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DIGITAL GOVERNMENT MODEL

Source: USAID North Macedonia

Acknowledgements

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Background:

WHY USE A MODEL TO DESCRIBE DIGITAL GOVERNMENT?

USAID's [Digital Strategy](#), released in April 2020, charts an Agency-wide vision for equipping staff and partners to adapt development and humanitarian assistance to the opportunities and risks resulting from the proliferation of digital technology.

The role of digital technology across sectors has become undeniable in recent years and it has transformed most aspects of public and private life, including government. Technology has transformed the world's governments in three overarching ways: management of daily operations, delivery of services, and engagement with stakeholders including individuals, businesses, and civil society.

USAID and development partners are increasingly looking to support countries in the process of adopting technologies to create public value¹ — broadly referred to as **digital government**² — while mitigating and avoiding significant risks. These opportunities and challenges became even more stark in the face of the COVID-19 pandemic, which demonstrated the importance of digital government processes and tools. Governments with digital systems, processes, and infrastructure in place were able to quickly scale emergency response assistance, communications, and payments. At the same time, the pandemic has accelerated many risks associated with digital tools, as state and non-state actors are spreading mis- and disinformation, exploiting personal data, and using new technology to increase surveillance and social control.



What Is Digital Government?

*“Digital government” refers to the use of digital technologies as an integrated part of government strategies. It relies on leveraging a country’s digital ecosystem to engage government actors, non-governmental organizations, businesses, civil society, and individuals to support the production of and access to data, services, and content through interactions with the government. Digital government is divided into three categories of systems used to **manage** internal systems and processes, **deliver** government services, and **engage** with stakeholders.³*

- 1 Public value describes the value that an organization or activity contributes to society.
- 2 USAID uses the term *digital government* over the alternatives since it appears most frequently in the literature. Furthermore, as the [UN e-Government Development Index](#) states, in some cases, “reference is made to digital government as the next phase of e-government.” Thus, as this landscape aims to be comprehensive, the broader term was chosen.
- 3 Definition in the USAID Digital Ecosystem Framework. Originally adapted from OECD (2014), Recommendation of the Council on Digital Government Strategies, OECD/LEGAL/0406. Available at: <https://legalinstruments.oecd.org/en/instruments/OECDLEGAL-0406>.

This document provides a descriptive model as the basis for a shared understanding and vocabulary of the key components of digital government. It builds on, and is informed by, existing frameworks for digital or e-government.⁴ This model is not intended to be prescriptive, nor is it intended to replace existing reference frameworks and documents already in use by partners. The model is a living document intended to evolve over time and complements the strong base of existing work on digital development and governance (refer to the complementary resources box).

There is no common definition in the development community of digital government, sometimes referred to as e-government, nor is there agreement on its principal components⁵. This model describes what governments are currently investing in but does not describe what they should invest in. By suggesting a common vocabulary, this document sets the stage for future research and technical assistance across USAID on digital government under the Digital Strategy.

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Source: USAID

COMPLEMENTARY RESOURCES

[Principles for Digital Development](#)

[Country-specific digital strategies](#)

[USAID Democracy, Human Rights, and Governance Strategy](#)

[USAID Digital Strategy](#)

[USAID Digital Visions and Digital Strategy Action Plans](#)

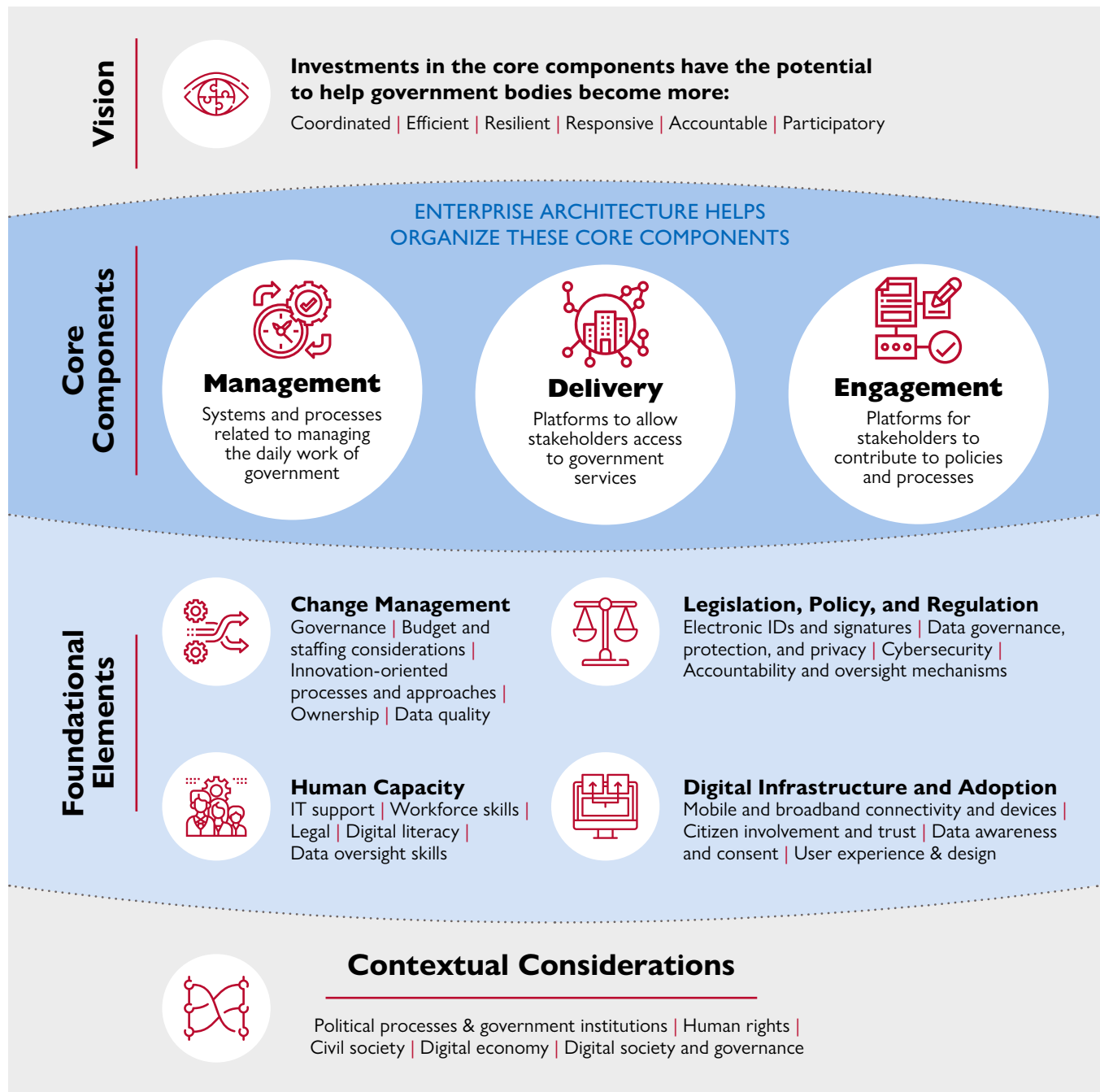
[USAID Digital Ecosystem Country Assessments \(DECAs\)](#)

4 Frameworks from the following organizations were reviewed in preparing this USAID model: OECD, International Telecommunications Union (ITU), PwC, UNDP, World Bank, Future State, Estonia e-Governance Academy (eGA), and Deloitte.

5 How Can Digital Government Advance Global Development and Democracy? <https://www.brookings.edu/blog/up-front/2021/12/15/how-can-digital-government-advance-global-development-and-democracy/>

The Model

Digital government is the use of digital technologies as an integrated part of government strategies. This includes three core components: i) management of internal government systems and processes; ii) delivery of government services; and iii) engagement with stakeholders. The core components rely on a set of foundational elements and contextual considerations that influence the success of digital government investments.⁶



⁶ All examples under the foundational elements (e.g., governance, ownership, data quality) are illustrative, and do not intend to provide an exhaustive list.

Vision:

WHAT CAN AND SHOULD DIGITAL GOVERNMENT STRATEGIES AND INVESTMENT AIM TO ACHIEVE?

Donors and partners invest substantial funding and human resources into digital government initiatives with the hope that such initiatives will improve governance and service delivery. However, “getting digital government right is not just about digital, it is also about companion analog processes, including strengthening government institutions and democratic norms and processes.”⁷

Vision



Investments in the core components have the potential to help government bodies become more:

Coordinated | Efficient | Resilient | Responsive | Accountable | Participatory

Investments in digital government *have the potential to* help government become more:

- **Coordinated**, by providing the systems and tools necessary for government bodies to work together across ministries and levels (e.g., national, provincial, municipal);
- **Efficient**, by achieving fiscal savings and allowing for innovation by decreasing the time spent on administration;
- **Resilient**, by supporting response to and recovery from natural disasters or other sudden social and economic changes;
- **Responsive**, by increasing the ability to anticipate and respond to a range of stakeholder needs, including from individuals, the private sector, and civil society actors;
- **Accountable**, by reducing opportunities for corruption and providing tools for collaborative, inclusive, accessible, and transparent policy design and service delivery; and
- **Participatory**, by creating systems and tools that enable citizens and civil society to engage with governments.

The extent to which these outcomes are possible depend largely on the enabling environment, which includes democratic norms and institutional capacity, among other factors. Above all, digital initiatives undertaken by a government are part of the broader political, economic, and social







Source: Panos

7 George Ingram and Meagan Dooley, “Digital government: Foundations for global development and democracy,” Center for Sustainable Development at Brookings, <https://www.brookings.edu/wp-content/uploads/2021/12/Digital-government.pdf>

context. The same digital investments that can support democratic institutions, rights-respecting government bodies, and open societies in one context can be used to suppress political dissent, quash individual freedoms and rights, and limit competition in the marketplace. When digital government investments are undertaken by authoritarian governments, in countries affected by democratic backsliding,⁸ or by malign actors, those investments can serve as agents of repression and restriction.

Investments in digital government have risks, and may intentionally or unintentionally increase:

-  **Repression**, by using technology to surveil, censor, and socially manipulate citizens.
-  **Restriction**, through internet shutdowns and rules that limit access to technology.
-  **Exclusion**, by shifting interaction with governments to digital channels that are difficult to use or not available to all segments of society.
-  **Technology overdependence** on brittle, inflexible, and overly complex systems, specific technology vendors, or specific platforms, hardware, and software.



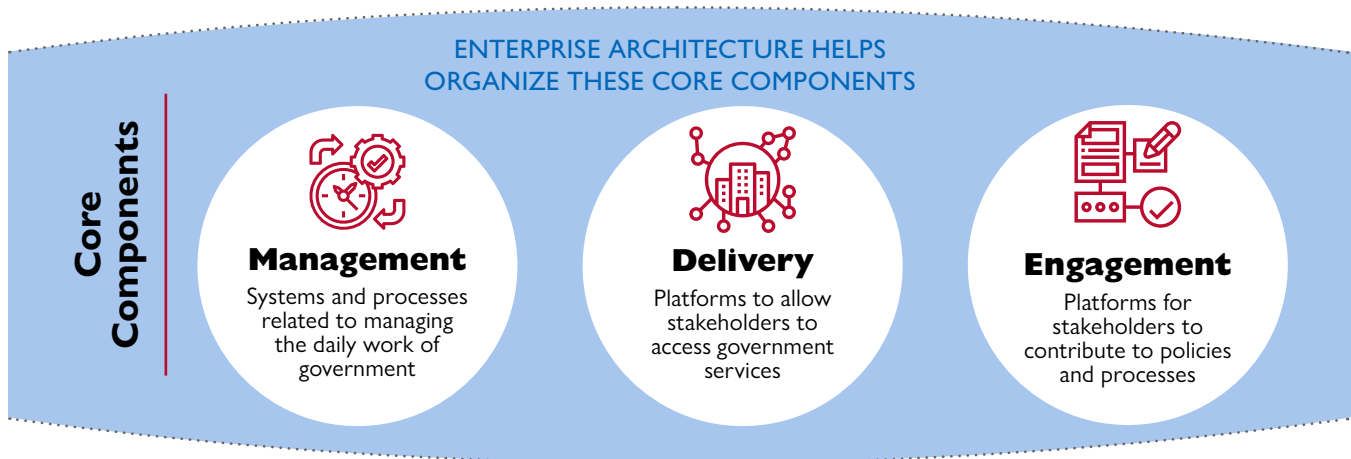
Source: USAID

8 For more information, refer to [V-Dem](#)

Core Components:

WHAT ARE THE TANGIBLE, VISIBLE COMPONENTS THAT COMPRISE DIGITAL GOVERNMENT?

USAID defines digital government broadly, looking across the functions of government in order to understand the impact digital tools have on the work of governments. This model uses three categories to describe the components of digital government: management, delivery, and engagement.



These three categories provide an expansive definition of how technology is changing government across its various functions. Regardless of category, digital government investments must be *sustainable*, supporting government policy planning, operations, and services with data and information over the long term, and *integrated* into broader efforts to improve governance.

The core components of digital government are:



Management, or e-administration, includes the digitalization⁹ of internal government processes and systems. Examples include:

- **Digital databases**, which store data in a digital format for easier reference and data analysis;
- **Data storage solutions** that allow for data to be securely stored and protected;
- **Management information systems (MIS)**, are information systems used for decision-making, and for the coordination, control, analysis, and visualization of information; and
- **E-procurement systems**, which enable a more efficient and transparent exchange of information and transactions between government and suppliers of goods and services.

⁹ Note this overview document uses the term *digitalization* rather than *digitization* intentionally. “Digitization” refers to a change from a paper-based process to digital process; “digitalization” refers to the full digital transformation of an organization, which can include entirely new processes and operations to fully adapt to digital technology.



Delivery, or e-service delivery, includes the digitalization of government service provision. Examples include:

- **Government portals**, including mobile apps, which provide access to information and services and the ability for stakeholders to carry out administrative procedures online;
- **Digital payments**, which can help governments improve public financial management and increase the efficiency and transparency of payments to and from government bodies; and
- **Digital identification (ID) systems**, which have the potential to provide the means for individuals to securely prove their identity and provide a unique ID number that facilitates data exchange across government systems. However, Digital ID systems must be secured; designed to be broadly inclusive and with meaningful consent processes; and implemented in countries with robust data protection, privacy regulations and policies, consistent enforcement of these regulations and policies, and independent oversight and grievance redress mechanism.¹⁰



Engagement, or e-participation, includes digital channels and platforms through which stakeholders can collaborate with and influence government agencies and policies. Examples include:

- **Citizen and voter education**, which are provided through accessible channels;
- **Government-supported incubation hubs**, which engage the private sector in creating tools and systems to meet the specific needs of governments;
- **Open data portals**, which allow citizens and businesses to use government data for innovation, services, and accountability;
- **Political participation mechanisms**, which offer stakeholders access to direct lines of communication with local representatives to raise questions and concerns, and which provide an easy way for representatives to respond; and
- **Citizen science initiatives**, whereby the public voluntarily participates in the scientific process to help address real-world problems.

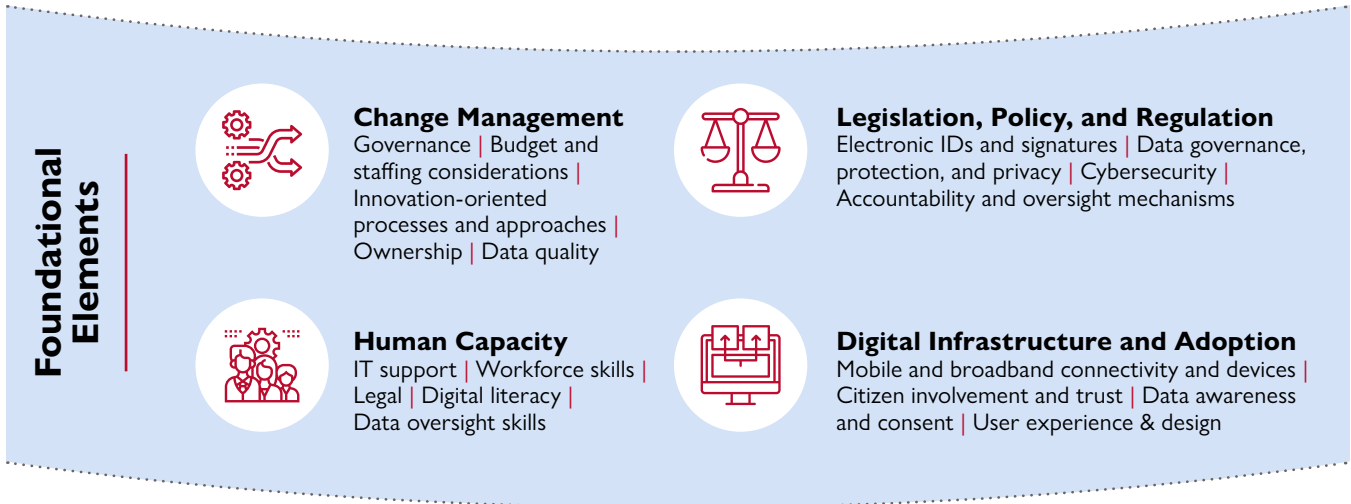
Enterprise architecture enables digital government by allowing technical components to work together. It requires coordination between agencies and the standardization of processes, protocols, and policies. Comprehensive enterprise architecture enables the integration of systems and shared services across government agencies. This requires robust connectivity infrastructure and devices across government bodies operating at the national, regional, and local levels.

¹⁰ For more on inclusive, secure, and appropriate digital ID systems, refer to the Principles on Identification for Sustainable Development (2021) <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/213581486378184357/principles-on-identification-for-sustainable-development-toward-the-digital-age> and the Good ID Movement <https://www.good-id.org/en/>

Foundational Elements:

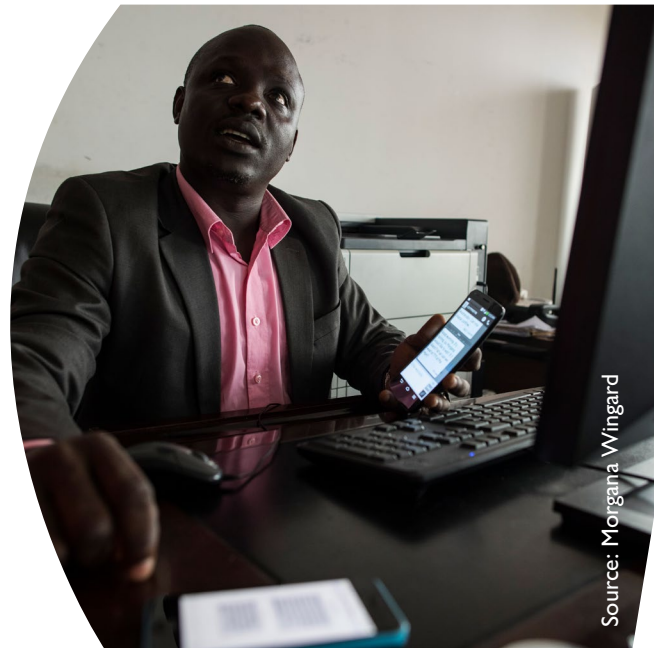
WHAT ARE THE LESS TANGIBLE, CRITICAL FACTORS THAT DETERMINE IF THE CORE COMPONENTS LEAD TO POSITIVE DEVELOPMENT OUTCOMES?

To achieve this vision, initiatives that focus on the core management, delivery, and engagement components must be met with investments in foundational elements. Foundational elements include: change management; human capacity; legislation, policy, and regulation; and digital infrastructure and adoption.



Change management considerations:

- Planning for the long-term **governance** of digital systems, which includes identifying the agency and staff members who will be responsible for sustaining digital systems;
- Planning for ongoing costs and required personnel by considering long-term **budget and staffing** needs early on;
- Integrating **innovation-oriented processes** into government standard operating procedures, such as agile techniques and human-centered, rights-respecting design processes;
- Planning for the **ownership of business processes** and the responsibility for their development, modification, and simplification;
- Ensuring **data quality** by consistently cleaning and checking data sets for errors and biases as they are entered into digital government databases and used for analysis; and
- Ensuring **ongoing data security** by monitoring cybersecurity threats, potential changes in administration, and risks of democratic backsliding.



Source: Morgana Wingard



Human capacity across government staff, the private sector, and individuals:

- **IT support** to maintain, update, and troubleshoot systems either through internal government hiring or outsourcing to external support entities;
- **Workforce skills** to ensure that government staff are willing and able to use software, reimagine business processes, analyze data, adapt to new technology, and proactively address downstream impacts of data and technology;
- **Capacity** among regulators, judges, and lawyers to design, implement, and litigate underlying policies and frameworks;
- **Digital literacy** at all levels, supporting stakeholders who are asked to engage with the government in new and technology-driven ways and to play a role in securing their own data, ensuring their rights are respected, and to protect themselves against cybersecurity threats; and
- **Data oversight skills** to ensure that data is collected, stored, and shared in line with respect for human rights and democratic values.



Adoption and implementation of enabling **legislation, policy, and regulations:**

- Legal recognition of **electronic signatures** and IDs to allow for digital transactions and services;
- **Data governance, protection, and privacy** measures to avoid misuse of personal information for profit, surveillance, or other malintent by current or future internal government actors and their private sector data-sharing partners;
- **Cybersecurity** legislation to designate responsibility for managing cyber incidents, combat cyber crime, and increase awareness of common cybersecurity risks among government staff and the general public; and
- **Accountability and oversight mechanisms**, such as ombudsmen, national human rights institutions, reporting mechanisms for corruption and discrimination by government officials, and publicly accessible information on laws, compensation, grievance procedures, and rights.¹¹



Digital infrastructure, access, and use considerations:

- Affordable and accessible **mobile and broadband connectivity and devices**, underpinning the core components. Geographic network coverage, network performance, Internet bandwidth, access to connected devices, and spectrum allocation all affect who will and will not be reached by digital government initiatives;
- **Citizen involvement and trust** must be nurtured at all stages of digital government initiatives, through transparent and inclusive implementation that takes into account the views and concerns of key stakeholders;
- **Data awareness and consent**, when actively fostered, can help individuals understand and make decisions about how their data is being used, thereby encouraging participation; and
- **User-experience and use of design principles**¹² can also facilitate trust, inclusion, access, and use by making digital government tools simple and intuitive for all types of stakeholders (including marginalized groups and individuals with specific access needs, such as persons with disabilities).

11 For general guidance on oversight, refer to <https://ctb.ku.edu/en/table-of-contents/maintain/maintain-quality-performance/establishing-oversight-mechanisms/main>

12 Refer to the Principles for Digital Development (<https://digitalprinciples.org/>) and the Universal Design principles (<http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/>).

Contextual Considerations:

WHAT OTHER FACTORS WILL INFLUENCE WHETHER DIGITAL GOVERNMENT INVESTMENTS WORK TOWARD THE VISION?



Contextual Considerations

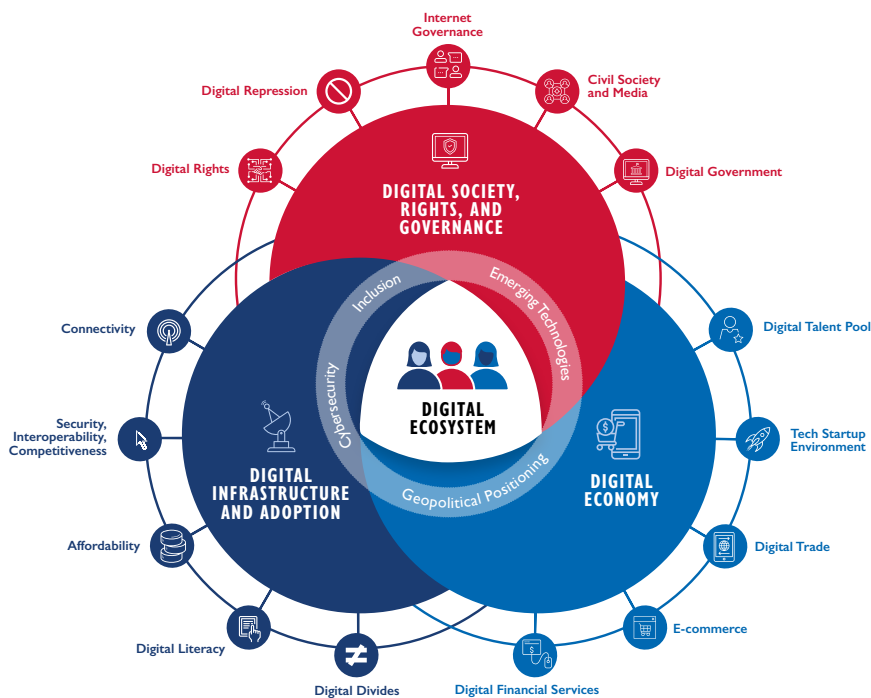
Political processes & government institutions | Human rights | Civil society | Digital economy | Digital society and governance

Digital government investments are influenced by broader **democracy, human rights, and governance** considerations. Such considerations include:

- The presence—or lack of—participatory, representative, and inclusive **political processes and government institutions**;
- The protection and promotion of **universally recognized human rights**;
- **Equitable access** to government services;
- Freedom of the **press**;
- A strong **civil society**; and
- **Legal and judicial systems** to foster greater accountability of institutions and leaders to citizens and the law.

Additionally, **equitable access to platforms** is vital to successful digital engagement strategies. Engaging youth, women, and marginalized or underrepresented groups in digitalization initiatives is key to addressing and closing the digital divide.

Digital government investments influence and are influenced by all aspects of the digital ecosystem as articulated in the three pillars of USAID’s [Digital Ecosystem Framework](#). The first pillar is *digital infrastructure and adoption*, which includes the resources that make digital systems possible. The second pillar is *digital society, rights, and governance*, which includes digital interactions between government, media, and civil society. The third pillar of the digital ecosystem is the *digital economy*, which is defined by factors such as digital financial services, e-commerce, the tech startup environment, and the digital talent pool.





Under the Digital Strategy, USAID's Technology Division in the Innovation, Technology, and Research Hub (ITR), with support from the Center for Democracy, Human Rights, and Governance, is providing technical assistance, resources, and workshops on digital government. If you are interested in learning more about these initiatives, please reach out to the Development Informatics team at devinfo@usaid.gov.



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