

Strengthening Digital Government

The rapid integration of digital technologies is transforming today's societies and economies. An important aspect of this is the change in citizens' and businesses' expectations about their interaction with governments. But meeting these new expectations poses a great challenge for governments. Indeed, it requires the digital transformation of governments themselves; failing to adapt could undermine the social contract.

To rise to this challenge, governments need to change the way they work and organise themselves, and ensure they have the skill sets needed to use new digital tools, work collaboratively and engage with citizens and businesses. This will require, among others, creating or updating relevant legal, regulatory and governance frameworks.

Key recommendations

- **Develop a digital government strategy**, complemented by a plan of action and an impact assessment instrument. The strategy should indicate expected outputs, outcomes and impacts, and should be formulated with the involvement of public sector organisations across all levels of government and consulting external stakeholders.
- **Define a clear governance framework for digital government** providing a high-level political mandate, powers and resources to the public sector organisation responsible to steer the design and co-ordinate the implementation of the digital government strategy across the public sector.
- **Update the legal and regulatory frameworks** in order to safeguard citizens' digital rights and incorporate the potential implications of increasing use of emerging technologies and data into existing legal safeguards.
- **Invest, or continue to invest, in the development of important key digital enablers** (e.g. digital identity, shared data services, shared business processes) and provide incentives for their use across the public sector.
- **Focus on developing digital and data-related skills** in the public sector, creating profiles and career paths based on forecasted needs, and providing programmes for training and retraining of civil servants.
- **Promote and enforce the adoption of digital standards and guidelines** to offer more coherent, interoperable and resilient digital government infrastructures (e.g. standardised model for ICT project management, standardised model for business cases, service standards, data interoperability).
- **Establish an integrated service design and delivery policy** to help public servants adopt user design (UX) approaches from beginning to end and develop services with agile methodologies, whilst safeguarding multi-channel accessibility.
- **Develop an overarching policy to support the development of a data-driven public sector**, considering actions to establish the necessary data governance that would simplify and enhance data sharing practices and actions, and promote the strategic use of data and emerging technologies across the public sector.
- **Establish an open government data strategy** (within the overarching data governance framework and policy), engaging external stakeholders, with clear actions to manage each stage of the data value chain and support the reuse of open government data for value creation.

The digital transformation has empowered users and providers and made it possible for them to choose how to access or deliver a service, how to communicate, when to engage on policy areas or issues, which social groups to join or business areas to invest in, and how to participate more actively in local, national or even global challenges (OECD, forthcoming a).

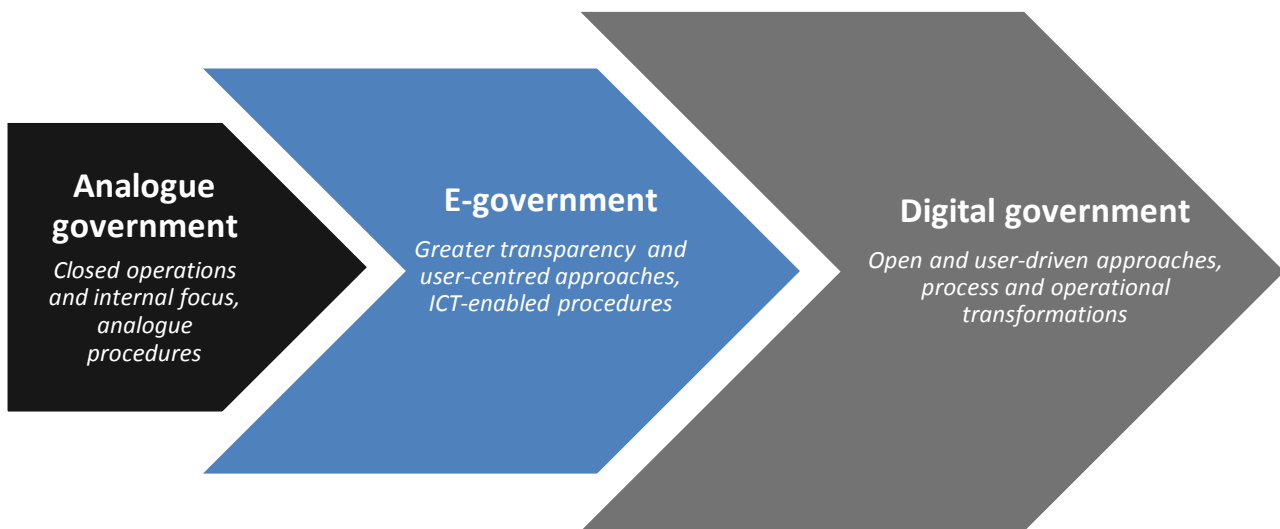
The greatest challenge for governments is to meet these new expectations. Governments are adapting public service delivery, policy making, engagement and collaboration approaches to the digital age (OECD, forthcoming a). New digitally enabled approaches, supported by the necessary changes in the public sector culture, need to be implemented if governments are to successfully meet citizens' and businesses' needs and demands.

This will in essence require the digital transformation of governments: a digital government is fundamental to serve digital societies and economies' needs (OECD, 2017a). Governments need to understand that becoming fully digital is no longer an option, but rather an imperative for their legitimacy as guardians of well-being and progress. The social contract all societies have with their respective states will depend on governments' ability to become digital (OECD, forthcoming b).

To become fully digital, governments need to adopt and use digital technologies and data as strategic components of their efforts to modernise the public sector. Digital technologies and data reuse need to be integrated in core processes and activities in order to establish new ways of working and promote greater openness and collaboration. This requires new governance and institutional frameworks and the development of new capabilities and skills able to sustain a digital public sector culture (OECD, forthcoming a; 2014).

Digital technologies should not just be used to digitise existing government processes and to offer public services online. Governments should prioritise using digital technologies and data to rethink the design and implementation processes of public services and policies in order to achieve more citizen-driven approaches. Ultimately, a transformed public governance should produce outcomes that best meet user needs (OECD, 2014).

Figure 1. Progression towards the digital transformation of governments



Source: Based on OECD (2014), "Recommendation of the Council on Digital Government Strategies", <https://www.oecd.org/gov/digital-government/Recommendation-digital-government-strategies.pdf>.

When integrating and using digital technologies to achieve a fully mature digital government, six main policy dimensions should be considered (see Box 1). If fully implemented, they should create a digital government environment well equipped to meet the needs of a digital society and economy (OECD, 2018a).

Box 1. The six dimensions of the OECD Digital Government Framework

1. From the digitisation of existing processes to **digital by design**:

Government approaches “digital” with an understanding of the strategic activities involved with successful and long-lasting transformation. They take into account the full potential of digital technologies and data from the outset in order to rethink, re-engineer and simplify government to deliver an efficient, sustainable and citizen-driven public sector, regardless of the channel used by the user.

2. From an information-centred government to a **data-driven** public sector:

Government recognises data as a strategic asset and foundational enabler for the public sector to work together and uses data to forecast needs, shape delivery, understand performance, and respond to change.

3. From closed processes and data to **open by default**:

Government is committed to disclosing data in open formats, collaborating across organisational boundaries and involving those outside of government in line with the principles of transparency, integrity, accountability and participation that underpin digital ways of working and the *Recommendation of the Council on Open Government* (OECD, 2017b).

4. From a government-led to a **user-driven** administration, that is, one that is focused on user needs and citizens’ expectations:

Government adopts an approach to delivery characterised by an “open by default” culture and ambitions of “digital by design” to provide ways for citizens and businesses to communicate their needs and for government to include, and be led by, them when developing policies and public services.

5. From government as a service provider to **government as a platform** for public value co-creation:

Governments build supportive ecosystems that support and equip public servants to design effective policy and deliver quality services. That ecosystem enables collaboration with and between citizens, businesses, civil society and others to harness their creativity, knowledge and skills in addressing challenges facing a country.

6. From reactive to **proactive** policy making and service delivery:

Governments reflecting these five dimensions can anticipate, and rapidly respond to, the needs of their citizens before a request is made. They also proactively release data as open data rather than reacting to a request for access to public sector information. Transformed, proactive, government allows problems to be addressed from end to end rather than the otherwise piecemeal and reactive digitisation of component parts.

Source: OECD (2018a), *Digital Government Review of Brazil: Towards the Digital Transformation of the Public Sector*, <https://doi.org/10.1787/9789264307636-en>, based on the OECD (forthcoming c), *The Digital Government Framework*.

Better public services through digital government

Changes in public service delivery are one of the main areas of citizens’ rising expectations of government. Based on the new customised service delivery models of private digital firms such as Uber, Airbnb, Facebook or Amazon, citizens expect similar experiences with public services in terms of usability, accessibility, friendliness, convenience and effectiveness. Citizens expect governments to offer public services that are designed with a user-driven perspective and adaptable to different user profiles (OECD, 2017a).

Embracing and implementing user-driven approaches in the design and delivery of public services is becoming one of the major priorities of governments. To safeguard public trust and social well-being, digital technologies and data reuse should not be seen as ends in themselves, but rather as means to transforming and enhancing public service delivery to meet user needs and expectations (OECD, forthcoming b). Digital tools should enable users to express their needs and public sector organisations to test ways to best identify and meet these needs.

The successful implementation of user-driven approaches to public service delivery will first require a change in public sector culture. Indeed, the digital age has brought forth the quest and desire for greater public engagement and spaces for collaboration in our societies and economies. The digital era can thus be characterised as the era of collaboration and networked societies (OECD, forthcoming c). Firms collaborate with their users to optimise services,

civil society organisations collaborate with citizens to address public issues and individuals collaborate with other individuals to share their goods and offer services in what is known as the “shared economy”.

If governments are to become user-driven, they will need to create a culture of collaboration across the public sector, taking a holistic and system-oriented approach to anticipating and identifying policy issues and finding solutions to address them. The bureaucratic, silo-based culture characterising many public sector organisations’ service delivery practices needs to be replaced if governments are to move towards user-driven approaches. (OECD, forthcoming c; 2017a). Governments will need to instil a culture of collaboration with whole-of-government efforts to share data and address common challenges. Public servants will need to be attracted, trained or retrained with the skills needed to adopt openness, collaboration and “share by default” approaches while using digital technologies and data to deliver public services.

Governments need to invest in creating the right environment for public sectors that can operate in the digital age. This implies supporting the professionalisation of digital career paths across public sectors and the development of an advanced civil service culture that uses digital technologies to engage with users and place their needs at the centre of its activities. This will require structures to promote awareness of the opportunities and benefits of digital technologies and data reuse, and to equip civil servants with the necessary skills. If the digital transformation of the public sector is to successfully lead to user-driven services, it will have to be associated with a transformed and empowered civil service workforce, enriched by a new mindset, new capabilities and, above all, adequate leadership and digital skills (OECD, 2018a).

Moreover, developing a user-driven approach to public service design and delivery will require the implementation and adoption of key digital enablers allowing public sector organisations to integrate data, processes and tasks when necessary, to collaborate through shared tools, and to offer public services that are more usable, convenient and accessible. Such enablers include common digital identity mechanisms, shared data services based on a common data infrastructure and interoperability standards (OECD, 2018a; 2017a).

Governance, measurement and data

A strategic approach to digital transformation requires first and foremost a digital government strategy that set out practical and strategic steps for diffusing and using digital technologies for more collaborative, innovative and open governments. Such a strategy should go hand in hand with the right architecture for the use of data, an appropriate governance infrastructure to guide and integrate the use of digital technologies, and a valid measurement framework to assess government’s progress in becoming fully digital (OECD, forthcoming a). If these elements are not well established, despite strong political support, governments may fail in effecting a digital transformation of the public sector.

Governments need a proper governance framework and, in particular, the right institutional and legal set-ups to create a digital government environment. An institutional architecture is needed that cuts across silos and promotes sharing and collaboration. The institutional set-up should guarantee the right level of co-ordination across public sector organisations for a cohesive and integrated use of digital technologies and data (OECD, forthcoming d). This implies creating a specific public sector organisation capable of leading the digital government strategy and digital solutions deployment and ensuring cross-government co-ordination. Such a body needs to be empowered to define an overarching vision for the digital transformation of the public sector and to steer and co-ordinate actions in line with predefined objectives, holding other actors accountable if necessary (OECD, forthcoming a).

Legal frameworks also need to be updated to support the integration and adoption of digital technologies across the public sector and to respond to data sharing and reuse needs. Given the increasing use of data and emerging technologies such as artificial intelligence (AI), legal frameworks need to be updated be able to address issues around citizens’ digital rights and protection, such as the “Once Only Principle”, personal data protection or citizen consent models for personal data reuse (OECD forthcoming e; 2017a).

Funding models and ICT procurement approaches will need to be revisited. System-based rather than silo-driven choices require agile business case methodologies, innovative approaches to the commissioning of ICT goods and services, and agile project delivery models. The joint development and adoption of common key enablers across the public sector as ways to improve productivity and deliver better value, will demand co-funding instruments and strategies as well as commonly adopted methodologies to formulate value propositions (OECD, 2018a).

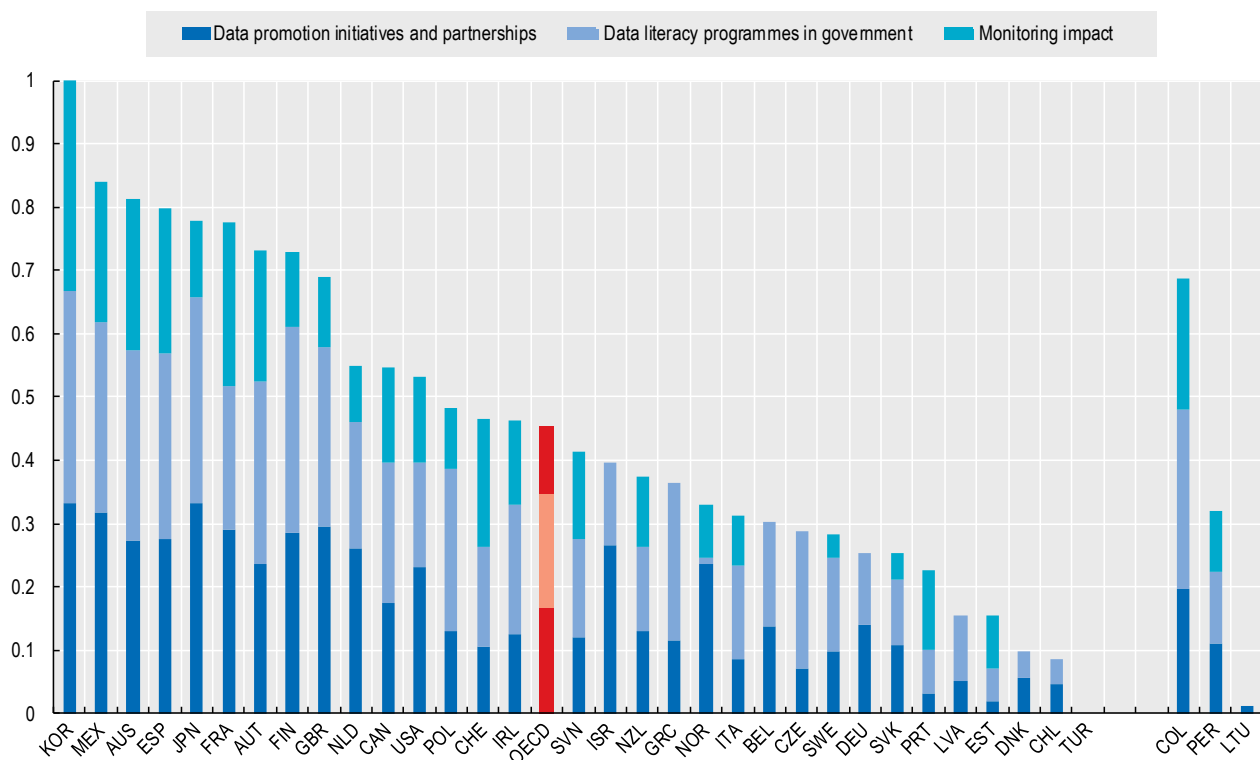
Data is at the core of the digitalisation process of the public sector. Data needs to be used as a strategic asset for policy making, service delivery and organisational management. This requires a data governance framework that optimises data availability, enhances data accessibility and supports data reuse within and outside the public sector

through better management of the entire data value chain, from collection through open data to reuse. Such a data governance framework will enable the use of data to transform the design, delivery and monitoring of public policies and services in a way that promotes well-being and public trust (OECD, forthcoming b; forthcoming d; 2017a).

The application of AI technologies can greatly enhance data as an asset. Automatic data processing and decision making can help governments better anticipate potential public issues and meet the needs of citizens more proactively. Governments will need to consider the many potential benefits of AI and adopt practical measures to test its relevance in government activities and processes. However, it will be important to design an appropriate governance framework, particularly in terms of ethics, accountability and transparency. To safeguard public trust, governments will need to guarantee the ethical use of data and AI, and design suitable transparency and accountability frameworks for automatic data processing and decision making (OECD, forthcoming e).

Governments will also need policies supporting data sharing and reuse for public value co-creation (Figure 2). Open government data is essential for designing user-driven services and policies, and for collaborating with external stakeholders to address challenges and promote a culture of openness (OECD, 2018b).

Figure 2. Pillar 3: Government support for data re-use



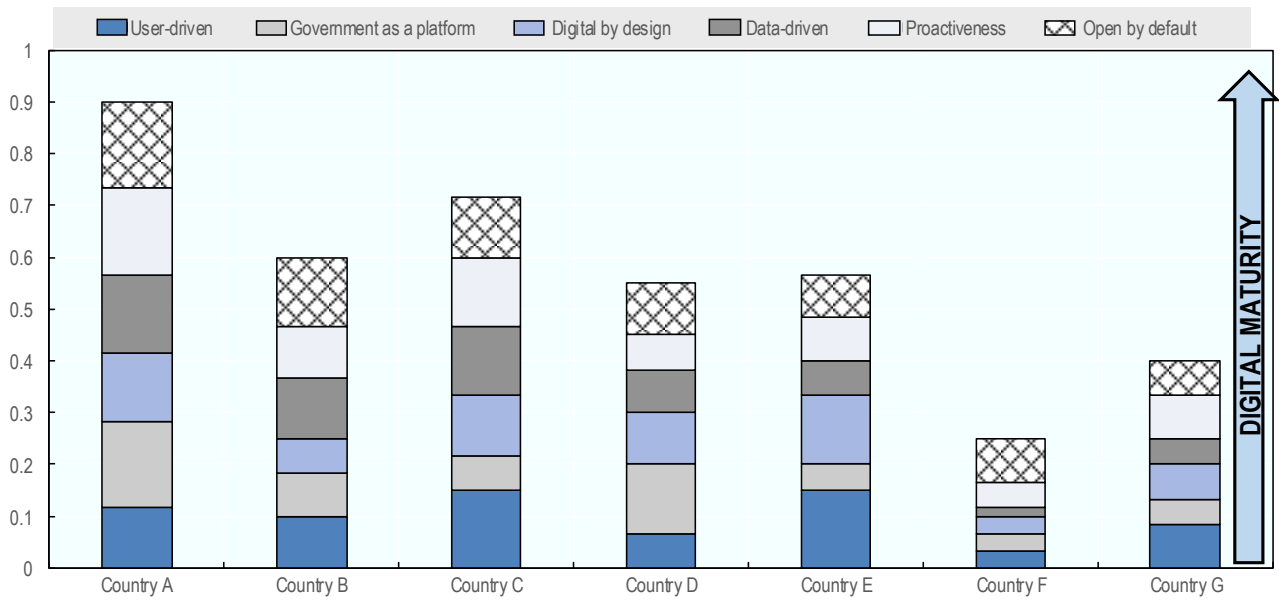
Source: OECD (2018b), *Open Government Data Report: Enhancing Policy Maturity for Sustainable Impact*, <https://doi.org/10.1787/9789264305847-en>.

To become “fully digital”, governments need indicators and regular monitoring to identify gaps and shortcomings in terms of the six dimensions of a digital government environment (Box 1). However, most current national and international digital government measurement instruments focus on measuring governments’ use of technology to digitise existing processes and services, and do not allow them to assess their progress towards a digitally transformed public sector.

There is therefore a need for a new framework to measure a digital government environment and assess countries’ progress towards it.

Under the leadership of the OECD Working Party of Senior Digital Government Officials, the OECD Digital Government Indicators Project (Figure 3) will attempt to measure the digital transformation of the public sector in terms of the six main dimensions of a digital government. Drawing upon the 2014 OECD *Recommendation of the Council on Digital Government Strategies*, the indicators will enable governments to assess their current level of maturity within each dimension, as well as evaluate their progresses in implementing the Recommendation.

Figure 3. OECD Digital Government Indicators Project (Pilot Version under Construction)



Further reading

OECD (forthcoming a), *The Digital Transformation of the Public Sector: Helping Governments Respond to the Needs of Networked Societies*, OECD Publishing, Paris.

OECD (forthcoming b), “The Impact of Digital Government on Citizen Well-Being”, *OECD Working Papers on Public Governance*, No. 32, OECD Publishing Paris.

OECD (forthcoming c), *The Digital Government Framework*, OECD Publishing, Paris.

OECD (forthcoming d), “A data-driven public sector: Enabling the strategic use of data for productive, inclusive and trustworthy governance”, *OECD Working Papers on Public Governance*, No. 33, OECD Publishing, Paris.

OECD (forthcoming e), “State of the Art on the use of Emerging Technologies in the Public Sector”, *OECD Working Paper on Public Governance*, No. 31, OECD Publishing, Paris.

OECD (2018a), *Digital Government Review of Brazil: Towards the Digital Transformation of the Public Sector*, OECD Digital Government Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264307636-en>.

OECD (2018b), *Open Government Data Report: Enhancing Policy Maturity for Sustainable Impact*, OECD Digital Government Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264305847-en>.

OECD (2017a), *Digital Government Review of Norway: Boosting the Digital Transformation of the Public Sector*, OECD Digital Government Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264279742-en>.

OECD (2017b), *Recommendation of the Council on Open Government*, OECD, Paris, <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0438>.

OECD (2014), *Recommendation of the Council on Digital Government Strategies*, OECD, Paris, www.oecd.org/gov/digital-government/Recommendation-digital-governmentstrategies.pdf (accessed 12 July 2018).

Digital technologies and large-scale data flows are fundamentally changing how people live and work, interact with one another, participate in the economy, and engage with the government. The OECD's **Going Digital** project examines how government policy can help ensure this digital transformation benefits all by increasing growth and improving well-being. Going Digital Policy Notes provide insights into key trends, opportunities and challenges, and the policy directions needed for making the most of digital transformation.

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