, structural, and operational drivers**

There are several strategic, structural, and operational drivers for implementing public services in Government 5.0. Consider the follow questions posed by PwC:

### **Strategic questions - “Why do we do this?”**

- Is the activity essential to meet government priorities?
- Does the government need to fund this activity?
- Does the activity provide substantial economic value?

This might include looking at options for the public to do more for themselves as well as the public sector stopping doing things completely.

### **Structural questions - “By whom and for whom?”**

- Can the activity be targeted to those most in need?
- Can local bodies as opposed to central or federal government provide the activity?
- Can the activity be provided by a non-state provider or by citizens, wholly or in partnership?
- Can non-state providers be paid to carry out the activity according to the results they achieve – payment by results?

This might also include looking to provide many more services online or through other cheaper delivery channels shared across public organisations.

### **Operational questions - “How can we do this?”**

- How can the activity be provided at lower cost?
- How can the activity be provided more effectively?

This might include reducing spending through outsourcing, standardising, simplifying and sharing routine services and boosting staff productivity.

(Source: [PwC, 2013](#), p. 32)



## Conclusion

Transformation fatigue and change fatigue need to be language of the past. Changes in societal expectations, technologies, and business will never be this slow again. As a leader of Government 5.0, you need to take leadership to change the mindset of staff to one that embraces iterative innovation, loonshots, policy simulations, and building T-shaped capabilities. Foster responsible, trusted, and explainable service delivery that is personal, affective, and co-created. Together, these provide the foundation for whole-of-life service delivery for citizens in Government 5.0.

There are many exciting opportunities ahead for governments to meet the changing demands of citizens in a new era of public service. It is critical that organisations large and small rise to meet these innovation challenges to ensure they capitalise on the major trends rather than getting left behind and failing to deliver what society needs.

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