

GovStack

Empowering Societies to Chart Their Digital Future

3rd Digital Transformation in Government Conference
June 14th 2022 - Virtual



REPUBLIC OF ESTONIA
MINISTRY OF FOREIGN AFFAIRS



Bundesministerium für
wirtschaftliche Zusammenarbeit
und Entwicklung



dial Digital
Impact
Alliance

1

Motivation

Challenges and progress in transformation of government services.

2

Concept

Model of a holistic digital government platform setup with *Building Blocks*, with diverse country models and perceived / tangible benefits

3

Approach

Bringing the technical approach to life.

4

Joining Us

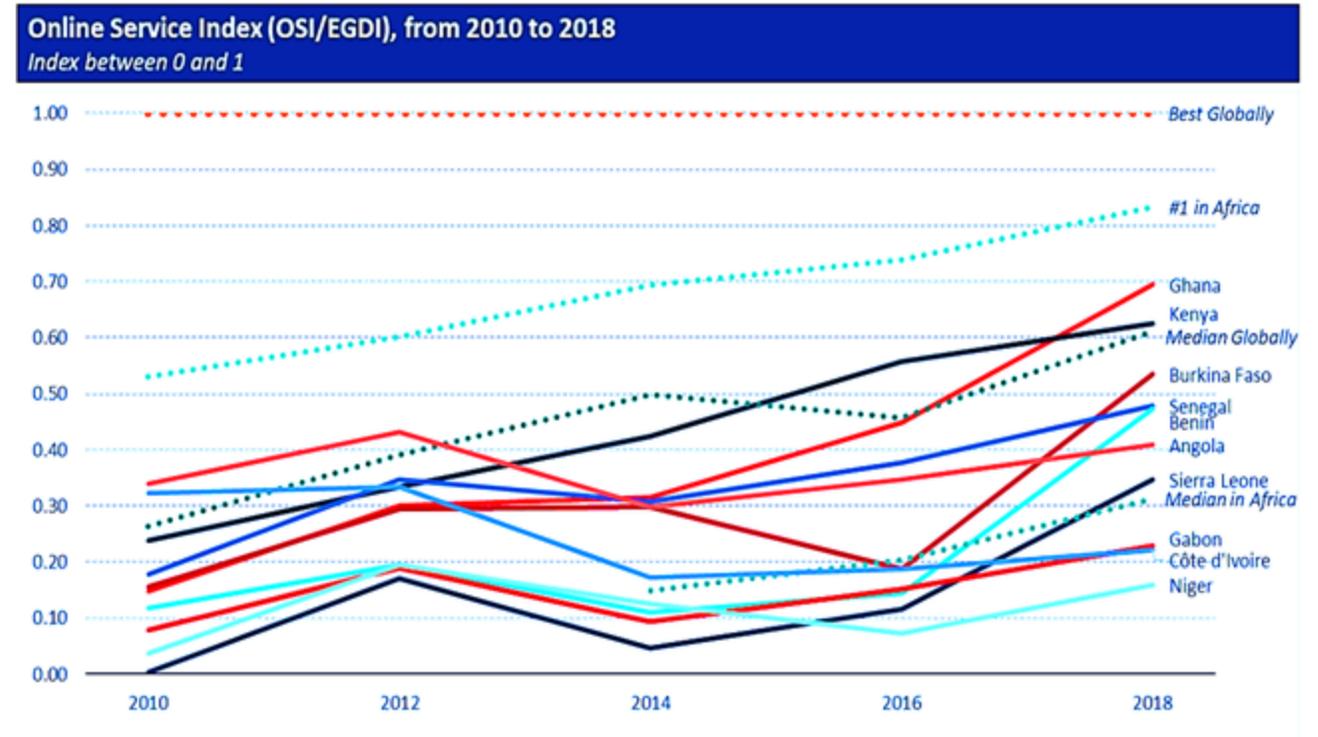
Get involved. Stay engaged. Partner up. Shape future.

1

Motivation

Governments in developing countries are all on a progressive pathway to digitize service delivery. Not all are without struggles.

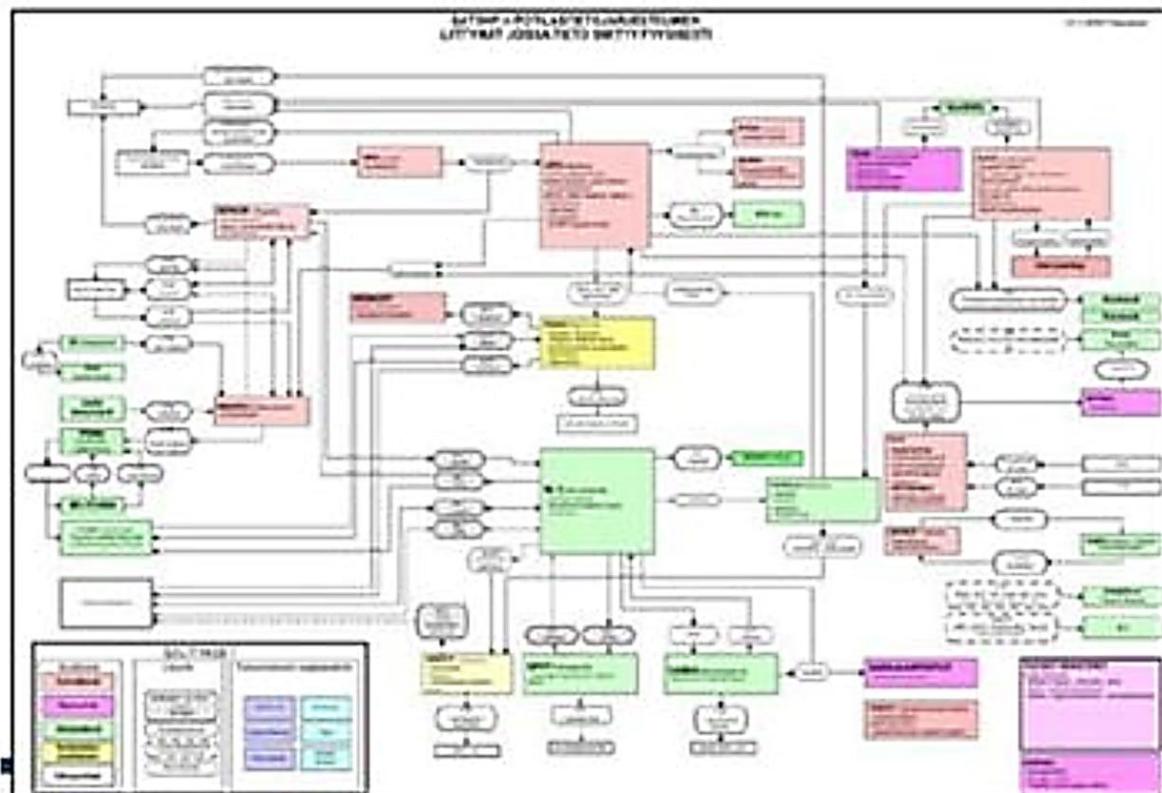
- **Coordination:** Problems in coordination commonly occur in aligning ICT ministry work with that of other agencies.
- **Siloes:** Siloed investments and duplicative efforts by development partners create fragmented digital governance in partner countries.
- **Funding:** Challenges in procuring and implementing affordable IT solutions persist, as do challenges in finding the necessary capital to invest in ICT infrastructure projects.
- **Scaling:** Major challenges exist in adapting and investing in projects at scale, particularly in the rollout of physical ICT infrastructure, and deployment and use of common data platforms.



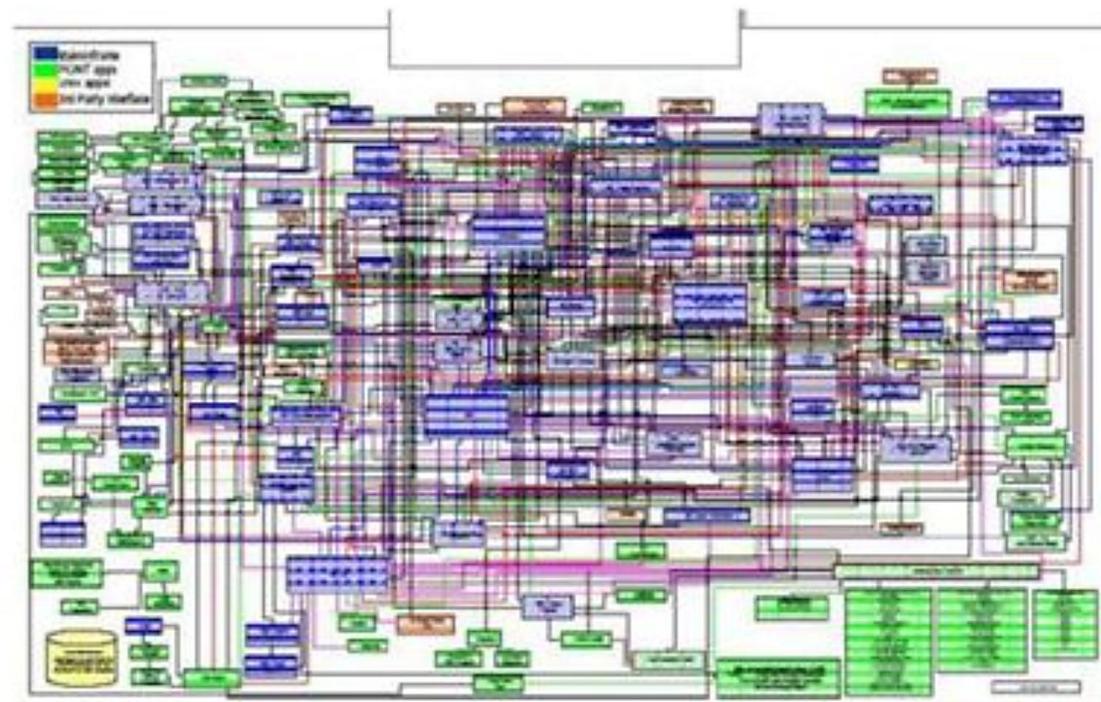
Continuous but disparate digital service provision progress across selected countries
[source: [DIAL Listening Study](#)]

Digital “government” in development context.

In the early days...



Now



All governments need to grapple with a range of challenges as they digitally transform.



Lack of updated and comprehensive national ICT plans with KPIs and timetables



Limited financing and procurement for ICT projects



Limited coordination of ICT strategy implementation across government



Lack of interoperability frameworks in systems leading to siloed approaches



Ineffective governance and institutional frameworks to steer digital transformation efforts



Human capacity, digital literacy, and limited competencies amongst the workforce



Limited access to infrastructure across the country, affordability and internet access



Limited cross-border integration of systems and regulatory frameworks





In LAC
3+ interactions
per transaction



**£1.7 billion in
savings in the UK**

50x lower costs



1. Ausgangspunkt
- in Deutschland haben viele verschiedene
2. Untersuchung
- in Deutschland haben viele verschiedene
3. ...
4. ...
5. ...

SQ3R
Method
(Klausur lernen, etc.)
Read
Question
Survey
+
Eigeninitiative & Elaboration
- Wissensabspeicherung
- universell anwendbar



2

Concept

There is an existing logical approach practiced by leading e-gov. examples to create common shared platform to deliver various government services digitally...

A **holistic** (*Whole-of-Government*) digital platform that can be used by any government agency across sectors to build new e-gov. services without the need to redesign, test and operate the underlying systems and infrastructure themselves every time.

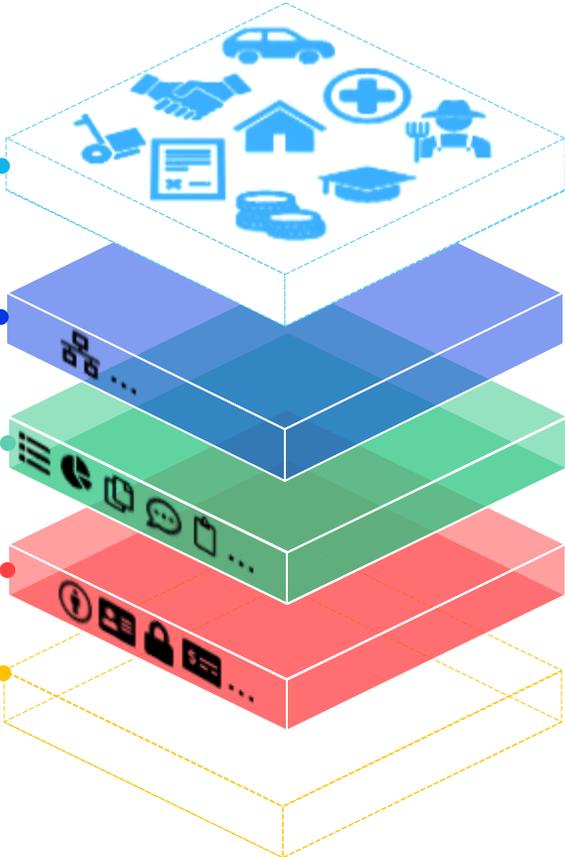
Instead of creating unique and disparate solutions, use a common reusable stack of *Building Blocks* to form the core platform engine and contextualize various e-gov. services on top.

Adaptive shared citizen-centric e-gov. services facilitated by a service-oriented architecture

Mediation middleware
Open API Gateway, secure data exchange

Common Applications Blocks
e-Learning, e-Marketplace, Business Intelligence / Analytics, Workflow, etc.

Foundational Blocks**
Identity/Authentication, Security, Consent, Payment, Registration, Messaging, etc.
*** Digital Public Infrastructure (DPIs) considered part of this foundational layer*



Hosting

[Recommended reading: [Key findings on digital government “stacks” by New America](#)]



e-estonia.com/solutions/

building blocks of e-estonia

The Estonian dream is to have as little state as possible, but as much as is necessary. Thanks to e-solutions, communications with the state are fast and convenient for all, and our country is more effective as a result.

e-Estonia's success relies on a clever infrastructure that has made it possible to build a safe e-services ecosystem. An important part of this ecosystem is flexibility and the ability to integrate its different parts, while improving e-services and allowing government systems to grow.

[VIEW ALL SOLUTIONS](#)



e-identity



interoperability services



security and safety



healthcare



e-governance



mobility services



business and finance



education and research



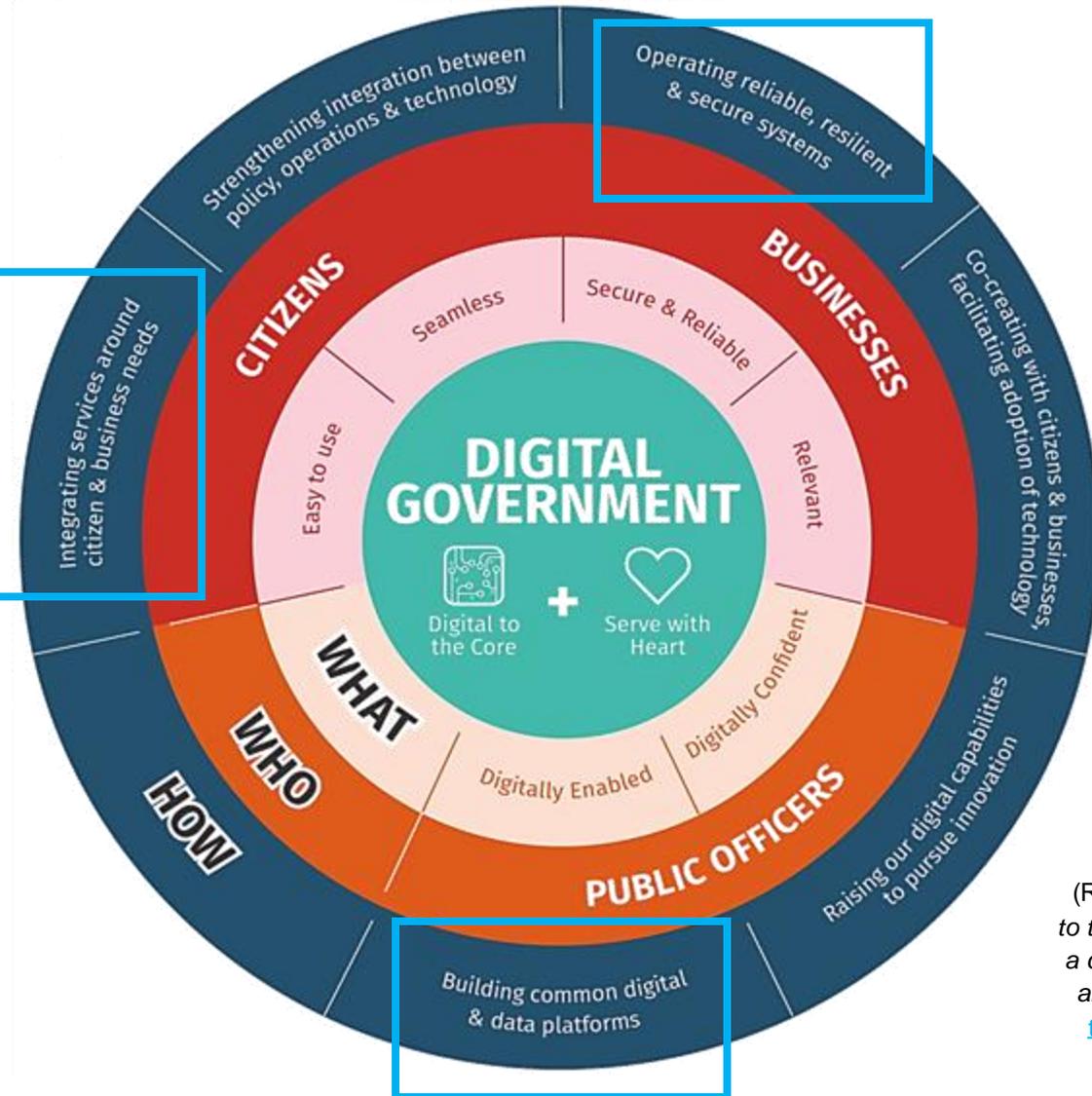
Each solution is enabled by the India Stack

Agile IndEA Building Blocks	
Core Building Blocks to be established in WAVE 1	
1.	Digital identity – Enable unique identification and authentication of users, organizations or other entities
2.	Digital Registries – Centrally manage databases that uniquely identify and describe persons, service providers, facilities, assets, procedures, products, sites or other entities related to the organization.
3.	Integration management – Provide a gateway between external digital applications and other Building Blocks, thereby ensuring interoperability and implementation of standards, which is essential for integrating various Building Blocks and applications
4.	Messaging – Facilitate notifications, alerts, or two-way communications between applications and communications services, including short messaging service (SMS), unstructured supplementary service data (USSD), interactive voice response (IVR), email or social media platforms
5.	Cloud Infrastructure – For hosting data and applications, getting all the benefits of cloud
6.	Security and access – Provide ICT administrators the ability to centrally configure and manage user and group access permissions to network resources, services, databases, applications, and user devices
Common Solution Building Blocks to be established in WAVE 1	
1.	Registration – Records identifiers and other general information about a person, place or other entity, typically for registration or enrolment in specific services or programmes and tracking of that entity over time
2.	E-Payments – Implement and log financial transactions receipts and payments online in multiple ways.
3.	Workflow management – Help to optimize business processes by specifying the rules that govern the execution of a sequence of activities and the exchange of associated information to orchestrate the process flow from initiation to completion.
4.	Case management – Register or enroll users and provide longitudinal tracking of services, often across multiple service categories, departments and locations
5.	Feedback – Provide the ability for consumers and providers of services to send, track and address any issues pertaining to service quality, including any kind grievance redressal.
6.	Consent management – Manage a set of policies allowing users to determine the information that will be accessible to specific information consumers, for which purpose, for how long, and whether it can be shared further
7.	Reporting and dashboard – Provide pre-packaged and custom presentations of data and summaries of an organization’s pre-defined key performance metrics, often in a visual format

Building Block classification from the Agile IndEA Framework (Version 1.0 | 2019) by India’s Ministry of Electronics & Information Technology [source: negd.gov.in/india-enterprise-architecture]

With a broad ubiquitous inclusive platform that has no physical presence required, costs are reduced in designing new services with already significant social outcomes incl. rapid growth in bank account ownership, digital ID covering almost all population, and enhanced infrastructure reaching to more mobile devices. [source: digifingroup.com/what-is-india-stack]

www.tech.gov.sg



(LEFT) "A Digital Government will be able to build stakeholder-centric services that cater to citizens' and businesses' needs. Transacting with a Digital Government will be easy, seamless and secure" with tangible setup and benefits incl.:

- e-payment and e-signature options for 100% of Government services
- Intuitive, accessible and easy-to-use digital services
- Greater confidence in data as digital services infrastructure continues to be fortified
- More digital services like Moments of Life and Business Grants Portal

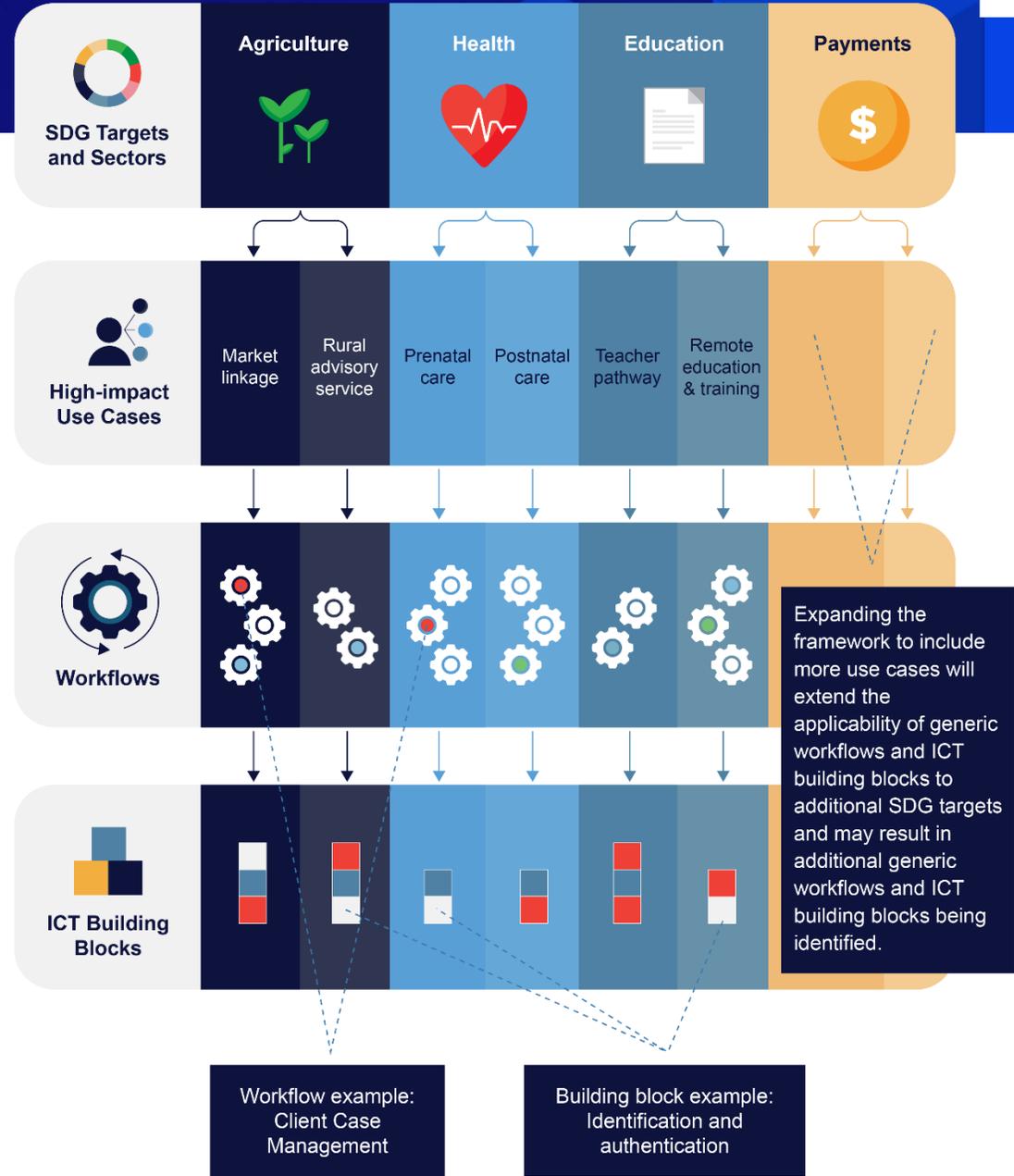
[source: tech.gov.sg/digital-government-blueprint]

(RIGHT) "With SGTS, agencies would be able to tap on a suite of tools and services hosted on a common infrastructure to ensure consistency and high quality of their applications." [source: tech.gov.sg/products-and-services/singapore-government-tech-stack]



Through coordinated (re)use of these common digital components...

Ideal: Across sectors and government agencies, subset of same ICT building blocks can be put in place and leveraged. Whereas they are used to deliver one use case, such as agriculture market linkage service, their foundational design can be reapplied to deliver others additional use cases across multiple sectors.



Same components can be reused

A holistic digital platform utilizing reusable stack of *Building Blocks* should help a country see a wide range of 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.

...as evidenced by countries who have long adopted the approach and successfully accelerated their own transformation...

Estonia



- Estonia among a group of countries w. "Very High" scoring of the UN's E-Government Development Index (EDGI) as of 2020 [[2020 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](#).

Singapore



- Singapore also among a group of countries w. "Very High" scoring of the UN's E-Government Development Index (EDGI) as of 2020 [[2020 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%."

Australia



- [AUS' Digital Service Platform Strategy](#) speaks of initiatives closely align to core principles of GovStack: API standards, "open architecture, interoperability standards and specifications", removing legislative and collaboration barriers, etc.
- "[Tell Us Once](#)" principle (aligned w. overall concept of "[Once Only](#)" by common leading e-gov. examples)
- Single MyGov portal with [public KPIs](#) to track gov. portal and service accessibility performance.

Recent evaluations demonstrate the economic value of the building block approach.

India



“A report by India’s Ministry of Electronics and Information Technology suggested that a business-as-usual approach in India would create \$500–650 billion in economic value from digital services by 2025. However, this is significantly less than the **potential \$1 trillion that could be generated in the scenario where digital technologies are fully utilized** to unlock productivity, savings and efficiencies **through a cross-sector collaborative approach** across more diverse sectors...” [source: [GSMA](#)]

Australia



“... in June 2019, **284 websites and 91 agencies** from all tiers of the Australian government were using the **same content management system, GovCMS**. A model by Deloitte was commissioned by the Digital Transformation Agency to determine WGA cost savings, which showed that the operating cost for the 284 sites would exceed \$73 million if hosted independently. Since the total cost of operating GovCMS in 2018–2019 was \$5.9 million, this amounted to an **overall saving of \$67.1 million.**” [source: [GSMA](#)]

Saudi Arabia



In initial analysis in effort to inform their drafted *Sustainable Digital Investment Framework*, implementing **one Building Block (Remote Signature) in a holistic cross-gov. approach yielded a tangible total cost of ownership at 17mSAR, compared to 490mSAR if operated individually by 140+ gov. agencies along a 3-year horizon.** “The investment optimization is consequent, 473mSAR for solely the Remote Signature as a *Building Block*.” [source: Cost optimization study by the Digital Gov. Authority of KSA, shown during a bilateral meeting between KSA-DGA and GovStack stakeholders]

3

Approach

GovStack is a joint initiative to bring this *Building Block* approach to a broader reality.

GovStack

GovStack

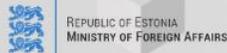
Vision: Empowering Societies to Chart Their Digital Future

Mission: Uniting governments and development ecosystem actors to connect, maintain and share digital commons

govstack.global



giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung

dial Digital Impact Alliance

What is it?

GovStack initiative is an expert community-driven multistakeholder effort aimed at deriving common technical practice and understanding of the *Building Blocks* approach as seen in implemented countries.

What does it aim to achieve?

By unpacking and simplifying the technical approach that goes into building holistic digital government, *GovStack* aims to accelerate countries' ownership of e-gov. solutions and in doing so improve services for social well-being.

Where did it come from?

GovStack model is an extension of the [SDG Digital Investment Framework](#), an earlier effort by the Digital Impact Alliance (DIAL) at the UN Foundation and the International Telecommunication Union (ITU).

There is an existing proven framework practiced by leading e-gov. examples: The use of generic *Building Blocks*.

What are *Building Blocks*?

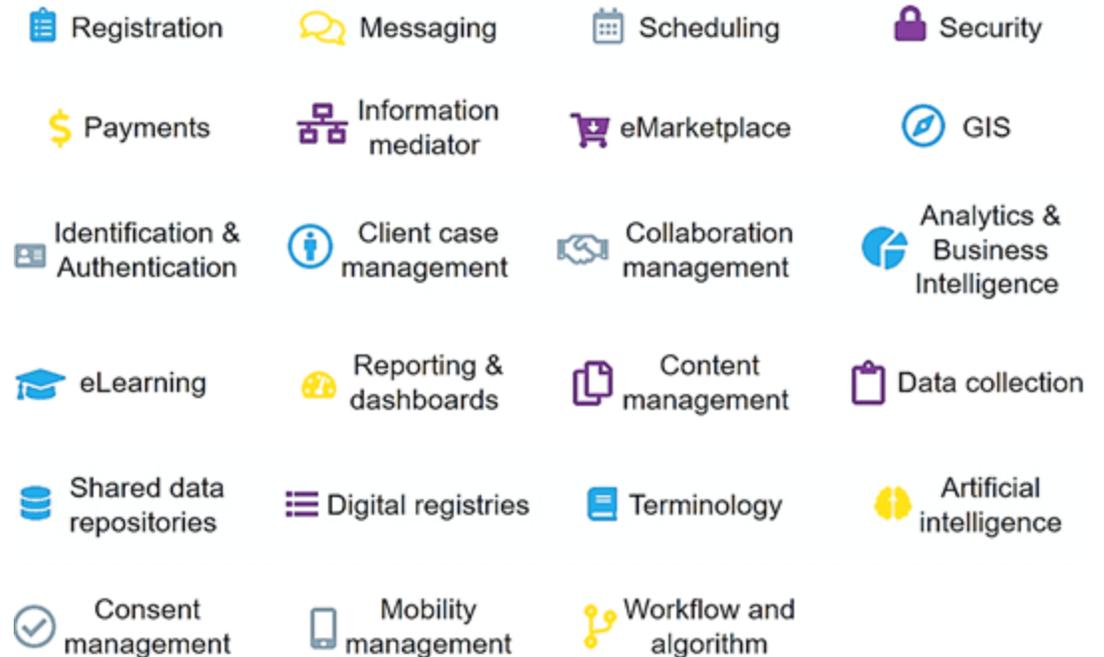
Generically-defined **software components** that in combination provide key functionalities to facilitate generic workflows common across multiple sectors.

What are their characteristics?

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

Building Blocks set

Identified **components** so far

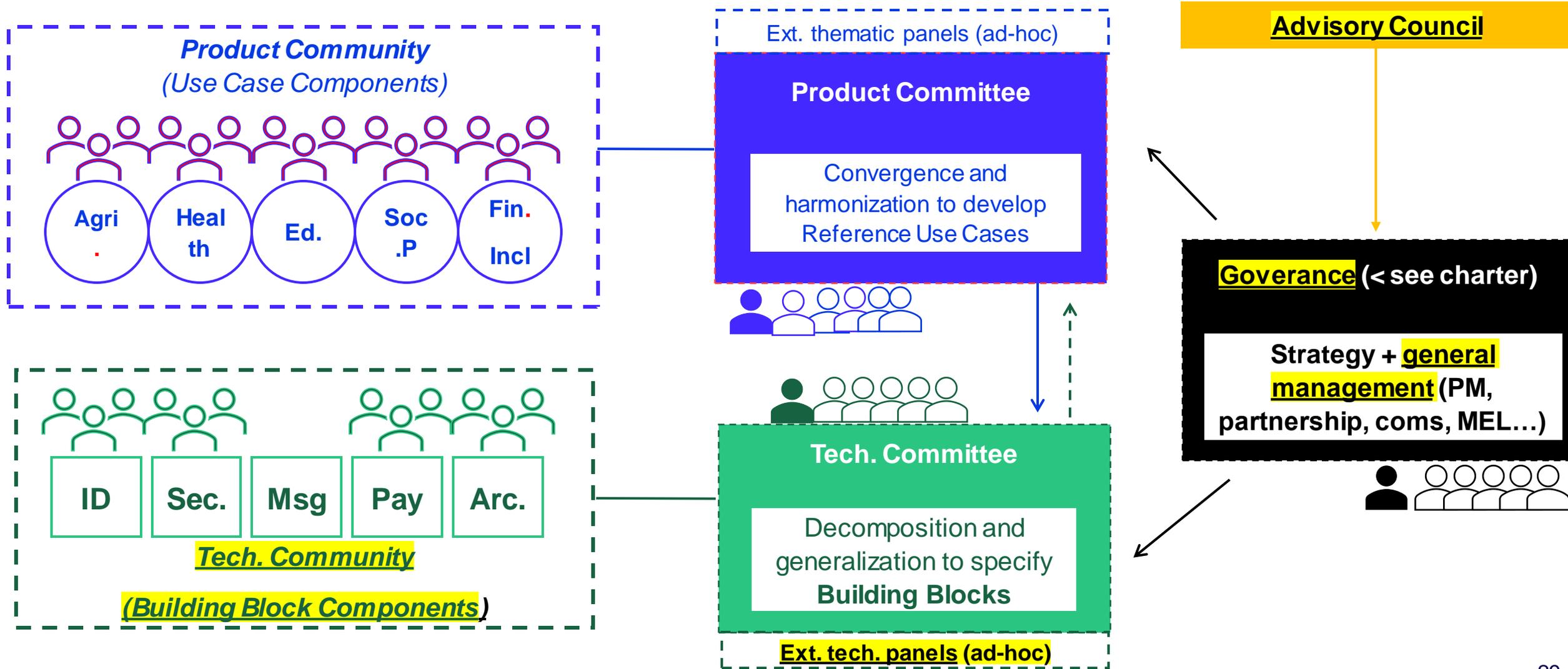


[refer to: *Building Blocks* section of [Govstack.global](https://govstack.global)]

The initiative has 3 strategic areas

	Major Strategic Areas	Goal
<p>1 Specify</p> 	<p>Develop and evolve specifications for high-priority Building Blocks, and a Blueprint for an illustrative digital government service that uses them</p>	<p>→ Create technical reference pieces of generic digi. gov enabling components</p>
<p>2 Demonstrate</p> 	<p>Invite approach demonstration and develop working reference models of the illustrative stack showcasing applicability of digital services, guided by specification outputs from Phase I (Building Blocks and Blueprint)</p>	<p>→ Show how the GovStack approach can employ a set of cross-sector, interoperable, secure and integratable Building Blocks to demonstrate delivery of a pipeline of digital services</p>
<p>3 Apply</p> 	<p>Engage pilot countries to inform approach in their larger digital government strategy effort and implementation roadmap, and sustain ongoing advocacy and address country capacity needs</p>	<p>→ Ultimately inform national digi. gov strategy drawing from proposed approach + diff. reference models in their transformation journey</p>

Operating Structure



The 2022 road map for BB development & release has been structured in three waves:

Wave 1 - GitBook, licensing & copy right previous to release

[1] Registration and Digital registries addressed as one
 [2] Security potentially redressed as "Authentication"
 [3] Identification & Authentication to focus on "Identification"

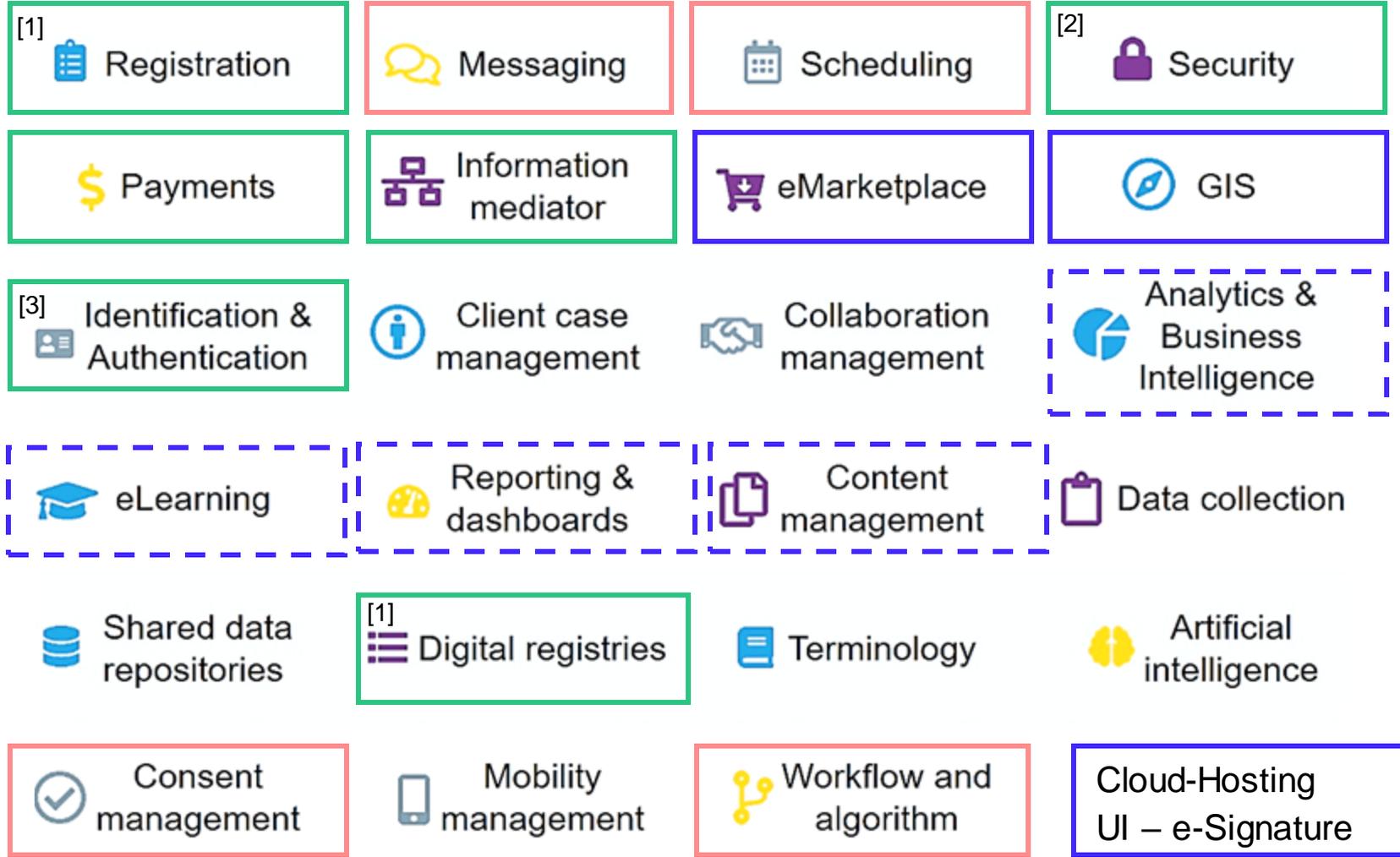
Wave 2 - TAC Review GitBook, licensing & copy right

Wave 3 - Call for contributors Development TAC Review GitBook, licensing & copy right

Where GovStack can incorporate/integrate

June

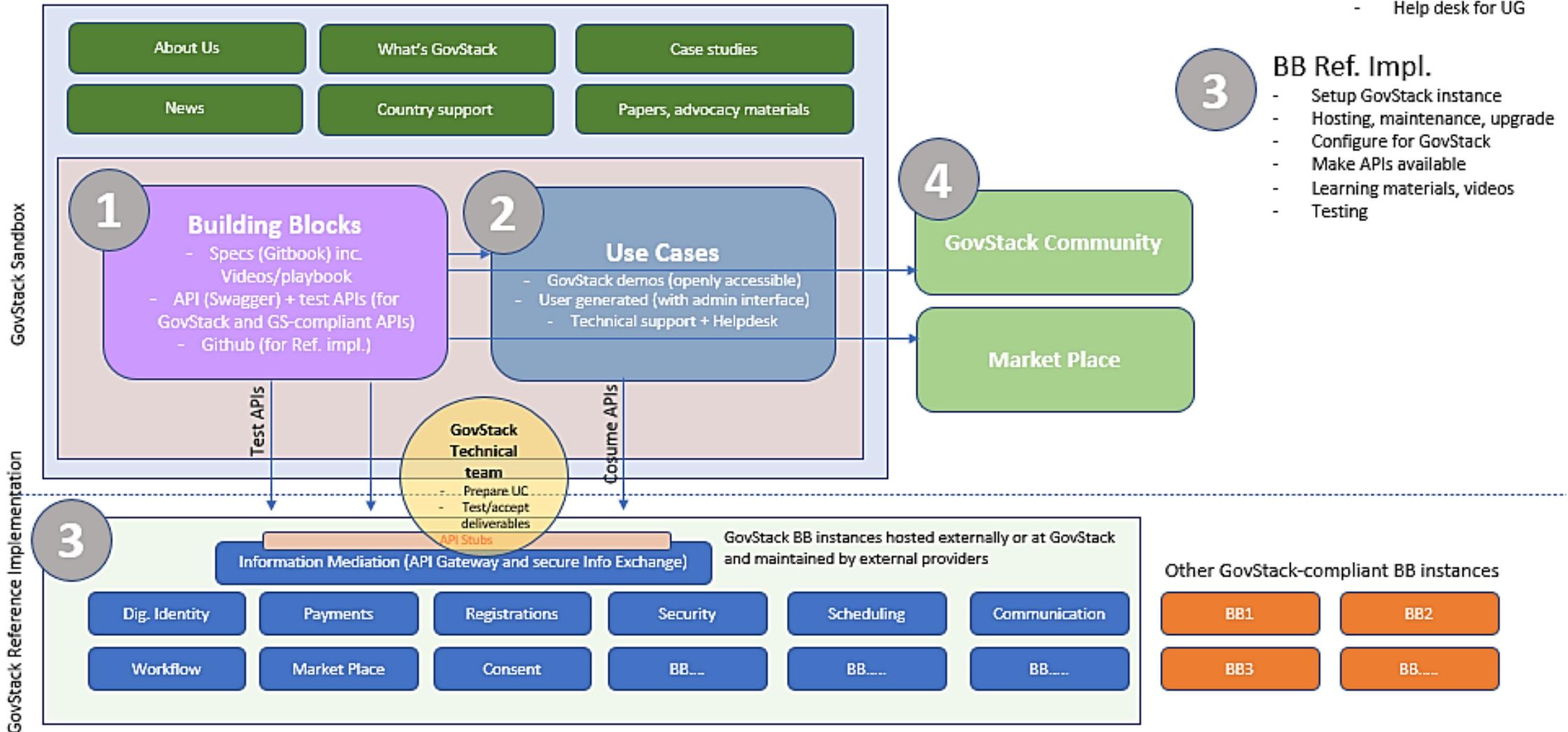
May -
 June
 July
 May-
 June
 July-Oct
 Nov
 Dec



Envisioned marketplace / demo. platform: to be finalized

GovStack Environment & Procurement Roadmap

GovStack environment hosted under govstack control



GovStack Country Engagement / Implementation



Current Partner Countries



GovStack Services: We collaborate with governments in the following areas:

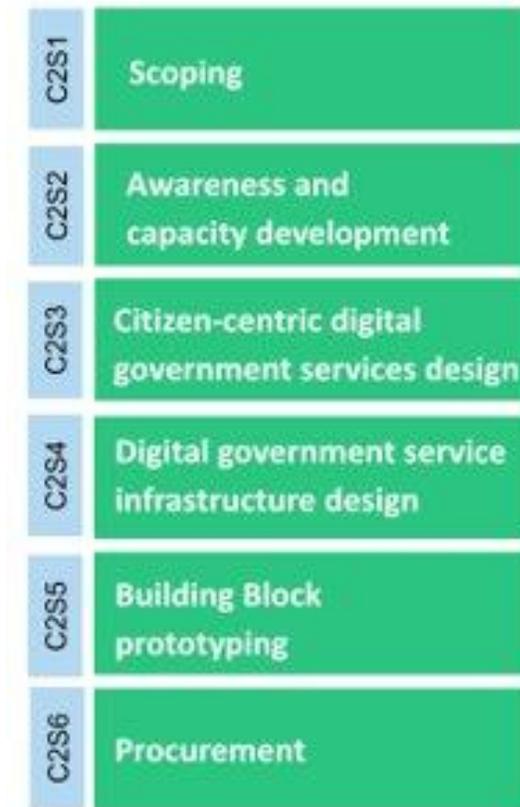
<p>Assessing e-government readiness and roadmap development</p>	<p>Piloting of e-government use case</p>	<p>Strengthening local capacity</p>	<p>Contribution of local actors to the Building Block specifications</p>	<p>Participation of local actors in Communities of Practice</p>
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General Implementation Updates:

- GovStack local & regional team is growing: Additional GovStack staff in Kenya, Rwanda, Egypt, Estonia hired
- Country Piloting started: Initiation of partner country dialogue - stakeholder consultation meetings conducted
- Kick-off implementation phase of the D4D Initiative for Digital Government and Cybersecurity (IDGC) in the Horn of Africa

GovStack Country Engagement Methodology:

- GovStack Country Engagement Framework
- Development of GovStack Country Engagement PlayBook
- GovStack Capacity Strengthening Toolbox



...and guided by these core working principles...

- **Neutrality:** We will give no priority preference or exclusivity to a specific product or standard. All outputs and working processes will be based on how well it helps us achieve our goal.
- **Generic:** All knowledge products will be generic and comprehensive in capturing, as much as possible, all relevant design specifications, and will not be specific to any single products in-market.
- **Open-source:** All final deliverables will all be open-source and publicly accessible for reuse and replication by anyone – they will be Digital Public Goods.
- **Standard-based:** All knowledge products will capture and be guided by industry-recognized standards --or reuse those from another sector where a lack of standards exists.
- **Minimalistic:** We will focus on the most common functionalities at the lowest maturity level that are required to deliver the minimum capabilities for each *Building Block*.
- **Agile:** We will use quick cycles to develop documentation to test and validate, and then go for the next iteration.
- **Integration:** We will ensure a seamless exchange of information across applications and delivered through different channels. Services should be “integrated by design.”
- **Citizen-centric:** Design will be centered around typical high-priority User Journeys and Use Cases related to the SDGs.

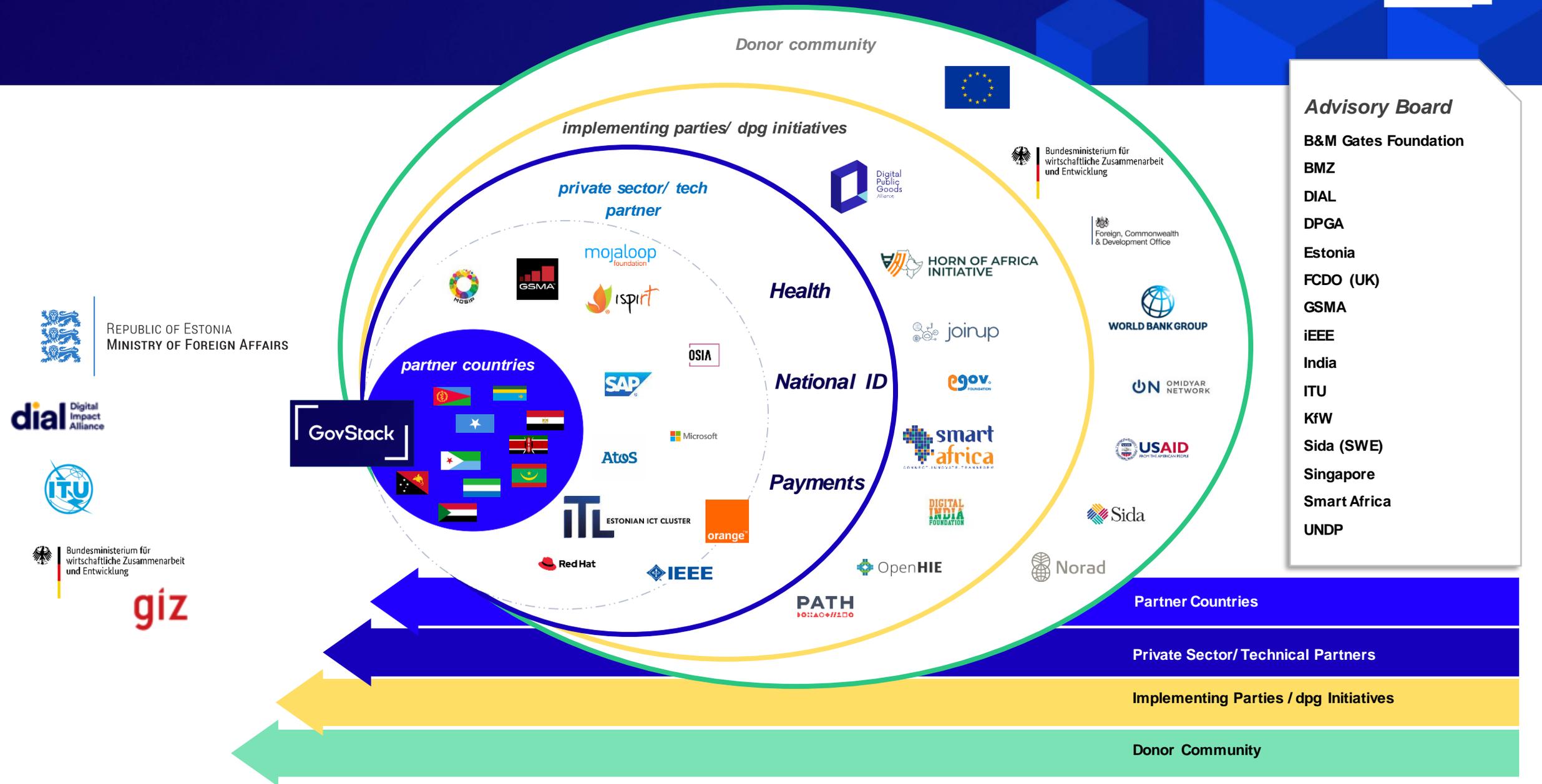
Together, these tenets broadly align with the

 Principles *for*
Digital Development

...to inform creation of an eventual living platform showcasing interconnected solutions addressing multiple use cases, starting with these 5...

Use Case	SDG Targets	Brief Description
Postpartum and Infant Care (detailed here)	 	Profiles the care service for mother and child spanning the mother's prenatal and postnatal periods to ensure both are health. 7 steps.
Market Linkage (detailed here)	  	Profiles a service of information service delivery and provision of market linkage for rural farmers to improve incomes and their livelihoods. 9 steps.
Rural Agri. Advisory Services (detailed here)	 	Profiles a service connecting rural farmers to market information and other informational services with a vital role to improve knowledge. 9 steps.
Unconditional Social Cash Transfer** (detailed here) <i>**COVID-relevant</i>		Profiles specifically the delivery journey of a generalized unconditional social cash transfer service provided to financially disadvantaged or vulnerable people or households without conditionality. 9 steps.
Remote Learning (detailed here)	   	Profiles a service for delivering digital content and tools that can be used to provide or supplement all types of learning in disconnected or connected environments. 5 steps.

Buidling a strong GovStack Partner Ecosystem



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Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung

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Foreign, Commonwealth & Development Office

HORN OF AFRICA INITIATIVE

WORLD BANK GROUP

joinup

UN Omidyar Network

egov.

USAID

smart africa

Sida

Norad

PATH

OpenHIE

IEEE

Red Hat

ITL ESTONIAN ICT CLUSTER

orange

AtoS

Microsoft

SAP

OSIA

ISPIRIT

GSMA

mojaloop foundation

Digital Public Goods Alliance



Donor community

Building Blocks amplify impact of Digital Public Infrastructure (DPI)

The terms can be a subset of one another, but not necessarily. If they are used as a subset, they inherit their positive attributes.

Digital Public Infrastructure

... are solutions and systems that enable the effective provision of essential society-wide functions and services in the public and private sectors.

Digital Public Goods

... open-source software, open data, open AI models, open standards, and open content that adhere to privacy and other applicable laws and best practices, do no harm by design, and help attain the SDGs.

Building Blocks

... are software code, platforms, and applications that are interoperable, provide a basic digital service at scale, and can be reused for multiple use cases and contexts.

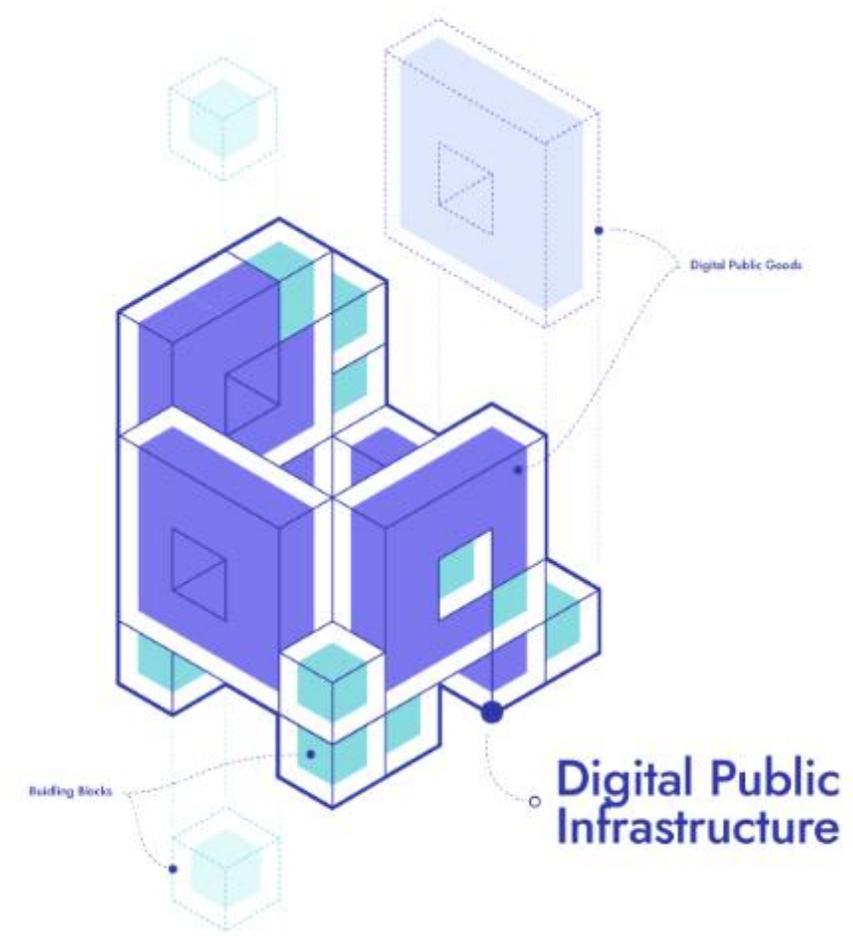
e.g. MOSIP (Philippines)

X-Road (Ukraine, Benin)

openG2P (Sierra Leone, Ukraine)

Inherit

Inherit



A GovStack Stakeholders Platform will facilitate open participation from groups around the globe.

Aiming biannual convening to allow:

- **Expert working groups and community meetup** to work on specifications, review building blocks in the **Technical Review Committee**, provide in-country implementation perspective and advice, exchange knowledge and discuss next steps in the technical direction of the initiative
- The formation and **meeting of the Advisory Board** to set the future strategic view and discuss / explore partnerships, review governance elements
- **High-level panel discussions** describing latest trend in e-gov. in relation to GovStack approach and inspiration from the model (e.g. Tallinn Digital Summit 2021, IGF 2021)
- **Digital Government Leader's Forum** (parallel track) with open invitation to general participation by country delegates, technical knowledge groups, industry associations, other relevant stakeholders to share experiences and connect ideas.
- Support **development of a long-term institution** and develop concepts for co-investment



First installment being planned at the 2021 [Digital Tallinn Summit](#).

Building on each others ideas & experiences

GovStack exchange formats

CIO - Digital Leaders Forum

knowledge-sharing program with workshops among CIOs. Each episode of the forum hosts a Government CIO to share his/her country's experience in digitization of government services using a building block approach.

Digital Public Goods Alliance

GovStack participation in shaping the development of and investment in digital public goods.

GovStack Governance Committee Meetup

Governance Committee members meet twice per year for working sessions and workshops both internal and with close partners.

Regional Communities of Practice (CoPs)

Fostering the exchange between private sector, tech ecosystem and civil society within partner countries and regional (e.g. within Horn of Africa)

The banner features the GovStack logo in the top left and the WSIS Forum 2022 logo in the top right. The main text reads: "First Episode of the GovStack CIO Leaders Forum" and "WSIS, Friday 3 June 2022 11:00-12:45 CET". Below this, it says "Featuring:" followed by six portrait photos of speakers. At the bottom, there are logos for ITU, giz (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH), dial (Digital Impact Alliance), and the Republic of Estonia Ministry of Foreign Affairs.

GovStack

WSIS FORUM 2022
Starting on 15 March
Final week 30 May - 3 June

First Episode of the GovStack CIO Leaders Forum
WSIS, Friday 3 June 2022 11:00-12:45 CET

Featuring:

- Kristo Vaher**
CTO, Estonia
- Abhishek Singh**
President & CEO,
National E-Governance
Division, Ministry of
Electronics and IT,
Government of India
- David Roos**
Deputy Head of the
Sector Programme
Digital Development
GIZ
- Sherman Kong**
Senior Advisor
Digital Impact Alliance
(DIAL)
- Valentina Dominguez**
Generation Connect
Europe Youth Group
Representative
- Yolanda Martínez**
GovStack Overall Lead,
ITU

ITU **giz** Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH **dial** Digital Impact Alliance **REPUBLIC OF ESTONIA** MINISTRY OF FOREIGN AFFAIRS



Caroline Troein
Lead Researcher

Effectiveness of digital solutions
is dependent on



meticulous and robust implementation

First Wave Building Block Specifications

First Wave Building Blocks

Specifications

Architecture Specifications	PDF
Security Specifications	PDF
Information Mediator (IM) Specifications	PDF
Registration	PDF
Digital Registries	PDF
Identity and Verification	PDF
Payments	PDF

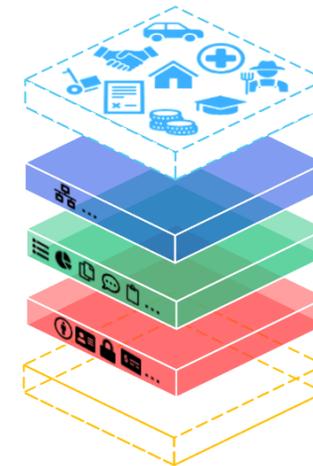
Review sessions (December 2021)

Please find listed below the recordings and extracts from chat from the review sessions of First Wave Building Block Specifications

Security and Architecture Requirements	Recording	Extracts from chat
Registrations and Registries	Recording	Extracts from chat
Payments	Recording	Extracts from chat
Digital Identity and Verification	Recording	Extracts from chat

Second Wave Building Block Specifications

The GovStack initiative aims to build a common understanding and technical practice on fundamental reusable and interoperable digital components, which we collectively refer to as Building Blocks. Our effort is expert-driven and community-based, and includes the participation of multiple stakeholders to bring together expertise for strengthening a government's cross-agency architecture view. Our focus is to enable countries to kickstart their digital transformation journey by adopting, deploying, and scaling digital government services. Through the digital "building blocks" approach, governments can easily create or modify their digital platforms, services, and applications by also simplifying cost, time, and resource requirements.



Second Wave Building Blocks

Scheduling Specifications	Google Doc version	Feedback form
Messaging Specifications	Google Doc version	Feedback form
Workflow Specifications	Google Doc version	Feedback form
Consent Management Specifications	Google Doc version	Feedback form

Recordings and Extracts from Chat

Workflow and Communication Messaging Building Blocks Review	WorkFlow BB Presentaiton	Communication Messaging BB Presentaiton	Recording	Extracts from chat
GovStack Consent and Scheduling Building Blocks Review	Consent BB Presentaiton	Scheduling BB Presentaiton	Recording	Extracts from chat

<https://docs.egovstack.net/v0.9.0/>

Call for Expert Contributors

Call for Expression of Interest to be a GovStack Technical Contributor!

GovStack Building Blocks are growing and our technical community as well. Join us and contribute with your expertise in different technology domains in the preparation of technical specifications of GovStack Building Blocks.

Women are highly encouraged to express their interest!

Background:

The GovStack initiative aims to build a common understanding and technical practice on fundamental reusable and interoperable digital components, which we collectively refer to as Building Blocks. GovStack's focus is to enable countries to kick start their digital transformation journey by adopting, deploying, and scaling digital government services. Through the digital "building blocks" approach, governments can easily create or modify their digital platforms, services, and applications while also simplifying cost, time, and resource requirements.

GovStack is a community driven initiative founded by The Ministry of Foreign Affairs of the Republic of Estonia (MFA Estonia), the International Telecommunication Union (ITU), the Federal Ministry of Economic Cooperation and Development of the Federal Republic of Germany (BMZ), and the Digital Impact Alliance (DIAL) at the UN Foundation. Together, we are collaborating to accelerate digital transformation and digitalization of government services for the achievement of Sustainable Development Goals (SDGs) particularly in low-resource settings. The collaboration establishes a global high-level framework for digital government cooperation to assist countries in learning and implementing scalable digital services and applications in a cost efficient, accelerated and integrated manner and that are built applying best software development principles and best countries' experiences and practices.

GovStack is an extension of the earlier effort established by the International Telecommunication Union (ITU) and Digital Impact Alliance (DIAL) on development of an [SDG Digital Investment Framework](#).

The collaboration is in the process of implementing a "Reference Digital Government Platform" as a "Digital Public Good" based on reusable, standards-based, secure and interoperable ICT building blocks available to the whole-of-government agencies to build and deploy their digital services and applications. Reducing the time and effort needed to introduce new digital services will allow digital services to be scaled up and upgraded in a more agile and cost-effective manner. This will facilitate also delivering solutions that best meet citizens' needs who expect to have a seamless, consistent and connected experience across the spectrum of government digital services wherever they are and regardless of their income or literacy levels.

As technical contributor to the specifications BB you will undertake according to your contribution availability the following tasks:

- Work in close collaboration with the project technical advisory group, the steering committee and a group of 5-7 experts to develop functional requirements and technical specifications (including Open API specifications) leveraging best practices and state of the art technologies from different countries for the specific domain Building Block. This building block will be implemented as a component of a "Reference Digital Government Platform" that will be built based on the technical and functional requirements developed.
- Ensure that developed requirements are open, standards-based, secure by design and interoperable that leverage already existing standards or any existing similar requirements.
- Ensure that developed requirements will deliver the functionalities identified in a number of targeted use cases that will be provided to the group.
- Coordinate with the Architecture Working Group to ensure that the building block will integrate and fit with the Reference Architecture to comply with information exchange, security and interoperability needs and standards.
- Ensure that developed requirements could be implemented in resource-constrained environments to deliver prioritized use cases and digital government and other sectoral services at national level in developing countries.
- Adapt and adopt best practices and lessons learned from different countries that could be implemented in resource-constrained environment.
- Consult with a wider expert group to collect and incorporate feedback received from the reviewers on the developed requirements

Concrete deliverables in each working group:

- Functional requirements and technical specifications (including Open API specifications) leveraging best practices and state of the art technologies for each Building Block domain specially designed for resource-constrained environments.

Qualifications and experience:

- Advanced university degree in engineering, economics, law, education, management, telecommunications/ICTs or related fields OR education in a reputed college of advanced education with a diploma of equivalent standard to that of an advanced university degree;
- Comprehensive background and understanding in subjects related to e-governance and enterprise architecture;
- More than 7 years of experience in software development at senior level;
- Significant experience and previous engagement preferably at a national level contributing to designing, developing, implementing and maintaining the different domains included in this call for experts;
- Ability to draft and formulate functional requirements and technical specifications including Open API specifications leveraging best practices and state of the art technologies from different countries that could be implemented also in resource-constrained environment;
- Expert experience in Architectural approaches, methods and frameworks and how those could be implemented at country level;
- Demonstrated experience and strong understanding of and engagement with Open-Source Software Development;
- Experience in being part of a technical expert group with strong management experience;
- Strong understanding of how to implement digital services in resource-constrained environment and how to take into consideration that in technical requirements setting;
- Expert experience in and knowledge of applicable standards and how they can be applied for the designated area of work to ensure interoperability and security by design;

Languages: Excellent command of the English language, both written and oral.

Deadline for Expression of Interest: 30 June 2022.

First Name(Required)

Last Name(Required)

Gender(Required)

- Male
 Female
 Other

Other

Nationality(Required)

Country of Residence(Required)

Email(Required)

Please select the domains of expertise that are relevant to your experience(Required)

- Digital Identity
- Digital Registries
- Registration
- Security
- Information Mediator
- Payments
- Workflow
- Consent
- Digital Signature
- Messaging
- UX/UI
- GIS
- e-Market Place
- Cloud Infrastructure
- e-Signature
- Enterprise Architecture
- Content Management
- Reporting and Dashboards
- Analytics

Short Motivation Text(Required)

0 of 500 max characters

Upload your CV(Required)

No file chosen

Accepted file types: pdf, doc, docx, Max. file size: 50 MB.

Submit



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Be a part of the GovStack Initiative!

GovStack

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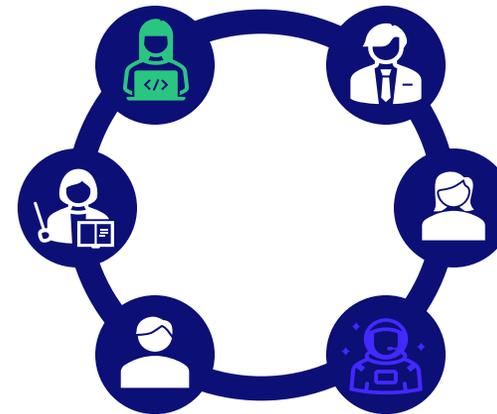
Technical contribution

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



Empowering communities

Join the Partner2Connect Digital Coalition.



Connect with GovStack!

GovStack



<https://www.linkedin.com/company/govstack>



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