

Whole-of- Government digital transformation

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ITU Regional Office for Asia and the Pacific

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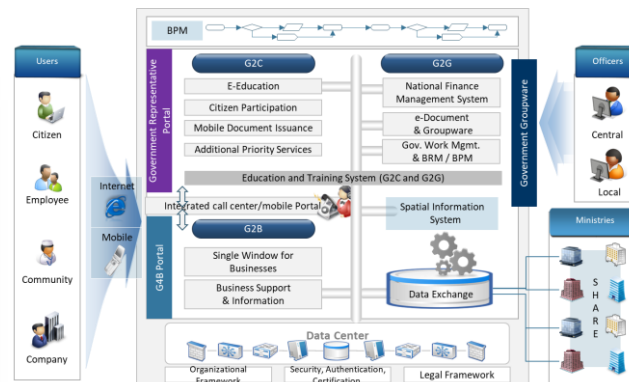
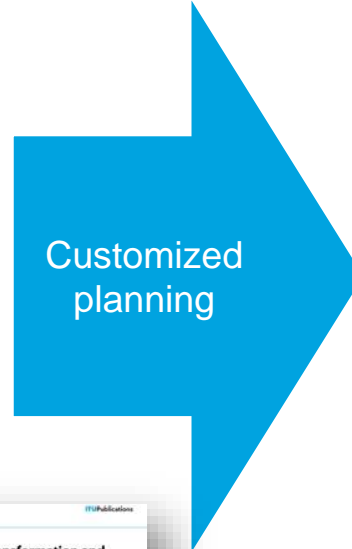
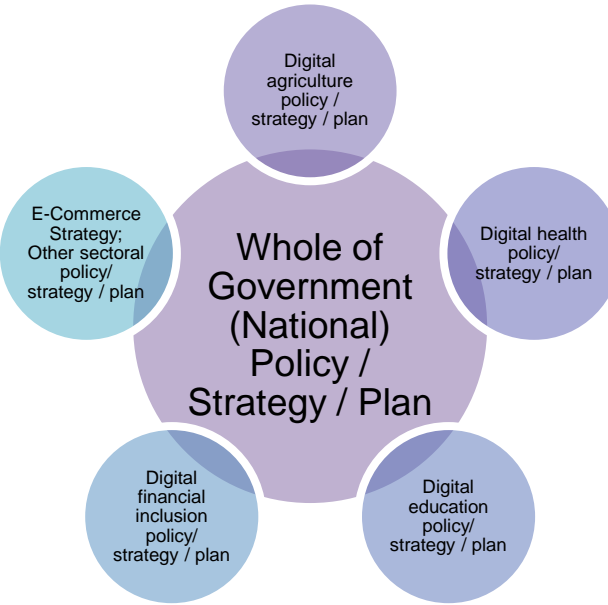
Whole of Government Digital Transformation

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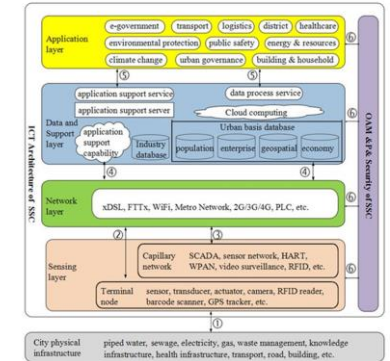
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Whole-of-government approach for digital development

National Vision and SDG implementation plan



Smart city



Smart village



Smart Islands



GovStack is a multistakeholder, community-driven initiative, focused on accelerating national digital transformation worldwide, and drawing on expertise from contributors across the private sector, civil society, and governments all over the world.

The initiative was founded by the International Telecommunication Union (ITU), Estonia, Germany, and the Digital Impact Alliance at the United Nations Foundation in 2020.



REPUBLIC OF ESTONIA
MINISTRY OF FOREIGN AFFAIRS



Bundesministerium für
wirtschaftliche Zusammenarbeit
und Entwicklung

giz Deutsche Gesellschaft
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Zusammenarbeit (GIZ) GmbH



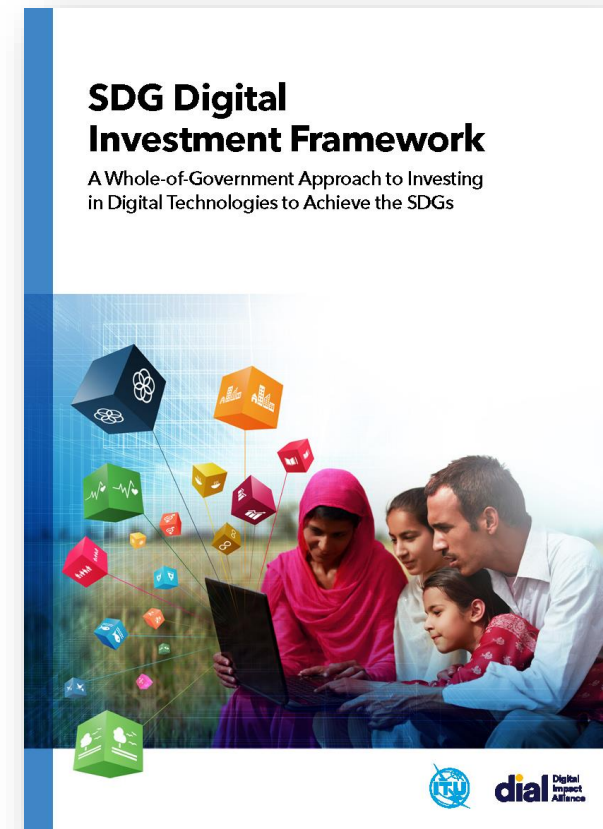
digital
impact
alliance

GovStack: Why we exist

In 2015, world leaders agreed to 17 Global Goals for Sustainable Development to speed up global development.

Many of these goals rely on our ability to deliver services to people, and we know that digital technology can facilitate broader access.

GovStack aims to break down the barriers to building sustainable digital public infrastructure and help governments create human-centered digital services that empower individuals and improve well-being.



Country governments struggle with the digitization of their public services for several reasons



SILOES

Siloed investments and duplicative efforts by development partners promote fragmented digital governance and silos in partner countries.



FUNDING

Challenges in procuring and implementing affordable IT solutions persist, as do challenges in creating the necessary capital to invest in ICT infrastructure projects.



SCALING

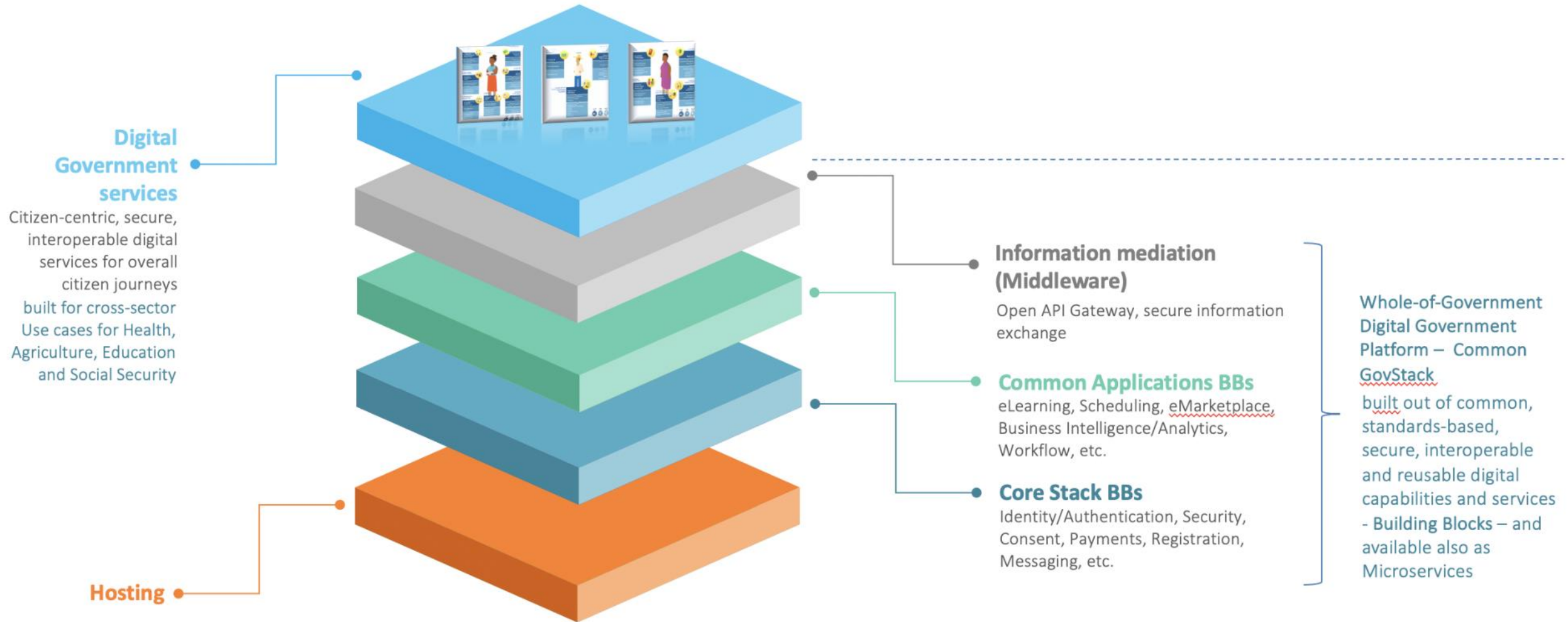
Huge challenges exist in adapting and investing in projects at scale, particularly around the rollout of physical ICT infrastructure, the deployment and use of common data platforms.



COORDINATION

Problems in coordination commonly occur in aligning ICT ministry work with that of other agencies.

W-o-G approach overcomes digital transformation challenges by utilizing a common reusable stack of Building Blocks



A WoG Digital Government Platform is a “platform of platforms” that can be used by any government agency, department across different sectors to build new government digital services without having to design, test and operate the underlying systems and infrastructure themselves.

GovStack leverages W-o-G approach to design digital government services with generic Building Blocks

What are *Building Blocks*?











Generically-defined **software components** that in combination provide key functionalities to facilitate generic workflows common across multiple sectors.

What are their characteristics?

- Interoperable with other Building Blocks
- Reusable software components
- Open-source, commercial off-the-shelf (COTS), or freely available with open access to data
- Facilitate one or more generic workflows
- Applicable to use cases across multiple sectors

Building Blocks set

Identified **components** so far

 Registration	 Messaging	 Scheduling	 Security
 Payments	 Information Mediator	 eMarketplace	 GIS
 Identification & Authentication	 Client Case Management	 Collaboration Management	 Analytics & Business Intelligence
 eLearning	 Reporting & Dashboards	 Content Management	 Data Collection
 Shared Data Repositories	 Digital Registries	 Terminology	 Artificial Intelligence
 Consent Management	 Mobility Management	 Workflow and Algorithm	

[refer to: Building Blocks section of [Govstack.global](https://govstack.global)]

GovStack is building a community driven toolbox to drive digital government initiatives globally

GovStack



GovSpecs

Take the guess work out of building your stack.

We'll give you the Building Blocks to ensure your stack is scalable, optimized for innovation, and built to last.

Specifications ready :

ID, Payments, Registration, Registries, Information Mediator, Security, Architecture, Scheduling, Messaging, Workflow, Consent

Q3 2023: e-Signature, e-Marketplace, UX/UI, GIS, Cloud & Infrastructure



GovTest

Jump in the sandbox to experiment and create.

A digital testing environment to learn, experiment, and prototype services based on Building Blocks.

Q3 2023: GovStack Sandox with 4 govStack compliant Building Blocks: Information Mediator, Consent, ID & Payments
Other DPGs: eRegistrations from UNCTAD and Ukraine and workflow from DIGIT India



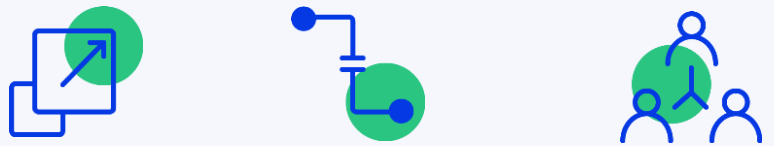
GovLearn

The global knowledge hub for e-government.

Join one of our Communities of Practice (like the [CIO Digital Leaders Forum](#)) to be on the cutting edge of digital government with best practices and tools.

Ready: [GovStack implementation playbook](#)
Q4: GovStack LMS in Atingi

GovStack integrates seamlessly with nationally adopted data frameworks and policies while enabling efficient data governance



SCALING **SILOES** **COORDINATION**

At the core of these recurring themes are

- Fragmentation of data
- Different data standards
- Risks of Data Security and Privacy
- Risks of Duplication
- Loss of data integrity for data in transit
- Limited analytics

Building Block Design Principles

- Interoperable
- Citizen-Centric
- Open Standards and Open Source
- Sustainable
- Secure
- Accessible
- Flexible
- Robust



Technical/Non-Technical Requirements

- Federated architecture
- API Gateways
- Adapter based Data Exchange



GovSpecs

- ID and Verification,
- Payments,
- Registration,
- Registries,
- Information Mediator,
- Security,
- Government Enterprise Reference Architecture
- Scheduling, Messaging, Workflow, Consent
- e-Signature, e-Marketplace, UX/UI, GIS,
- Cloud & Infrastructure

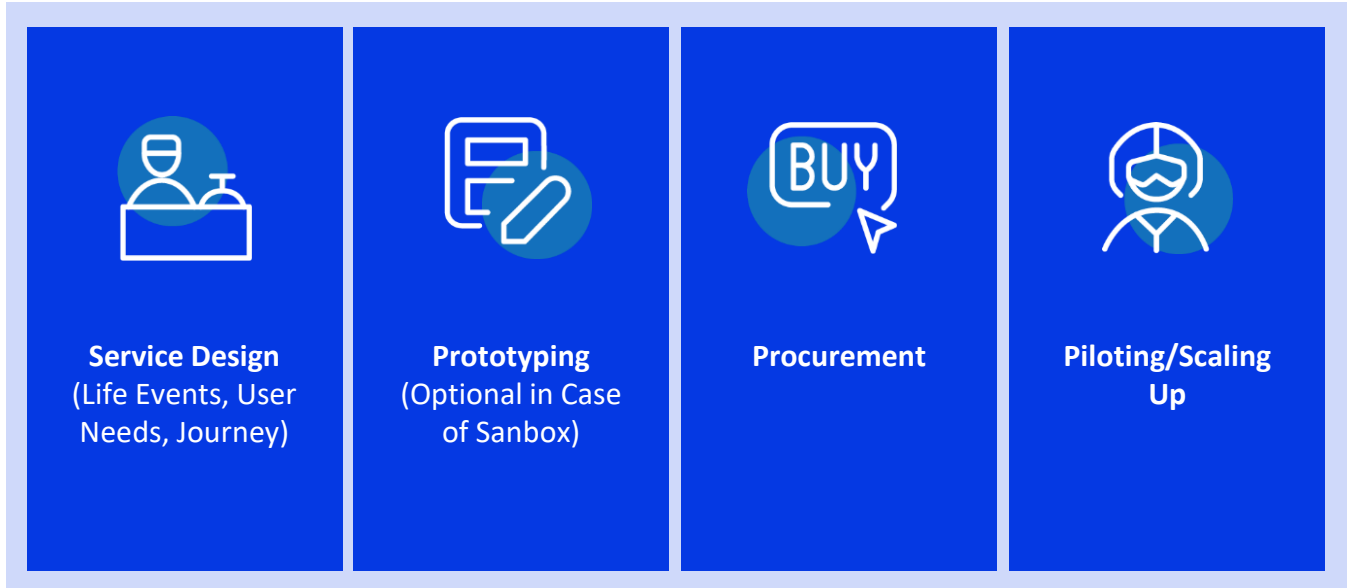
[refer to: Building Blocks section of [Govstack.global](https://govstack.global)]

GovStack has crafted an implementation framework to expedite W-o-G based digital transformation

GovStack can be incorporated into policy



GovStack can guide service design, prototype & scaling



How to read the Playbook on Gitbook:



GovStack Implementation Playbook

- GovStack Overview
- Implementation framework
- GovStack design principles
- Strategy & Governance
- Service Design & Delivery**
- Building Block specifications
- Digital Teams Composition
- Learning and Exchange

Co-design "to-be" user journey

Version for TAC Review October 2022

The "as-is"/"Initial To-Be" user journey along with its qualitative & quantitative findings enable you to run co-designing sessions with service community and relevant stakeholders. These co-designing sessions aim to improve the service and deliver a user friendly experience documented in form of a "to-be" user journey. The following image describes the aforementioned co-design process.

Export as PDF
Copy link

Scope of work	Activities	Digital team	Deliverables	Next steps	Resources
A good co-design process requires:					
<ul style="list-style-type: none">Defining the key users of the "to-be" journey. These key users include citizens-business, public officials of the different entities that participate in the journey, and any stakeholder related to the service.Describing the key steps and activities in their expected 'to-be' process.Identifying happy points (innovate in anticipating user needs).Considering interoperability along the steps of the journey to reach the least viable number of touch points and a seamless experience.Identifying access & delivery channels for the service – voice command, web, mobile app, sms, physical presence according to the service community context & needs.Identifying country legislation, policies & standards regulating the service that need to be updated to enable the "To-Be" User journey.Identifying service components to be standardized. These will become a part of Country digital service design standards. Standardisation inculcates familiarity with service users, allowing them to easily identify official forms/documents/resources and disregard forged ones.					

The playbook is divided into 2 chapters (comprising of sequence of steps to digitise a service using Building Block approach)

Step within the implementation journey

Each step within the implementation journey consists of these sub-items

GovStack engagement opportunities allow countries to select the level of involvement that best suits their needs



Implement GovStack

Become a reference implementation country and transform your government services.



Technical Contribution

Develop and review **Building Block specifications** in GovStack working groups

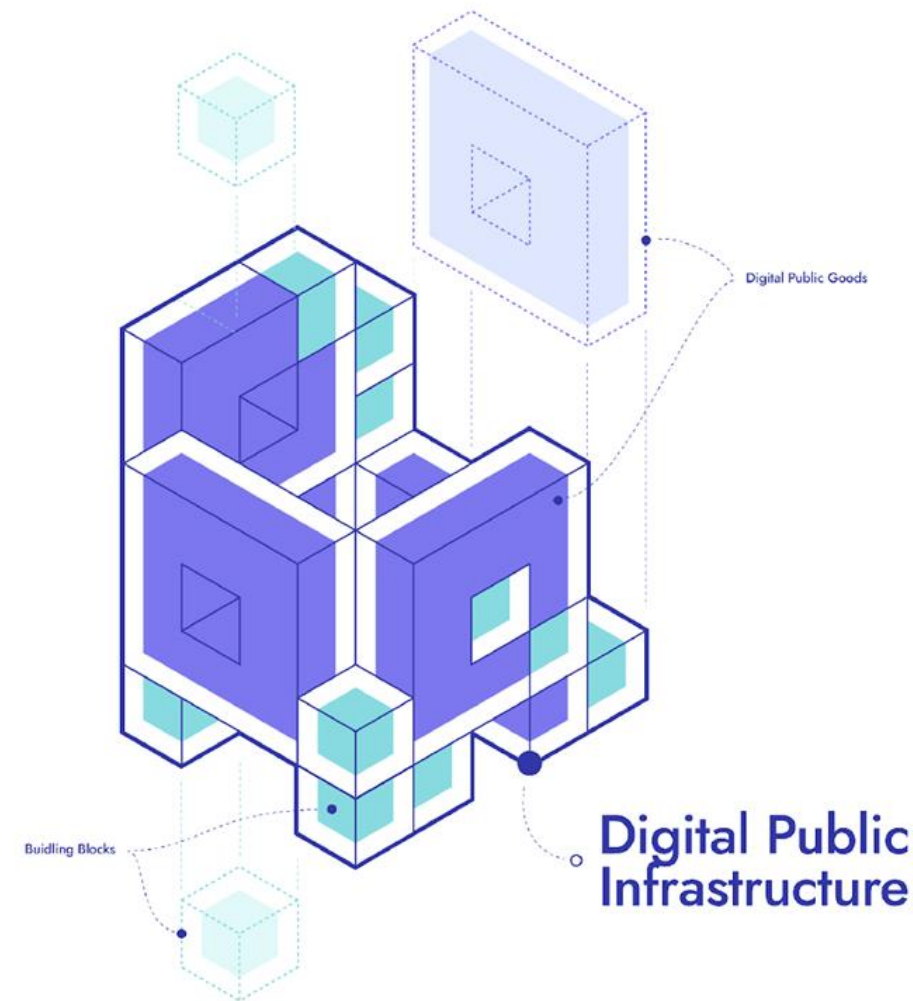
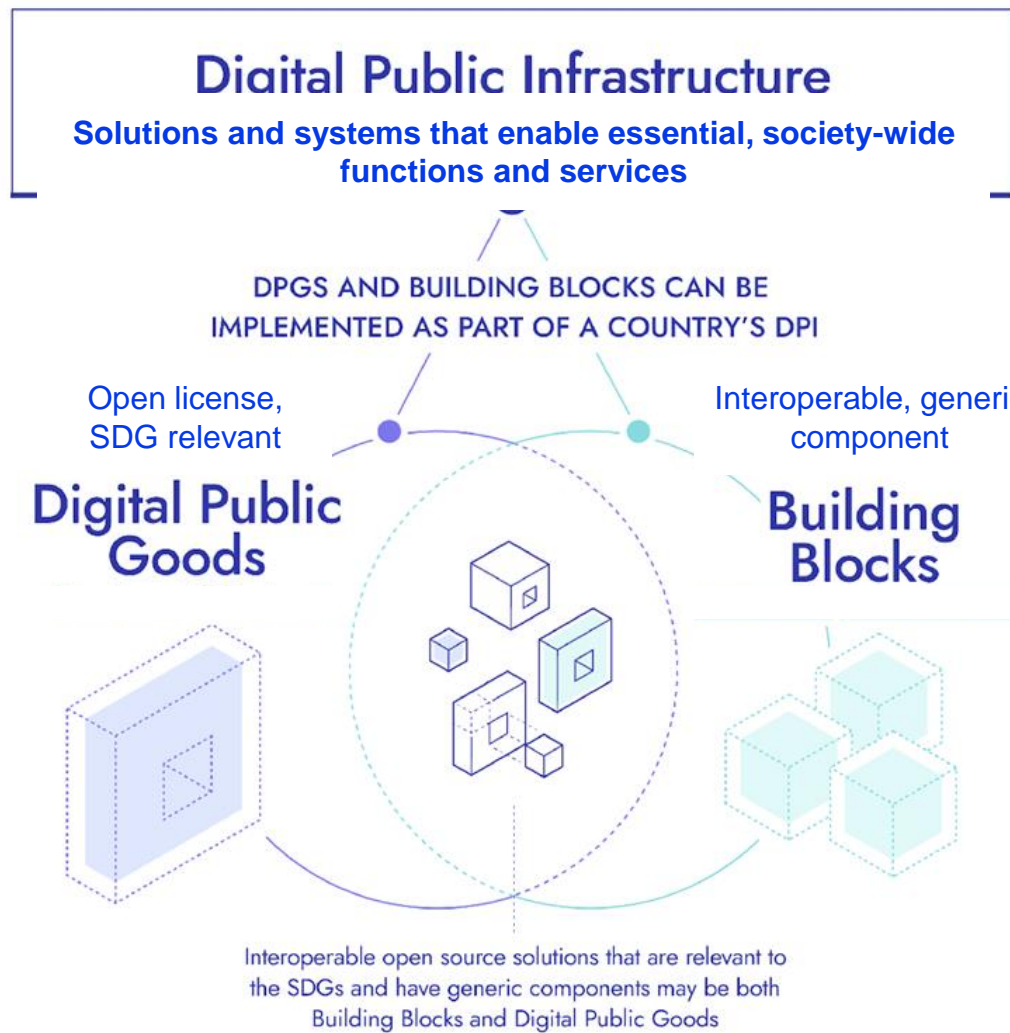


Learning and Exchange

Share best practices in our GovStack communities of practice and exchange formats



Together, Digital Public Goods and BBs enable Digital Public Infrastructure (DPI) to speed up progress on Global Development



Thank You



Contact Us

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Annex



The GovStack approach has wide-ranging benefits



Speed

Increases speed of delivery by facilitating reuse of core service elements and redirecting resources towards improving citizen outcomes.



Cost-efficiency

Provides common capabilities cross-departments / -agencies which avoids duplication of efforts, reduces cost to develop new e-gov. services.



Real economic return

Provides socioeconomic ROI by enabling faster and closer connections from government to addressing needs of citizens and businesses.



ONE government

Enables service delivery that links and invokes different parts of government, providing a connected, consistent and seamless user experience.



Agility + Responsiveness

Enable governments to design and deliver new services quickly to respond to needs and unexpected circumstances (e.g. global pandemic and disasters).



Integration + exchange

Enables integrated transactions and exchange of information across other equivalent stacks and systems through standards and open APIs.



Harmonized policies

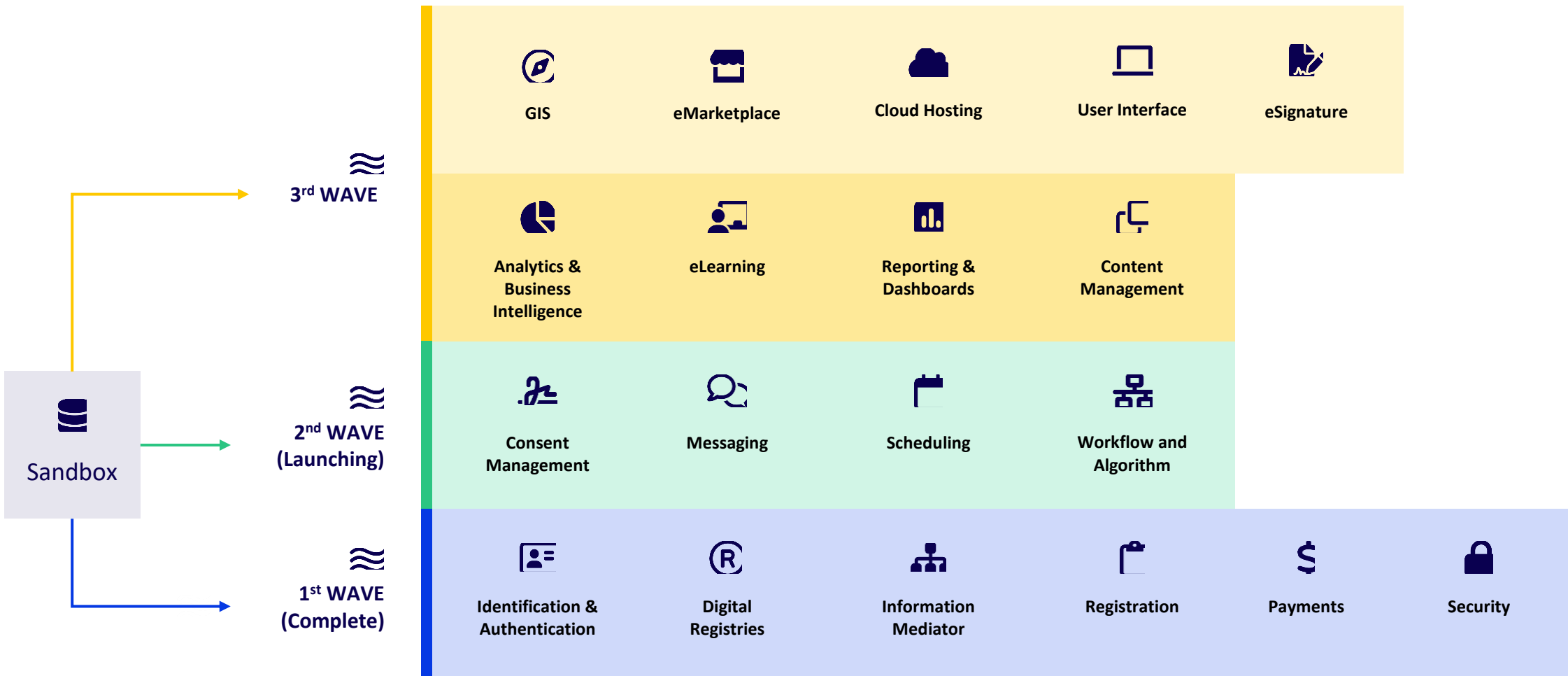
Opens possibilities for aggregation of big data for richer insights that would help develop better nonconflicting policies and monitor operations.



Minimized vendor lock-in

Minimizes product 'lock-in' and allows independent services to run where modular Building Blocks could be replaced without impacting overall exp.

GovStack Building Blocks are released in waves



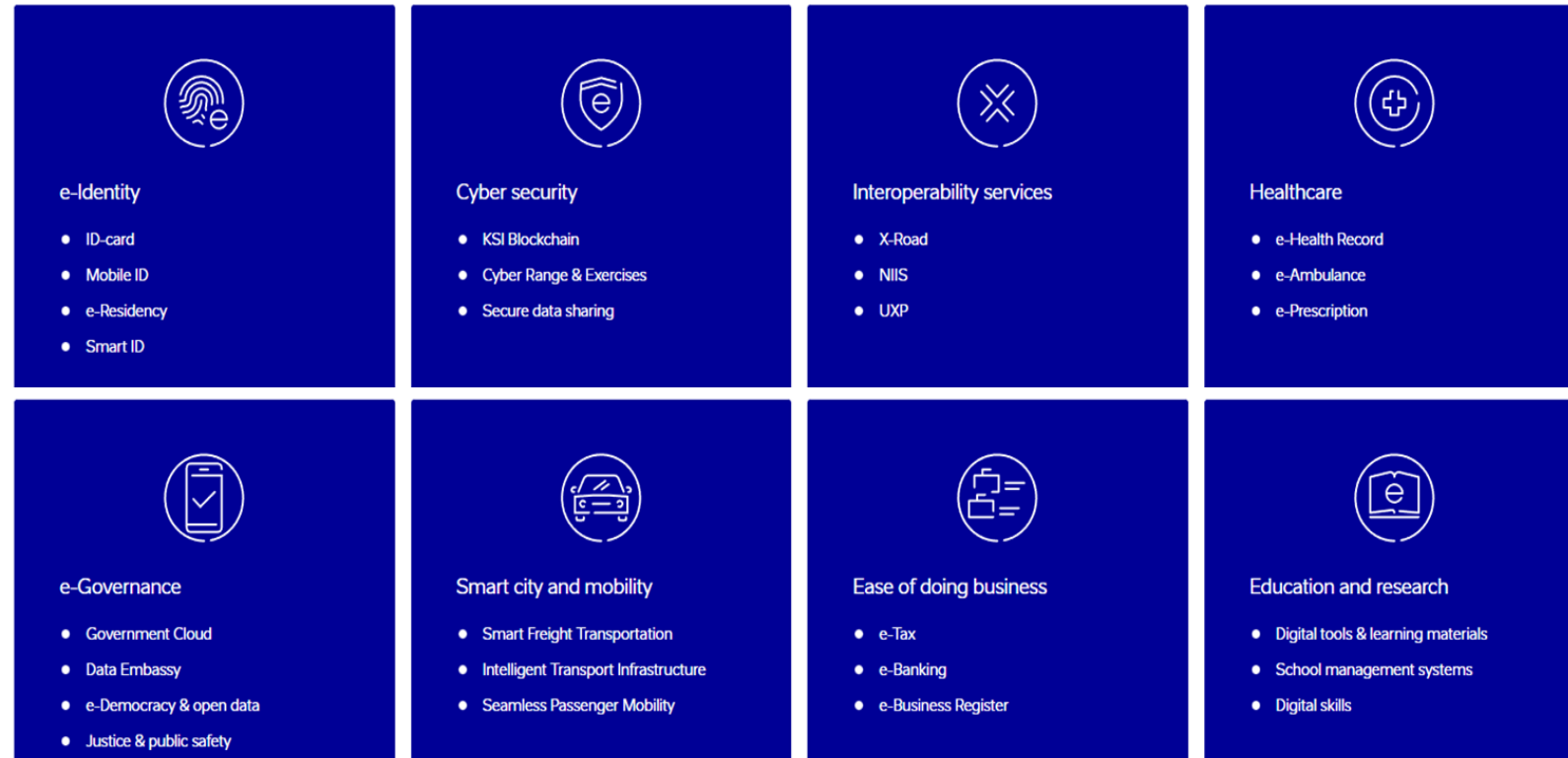
GovStack approach follows best practices from digital leading countries

Estonia

- Estonia among a group of countries w. "Very High" scoring of the UN's E-Government Development Index (EDGI) as of 2020 [[2022 UN E-Government Survey](#)]
- **99%** of the public **services** are available **online 24/7** with **44% Estonians voting electronically** and an estimated **844 years of work saved**. [[e-estonia](#)]
- Estonia embraces a similar [Building Block](#) approach with an [interoperability service](#) called **X-Road** as the backbone of e-Estonia connecting **52,000 organizations as indirect users**
- Seamless cross-sector integration of gov. services can be viewed as [demonstrations here](#).



Solutions & services



GovStack approach follows best practices from digital leading countries

Singapore

- Singapore also among a group of countries w. "Very High" scoring of the UN's E-Government Development Index (EDGI) as of 2020 [[2022 UN E-Government Survey](#)]
- SGN's "GovTech Stack" employs reusable microservices (similar to the approach of Estonia) e.g. national ID for authentication as [one of the core layers in the stack](#).
- Conscious reorganization of ministerial structure to allow for holistic cross-ministerial planning and approach with council of Ministry CIOs and [whole-of-government coordination](#).
- "To date, [/based on 2019 KPIs on Digital Government Blueprint](#) of Singapore/, **95% of /digital government service/ transactions (by volume) are completed digitally from end-to-end**, meeting the target of 90-95%."



GovStack approach follows best practices from digital leading countries

Moldova

Front-Office Digitization (FOD) is a framework containing a collection of visual components and integration libraries that enables rapid design and development of digital government services front-offices. Designed with a focus on user experience, FOD components are used to easily configure and develop thin back-office for governmental service providers. Optionally, FOD could be integrated with any existing service provider back-office. The main beneficiaries of FOD-based services are citizens, businesses, and foreigners.

Building on a re-engineering methodology, FOD focuses on reusing data and other available electronic platforms and tools to simplify or eliminate public service requests, minimize the time needed to solve a request and ensure efficient back-office operations. As a result, users don't have to physically go to the public service provider to request, pay or receive the service. In the case of electronic-only document requests, the document is delivered only by electronic means. Three complex public services have already been developed based on FOD, with three additional services currently underway.



Country Engagement updates in focus countries: Use cases prioritized

Government services have been identified through a collaborative effort including government representatives, the GovStack global & country teams as well as tech experts from the ecosystem during in-country workshops

DJIBOUTI

(co-financed by the EU)

Prioritized use cases

- eCabinet
- Construction permits

Activities

- Engagement with country team
- Use case prioritization evaluation finalized
- Service Design approved
- Implementation ongoing

EGYPT

Prioritized use cases

- The Super Mom Use Case bundle

Activities

- High-level launch event w/ Vice Prime Minister
- Fit-Gap Analysis of GovStack Specifications

RWANDA

Prioritized use cases

- E-waste management
- Assessment of GovStack Workflow BB for Rwanda Stack

Activities

- Identification of missing building block in Rwandan Stack (workflow management)
- Identification of e-waste EPR use case
- Service Design approved
- Implementation ongoing

UKRAINE

Activities

- Supporting Ukraine to globally provide eGov products as DPGs
- Ukrainian products GovStack compliant & part of the stack

KENYA & SOMALIA

(co-financed by the EU)

Activities

- In-Country Kick-Off
- Use case prioritization

Building Blocks can be applied across many sectors to support high-impact use cases

