



## Digital Services for Digital Development

Paradigm shift in servicing the next billion

A Whole-of-Government to investing in digital technologies for SDG



# Digital Services for Development

Digital transformation concerns a continuous process of adoption of digital services that fundamentally change the way government and private sector services are ideated, planned, designed, deployed and operated.

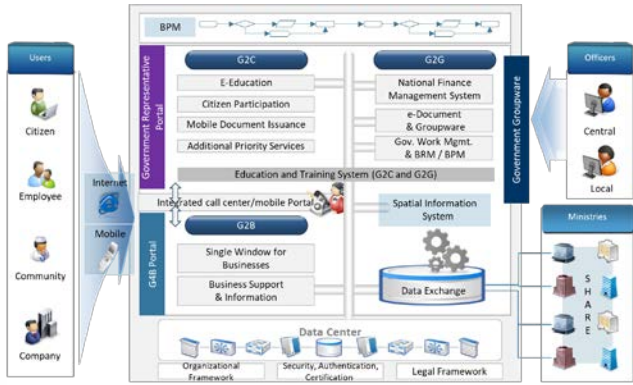
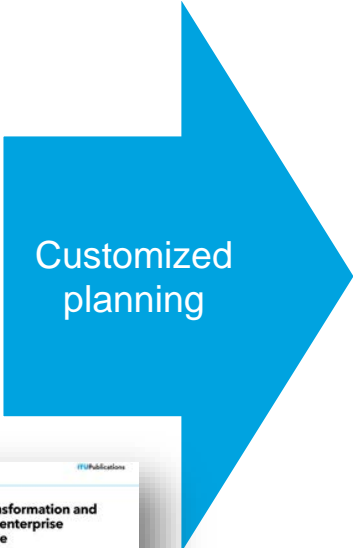
From a citizen perspective, it is the transformation of services (enabled by digital technologies) that matters the most.

Digital transformation is a systemic modernization and change initiative not a technological one to implement the SDG.

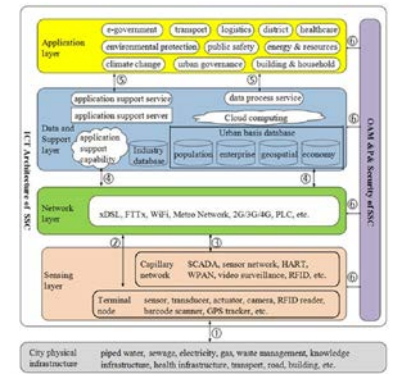


[https://www.itu.int/pub/D-STR-DIG\\_TRANSF-2019](https://www.itu.int/pub/D-STR-DIG_TRANSF-2019)

# Whole-of-government approach for digital development



## Smart city



## Smart village



## Smart Islands

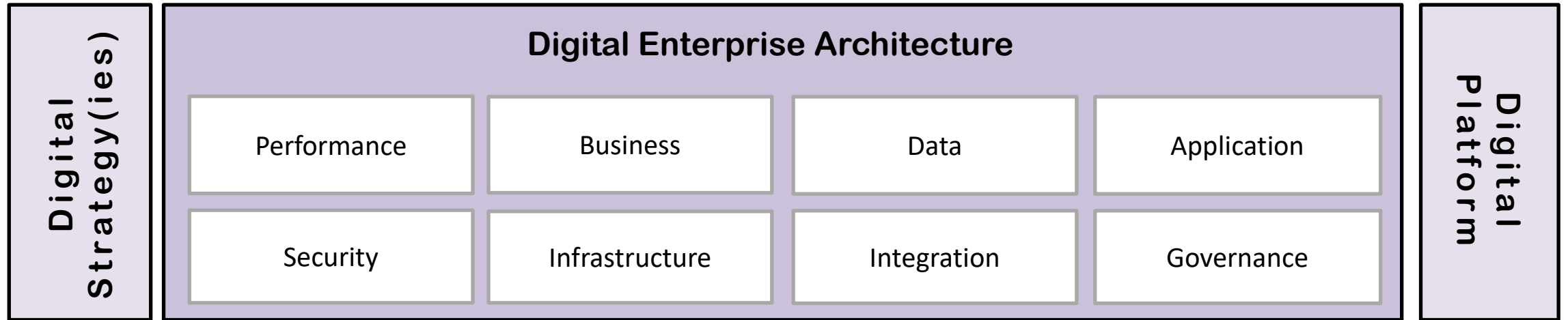


International level

National level

Local level

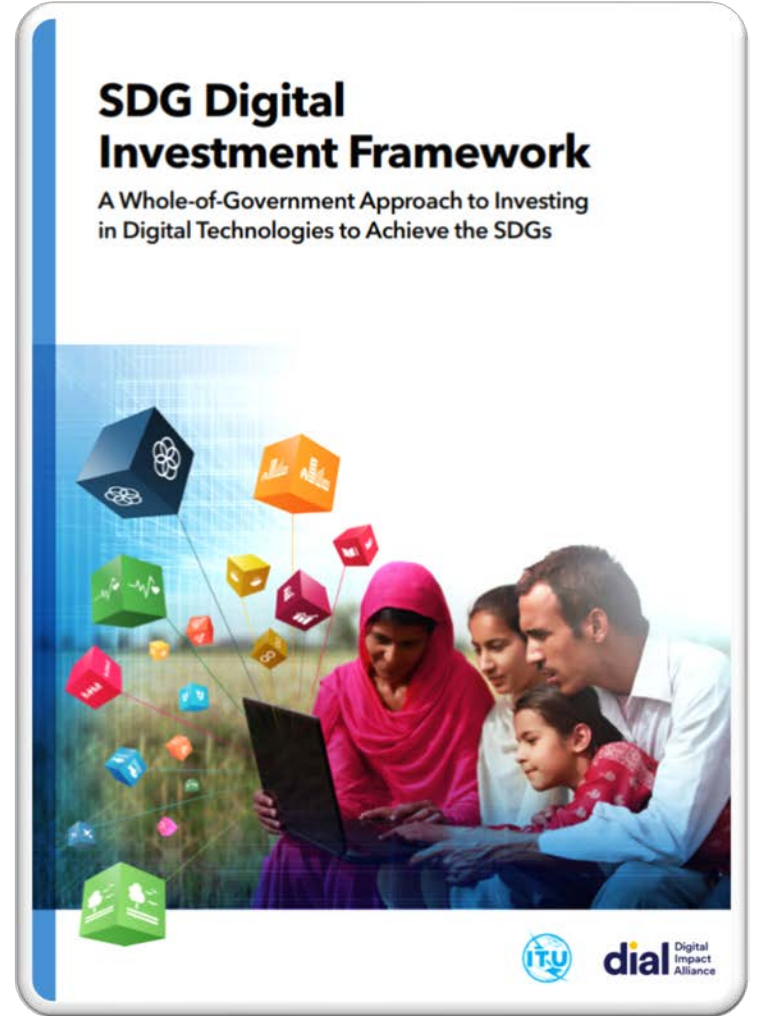
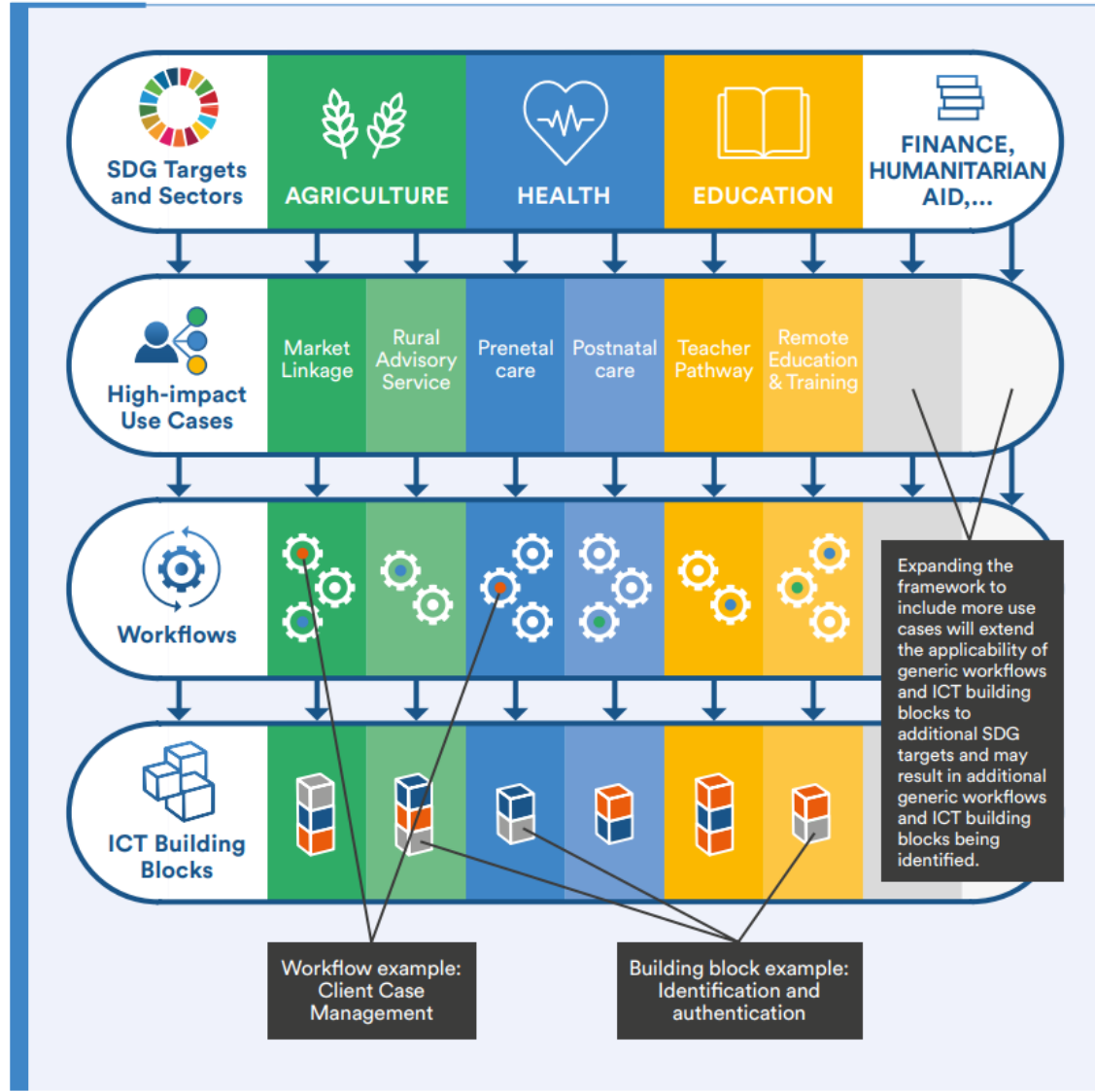
# Digital Government Services development process



Digital  
Health /  
Agriculture /  
Government  
Strategy

The digital enterprise architecture enables a whole-of-government approach to support government to deliver services in a coordinated, integrated and interoperable manner to accelerate public service innovation and transformation for better citizen outcomes and optimal utilization of ICT infrastructure.





<https://www.itu.int/pub/D-STR-DIGITAL.02-2019>



# What are ICT Building Blocks?

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

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	

Category	Agile IndEA Building Blocks
Core Building Blocks	<b>Core Building Blocks to be established in WAVE 1</b>
	1. <b>Digital identity</b> – Enable unique identification and authentication of users, organizations or other entities
	2. <b>Digital Registries</b> – Centrally manage databases that uniquely identify and describe persons, service providers, facilities, assets, procedures, products, sites or other entities related to the organization.
	3. <b>Integration management</b> – 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. <b>Messaging</b> – 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. <b>Cloud Infrastructure</b> – For hosting data and applications, getting all the benefits of cloud
	6. <b>Security and access</b> – Provide ICT administrators the ability to centrally configure and manage user and group access permissions to network resources, services, databases, applications, and user devices
	<b>Core Building Blocks to be established in WAVE 2</b>
	1. <b>Mobility management</b> – Securely enable employee use and management of mobile devices and applications in a business context
	2. <b>Analytics and business intelligence</b> – Provide data-driven insights about business processes, performance, and predictive modeling
	3. <b>Artificial intelligence</b> – Package machine intelligence capabilities as reusable services to perform work, extract insights from data, or provide other business capabilities
	4. <b>Geographical information</b> – Provide functionality to identify, tag and analyze geographic locations of an object, such as a water source, building, mobile phone or medical commodity
	5. <b>Enterprise App Store</b> – Provide a single touchpoint (download point) for all the Apps of the Enterprise.
Common Solution Building Blocks	<b>Common Solution Building Blocks to be established in WAVE 1</b>
	1. <b>Registration</b> – 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. <b>E-Payments</b> – Implement and log financial transactions receipts and payments online in multiple ways.
	3. <b>Workflow management</b> – 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. <b>Case management</b> – Register or enroll users and provide longitudinal tracking of services, often across multiple service categories, departments and locations
	5. <b>Feedback</b> – 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. <b>Consent management</b> – 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. <b>Reporting and dashboard</b> – Provide pre-packaged and custom presentations of data and summaries of an organization's pre-defined key performance metrics, often in a visual format
	<b>Common Solution Building Blocks to be established in WAVE 2</b>
	1. <b>eLearning</b> – Support facilitated or remote learning through digital interaction between educators and students
2. <b>Collaboration management</b> – Enable multiple users to simultaneously access, modify or contribute to a single activity, such as content creation, through a unified access portal	
3. <b>Content management</b> – Support the creation, editing, publishing and management of digital media and other information	
4. <b>Scheduling</b> – Provide an engine for setting up events based on regular intervals or for triggering specific tasks in an automated business process, based on specific combinations of status of several parameters	
5. <b>Terminology</b> – Provide a registry of definitions and terms with defined nomenclature standards, metadata, synonyms and sometimes a knowledge map for a particular domain of knowledge (e.g. health) which can be used to facilitate semantic interoperability.	

Examples of Building Blocks from India Agile EA document  
[https://meity.gov.in/writereaddata/files/agile\\_indea\\_framework-v.1.0.pdf](https://meity.gov.in/writereaddata/files/agile_indea_framework-v.1.0.pdf)

# Accelerating digitalization of government services in low-resource settings:

## Implementing a reference digital platform based on reusable building blocks

**Vision:** Developing a model or reference “common digital SDG platform” as a Digital Public Good (DPG) comprised of essential standards-based, secure, interoperable and reusable building blocks available to the whole-of-Government agencies to build and deploy their digital services and applications in a cost efficient, accelerated and integrated manner particularly in low-resource settings



REPUBLIC OF ESTONIA  
MINISTRY OF FOREIGN AFFAIRS



Bundesministerium für  
wirtschaftliche Zusammenarbeit  
und Entwicklung



**dial** Digital  
Impact  
Alliance

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH



# Smart Villages

**A WHOLE-OF-GOVERNMENT  
APPROACH TO DIGITALLY  
TRANSFORM RURAL  
COMMUNITIES**





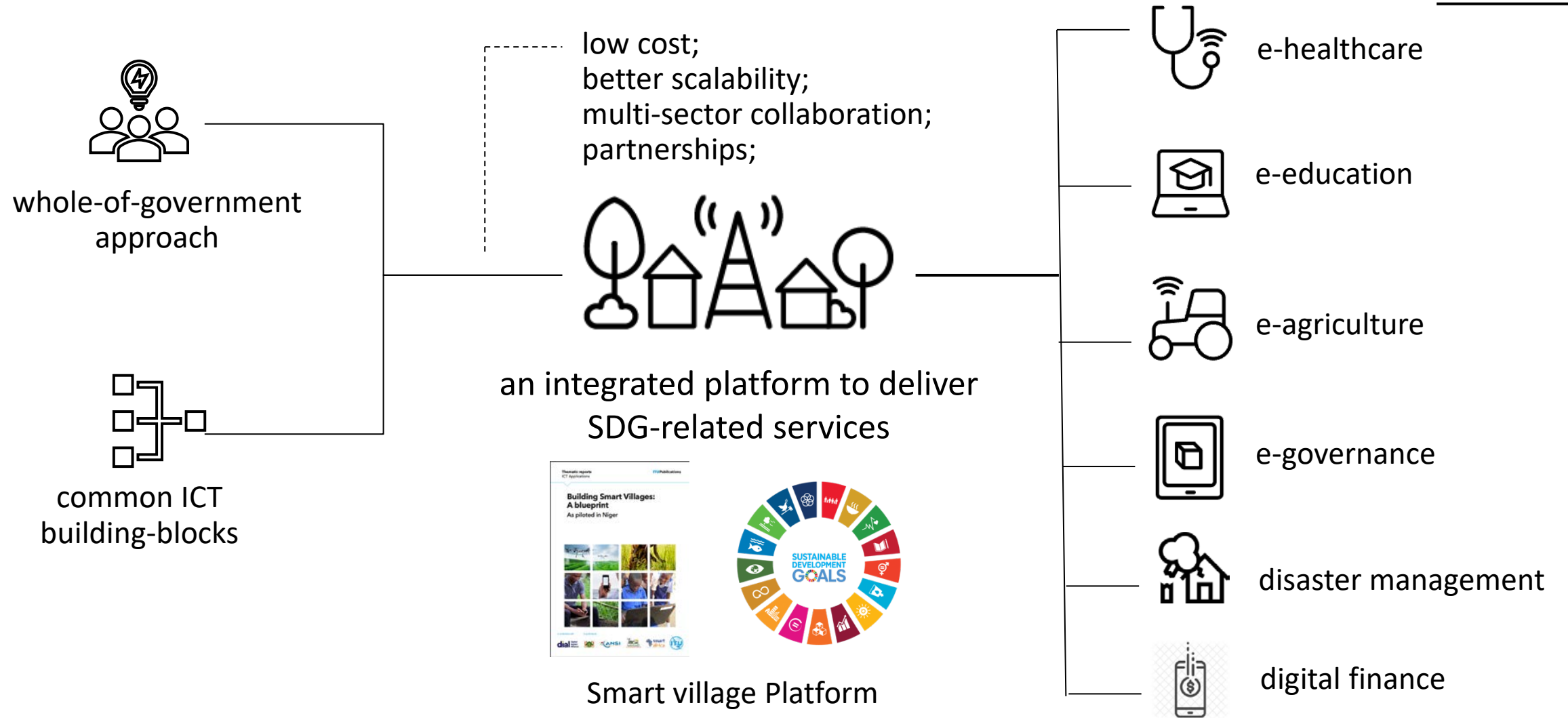


## Smart Villages

- A Whole-of-government, Whole-of-society approach for SDG digital investments and digital transformation
- Concrete approach to mutualize digital investments to achieve cost efficiencies through economies of scale [similar to «Car Pooling»].
- Consider various citizens' needs in an integrated manner.
- An initiative to reinforce national unity and inclusiveness so no one is left behind.

# About Smart Islands and Smart Villages

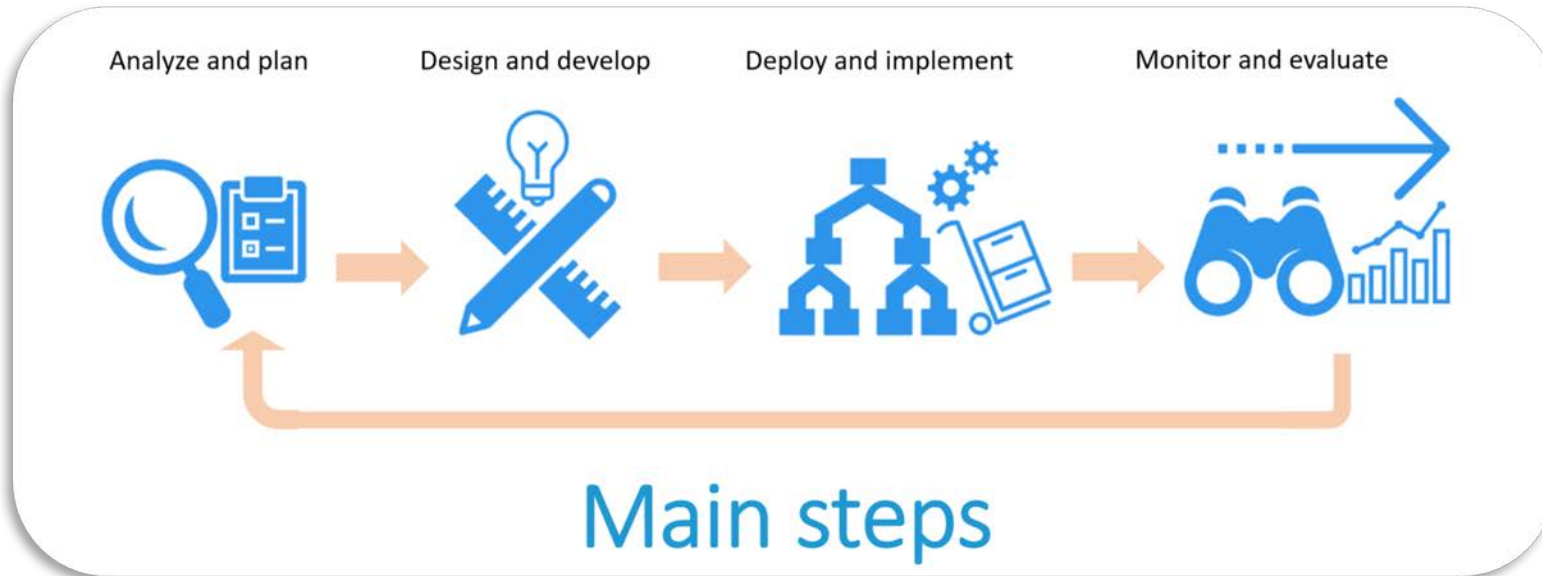
## Examples



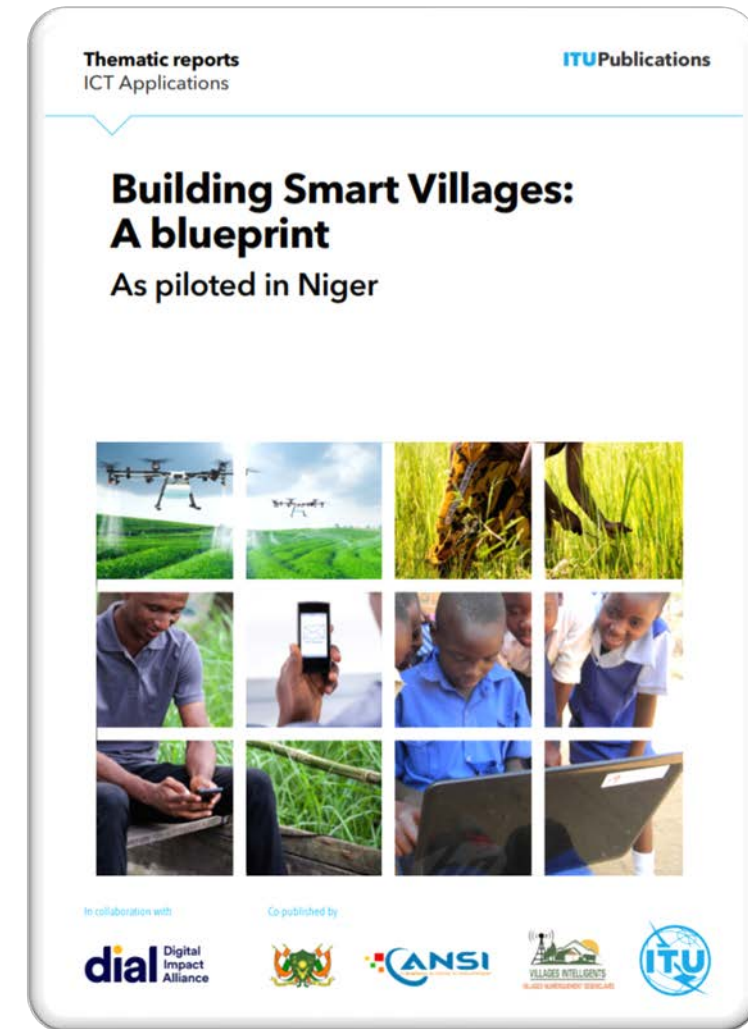


# Smart Villages Blueprint

A practical tool for establishing smart villages



[https://www.itu.int/pub/D-STR-SMART\\_VILLAGE.NIGER-2020](https://www.itu.int/pub/D-STR-SMART_VILLAGE.NIGER-2020)



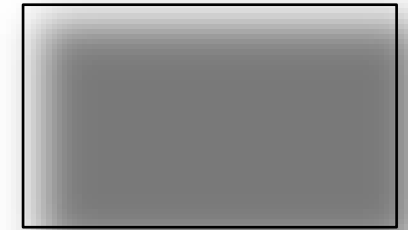
# Toolkits for Smart Villages and Islands

A combination of toolkits used for planning smart islands services, infrastructure, digital skills etc.



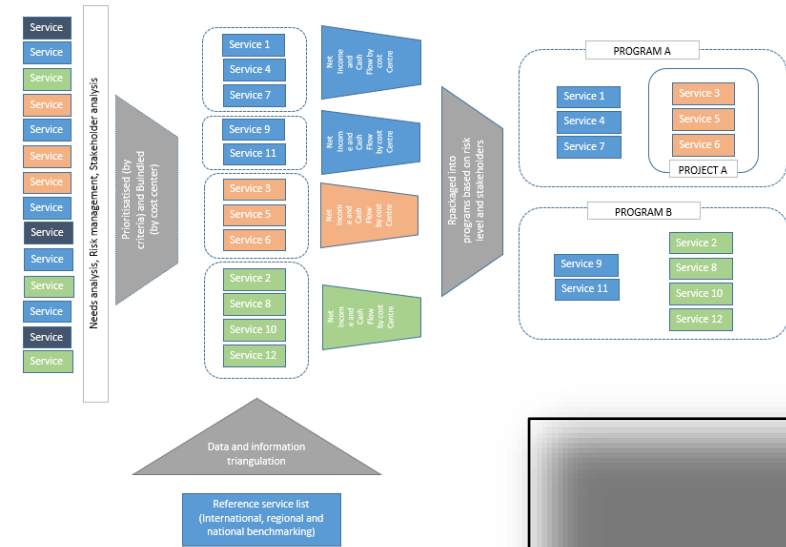
Digital services planning

Last mile connectivity toolkit



GIS connectivity maps

Others







**THANK YOU**

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