Acknowledgments

This case study was prepared by World Bank staff as one component of the Middle East North Africa (MENA) region’s GovTech: Citizen-Centric Service Delivery, Renewing the Social Contract in MENA (P176940) program of Advisory Services and Analytics (ASA) work. This program was an effort to advance the knowledge and awareness on “how to” strengthen service delivery, public trust, and renew the social contract through the effective implementation of a GovTech approach in operations financed by the World Bank. The core team for the project was led by Stephen Davenport and comprised Saki Kumagai, Dolele Sylla, Emily Kallaur, Tala Khanji, Lina Fares, Geoff Handley, and Nataliya Biletska, under the overall guidance of Jens Kristensen. For the Djibouti case study, essential information, insights and guidance relating to GovTech activities were provided by Eric Dunand, Kadar Mouhoumed Omar, and Robert Yungu, under the guidance of Boubacar-Sid Barry.

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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ARMD</td>
<td>Autorité de Régulation Multisectorielle de Djibouti</td>
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<tr>
<td>ASA</td>
<td>Advisory Services and Analytics</td>
</tr>
<tr>
<td>CERT</td>
<td>Computer Emergency Response Team</td>
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<td>CPF</td>
<td>Country Partnership Framework</td>
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<td>CSC</td>
<td>Citizen Service Center</td>
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<td>DECA</td>
<td>Digital Economy Country Assessment</td>
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<td>DT</td>
<td>Djibouti Telecom</td>
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<tr>
<td>GTMI</td>
<td>GovTech Maturity Index</td>
</tr>
<tr>
<td>ICI</td>
<td>Inclusion, Connectivity and Strategy of the Institutions</td>
</tr>
<tr>
<td>IPF</td>
<td>Investment Project Financing</td>
</tr>
<tr>
<td>IT / ICT</td>
<td>Information Technology / Information and Communication Technologies</td>
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<tr>
<td>ITAS</td>
<td>Integrated Tax Administration System</td>
</tr>
<tr>
<td>MCPT</td>
<td>Ministry of Post and Communication Technologies</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East North Africa</td>
</tr>
<tr>
<td>MENI</td>
<td>Ministère Délégué Chargé de l’Economie Numérique et de l’Innovation / Delegate Ministry in Charge of Digital Economy and Innovation</td>
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<tr>
<td>PAD</td>
<td>Project Appraisal Document</td>
</tr>
<tr>
<td>PAMAP</td>
<td>Public Administration Modernization Project</td>
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<tr>
<td>PKI</td>
<td>Public Key Infrastructure</td>
</tr>
<tr>
<td>RFP</td>
<td>Request for Proposals</td>
</tr>
<tr>
<td>SAI</td>
<td>Supreme Audit Institution</td>
</tr>
<tr>
<td>SCAPE</td>
<td>Strategy for Accelerated Growth and Promotion of Employment</td>
</tr>
<tr>
<td>TTL</td>
<td>Task Team Leader</td>
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</table>
1. Introduction

GovTech is a whole-of-government approach that promotes simple, efficient, and transparent government with the citizen at the center of reforms. While earlier e-government programs focused on building IT systems for public administration and moving services online that often remained analog in design, GovTech strategies aim to provide citizen-centric services that are digital by design and coordinated across the government, and it prioritizes two-way interaction with citizens by mainstreaming citizen engagement.

If implemented successfully, a GovTech-oriented strategy to modernizing the public sector can help governments to improve service delivery, which may contribute to increased citizen trust in government and a stronger social contract, in addition to creating jobs and enabling growth of the digital economy. According to the World Bank’s GovTech strategy, digital technologies are vital to addressing both dimensions of citizens’ trust in government: trust in government’s competence (ability to deliver on promises) and trust in government’s values (the motivations driving policy). It argues that “becoming fully digital is no longer an option, but rather an imperative for [governments’] 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” (World Bank 2021a). At the same time, GovTech reforms have the potential to undermine the social contract if they raise citizen expectations, but actual delivery falls short. Large-scale ICT procurement also poses serious risks related to corruption and failed technical implementations, and if not well managed, such factors can prompt a weakening of the social contract.

The World Bank’s 2021 World Development Report, Data for Better Lives, puts forward a framework for thinking about a new social contract specifically for data that defines rules of the road for governance in the digital age. This new social contract would “enable the use and reuse of data to create economic and social value, while ensuring equitable access to the value realized, as well as fostering participants’ trust that they will not be harmed by data misuse” (World Bank 2021b). Digital transformation of government would then ideally be grounded in this social contract for data.

Targeting World Bank task teams and GovTech practitioners, this case study provides operational examples and lessons learned to date from GovTech work in Djibouti to inform future activities. The case study is part of the World Bank Middle East North Africa (MENA) region’s GovTech: Citizen-Centric Service Delivery, Renewing the Social Contract in MENA (P176940) program of Advisory Services and Analytics (ASA) work. Preparation of the case studies relied on desk reviews of operational and related documents and interviews with World Bank project team members. The description of project elements came from Project Appraisal Documents (PADs) and Project Restructuring Papers, while details on implementation and results achieved drew on Implementation Status and Implementation Completion Reports (ISRs/ICRs). Interviews with World Bank operational staff provided additional insights on lessons learned, and information on the country context drew on key World Bank country documents such as Country Partnership Frameworks and on national government strategies.
2. Overview: GovTech in Djibouti

This case study provides an illustration of World Bank support for operationalizing GovTech approaches in a country in the early stages of public sector digital transformation, using the example of Djibouti. Introducing digital service delivery is a major area of focus for the Government of Djibouti. In 2015, the government created a National Agency for State Information Systems (Agence Nationale de Systèmes d’Informations de l’État, or ANSIE) positioned within the Office of the Presidency to modernize the public administration and increase public sector efficiency. The government has been working toward its digitization objectives with financing from the World Bank, especially through the Djibouti Public Administration Modernization Project. Among other activities, this project has provided capacity building support for ANSIE’s efforts to design and implement government-wide shared services and core government platforms through a GovTech approach.

Djibouti has achieved impressive economic growth in recent years, but human development deficits and fragility persist. A small country with an economy built on its strategic position at the intersection of three continents, Djibouti has been experiencing strong growth, with an average annual GDP expansion of 7 percent from 2014 to 2019. After dipping to 0.5 percent in 2020 due to the COVID-19 pandemic, growth recovered to around 5 percent in 2021 as demand for transit and logistics services rebounded (World Bank 2021c). This growth is, however, from a low base. Djibouti ranks 166th out of 189 countries in the 2020 Human Development Index (UNDP 2020), and the country remains highly vulnerable to global health, economic, regional security, and climatic shocks. “Djibouti Vision 2035” lays out the country’s long-range development plan, which the government is operationalizing through the Djibouti Inclusion, Connectivity and Strategy of the Institutions Plan for 2020–2024.

Governance challenges are major concerns in Djibouti, a country that Freedom House classifies as “not free”. Djibouti scored in the 10th percentile globally on Voice and Accountability in the 2020 Worldwide Governance Indicators, and 142nd out of 180 countries on Transparency International’s 2020 Corruption Perceptions Index. As a case in point, in 2019 the telecommunications company Ericsson paid more than $500 million to the U.S. government in response to charges that it violated the Foreign Corrupt Practices Act by paying bribes to government officials in multiple countries, including Djibouti (AP News 2023). In the Freedom House ranking, Djibouti scores 5 out of 100 on political rights and 19 out of 100 on civil liberties. The government is working on governance reforms on a variety of fronts, including the investment climate, fiscal situation, and state-owned enterprises, but institutional capacity remains fairly low.

Djibouti has made progress toward its vision of becoming a digital hub for the region (“Djibouti Connector”). Djibouti is one of the best-connected countries on the continent, with two cable landing stations providing access to nine submarine cables that have links to East Africa, Europe, the Middle East, and South Asia, and two further landing stations under development. The Djibouti Data Center, a Tier 3 data centre facility established in 2013, serves as an important junction for submarine cable systems in the area.

1 Available at https://freedomhouse.org/countries/freedom-world/scores.
2 Available at https://info.worldbank.org/governance/wgi/Home/Reports.
However, domestic IT services, skills, and digital infrastructure are weak. Djibouti’s internationally-oriented infrastructure creates a sharp contrast with the lack of digital service availability and low mobile coverage in the domestic market, making the country a digital paradox. The mobile subscription rate is the lowest in the region, with 47 mobile-cellular subscriptions per 100 inhabitants in 2022, just 36 people in 100 have active mobile-broadband subscriptions, and 65 percent of the population use the Internet.4

The public company Djibouti Telecom (DT) has a virtual monopoly on the delivery of internet connectivity, providing all ICT services in the country (including fixed and mobile services and broadband). As a result, Djiboutians face high prices for and a low quality of ICT services. Mobile services are three times more expensive in Djibouti than in neighboring Ethiopia, and mobile payment services have only recently been offered through DT (10 years after they became available in neighboring countries). The lack of competition in the domestic telecom market, and the lack of a digitally skilled workforce, are responsible for the stagnation in the ICT sector and significantly undermine private sector competitiveness. Moreover, the lack of access to reliable, affordable communications services is a major impediment to the government’s goal of moving service delivery online.

Indices of country-level progress in each of four GovTech dimensions comprise the World Bank’s global GovTech Maturity Index (GTMI), which gives a general impression of the status of public sector digital transformation in Djibouti (World Bank 2022). The GTMI aims at assisting practitioners in the design of digital transformation projects by measuring the key aspects of four GovTech focus areas defined in the World Bank’s global GovTech Strategy: 1) core government systems; 2) service delivery; 3) citizen engagement; and 4) GovTech enablers. It is a composite index made up of the Core Government Systems Index (CGSI); the Public Service Delivery Index (PSDI); the Citizen Engagement Index (CEI); and the GovTech Enablers Index (GTEI). The GTMI is the simple average of the four indices, representing a total of 48 key indicators, and denotes the extent to which 198 economies are advanced in these areas. Based on the GTMI score, countries are categorized into four groups, from Group A ("GovTech leaders") to Group D ("minimal focus on GovTech"). Djibouti is currently classified in the "C" group, which includes "governments with ongoing activities to improve some of the GovTech focus areas" (World Bank 2022). Its score is below the global average on the four sub-indices (each of which is an index from 0 to 1), with a very low score for citizen engagement (0.13), and somewhat higher scores for core government systems (0.35), public service delivery (0.29), and GovTech enablers (0.32). Turning to another measurement tool, Djibouti ranked 181st out of 193 countries in the 2022 United Nations E-Government Development Index.5

The remainder of this note is organized as follows. Section 3 provides key examples of GovTech activities supported by the World Bank in Djibouti, organized according to the four GovTech focus areas. Section 4 then looks at the portfolio again, but through five “lenses” for analysis that provide different perspectives on project design and implementation. Finally, Section 5 draws some lessons learned from the World Bank’s experience supporting GovTech approaches in Djibouti thus far.

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5 Available at https://publicadministration.un.org/egovkb/Data-Center.
3. World Bank Support for GovTech in Djibouti

In Djibouti, the World Bank’s support for GovTech approaches aligns with its Country Partnership Framework (CPF; FY2022-26), which includes a cross-cutting theme on fostering digital transformation, consistent with the government’s “Vision 2035” strategy. The current CPF is more selective than the World Bank’s previous country program for Djibouti, with the idea that concentrating resources on fewer priorities may increase the chance of transformational impact. The CPF also emphasizes the importance of building institutions, employing flexibility, and enhancing mechanisms for voice and accountability in the country program (World Bank 2021d). Moreover, GovTech support aligns with key priorities of the World Bank’s MENA Regional Strategy, including on strengthening public governance and service delivery and renewing the social contract.

This section looks at ways the World Bank is supporting digital transformation of the Government of Djibouti. Table 1 provides examples drawn from the World Bank Digital Governance Projects Database, which contains World Bank Group-funded investments (not technical assistance, Advisory Services and Analytics, or budget support) with large ICT or e-government components as of July 2020. The table includes active and recently closed projects from the database. This section then proceeds to discuss aspects of World Bank support under each of the four areas, which are:

1) **Core government systems** – includes ICT infrastructure, hardware, and software; government systems such as those for public financial management, human resources management, and procurement; disruptive technologies such as cloud computing; as well as an overarching digital government transformation strategy and set of related principles
2) **Public service delivery** – refers to human-centered online services that are simple, transparent, and universally accessible
3) **Citizen engagement** – includes open government approaches as well as mechanisms for accountability, citizen feedback and citizen participation in the workings of government
4) **GovTech enablers** – includes leadership, institutional strengthening, skill building, digital IDs, strategy and regulations, and innovation

Table 1. Examples of GovTech Activities in Djibouti Supported by the World Bank

<table>
<thead>
<tr>
<th>GovTech Areas</th>
<th>Project</th>
<th>Planned Activities</th>
<th>Key Results as of April 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Government Systems</td>
<td>Public Administration Modernization Project (&quot;PAMAP&quot;; P162904); Active</td>
<td>• Implementation of tax and customs systems and integration with X-ROAD</td>
<td>ASYCUDA World (customs system) has been implemented and the tax administration IT system replacement is underway; various other platforms also supported including a document management system based on the open-source ALFRESCO platform</td>
</tr>
</tbody>
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7 Projects that closed prior to FY2016 were not considered. One other relevant project, Governance for Private Sector Development and Finance (P146250) has also been added.
<table>
<thead>
<tr>
<th><strong>GovTech Enablers</strong></th>
<th><strong>Citizen Engagement</strong>*</th>
<th><strong>Public Service Delivery</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Djibouti Digital Foundations (P174461); Active</td>
<td>Public Administration Modernization Project (P162904); Active</td>
<td>Public Administration Modernization Project (P131194); Closed</td>
</tr>
</tbody>
</table>
| - Support for opening the ICT market to competition  
- Training sessions and capacity building programs for senior government officials and civil servants  
- Improve connectivity within government  
- Technical support to operationalize Delegate Ministry in charge of Digital Economy and Innovation (MENI)  
- Improving the legal framework to strengthen the digital economy  
- Strengthening of cybersecurity capabilities, especially building a Computer Emergency Response Team (CERT) and a Public Key Infrastructure (PKI) to secure digital transactions  
- Strengthening the foundational ID system | - Enable online tax and customs filing  
- Establish Citizen Service Centers (CSCs)  
- Target achieved for the number of health care providers trained on the health information management system |
| Project approved Dec. 2021; at time of approval, government had already taken significant steps toward opening the share capital of the incumbent operator Djibouti Telecom, and had passed a law establishing a multi-sector regulator | No results yet | Launch of pilot CSC is planned; some progress made on developing e-services accessible to citizens, including on several gender-disaggregated results indicators |

PAMAP supported the Ministry of Post and Communication Technologies (MCPT) and National Agency for State Information Systems (ANSIE) to develop a Digital Code that covers several themes including electronic communications (governance, regulation, competition, universal service); innovative digital services (Smart Gov, e-health, e-education, e-money, and mobile banking, etc.); cybersecurity and cybercrime; and electronic commerce

Supported establishment of a CERT and PKI

Initially, one of PAMAP’s principal goals was to unify the variety of
DJ Crisis Response - Social Safety Net Project (P130328); Closed
Governance for Private Sector Development and Finance (P146250); Closed

- Development of a national registry of the poor and vulnerable households in Djibouti
- Establish an automated National Payment System

Unified national registry of beneficiaries and an integrated project monitoring system developed
As of Nov. 2021, 100 percent of transactions are supported by the system

*Note: Citizen engagement refers to support in the PAD or PP for technology-enabled mechanisms for citizen engagement or feedback (i.e., CivicTech), or open government initiatives related to open data and transparency (e.g., web portals).

3.1 Core Government Systems

The World Bank’s Public Administration Modernization Project (“PAMAP”; P162904) aims to build a strong foundation and enabling environment for GovTech in Djibouti through a combination of policy reform, technology solutions, change management, and skill building. Currently, government information technology (IT) systems are siloed and duplicative. The government intends to incorporate them into a single platform to fully digitize service delivery (Figure 1); to increase systems security and reduce costs; and to enhance its online service portal for citizens. PAMAP (approved in 2018 for $15m) was designed to address key obstacles to service delivery access and efficiency by supporting business process reengineering and the interoperable digital platform, building institutional capacity, and strengthening accountability. One pilot Citizen Service Center (CSC), a physical location where digital services can be accessed, has already been implemented and launched by the Secretary General of the Government. Design of the PAMAP reflects lessons from the World Bank Group’s Djibouti Performance and Learning Review (PLR) of 2016, which proposed adjustments to its Djibouti Country Partnership Strategy FY2014–2018.
In some respects, Djibouti is advanced in terms of international connectivity and government digitalization. Due to the international linkages mentioned earlier, it is one of the best-connected countries on the continent in terms of regional connectivity, on par with Egypt and South Africa, and acts as a digital hub for its neighbors. The existing e-government architecture includes a powerful and fully operational data center, fiber optic network, and high-speed Internet in 15 out of 16 sites among the ministries and agencies within the administrative capital. The government has rolled out a backend interoperability platform based on the open-source X-ROAD system developed in Estonia, to which it aims to link other government systems. Data from across the government will be stored in a public cloud, so that ministries and agencies do not need to individually purchase servers and licenses. These centralized IT services will be managed and maintained by ANSIE, which functions as an IT service provider for the entire government.

PAMAP is also supporting several specific government functions. Under PAMAP, the World Bank is providing capacity building support to the Supreme Audit Institution (SAI)—in this case, the Court of Auditors—related to risk-based audit training, the completion and filing of public accounts, and knowledge sharing with another Court of Auditors in the region. The Court has now developed a new strategy, implementation of which will be supported by the project, including elements on digitization and the public accounting system. Following a project restructuring, PAMAP is also assisting the newly established Anti-Corruption Agency in enhancing its capacity to monitor the implementation of new asset declaration legislation. Additionally, the government is finalizing the implementation of the Alfresco document management platform, which will enable document management across the government. This is led by ANSIE along with ministry counterparts. As part of the scale-up in support for institution building through PAMAP, additional funding will be provided to strengthen the capacity of a new Delivery Unit introduced under the Prime Minister’s office, providing it with additional equipment as well as monitoring and evaluation tools.
In addition, the World Bank has been supporting Djibouti on government procurement. In the past, support for procurement has been delivered through small Institutional Development Fund operations. Under PAMAP, the World Bank is financing enhancements to the government’s e-government procurement web portal. These include enabling advertisement of procurement plans through the portal, allowing users to buy and download Requests for Proposals (RFPs) and pay online, and publishing the results of RFPs through the portal. This functionality does not rise to the level of a full e-procurement system but is rather a web-enabling of certain steps. Nevertheless, it should be very useful in terms of communicating and advertising aspects of the procurement process, and making strides toward greater transparency and efficiency. Moreover, the World Bank provides ongoing capacity building through a procurement specialist based in the country office who is available to support the government as requested.

3.2 Public Service Delivery

The government has already begun to digitize public services, and an e-services platform is in place, along with a plan for CSCs. A few services are available online, such as a COVID-19 app (for testing and vaccination status) and an e-Visa service. At the same time, given the low rate and high cost of mobile coverage in the country, physical centers for service delivery will be important for some time. In recognition of this, the government plans to deploy several CSCs, especially to increase access for the poor in remote or underserved areas. Instead of visiting multiple locations to obtain documents and services, citizens will be able go to a CSC, which would serve as a one-stop-shop for e-services through kiosks and assisted access terminals. Under the PAMAP project one pilot CSC was already established in 2023.

In terms of service delivery, the World Bank has opted to support digitization of two critical functions first: tax and customs administration. These functions were selected due to their key role in mobilizing domestic resources (via collection of VAT and other taxes and import duties) in the context of rising public debt and the government’s logistics hub development strategy. Enabling online filing and payment for taxes and customs fees necessitates business process reengineering along with upgrading of IT systems. Through PAMAP, the government has now completed the upgrade and deployment of a web-based customs information system, ASYCUDAWorld. This new platform has allowed the government to expand the coverage and digitization of customs business processes and provide online declarations, filing and payment services to users. Also, a firm has been selected to work with the tax administration authority to support procurement and implementation of a new Integrated Tax Administration System (ITAS) and ensure its effective integration with other public financial management systems and government systems via X-ROAD. This should create a better control environment and the capacity to cross-check data from various sources to identify risks.

3.3 Citizen Engagement

The World Bank’s Systematic Country Diagnostic for Djibouti recommended enhancing transparency and accountability as a route to improving service delivery (World Bank Group 2018). Citizen participation in public affairs has increased in Djibouti due to social media, which according to the World Bank’s Country Partnership Framework has “opened the door to increased scrutiny of public officials, enhancing transparency and dampening corruption” (World Bank 2021d). The Systematic Country Diagnostic underscored citizens’ rights to information about services and noted a need for citizens to have more complete information in order to reduce transaction costs, particularly for those who have to travel.
significant distances to access them. It also posited that investing in data systems to monitor progress on service delivery to businesses and households, and creating citizen feedback loops, would contribute to better access.

Expanding access to digital services creates new touch points for citizen engagement, but so far plans for active outreach are unclear. The online portal and CSCs will provide avenues for citizens to access services, which also creates the opportunity for government to conduct proactive service delivery monitoring by asking citizens specifically about their experiences. The PAMAP project includes support for citizen engagement activities such as mechanisms to gather feedback on service quality, and a gender-sensitive citizen outreach campaign to inform citizens about the CSC and available services. This is intended to improve access to services for women, and to ensure involvement of women in the design and delivery of e-services. However, these activities have not been undertaken yet, so it is not yet clear how feedback and engagement mechanisms will be designed and implemented.

3.4 GovTech Enablers

The government needs to establish a strategy for digital transformation, clarify institutional responsibilities and priorities, and chart the way forward. In 2014, the government adopted an ICT roadmap (the Integrated Strategic Plan 2014-2024, or Schéma Stratégique Intégré – SSI), which laid out a plan for increasing access to ICT across the country. ANSIE was created in 2015 and given responsibility for making improvements in government IT systems. In 2021, a Presidential decree established the Delegate Ministry in charge of Digital Economy and Innovation (MENI), and charged it with implementing the national policy for digital transformation, innovation and entrepreneurship, but MENI does not yet have a digital transformation strategy. With support from UNDP, MENI is currently developing such a strategy, which would include a national unique ID and the government portal for e-services along with other aspects of the digital agenda. Through two separate strands of analytical work, the World Bank is undertaking a 1) Digital Economy Country Assessment (DECA) that will provide a diagnostic basis for updating the national ICT strategy, and helping the government develop a draft innovation strategy for the digital sector; and 2) providing further support for a mid-term strategic review of the national plan, policy dialogue and assisting the government with hosting a Digital Forum.

Djibouti currently lacks a legal, policy, and regulatory framework for digital transformation and access to services, but has made major strides toward adopting a Digital Code, with World Bank support. The initial digital capability assessment for the PAMAP project noted the absence of an enabling framework for digitalization. For example, the country did not have policy and legal frameworks to ensure data privacy and security, safeguard biometric data, or protect electronic transactions. Without the enabling framework, the government cannot make use of the soft infrastructure that is already in place, such as the X-ROAD system. Since this time, the government has undertaken significant work on a comprehensive digital legal package (“Digital Code”), which will introduce foundational legal provisions that cover electronic transactions, digital signature, data exchange, cybersecurity, privacy and data protection, and access to information. This effort has benefited from several workshops held to validate the code with stakeholders to ensure that it is compatible with the constitution and laws already on the books. As of April 2023, the Digital Code has been approved by the Council of Ministers; it has not yet been adopted by the parliament. The World Bank’s Djibouti Digital Foundations project (P174461) project includes an indicator measuring the number of articles of primary digital legislation and regulation issued during the implementation period, and PAMAP also supports the Digital Code.
In comparison to other African countries with recently connected transoceanic cables, Djibouti’s telecommunications sector has made a relatively modest contribution to economic growth, which demonstrates the importance of regulatory and structural reforms in conjunction with GovTech initiatives. Although the country has made strong inroads into the regional data market, the potential of Djibouti’s domestic ICT sector remains largely untapped. Djibouti remains one of the last countries to maintain an essentially monopolistic telecom sector, along with Ethiopia and Eritrea. As mentioned earlier, lack of competition has constrained growth in digital infrastructure, both in terms of coverage and innovation, and has deterred investment in the domestic market. This also highlights the importance of aligning sectoral strategies with broader visions for reform. While Djibouti’s Vision 2035 emphasizes the need for a “diversified and competitive economy, with the private sector as a driver” as one of its five key pillars (Republic of Djibouti 2014), the strategy adopted across the ICT sector until recently contradicted this principle.

Further progress must be made on national ICT infrastructure to support the availability of affordable and quality broadband services as a basis for digital transformation (“Djibouti Connected”). The government has initiated key steps toward realization of this goal:

- During a Council of Ministers meeting in July 2021, the government approved the decision to open the share capital of the incumbent operator DT to a strategic partner, and produced a draft law defining the terms and conditions for the transfer of shares in state-owned enterprises; and
- A law establishing a multi-sector regulator (Autorité de Régulation Multisectorielle de Djibouti, “ARMD”) in charge of Telecom, Post and Energy was passed in December 2019; in August 2021, the General Director was appointed (the World Bank is supporting ARMD operationalization through technical assistance).

The Digital Foundations project aims to help Djibouti gradually introduce competition into the sector and attract private sector investment, which is expected to have a transformational impact on Djibouti’s nascent digital economy, and on governance. It is hoped that this major systemic change will unleash the potential of the private sector to create jobs, innovate, and drive economic growth. Establishing the foundations for a digital economy could also be transformative in terms of governance, enabling modernization of public service delivery along with greater transparency and accountability.

The World Bank has facilitated development of other key building blocks of a digital economy and public sector. Through the Governance for Private Sector Development and Finance project (“GoPro”; closed in 2021), the World Bank supported Djibouti in establishing a national automated payment system through the Central Bank that is helping to facilitate the clearing, settlement, and recording of monetary and other financial transactions. The project enabled the automated processing of 90 percent of transactions against a project target of 10 percent (and the share has now reached 100 percent). An automated payment system lays the groundwork for government-to-person payments, such as cash transfers, and for providing transactional public e-services. Now, through the Digital Foundations project, the World Bank will finance a study to explore the potential for the government to make electronic payments. In terms of other GovTech fundamentals, the PAMAP project has supported creation of a Computer Emergency Response Team (CERT), as well as a Public Key Infrastructure (PKI) system to support the encryption of digital transactions, which is essential as a basis for digital signatures and e-procurement—it could also serve as a basis for a future business registry, for example.
Djibouti also needs a foundational unique ID system; currently there are several citizen registry systems that are uncoordinated and duplicative. A unique ID system would facilitate management of safety net programs, tax administration, customs, registration of life events (births/deaths), and property rights, and improve access to financial and other services. This would also require enabling legislation related to data security and privacy. Implementation of a digital ID was originally envisioned as a key component of the PAMAP project, but was later removed (discussed further below). The government has made progress on rollout of the digital ID, and in early 2022, the president signed a decree that citizens must adopt it by June 2022. ANSIE operates a platform through which citizens can make an appointment to obtain the digital ID.

4. GovTech in Djibouti through Five Lenses

This section looks at the World Bank’s GovTech-related work in Djibouti through five “lenses” that provide a multifaceted view of the ways in which these activities may strengthen service delivery, public trust, and the social contract. The lenses, shown in Table 2, have been lightly adapted from the World Bank’s Evaluating Digital Citizen Engagement: A Practical Guide. Although they were developed with citizen engagement initiatives in mind, they are general enough to apply to GovTech writ large, and their use here is intended to ensure that key elements are not left out of the discussion. Since the main projects included in this case study are still ongoing, this is not a retrospective view of results achieved, but rather a discussion of the process of project design and the initial successes and challenges encountered in implementation.

Table 2. Lenses for Analyzing GovTech Initiatives

<table>
<thead>
<tr>
<th>Lens</th>
<th>To consider</th>
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<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Seeking to understand the explicit objective and underpinning assumptions of the initiative and wider environment, including the planned impact</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>Which actors are involved in decision making at what stages</td>
</tr>
<tr>
<td><strong>Participation</strong></td>
<td>How citizens are reached; the opportunities provided for them to participate and at what level; the attention paid to historically marginalized groups</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Overall program management; how privacy issues are managed; institutional and technical capacity; non-technical factors in implementation</td>
</tr>
<tr>
<td><strong>Effects</strong></td>
<td>How results are measured; how the initiative can adapt to changing circumstances; evidence of intended or unintended impact; funding arrangements and incentives for results</td>
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Source: Adapted from World Bank (2016), p.48.

4.1 Objective

Digital transformation in Djibouti is motivated by the government’s development objectives. The government aims to modernize the public administration to enable its vision of a diversified and robust private sector, to strengthen Djibouti’s role as a logistics and commercial hub for the region, and to address social and institutional challenges throughout the country. A broader animating vision for digitalization in Djibouti is the idea of a digital single market within the Horn of Africa region. This idea is being explored through a pipeline World Bank project (P176181), in which Djibouti could be a key player.
The adoption of the Djibouti “Vision 2035” development strategy in 2014 reflected the country’s commitment to improving service delivery as well as introducing structural reforms to strengthen Djibouti’s competitive advantage as a logistics hub. To materialize Vision 2035, the government has devised two five-year plans, namely the "Strategy for Accelerated Growth and Promotion of Employment" (SCAPE) for 2015-2019, followed by the strategy "Inclusion, Connectivity and Strategy of the Institutions” (ICI) for 2020-2024. While the first phase of SCAPE focused on upgrading the telecommunications/ICT infrastructure, the second phase (ICI) focuses primarily on promoting social inclusion, connectivity and regional integration. In parallel, the government has also developed an ambitious national strategy for the development of ICTs and adopted a ten-year ICT roadmap in 2014 (the Integrated Strategic Plan 2014-2024, or Integrated Strategic Scheme [ISS]), which aims to develop and generalize access to ICT across the country.

Djibouti’s vulnerability to climate-related risks strengthens the government’s commitment to digital transformation, which can boost societal resilience in a myriad of ways, as illustrated by the COVID-19 pandemic. Fostering a data-driven public sector can strengthen the government’s ability to track the impact of specific policies, monitor weather and market conditions, and manage natural resources such as water and forests. Disaster response capabilities such as early warning systems, efficient payment systems for cash transfers, and the capacity to quickly detect and respond to service disruptions depend on digitization. Connectivity can enable businesses and households to continue normal operations and respond to unfolding disasters, as observed worldwide during the pandemic.

4.2 Control

The government aspires to a whole of government approach to digitalization, and has prioritized putting institutional arrangements in place as an early step, though roles of several key institutions need to be clarified. Situated within the Office of the Presidency, ANSIE is charged with implementing, upgrading, and integrating government IT systems, as discussed earlier. The President sees ANSIE as a service provider within the government, and therefore created MENI to serve as the institution in charge of the government-wide agenda of digital transformation, innovation and entrepreneurship. However, the respective roles of ANSIE and MENI have not yet been clearly delineated. MENI, as the newest institution, is working to gain visibility and carve out its place in the government, while ANSIE has for now been left in its current position rather than subsumed by MENI. Creating the legal and regulatory framework for digitalization would seem to be in MENI’s purview, for instance, and indeed ANSIE is currently supporting the ministry on this.

Addressing vested interests is critical for advancing reforms in digital transformation. One of the expected benefits of digitization is the accompanying decrease in face-to-face transactions and extraneous steps in the business process that create opportunities for corruption. The PAMAP Project Appraisal Document rated the Political and Governance risk of the project as “Substantial”, noting that the reforms are likely to elicit strong pushback from stakeholders who benefit from the status quo. To mitigate these risks, PAMAP builds on the lessons around the findings of the 2017 World Development Report Governance and the Law, which stresses the importance of “commitment, coordination, and cooperation” as key ingredients for reforms to succeed (World Bank 2017).

The government has demonstrated strong commitment on digitalization, but issues around the development of the digital ID in particular have increased the complexity of its work with the World
Bank. The PAMAP project document notes government commitment evidenced by its funding of a high-quality data center and ICT infrastructure, and its stated intent to increase access to e-services. During project preparation there was also strong coordination among key stakeholders (Ministries of Interior, Social Affairs, Decentralization, and the Police) in working toward a digital ID for citizens, which was originally a significant piece of the PAMAP project. However, the government decided to proceed with a single-source contracting of a consulting firm to implement the digital ID rather than using World Bank funds for this. The government was not forthcoming regarding its plans related to the digital ID, and the lack of clarity caused delays in PAMAP implementation and prompted a project restructuring that removed the digital ID component, despite its centrality to the larger digital transformation vision. World Bank funding was instead moved to high-performing and newly scoped activities in e-services and institutional building, and the project was extended by one year. The change with respect to the digital ID component, which is viewed by the Ministry of Interior as having national security implications, raises concerns that the way in which the digital ID is deployed (e.g., with respect to vendor lock-in and proprietary rights) could pose challenges for the broader rollout of digital services.

On the policy front, as mentioned earlier, the liberalization of the telecommunications sector is a key issue. The World Bank is supporting this effort via the Digital Foundations project, as well as via a “One World Bank Group (WBG)” approach that coordinates the work of the World Bank, International Finance Corporation (IFC), and the Multilateral Investment Guarantee Agency (MIGA). Recently, the WBG shared a policy note with the government outlining international good practices on telecom sector liberalization to help advance this work.

The World Bank is working closely with ANSIE, MENI, and the Ministry of Post and Communication Technologies (MCPT). The PAMAP is financed via an Investment Project Financing (IPF) credit from the World Bank and implemented by a Project Coordination Unit located within ANSIE. The Governance Global Practice is leading the project, with Transport and Digital Development as a contributing practice area. The Digital Foundations project also uses the IPF instrument and is being implemented by a new Project Implementation Unit hosted by the MCPT, with MENI as another implementing agency. On the World Bank side, the project is led by the Transport and Digital Development practice, in cooperation with Energy and Extractives, Education, and Finance, Competitiveness and Innovation as contributing practice areas.

4.3 Participation

The government has taken steps to acknowledge citizen demand for better access to and monitoring of public services. Through a reform program centered on Citizens’ Service Standards (Déclaration de Services aux Citoyens), ministries must provide information to citizens on service availability, costs, and required procedures, but concrete improvements in access and awareness have been minimal thus far. In response, the PAMAP project aims to increase access to services and information, both online and through the establishment of CSCs, which are particularly intended to improve access for the poor in remote or underserved areas. Several project indicators track progress on this front, including “citizens involved in the design and delivery of e-services” and “percentage of CSC users satisfied with provided e-services”. Originally, the PAMAP project aimed at creating stand-alone CSCs to facilitate access to digital services, but due to logistical difficulties the government has instead signed a Memorandum of Understanding with the postal service. Since the post office already has locations across the country, the intent is to site CSCs
within these existing facilities. A proof of concept was implemented in 2023, and allowed the government to implement a CSC within a post office.

The PAMAP places high priority on helping to close the gender gap in service delivery, and increase access for persons with disabilities. It aims to make a concerted effort to involve women in the design and monitoring of activities, conduct gender-sensitive outreach campaigns, and conduct gender-sensitive customer service training. At the time of PAMAP project preparation, only 10 percent of women had Internet access, making CSCs particularly important for reducing gender-based disparities in access to services. Key project indicators such as those mentioned in the previous paragraph are disaggregated by gender. Moreover, the PAMAP is unusual for a GovTech project in its special attention to increasing service delivery access for persons living with disabilities, who represent around ten percent of the population in Djibouti. In the CSC proof of concept there is a plan to have one or two web stations dedicated for people with disabilities and equipped with appropriate technology to promote inclusion. Still, these commitments need to be translated into action.

While the government’s stated commitments to openness and citizen engagement in “Vision 2035” are noted, concrete progress in these areas is thus far quite limited. In 2019, the government did take a major step forward by placing all data from Household Consumption Surveys since 2002 online, where it can be used by researchers and the development community (Mendiratta, Soultan, and Konaté, et al. 2019). Ministers and high-ranking public administration officials have declared their assets under a new asset declaration policy, but verification procedures need to be implemented. The PAMAP project provides support for public data disclosure and access to information, adoption of an access to information law, and strengthening the asset declaration and verification process, all of which will be important to strengthening inclusive governance.

4.4 Technology

The PAMAP and Digital Foundations projects are highly complementary in that the former concentrates on governance and public services, while the latter concentrates on the critical enabler of competition in the domestic market. By improving digital connectivity through the introduction of competition and private investment in the ICT sector, the Digital Foundations project should lead to an increasing usage of online government services via better and more affordable Internet for citizens.

ANSIE is delivering on its mandate, but is overwhelmed by demand, and sustainability is a key question. ANSIE has the requisite expertise to implement the ambitious plan of integrating existing information systems using X-ROAD, and it is getting IT service requests from across the entire government, even including state-owned enterprises. However, staff are currently paid as consultants rather than as civil servants, meaning that these jobs are highly attractive relative to other jobs in the government. When the funding for PAMAP ends, the question is whether ANSIE will be able to maintain its staff on a special basis—acting almost as a semi-private IT consultancy within the government—or whether its staff positions will be converted to civil service positions. In recognition of this sustainability challenge, ANSIE is currently putting together a business model that would outline modalities for sustained funding, perhaps through Service Level Agreements with ministries and agencies. Alternatively, ministries and agencies could remit a certain amount of their budgets to fund ANSIE. In any case, having a centralized

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8 Available at https://disabilitydata.ace.fordham.edu/country-briefs/dj/.
coordinating IT provider is critical to avoid wasteful spending (e.g., with ministries unnecessarily buying duplicative software licenses).

As a new ministry, MENI currently has limited staff capacity, but will be receiving capacity building support from the Digital Foundations project. MENI is aiming to recruit civil servants and still has very few staff. Through the Digital Foundations project, the World Bank will provide support in various areas to help operationalize the ministry, including for consulting fees, equipment, stakeholder consultations, and technical training. The World Bank has been providing support for MENI to create the Digital Code and to promote its adoption, and to design a national digital economy master plan (strategy and methodological guide) with a holistic, gender- and climate-sensitive and climate resilient approach. As mentioned, MENI is also receiving support from UNDP to develop a digital transformation roadmap for the coming years.

Accelerating IT system adoption and usage is a central challenge: fewer than ten platforms are using the interoperability framework at present, and the PKI is not yet operational because of the lack of a legal framework. The e-ID platform covers less than 10 percent of the population and its deployment has been very slow. Business process reengineering and change management will be critical to making digital transformation effective. Currently, since there is no binding law to compel ministries to connect to X-ROAD, making progress will require significant attention to change management across institutions. Moreover, the government is proceeding to digitize services based on existing business processes, which means missing potential productivity gains. Business process reengineering should lay the groundwork for e-services by rationalizing policies and procedures first, such as reducing the number of people and steps involved in a process, before moving to digitize each step. The end goal is to make ICT investments more cost-effective and improve the service delivery experience for citizens. Digitization without change management can lead to making the same errors that existed in the process before, just more quickly.

4.5 Effects

Significant benefits of the World Bank’s support to digitalization in Djibouti are already being felt, although there is yet to be transformative impact on service delivery, since adoption of the e-services platform is not complete. As a result of the GoPro project’s support for an automated payment system, the process of clearing, settlement, and recording of monetary and other financial transactions is much improved and is contributing to the development of safe and efficient financial markets. Under PAMAP, the new custom system has significantly reduced the processing time for customs clearances. This customs upgrade has created an opportunity to implement a corridor between Djibouti and Ethiopia, with both governments now working to connect their customs systems, so that users can begin the process in Ethiopia.

More broadly, important progress has been made on the legal and institutional underpinnings for egovernment. While the systems and infrastructure for Djibouti’s digital transformation are increasingly in place, adoption depends on finalizing the legal, policy, and regulatory framework. An accomplishment of the PAMAP project is development and adoption of a new cyber security strategy. The Digital Code, preparation of which benefited from the support of the PAMAP project, is expected to be adopted relatively soon, and the government is taking key steps toward gradually introducing competition and private sector investment in ICT. As the current monopolistic system is replaced by a more open market, prices for ICT services should drop while quality and coverage will improve. This is expected to generate
transformative change across the economy by facilitating growth of the private sector, expanding the tax base, and enhancing public sector service delivery.

**The World Bank has embraced a flexible approach to project design and management.** During the PAMAP project restructuring, several indicators were removed from the results matrix, and replaced with more measurable and relevant ones (in particular, all indicators related to the digital ID component of the project were removed, since that component has been dropped). The matrix now includes the share of online filing of tax returns, the total number of e-services accessible by citizens, and the number of procurement functions available through the government platform. When the COVID-19 pandemic hit, the World Bank’s support to Djibouti under the PAMAP enabled the government to quickly develop an official COVID-19 app for tracking test results and vaccination status. Now, the government is asking the World Bank to expand the PAMAP project from a focus purely on the revenue side of tax administration to look also at the expenditure side in terms of budget preparation, human resource management, payroll systems, and treasury management. Since the work on the legal underpinnings for digital transformation is well advanced, the requisite laws could be in place by the time upgrades to revenue systems are underway.

5. **Lessons Learned**

Several themes emerge from the review of the World Bank’s GovTech portfolio in Djibouti. This concluding section aims to distill lessons about key GovTech ingredients, and highlight important challenges, to help inform future operations. Overall, the idea of a data-driven public sector offers great promise to transform service delivery and enable growth of a digital economy, thus increasing citizen trust in government’s competence and values and strengthening the social contract more broadly. All of this however rests on a new social contract for data, with data governance as its foundation, that engenders trust that citizens will not be harmed by data misuse (World Bank 2021b).

1. **Putting the right institutional arrangements in place and defining the roles and responsibilities of each stakeholder should be a priority when embarking on digital transformation of government.** In Djibouti, ANSIE was created at the top of government (in the Office of the Presidency). This follows good GovTech practice per the World Bank’s GovTech strategy (World Bank 2021a), which recommends that the entity implementing digital transformation be situated at the highest level of government possible to ease coordination challenges and promote a whole-of-government approach. However, ANSIE does not have a mandate to compel ministries to integrate their systems, but functions instead more like an IT service provider within the government. In recognition of this, MENI was created as a line ministry with a mandate for digital transformation – but as a line ministry itself, it may encounter challenges in getting cooperation from other ministries and agencies over which it does not have authority, and its role vis-à-vis ANSIE is not entirely clear. X-ROAD is the technical underpinning for a whole-of-government approach, but complementary institutional arrangements are still needed for implementation. In short, the ecosystem for digital transformation is currently in flux, and there is a need to clarify the overall IT governance model, including the roles and responsibilities among the players.
2. **Critically, World Bank support to GovTech in Djibouti has a heavy emphasis on the enabling environment, but systems adoption and usage remains a central challenge that seems to require a comprehensive change management strategy.** While each country's digital transformation will be highly context-dependent, some key enablers are necessary before moving aggressively on implementing digital systems and services. These include adequate infrastructure and connectivity, as well as the legal, policy, and regulatory enablers – for example, prior to onboarding citizens for a digital ID that contains sensitive data, countries need a legal and regulatory framework for personal data protection. Understanding the current status of the enabling environment is critical, which underscores the importance for the World Bank and partners to undertake solid diagnostic work prior to project design. This would include looking at existing laws, regulations, and policies to identify weaknesses and gaps; assessing the state of hard and soft infrastructure and existing IT systems; analyzing the political economy and technical soundness of institutional arrangements; and considering the need for a robust change management strategy and for long-term sustainability of solutions implemented.

3. **Digital IDs can be particularly sensitive in terms of political economy.** In Djibouti, the government saw the unique national identifier as an issue of national sovereignty, with security implications. This complicated the dialogue with the World Bank and prompted the need for a project restructuring. The lesson here seems to be to proceed with caution with respect to digital IDs, carefully assessing the sensitivities involved. It also suggests that the World Bank, as a trusted partner of many governments around the world, should strive to help countries bring international best practices – that have proven successful elsewhere – to bear when governments look to adopt digital ID solutions.

4. **While technology is central to GovTech, the purpose of digital transformation of the public sector is to improve governance and service delivery to citizens, thus strengthening the social contract.** There is a risk that the technical requirements of this complex undertaking can overshadow the ultimate objectives—"losing the forest for the trees". Thus far, in Djibouti, the government seems to be approaching its digital transformation as an IT project, which it largely is—but the next step is to focus on how the implementation of new systems can transform service delivery and strengthen governance. For instance, with the tax administration system, the key question is how the system can increase domestic resource mobilization. The creation of ANSIE as an IT service provider within the government prior to the creation (six years later) of MENI meant that X-ROAD was selected and implementation had begun before the government had a comprehensive digital transformation strategy. While proceeding iteratively on digital transformation may ultimately be a successful strategy, having the end goals in mind helps in prioritizing steps, such as which services and systems to focus on first, and for determining how to measure progress. Paying attention to non-technical drivers of e-service delivery uptake, such as the degree of trust citizens have in governments’ competence to deliver quality services and its commitment to safeguarding the privacy and rights of citizens, is also important. Gathering representative, timely, specific feedback from citizens on their experiences with service delivery may help build trust and momentum for increasing uptake, once e-services are available.
References


