



EQUITABLE GROWTH, FINANCE & INSTITUTIONS NOTES

GovTech Case Studies: Solutions that Work

Jordan: The SANAD Portal for Digital Government Services

Citizen-Centric Public Services that are Universally Accessible

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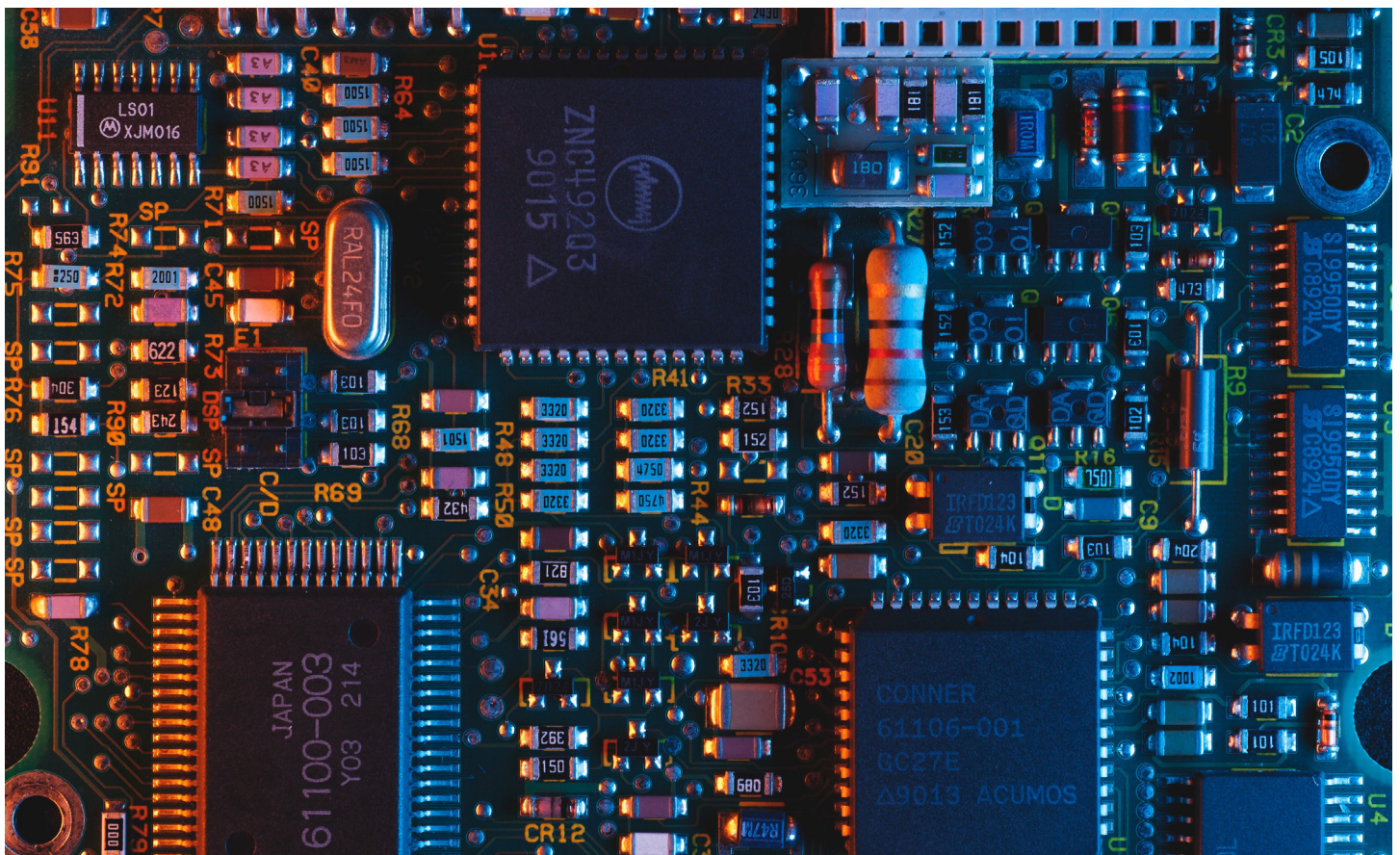
Introduction

Around the world, for many people, using government services has often meant filling out cumbersome forms, traveling – perhaps long distances – to government offices, and standing in lines to speak with an official. Under such conditions, accessing government services can be costly in time and money for individuals as well as businesses, and it can be difficult for governments to monitor service delivery effectively.

The Government of Jordan has been working to solve these issues through the digital transformation of the public sector, a process led by the Ministry of Digital Economy and Entrepreneurship (MODEE). A key piece of its vision is the SANAD¹ portal, which is meant to become a single, convenient gateway to digital government services. Available online and via mobile app, SANAD provides single sign-on access to more than 400 digital services, for example, enabling users to retrieve personal records such as birth certificates, apply and schedule appointments for government services, sign documents, and make payments.

Digital technology has been at the center of public administration reform efforts in Jordan since the early 2000s, but implementation has been hampered by external shocks and economic challenges such as the global financial crisis and the influx of Syrian refugees. Jordan's information technology (IT) infrastructure and capacity render the country favorably positioned in terms of digital competitiveness. However, attracting private investment also requires high-quality, reliable public services.

In recent years, the government has committed to accelerating digital transformation to improve public sector efficiency and service delivery access and quality. Considering a digitally enabled public sector as an essential driver of economic growth and job creation, the government has linked its digital objectives to national goals around becoming a hub for IT services in the region, increasing the employment of youth and women, and strengthening the social contract more broadly.



1. Sanad is an Arabic given name that means “supportive of those around him” and suggests a magnanimous character.

Problems and Objectives

Jordan is often described as an island of stability in a volatile neighborhood. It scores better than average among upper middle-income countries on government effectiveness in the World Bank's Worldwide Governance Indicators. However, unemployment is high at 23 percent overall, and even higher among women (29 percent) and youth (46 percent for those under age 25). The rate of female labor force participation is among the lowest in the world.² In the most recent Arab Barometer survey, only 15 percent of respondents said that the economic situation was good or very good, down from 55 percent in 2006.³

In June 2022, the government launched the [Economic Modernization Vision](#) that aims to bring more than one million young people into the labor market, increase per capita income by 3 percent per year, and improve Jordan's global competitiveness.⁴ Stimulating economic growth and job creation are therefore top priorities, and the government sees public sector digital transformation as an important piece of this agenda. In its view, in addition to making service delivery more efficient, e-services can stimulate demand for technology workers and foster a national digital ecosystem that supports a productive digital economy.

Enabling digital payments combined with reengineering and automating business processes should substantially improve the service delivery experience for citizens and businesses. Another part of the motivation for digitizing payments is to create a catalyst for increasing financial inclusion, especially for low-income Jordanians, for whom delivery of government payments to a bank account could become a gateway to other financial services.

In 2021, the government adopted an overarching [Digital Transformation Strategy](#) to outline a whole-of-government approach to public sector modernization.⁵ It espouses a set of guiding principles that includes (1) digital by default; (2) one-stop shop; (3) leaving no one behind; (4) simple, fast, and satisfactory services; and (5) the once-only principle—avoiding duplicate data requests to users.

The Digital Transformation Strategy is supported by the World Bank's [Jordan Youth, Technology, and Jobs \(YTJ\) Project \(P170669\)](#), which aims to increase digital skills among youth, expand digitally-enabled employment opportunities, and digitize service delivery, including bringing government services together into the SANAD portal.⁶ This is a massive coordination challenge, as it involves dozens of government entities and requires streamlining business processes, standardizing technical and data requirements, and linking disparate systems. Government collaboration with the private sector is also essential, since Jordan's strategy envisions the bulk of e-services being provided by private firms, with government as a platform.

2. <https://www.worldbank.org/en/country/jordan/overview>

3. https://www.arabbarometer.org/wp-content/uploads/ABVII_Jordan_Report-EN.pdf.

4. <https://www.jordanvision.jo/en>

5. https://www.mod.ee.gov.jo/EBV4.0/Root_Storage/EN/1/Jordan_Digital_Transformation_Strategy_2020_English_Unofficial_Translation.pdf.

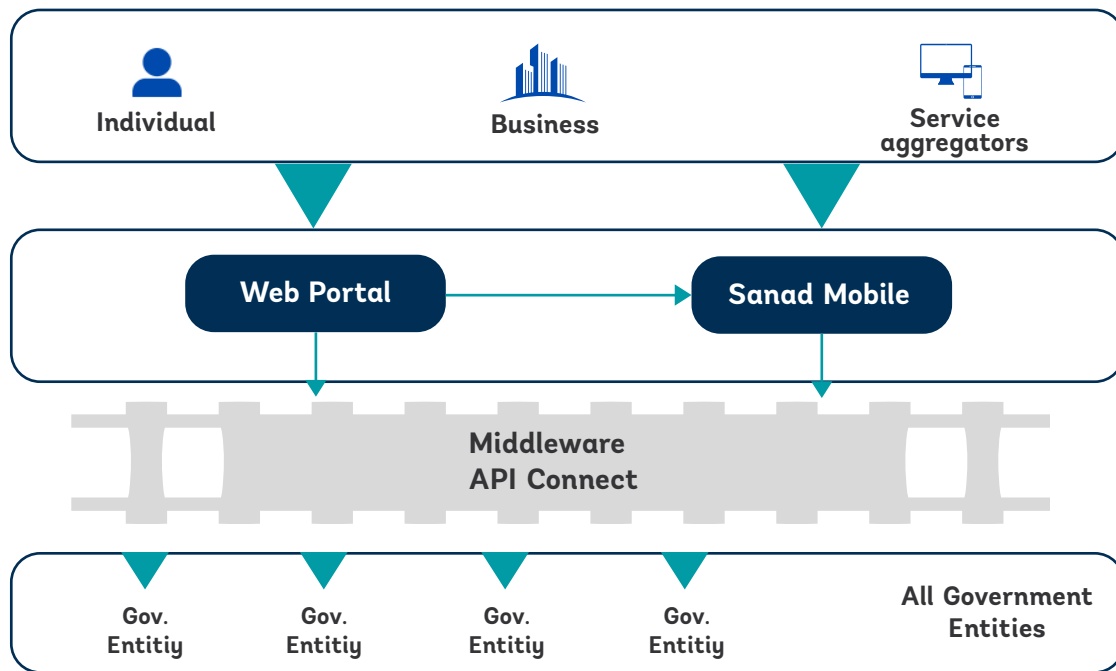
6. <https://projects.worldbank.org/en/projects-operations/project-detail/P170669>.

Solutions and Approaches

SANAD is a single sign-on e-services platform that is in the process of becoming the backbone for online public service delivery in Jordan. SANAD fits into the government's Digital Transformation Strategy (Figure 1), which includes a centralized government digital infrastructure, a data center, middleware, open application programming interfaces (APIs), a backend payment processing hub, and enabling policies such as on data privacy and digital signatures.

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Figure 1. Overview of Jordan's Planned E-Government Architecture (under implementation)



Source: Jordan National Digital Transformation Strategy & Implementation Plan (2021-2025)

The YTJ Project's support of SANAD is enabling the connection of dozens of new e-services related to licensing, civil status, health insurance, and other areas,⁷ using APIs. Through the process of digital transformation, the government is also gradually starting to shift toward a more user-centric approach to service design and delivery. In deciding which data to include in the SANAD mobile app, for instance, the government has analyzed which information is most often sought after by users of the web version. By applying the concept of information-by-default, the aim is to reduce the number of data inquiries that users must resolve online or in person. The government also responds directly to feedback, suggestions, complaints, and questions submitted via the "Suggestions & Complaints" service in the SANAD mobile app, and publicly via social media accounts—Facebook, Instagram, LinkedIn, and Twitter. Online dashboards for citizens, businesses, and residents are planned, with full functionality of the platform expected by the end of 2023.

One important step in business process reengineering has been a public value assessment that involved detailed testing of 25 e-services across 12 institutions. These 25 services were chosen from a pool of more than 400 existing services for evaluation in terms of quality and efficiency. Their selection was based on factors such as end-user demand, government priorities, and international good practices. The government plans to make improvements based on the assessment.

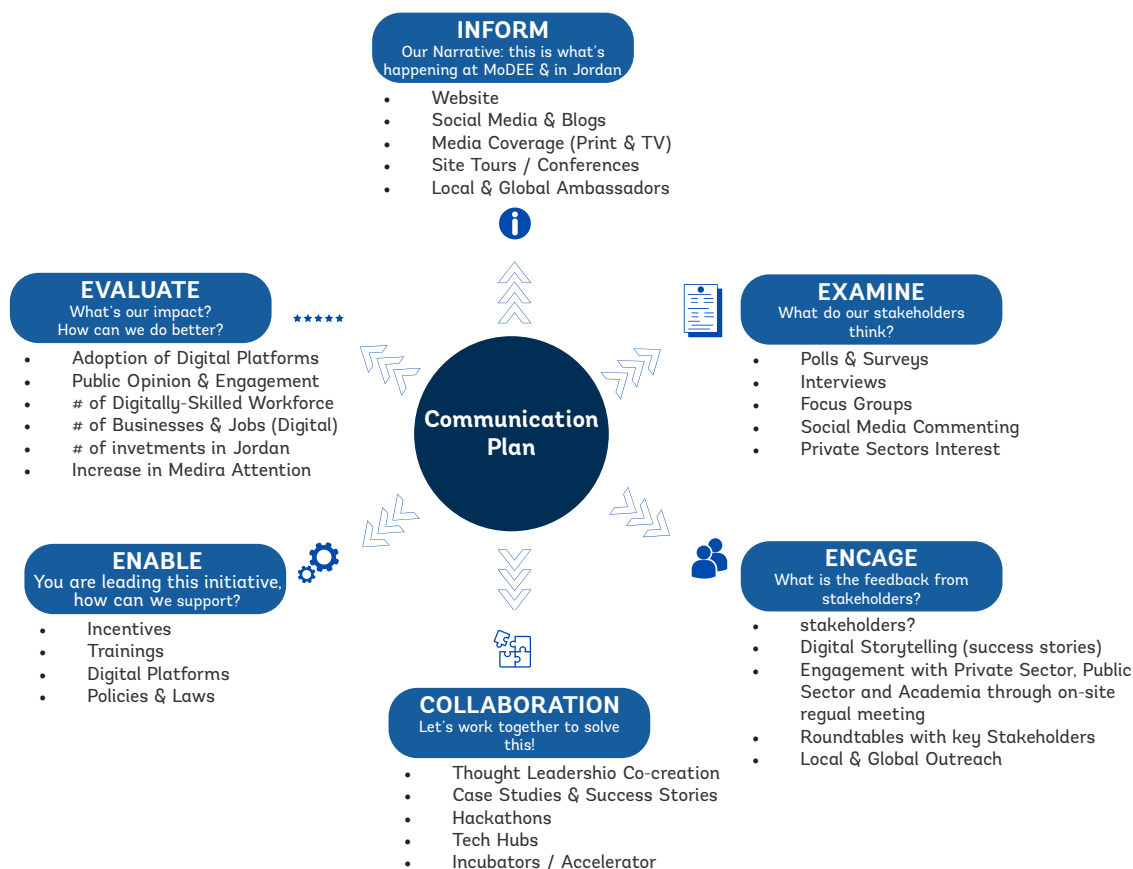
7. <https://www.jordannews.jo/Section-109/News/Sanad-app-adds-new-gov-t-e-services-23456>.

Since issues with the availability and quality of relevant data can be major stumbling blocks in digital transformation, the government has issued a Data Executive Plan to strengthen data management. Moreover, to enable greater data sharing among government entities, which until now has been uncommon, a government directive stated that all government data belongs to the Government of Jordan, not the line ministry that holds it.

There is a need to overcome institutional rivalries that delay implementation, and to revisit siloed ways of working to avoid duplication of effort and develop integrated processes and technologies. To overcome resistance and bureaucratic inertia, the YTJ Project incorporates capacity building and support for convening stakeholders. Also, the Communication Plan in the National Digital Transformation Strategy 2021-2025 (Figure 2) includes six pillars – inform, examine, engage, collaboration, enable, and evaluate – to facilitate effective communication with all stakeholders.



Figure 2. Communication Plan



Source: Jordan National Digital Transformation Strategy & Implementation Plan (2021-2025).

Ensuring personal data protection is a big challenge for all governments undergoing digital transformation. How sensitive data are used and protected is one of the key elements in a proper regulatory data framework. In Jordan, citizens activate their digital ID by verifying their identity by visiting one of the SANAD stations across the Kingdom where a citizen's fingerprint is captured and matched with the fingerprint data stored on the National Smart ID Card (match on card), or soon through iris recognition. The low uptake of the digital ID to date⁸ might be partially explained by concerns citizens have about whether they trust these systems, echoing concerns about digital IDs around the world.

8. As of February 2023, approximately 300,000 digital IDs have been activated out of a target of 3.5 million. Source: <https://www.jordannews.jo/Section-109/News/300-000-Jordanians-activate-digital-IDs-through-Sanad-app-26846>

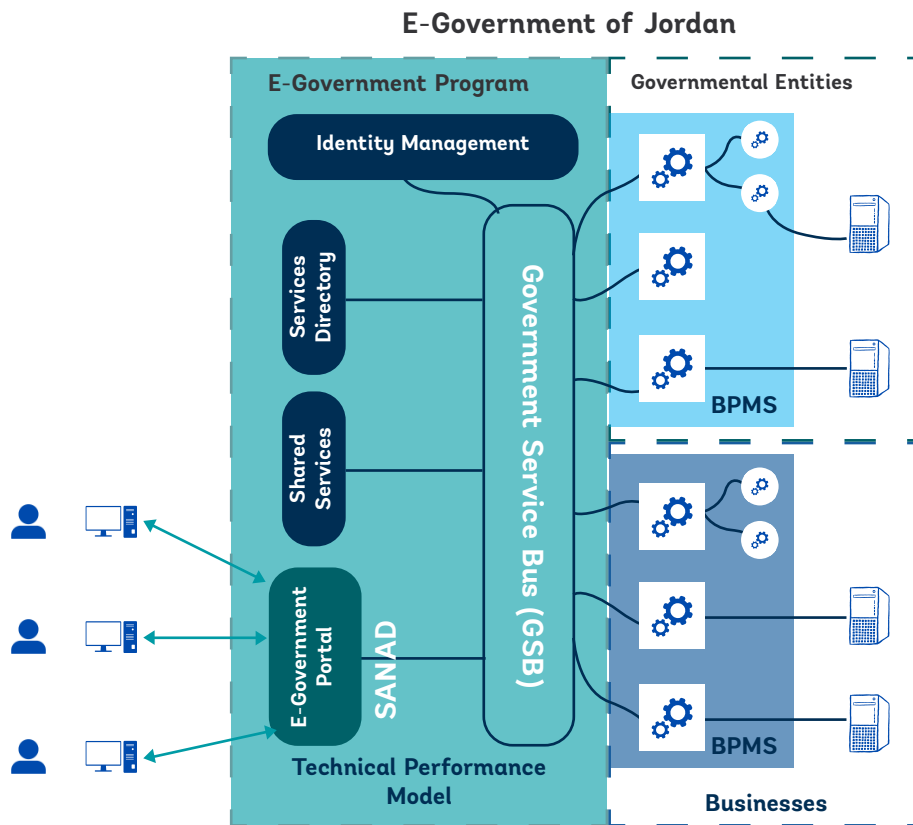
DIGITAL SOLUTIONS

A private sector consortium worked with the Ministry of Digital Economy and Entrepreneurship (MODEE) team to develop the latest version of SANAD, launched in January 2022. SANAD is available as a mobile app for iOS or Android smartphones or other devices and as a web portal. Phase 1 is completed – informative portal only; Phase 2, adding all services to the SANAD portal – is in progress. SANAD is based entirely on open-source components, so the government does not have to pay for a license agreement, and it owns the resulting code. A hybrid cloud solution, comprising public cloud and private government cloud, is used for hosting. To access full functionality, individuals must visit one of the SANAD stations to activate their identity using fingerprint biometric data, or soon, via iris recognition.

Once the federated e-government architecture has been fully implemented as envisioned, it will include a proprietary Government Service Bus (GSB) based on Service-Oriented Architecture (SOA) to enable a seamless service delivery experience (Figures 3 and 4). Once fully integrated with SANAD, the GSB will route service invocations towards service providers and return responses to users, and link to shared services such as digital payment capabilities. An information interoperability framework has been initiated that will ensure that all entities involved are using the same data protocols and standards.



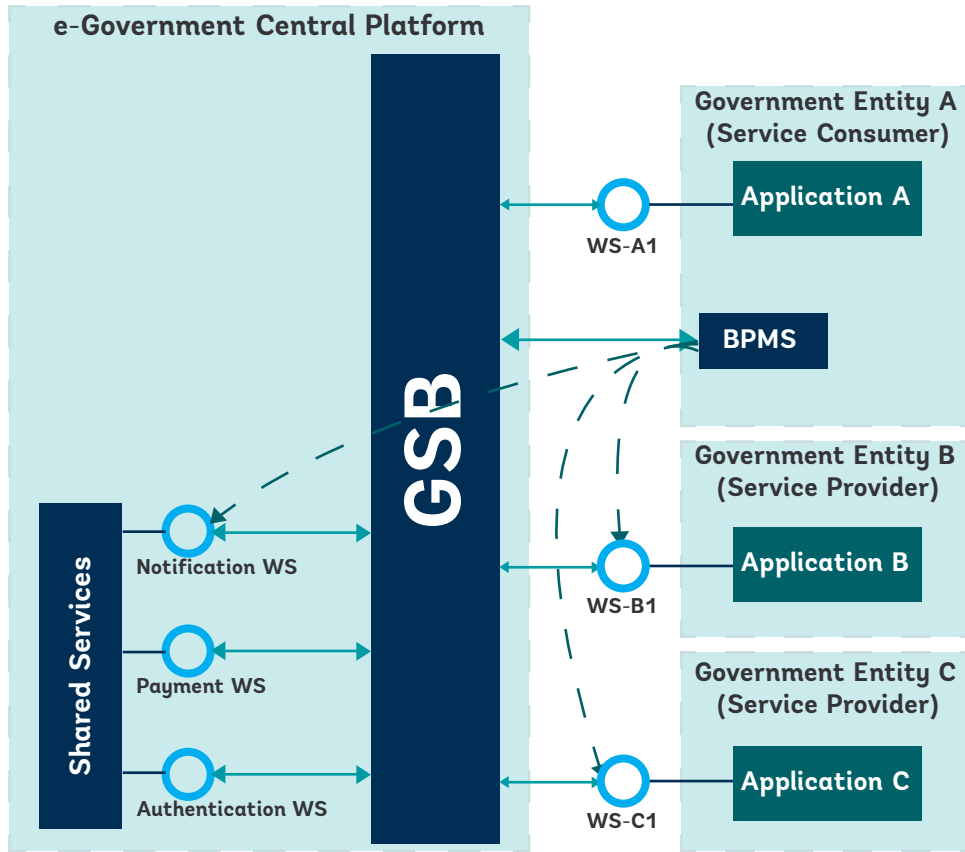
Figure 3. e-Government Architecture High-level View



Source: MODEE website (SANAD is a web service interface in the diagram).

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Figure 4. e-Government Architecture Framework (eGAF) and Business Process Management System (BPMS)



Source: MODEE website (SANAD is a web service interface in the diagram).

Results

Thus far, the implementation of SANAD has resulted in the following:

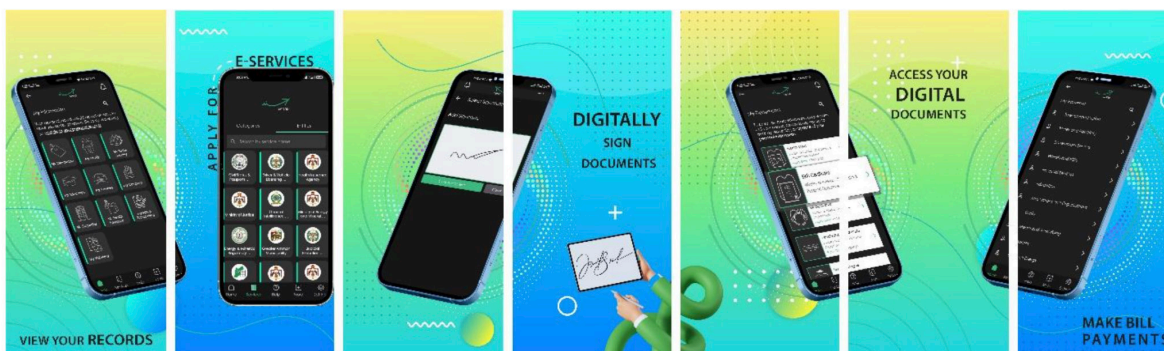
- The app has been downloaded over 3 million times and has had more than 4 million hits.⁹ SANAD offers access to more than 400 e-services for citizens and businesses, such as applying for government services including issuance of various permits, and licenses, passports, health insurance cards and many other transactional services from different government entities; accessing personal records such as birth certificates; signing documents digitally; and paying bills and fees both to the government and to the private sector.
- Users can access some features as a guest, but full SANAD functionality requires activation of a person's digital ID—a one-time process. The government has eased this process by allowing individuals to activate their IDs remotely and securely through their bank, taking into consideration specific criteria that must be met; they can also go in person to one of about 500 physical SANAD stations (kiosks).
- SANAD played a significant role during the COVID-19 pandemic as it allowed individuals to manage the vaccination process digitally, for example, with text reminders for appointments. The SANAD app served as the only trusted and verified source of vaccination status and could be used to show proof of vaccination before entering public buildings, when required.
- The platform supports various delivery channels including online and app-based (Figure 5), and via physical kiosks or Comprehensive Service Centers to promote inclusion. Entrepreneurs have also taken advantage of rising demand by providing in-person IT support and devices for citizens to access government e-services.

The COVID-19 pandemic altered the context for digital transformation in Jordan by accelerating demand for digitalization and prompting citizens to adopt e-services more quickly. This habituation to a digital ecosystem can be expected to continue to facilitate citizen uptake of new or enhanced e-services through SANAD.

Moreover, what began as an emphasis on the digitization of existing services and processes in Jordan has increasingly evolved toward a more user-centric rethink of the way services are delivered. Digital technology provides an opportunity to design service delivery not based on how government agencies are organized, but around how citizens and businesses live and work. This represents an enormous opportunity as well as a significant challenge and underscores the need for rigorous data protection and privacy assurances.



Figure 5. SANAD App Interface



Source: Screenshot of the SANAD app.

9. Source: SANAD website. <https://sanad.jo/default/en>.

Lessons learned

Early lessons from the Government of Jordan's experience with implementing this unified portal for e-services delivery include the following, which suggest potential takeaways for governments and World Bank task teams seeking to implement a GovTech approach:



Digitize for a purpose. The Government of Jordan is pursuing digital transformation to support larger development goals, not simply for the sake of digitizing, and this problem-driven approach has given focus to digital objectives and priorities. A clear signal of high-level political commitment to the agenda has helped to drive it forward. Also, anchoring the service delivery reforms within a holistic strategy and architecture for e-government has been important.



Digital transformation is incremental. Taking an incremental approach has been useful in Jordan. For example, the digital ID initiative built on previous investments in a national registry created for the national cash transfer program. The shift to a user-first rather than government-first mindset takes time and a concerted investment in change management and capacity. Based on the latest update of the SANAD mobile app and the addition of new services and features, SANAD's mobile app rating jumped from 1.8 to 4.8 in the AppStore.



Prioritize stakeholder buy-in and coordination. Coordinating the large number of stakeholders involved in public sector digital transformation, and overcoming resistance from vested interests, are two significant political economy challenges in implementing a unified service delivery portal. Some line ministries in Jordan have already individually undertaken extensive digitization efforts and are reluctant to revisit this process. Some resistance to change seems to come from civil servants who feel threatened by digitization. Digitization can also reduce opportunities for corruption and kickbacks, which may prompt some pushback. Ensuring that there is a government entity with the mandate to lead on digital transformation, and that it is empowered to enforce alignment with technical and procedural standards across the government, is important. These institutional arrangements have not yet solidified in Jordan.



Pay attention to capacity constraints. For the government department in charge of digital transformation in Jordan, the largest challenge on the technical side has been competing with private sector salaries and employment terms in recruiting and hiring skilled staff. Outsourcing specific tasks to private IT firms and collaborating with external partners have been important ways that MODEE has mitigated human resource capacity gaps. Taking a longer-term view, the YTJ Project supports digital skills training for young people as well as access to market for digital firms, to strengthen the digital ecosystem in Jordan.

Next Steps

Although more than 400 government services and features have already been digitized on SANAD, the government is working to continue enhancing and adding digital services and to mainstream digital payment to enhance functionality and transparency. Increasing citizen uptake of digital ID and strengthening data protections are also works in progress. MODEE plans to implement a public communications strategy to increase awareness of digital reforms.

The World Bank is also supporting the development of a National Register of Government Services that by 2025 will capture usage details for about 2,600 public services¹⁰ and allow the government to analyze service performance. The register is now available through the SANAD portal. Data will continue to include criteria on service access and quality, such as average waiting time and satisfaction rates. Inclusivity of services is a key concern, and better data that can be disaggregated by gender and other user groups will be important to monitoring progress. The YTJ Project has specific targets for women and Syrian refugees as beneficiaries of services provided by digital platforms.

Another future step is strengthening the “At Your Service” (Bekhedmetkom) mechanism that is designed to allow citizens to provide feedback and express their opinions through multiple channels. With Bekhedmetkom, citizens can use the Complaint, Suggestion, Compliment, Ask Government and e-services satisfaction and feedback channels to voice their opinions. This platform provides a powerful way for citizens to engage with government officials and have their voices heard, while prompting needed enhancements as per the feedback.

At the same time, there is a need for stronger interagency coordination and more systematic approaches to collecting and organizing feedback data to improve responsiveness to user complaints. The next frontier will be going beyond grievance redress mechanisms to mainstream user research and engagement throughout the cycle of service delivery planning, implementation, and monitoring. Enhancement of Bekhedmetkom will be beneficial for both citizens and government officials in facilitating better communication between them.

At the sectoral level, the YTJ Project will support digital transformation in health and education, for example by looking at electronic medical records and the potential for health sector data analysis. The YTJ Project is also financing an assessment looking at the interoperability of shared services, systems capabilities, data governance, and resilience to identify institutional and regulatory gaps relevant to digital transformation.

10. This is a technical figure that includes main services as well as sub-services; from a user perspective, the number of available services is much lower.

Contact Information

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Annex 1. SANAD Web Interface and e-Government Architecture



Signup and discover what you can do with Sanad

Create your Sanad account and activate your digital identity to access your government digital documents, apply for government services, access your personal records, digitally sign documents, make bill payment and many more features.

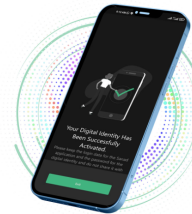
Activate your Sanad digital identity

Activating your digital identity will unlock many features allowing you to use fully digitized government services, accessing your personal information and government digital documents, digitally sign documents as well as making bill payments to government and private services.

To activate your digital identity, please visit one of Sanad stations or through the participant banks. For the list of stations, please click here.

Participating Banks:

- * Arab Bank
- * Bank Al Etihad
- * Housing Bank
- * Capital Bank



View your personal records

You can easily access your latest personal records and information on Sanad including the details of your National ID, family booklet, driving and vehicle licenses, properties and real-estate, education, health insurance, social security, bails and procurations, driving tickets, judicial requests and much more.

To serve you more effectively, please notify us if your personal records are not up to date by requesting an update to your personal information through Sanad app..



Use your government digital documents

You can easily access your government digital documents that can be used as an alternative for the traditional documents, knowing that they are protected by a secure and encrypted QR code to verify their authenticity. Digital documents include your National ID card, family booklet, birth certificate, drivers and vehicle licenses, health insurance card, university certificates and much more.

To serve you more effectively, please notify us if your personal records are not up to date by requesting an update to your personal information through Sanad app.





Apply for government services

You can easily apply for government services in a digitized and secure manner, omitting the need for in-person presence to the government entities. To ensure we deliver a seamless customer experience, we have developed the government services on Sanad as easy and convenient as possible.

[Watch Video](#)

Digitally sign documents

Digital signature is an electronic mechanism equivalent to a handwriting signature that is certified and trusted by using an encryption mechanism to verify the authenticity and integrity of digitally signed documents. You can now sign your digital documents through Sanad and send them to the concerned parties. Any digitally signed document can be verified through the digital signature verification service on Sanad app.

[Watch Video](#)



Make bill payment

You can easily pay your bills for both government and private services at any time through Sanad app using E-Fawateercom gateway, which provides different payment options including payment using your bank accounts and credit cards.

[Watch Video](#)





Enhance your customer verification and onboarding process with Sanad

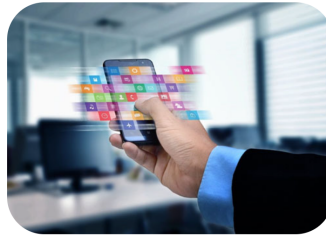
Connect and integrate with Sanad and save your customer the hassle to register and login to multiple systems using Sanad Digital Identity



Accessibility Menu

SPEED UP YOUR CUSTOMER ONBOARDING PROCESS USING SANAD DIGITAL IDENTITY

Easily enable your customers to onboard and login into your system using Sanad app



EXPEDITE YOUR e-KYC PROCESS FOR YOUR CUSTOMERS

Expedite the process of getting to know your customer by integrating with Sanad app



VERIFY YOUR CUSTOMERS USING SANAD DIGITAL DOCUMENTS

Validating your customers identity without collecting their physical identity document



ENABLE YOUR CUSTOMERS TO DIGITALLY SIGN DOCUMENTS USING SANAD

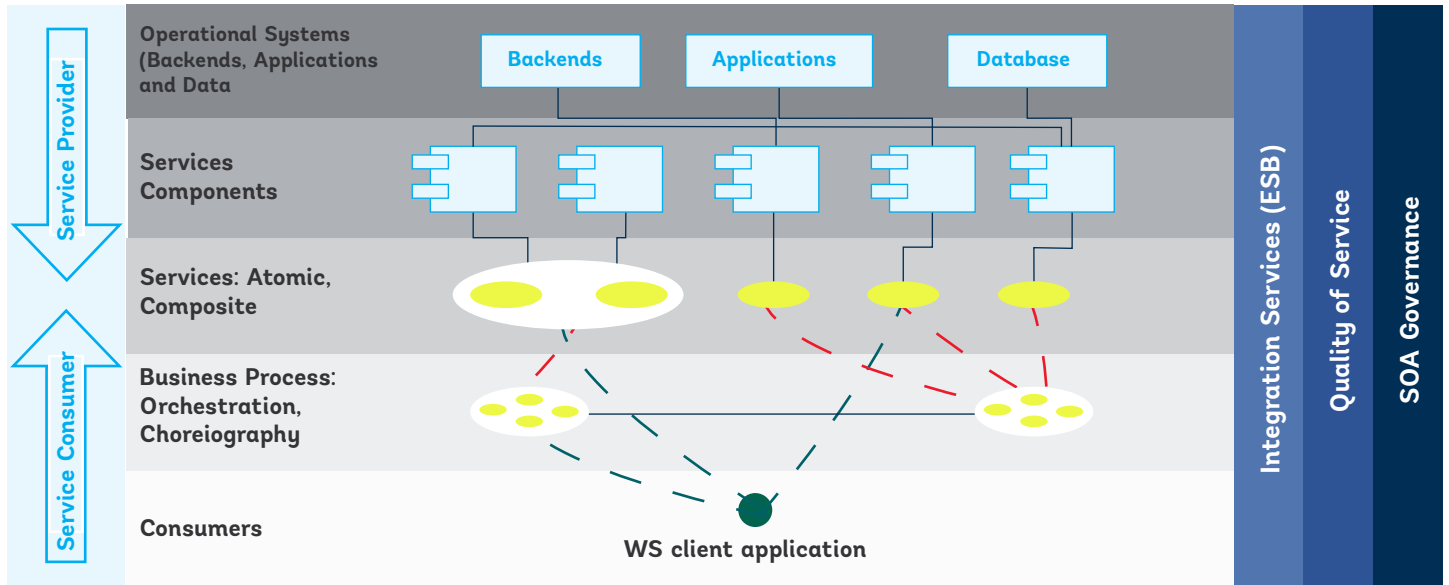
Enable your customers to digitally sign documents with Sanad without physical presence

Ready to connect with Sanad?

[Complete the business enquiry form](#)



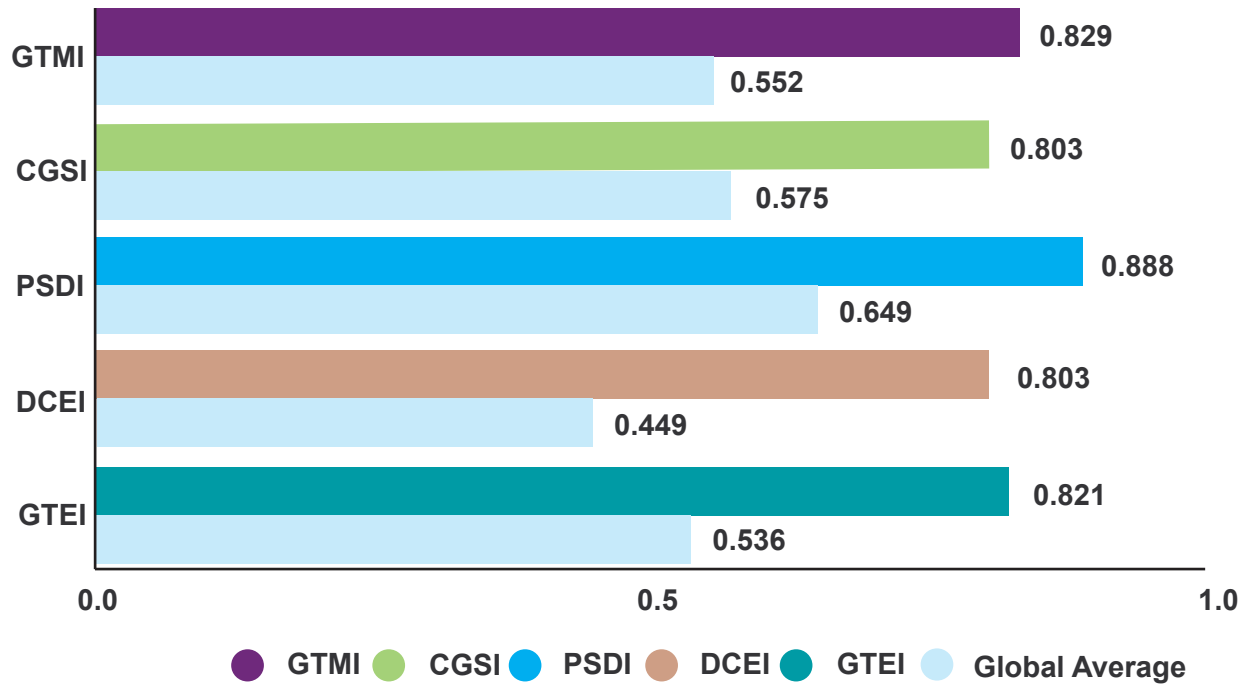
e-Government Architecture Framework Integration Reference Model



Source: MODEE website.



Annex 2. GovTech Maturity Index 2022 in Jordan



Source: World Bank GovTech Maturity Index (GTMI). Available at <https://www.worldbank.org/en/programs/govtech/gtmi>.

Note: The GTMI measures each country's progress on four key dimensions of GovTech by aggregating four subindices: the Core Government Systems Index (CGSI), Public Service Delivery Index (PSDI), Digital Citizen Engagement Index (DCEI), and GovTech Enablers Index (GTEI).

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