



Sierra Leone eGov Case Study

The Experiences and Perspectives

June 2022

dial Digital
Impact
Alliance



BILL & MELINDA
GATES foundation



■ Ransford Mensah, PhD



COUNTRY LEAD, Sierra Leone

- UN Foundation Digital Impact Alliance (DIAL)



EDUCATION

- PhD Information Systems
- MSc. Engineering Business Management
- BSc. Computer Engineering



CERTIFICATION

- TOGAF 9.2
- Agile Scrum Master
- ITIL EXPERT / ITIL 4 Managing Professional
- PMP
- PRINCE2 Practitioner
- CISA
- Certified Change Management Practitioner (CCMP)
- Certified Ethical Hacker (CEHv6)
- Oracle Certified Expert
- CompTIA Linux +, Security +, Project +

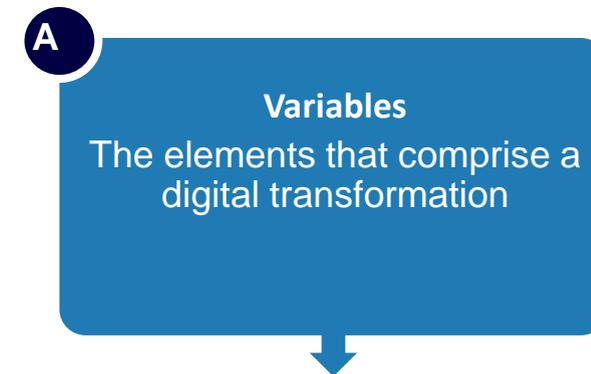


About DIAL



The **Digital Impact Alliance** is an independent global alliance funded by leading development agencies and private foundations. DIAL was established in 2015 and is housed at the UN Foundation.

DIAL is a “**think, do, replicate**” tank. It combines **practical research** with **evidence-based advocacy** to advance digital inclusion. DIAL identifies barriers to the routine use of digital solutions and data in service delivery; tests ways to remove them with public and private actors; and packages solutions for others to use in service delivery.



- Accelerate
- Build
- Connect

What does a digital transformation **look like in action**?
Can DIAL help *accelerate* it?



Digital Transformation

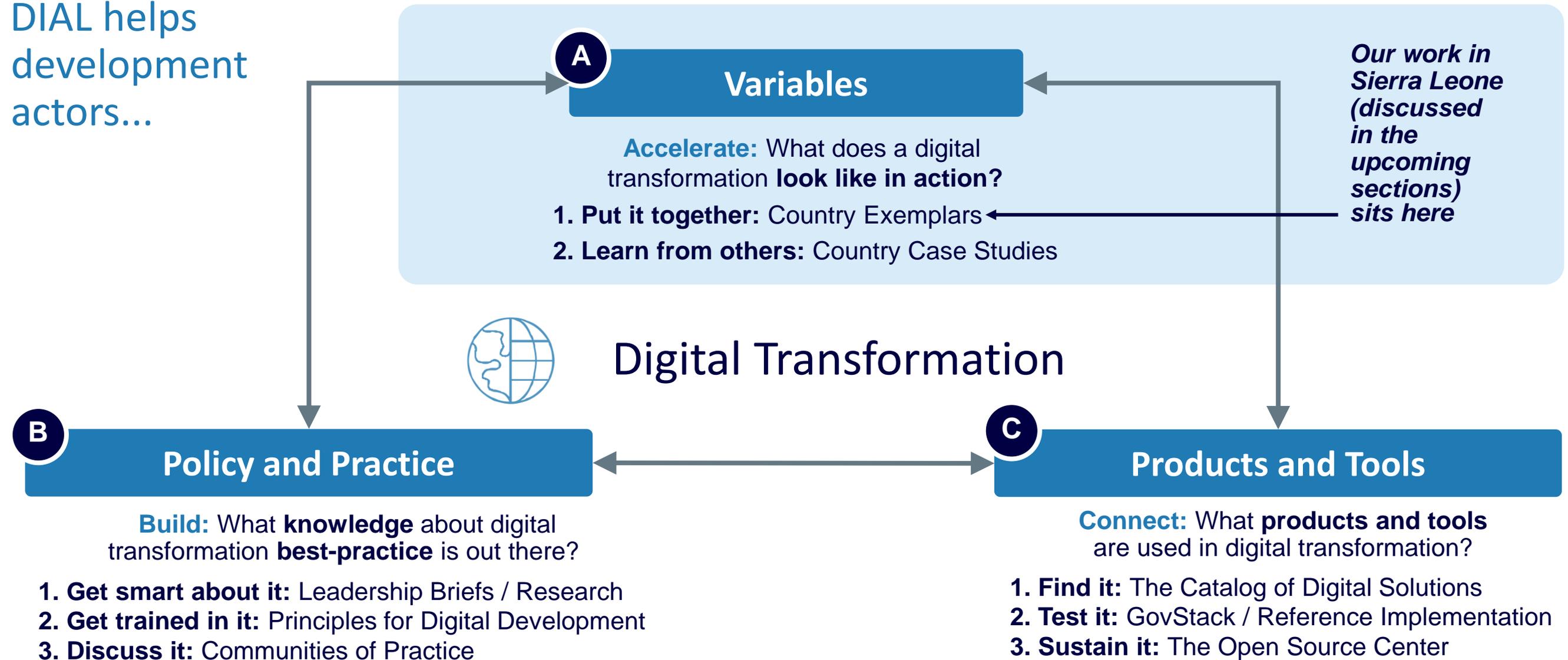
What **knowledge** about digital transformation **best-practice** is out there?
Can DIAL help *build* agreement and political will around it?



What **products and tools** are used in digital transformation?
Can DIAL help *connect* actors to the proven digital solutions that they need?

DIAL's [Digital Beacons Strategy](#) identified areas where digital transformation support was needed. We offer assistance to national governments who are interested in driving national digital transformation.

DIAL helps development actors...



The Current Situation

Africa's Digital Transformation Efforts Are Bearing Fruit

In its latest E-Government Survey, the UN notes that governments around the world are looking at new e-government initiatives in their pursuit of digital government transformation.

According to the UN, e-government holds the potential to improve the delivery of public services and is an enabler of effective, transparent and accountable public institutions.

All regions are making progress with developing e-government capabilities, but Africa is showing the greatest growth.

Sadly, no African country can yet boast very high EGDI value

The number of UN member states in Africa that have low e-government development index (EGDI) values dropped from 26 in 2016 to only seven in 2020s

65% of African countries allow citizens to register a business online, while more than half allow citizens to apply for a government post or request birth, death or marriage certificates.



Department of Economic and Social Affairs

E-Government Survey 2020

Digital Government in the Decade of Action for Sustainable Development

With addendum on COVID-19 Response

DIAL partnership with the Smart Africa Alliance

Digital Economy Blueprint

Smart Africa Alliance

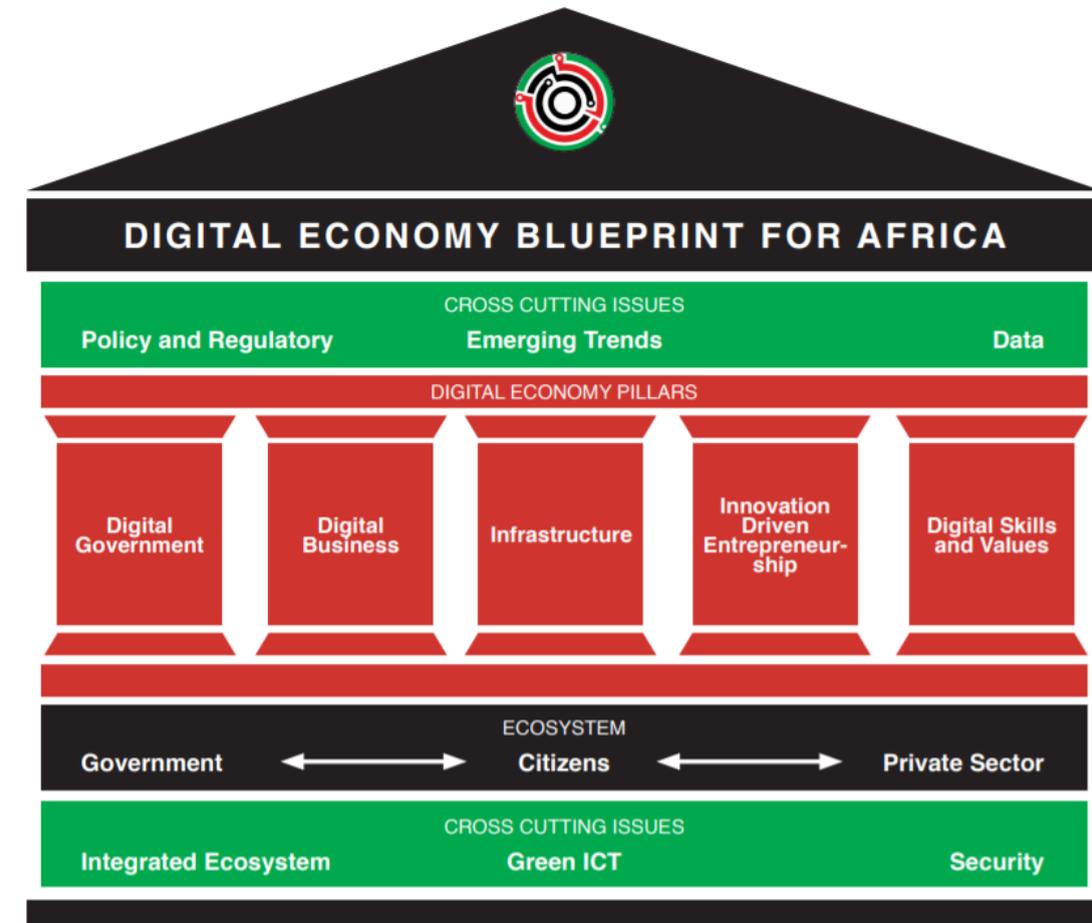
An alliance representing 32 African countries, Smart Africa was founded in 2014 with a vision to transform Africa into a single digital market by 2030 through:

- Building affordable digital infrastructure to interconnect the continent
- Promoting and facilitate investment and doing business across Africa
- Accelerating the birth and development of a digital society

Why partner with Smart Africa?

Smart Africa is an ideal partner for DIAL's country support, offering

- High-level support and commitment from African ICT ministers and Heads of State on Digital Transformation.
- Country peer learning networks, including a Digital Economy Working group composed of 10 member states that will act as a learning platform for our partnership in Sierra Leone
- Strong connections to the private sector and digital innovation ecosystem in Africa
- Catalytic support for flagship projects.



Background

Sierra Leone Digital Economy Diagnostic by the World Bank

R1. (precondition/highest priority/most urgent): **Strengthen leadership and promote institutional and donor's coordination** for digital transformation.

R2 (precondition/highest priority/most urgent): **Design and implement a WoG ICT enterprise architecture** to provide the foundation for digital transformation.

R3 (high priority/urgent): Create a **trust environment for digital government**.

R4 (high priority/urgent): Establish and apply a **shared platforms/services** for government approach.

R5 (high priority/urgent): Expedite the **implementation of a national data center as a base** for establishment of a hybrid government cloud to create a common virtual infrastructure for the public sector.



The Government of Sierra Leone (GoSL) asked DIAL to provide technical and financial support to their effort starting in 2021.

Sierra Leone has several advantages:

- **High level of political will:** The country's vision for digital transformation is championed from the Office of the President through many of its Ministries.
- **Strong vision for digital transformation:** The government is keen on mainstreaming technology and innovation into all of government.
- **A re-organized governance structure that is leading the digital transformation vision:** As seen through the government's establishment of the Directorate of Science, Technology and Innovation in the Office of the President, an empowered Ministry of Information and Communications, and the development of an initial digital development strategy.



Source: WorldAtlas.com

Background

Sierra Leone Digital Economy Diagnostic by the World Bank

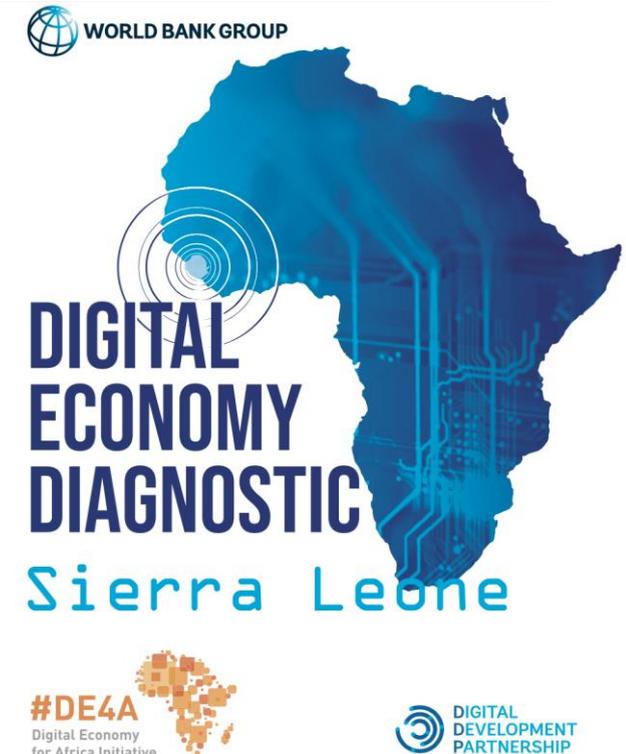
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Key Building Blocks for Digital Transformation

(High level view)

Funding Models

- Need sustainable funding model across ecosystem
- Governments need to co-invest to drive infrastructure programmes
- Universal Service Funds can be used to drive devices, connectivity and training
- Universal Service obligations linked to high-demand spectrum: 700MHz, 800MHz

Privacy, Security, Integrity

- Openness & Transparency foundational
- Build culture of trust – Government/Citizen/Business
- Strong Policy & Legislation on confidentiality/Privacy/Transparency
- Personal Data Protection - Ownership and Usage need to be controlled & audit by users
- Cybersecurity by design

Digital Economy

- Financial Inclusion
- Digital Payment capability
- Entrepreneurship & Innovation
- Fraud reduction
- Credit availability

Infrastructure

- Electricity is available, affordable and reliable
- National Broadband Strategy (wired & wireless)
- Accessibility and Affordability of access
- Quality & Reliability of network (bandwidth & up time)

Human Capital Development

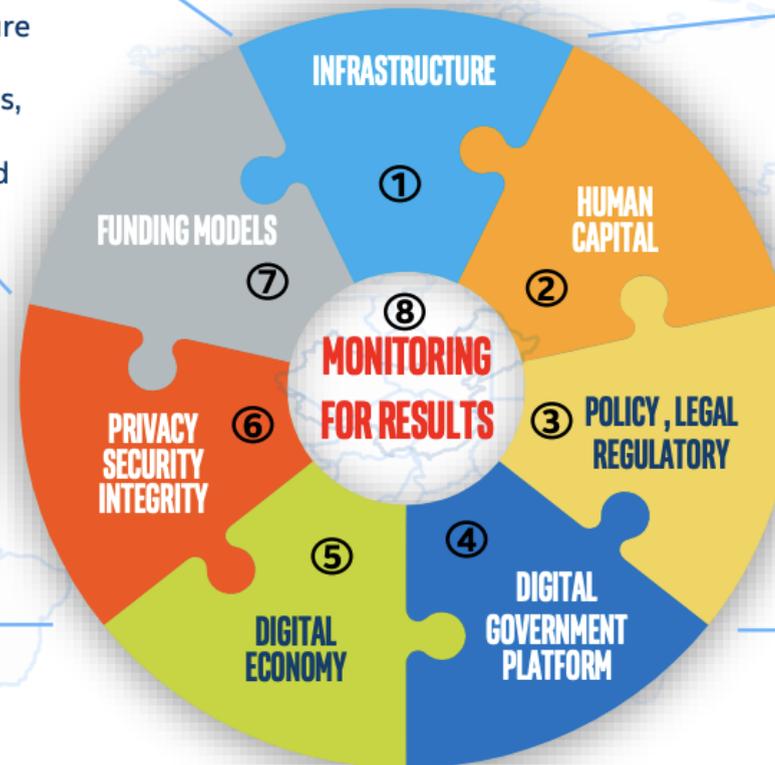
- Digital Inclusion (access, knowledge and skill)
- Digital Literacy (Technology savviness)
- Empowered all citizen (women ~ 50% pool of Talent)
- Capacity Building
- ICT capable government employees

Policy, Legal & Regulatory framework

- Political, Economic & Social Openness
- Enable & accelerate key ICT infrastructure development
- Create Open & Sustainable Competitive market
- E-Governance / E-Services friendly
- Accelerate Public-Private Partnerships

Digital Government Platform

- Optimized Data Center
- Cloud based Infrastructure, Analytics
- EID & End user Device
- Security, Network, Open-Data, Open API
- E-Services platform, Government Portal

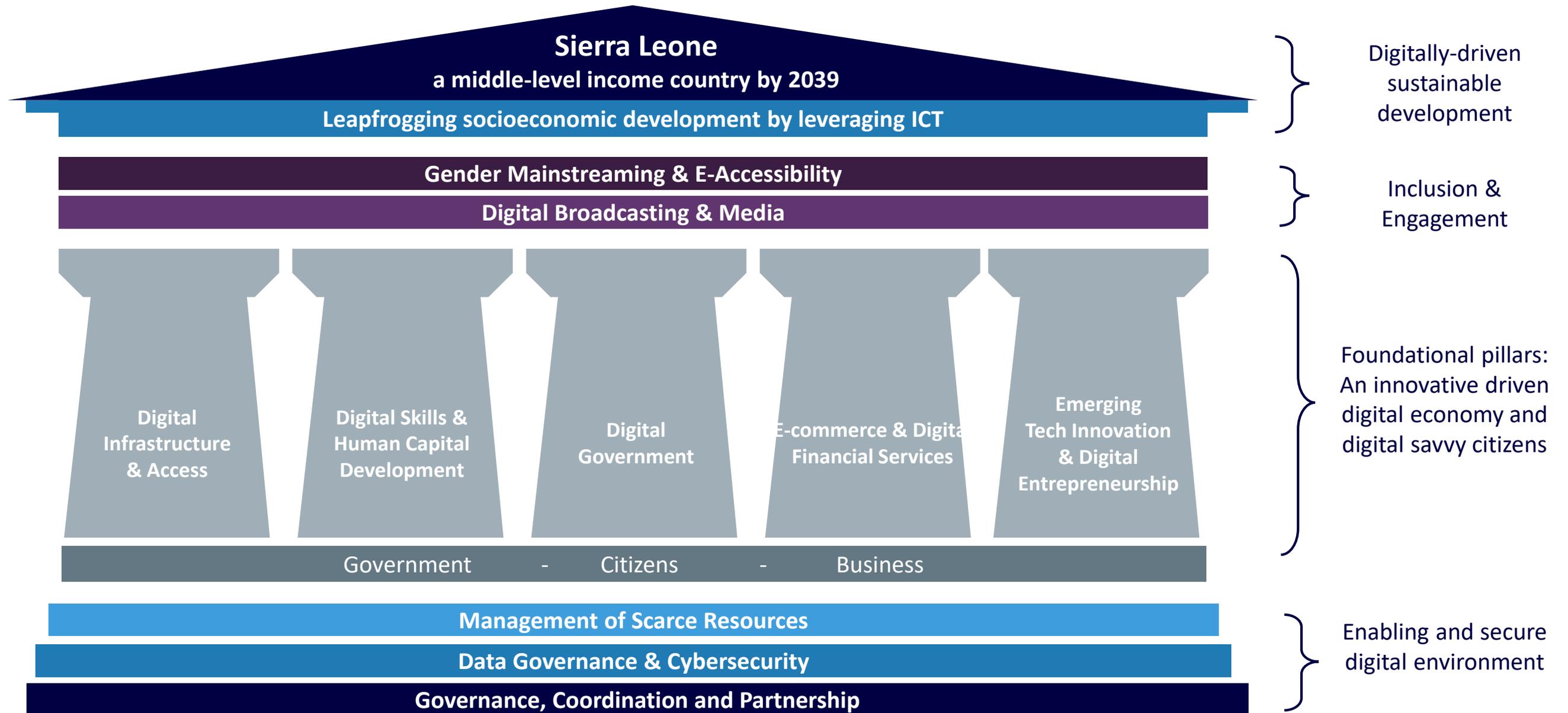


GoSL identified a few areas in 2021 where DIAL could support the policy environment. The National Digital Development Policy is completed, and the National Digital Development Strategy is in DRAFT. Trainings across Ministries are underway.



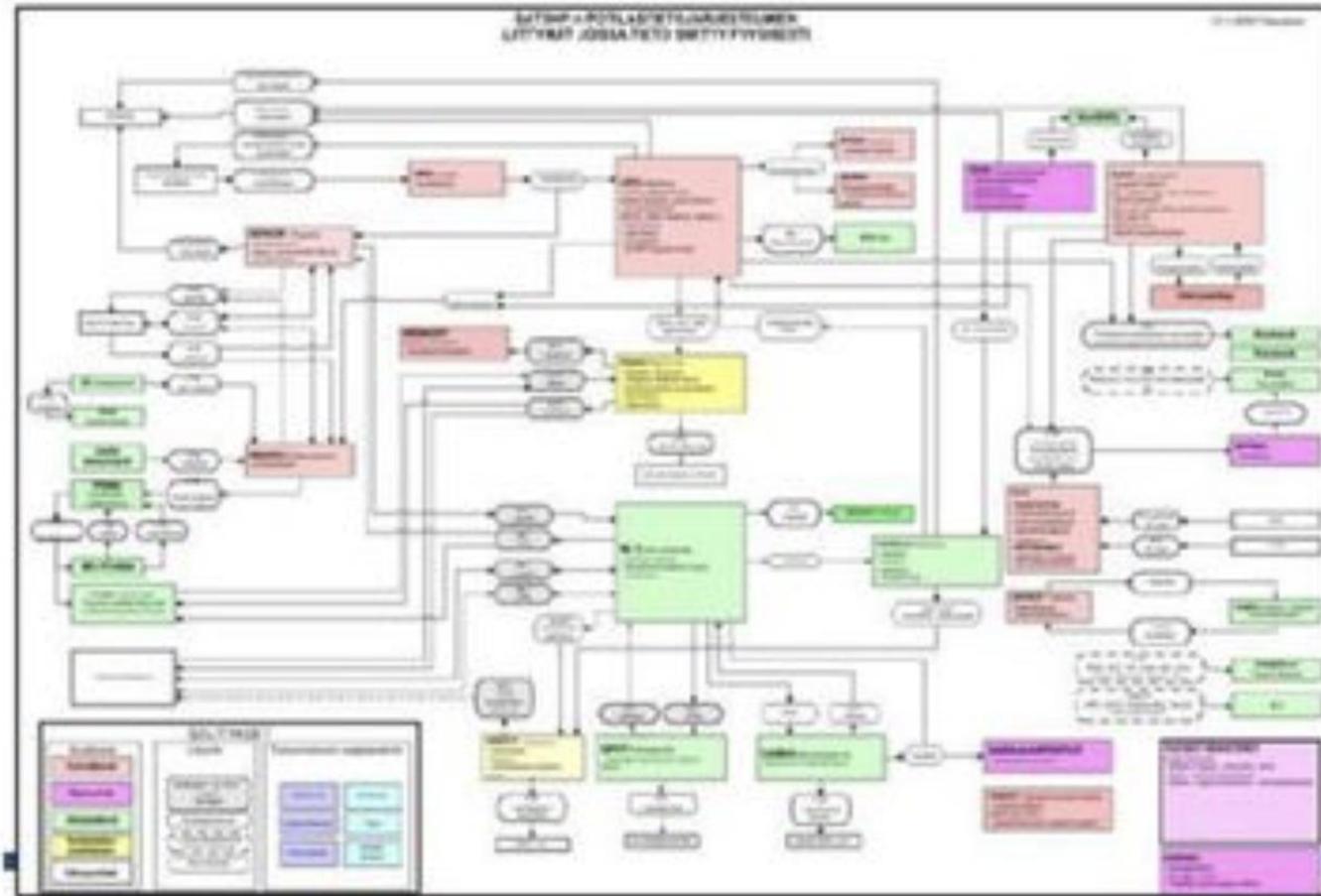
The National Digital Development Policy (NDDP) lays out how all digital efforts should connect.

Conceptual Framework

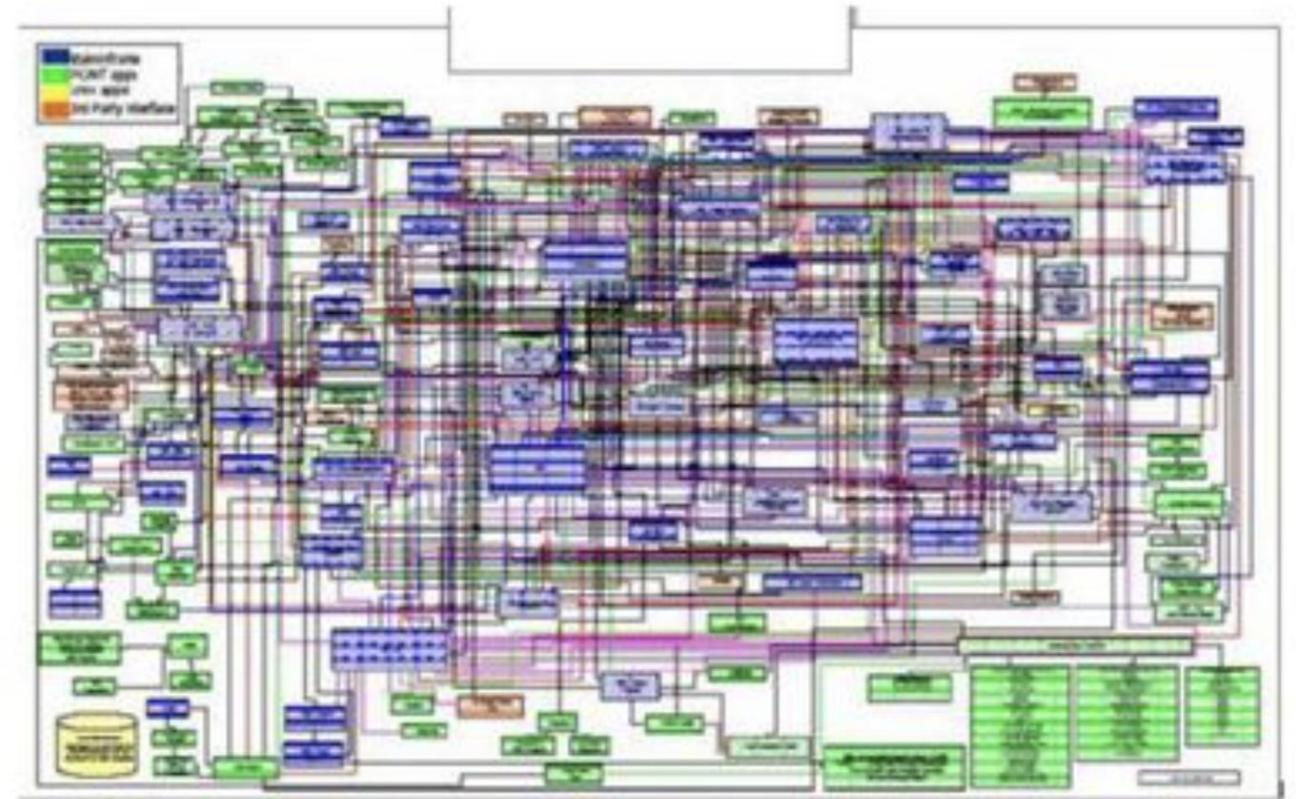


GOVERNMENT EVOLUTION

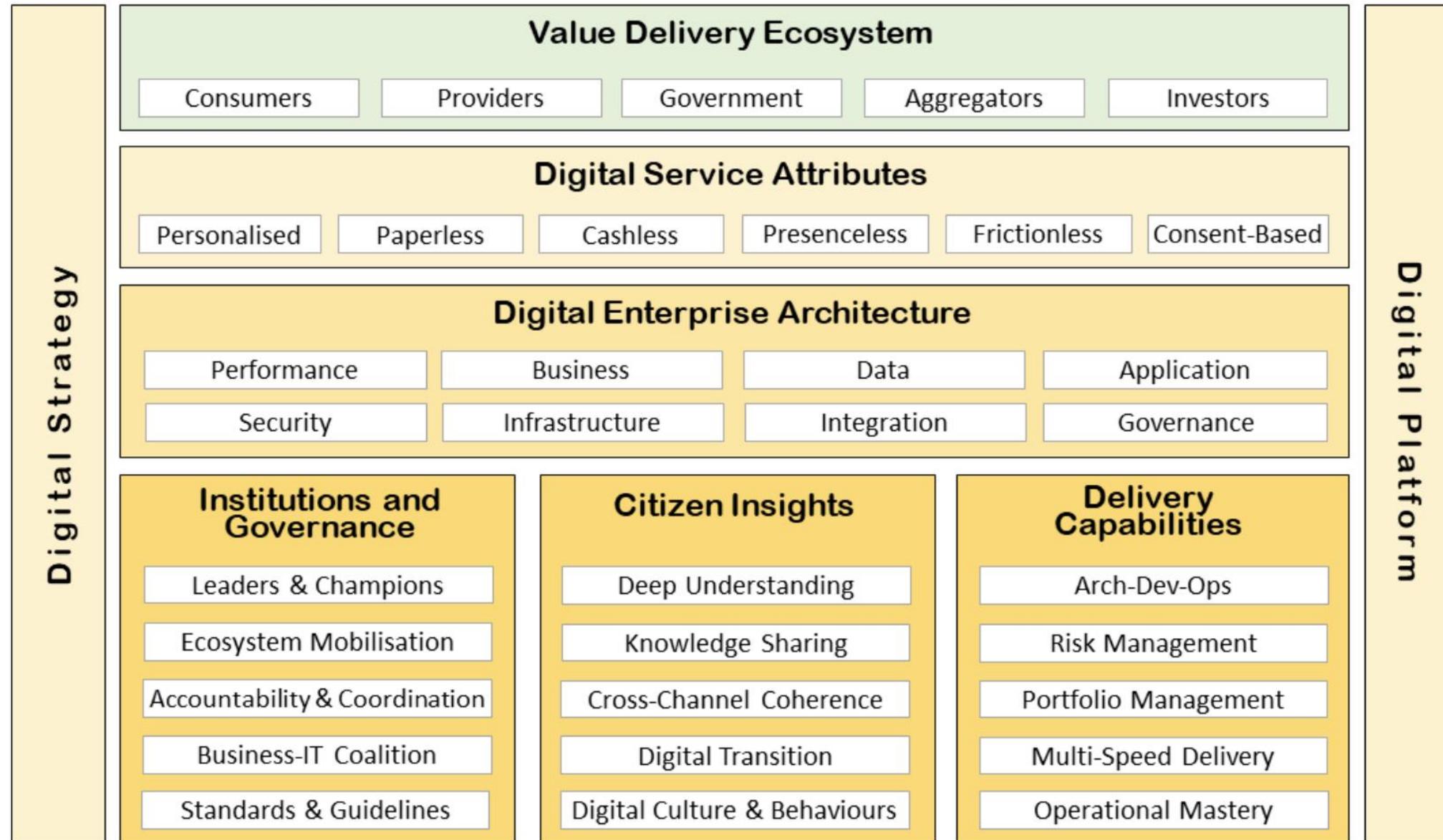
In the early days...



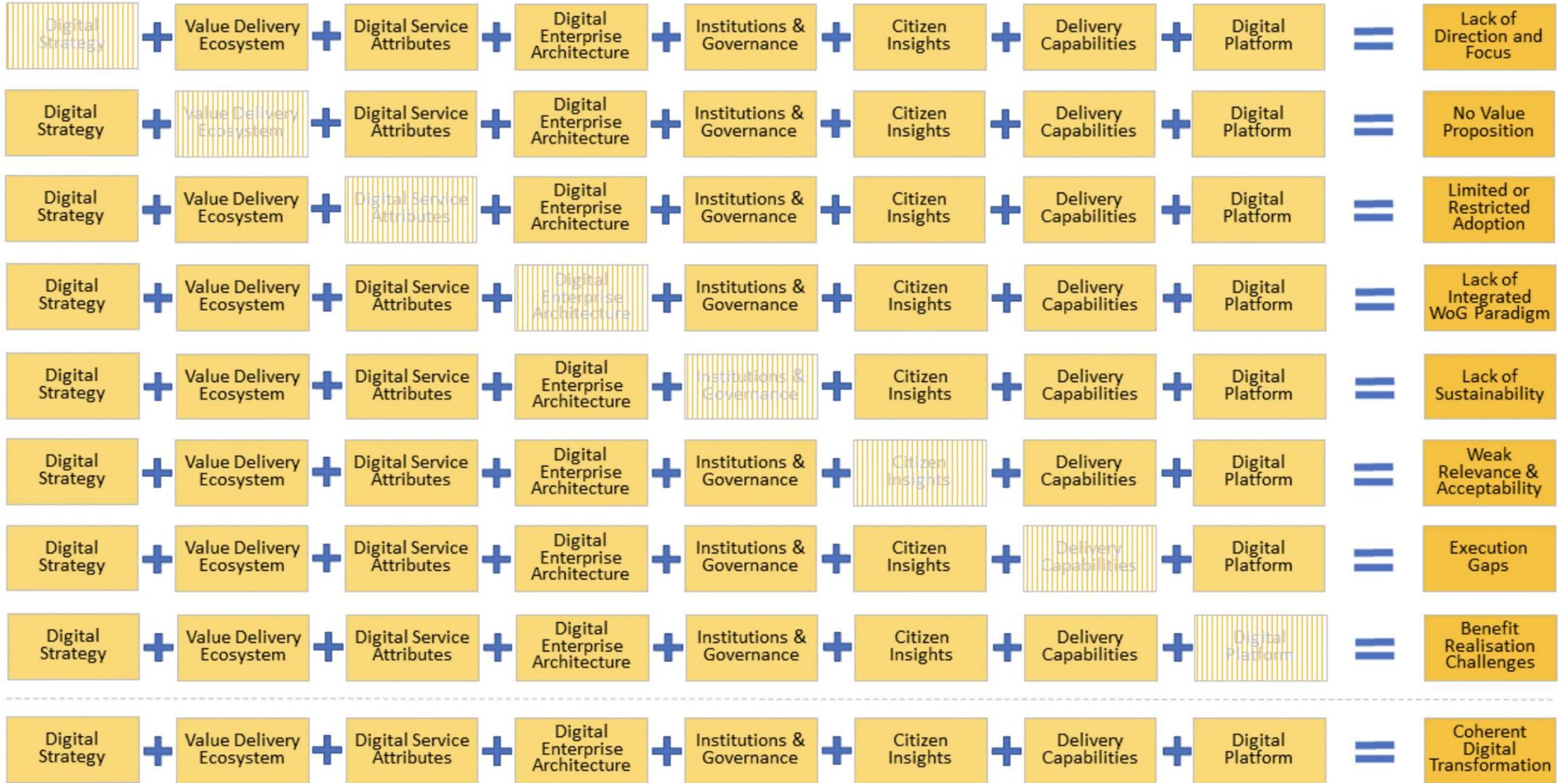
Now



Key Building Blocks for Digital Transformation



Impact of missing building blocks



Issues faced by Government

- Integration and Interoperability Issues
- Lack of Knowledge Sharing
- Security Issues
- Lack of Standards

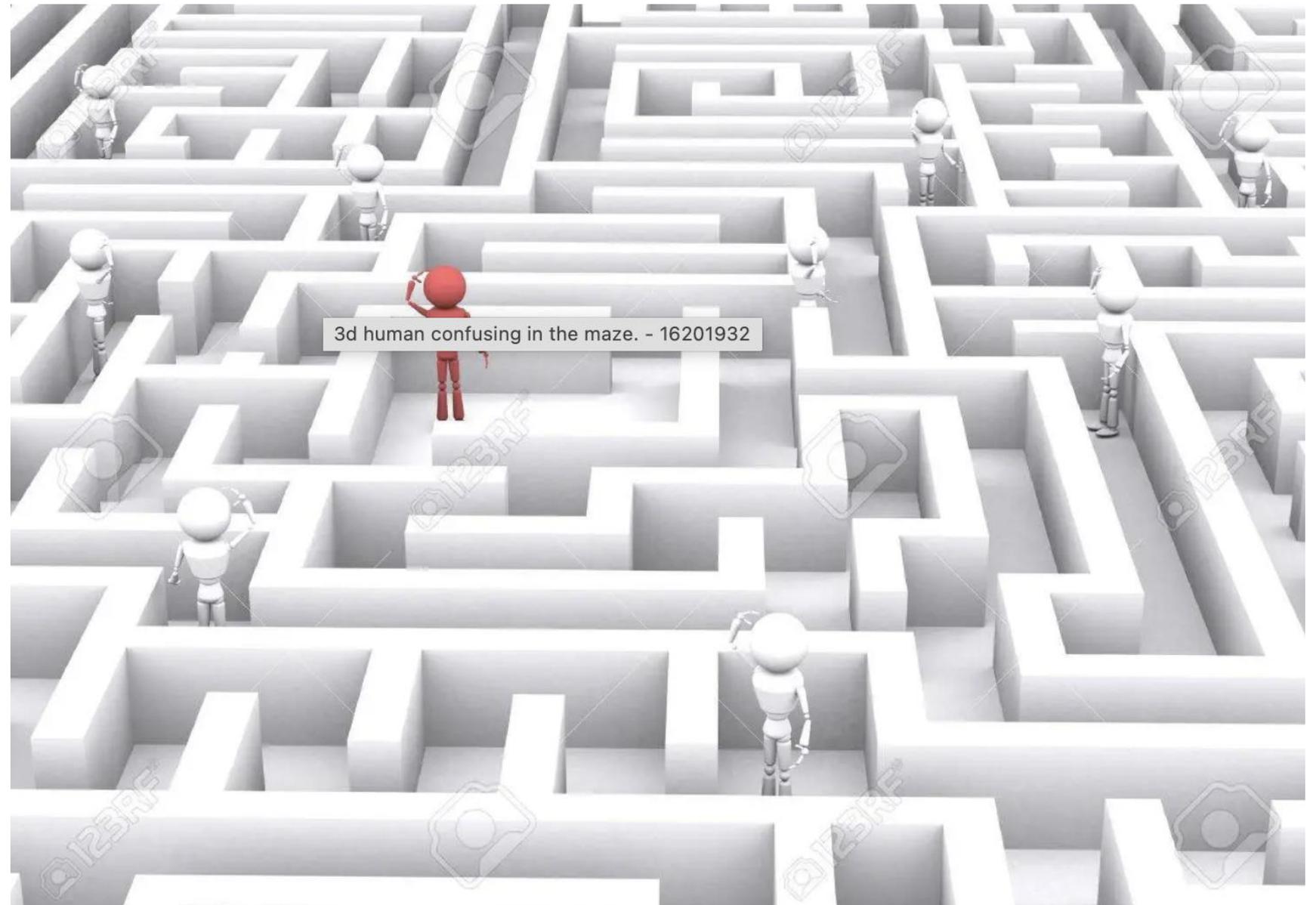


Risk of creating a chaos of Government digital services

Governments in most of the developing nations, like in Sierra Leone are a **complex multi-tier organization**, having Ministries, departments and agencies.

Government's initiative to enable citizen services across the country using IT enabled resources is huge and complex.

With the diversity of people, cultures, incomes, backgrounds and with different levels of expectations across different demography's, this task becomes even more complex.



Enterprise Architecture



Coherence

Agility

Robustness

Ability to migrate

Alignment

Interoperability

Transformation

Scalability

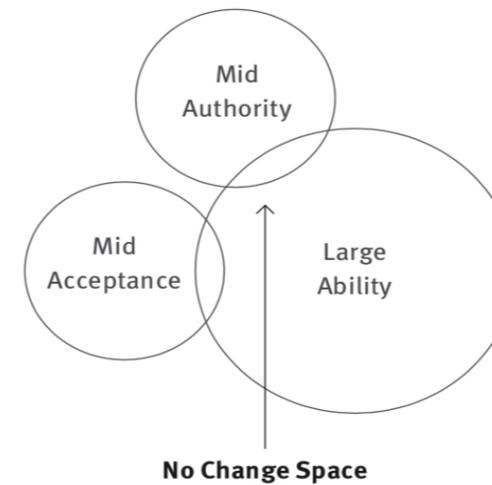
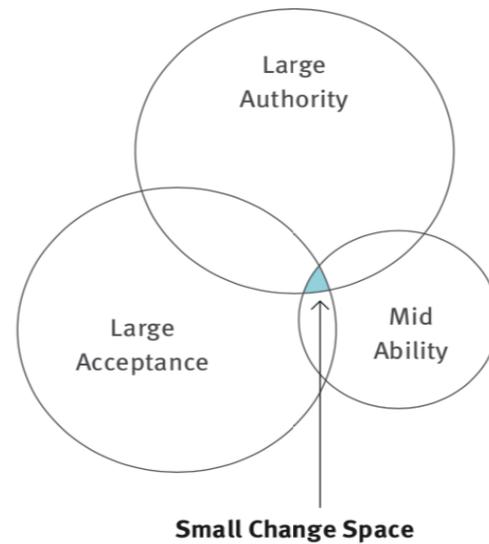
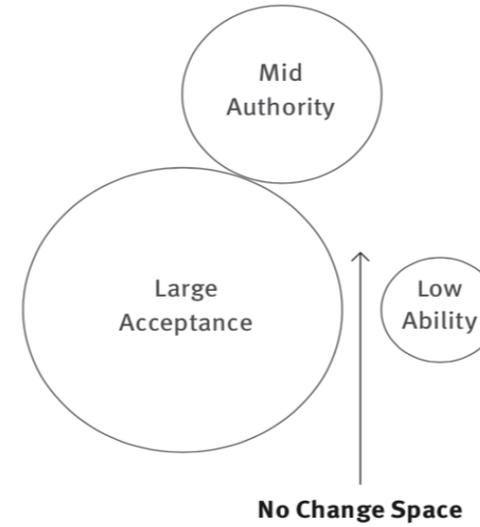
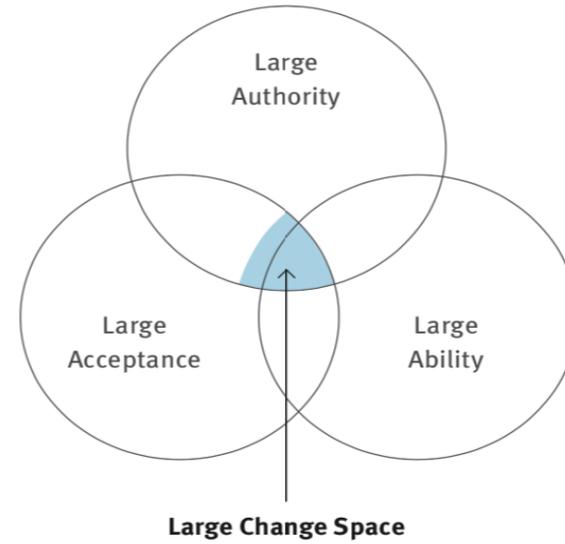
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Benefits of due to EA in Government

Sierra Leone Government Enterprise Architecture Framework

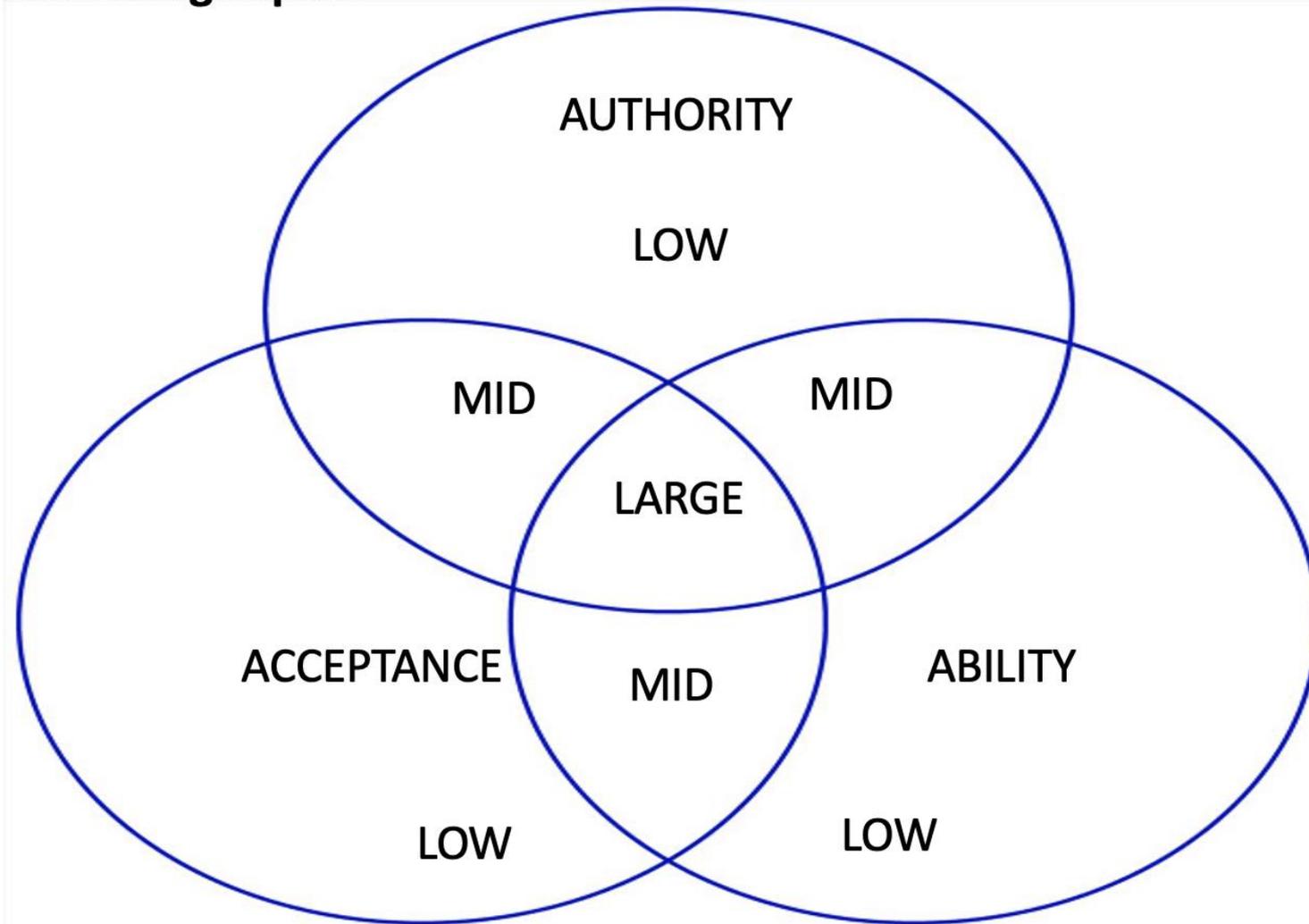
- **Provides a Common Language:** provides a common language for MDAs involved in the delivery of cross government services
- **Enhances Collaboration:** supports the identification of re-usable and sharable services and applications
- **Assists in describing and analyzing IT investments:** provides a basis for the objective review of investment by government
- **Assists in transforming Government:** enables more efficient and timely delivery of e-Services through a repository of standards, principles and templates that assist in the design and delivery of ICT capability and, in turn, business services to citizens

Change Space Analysis

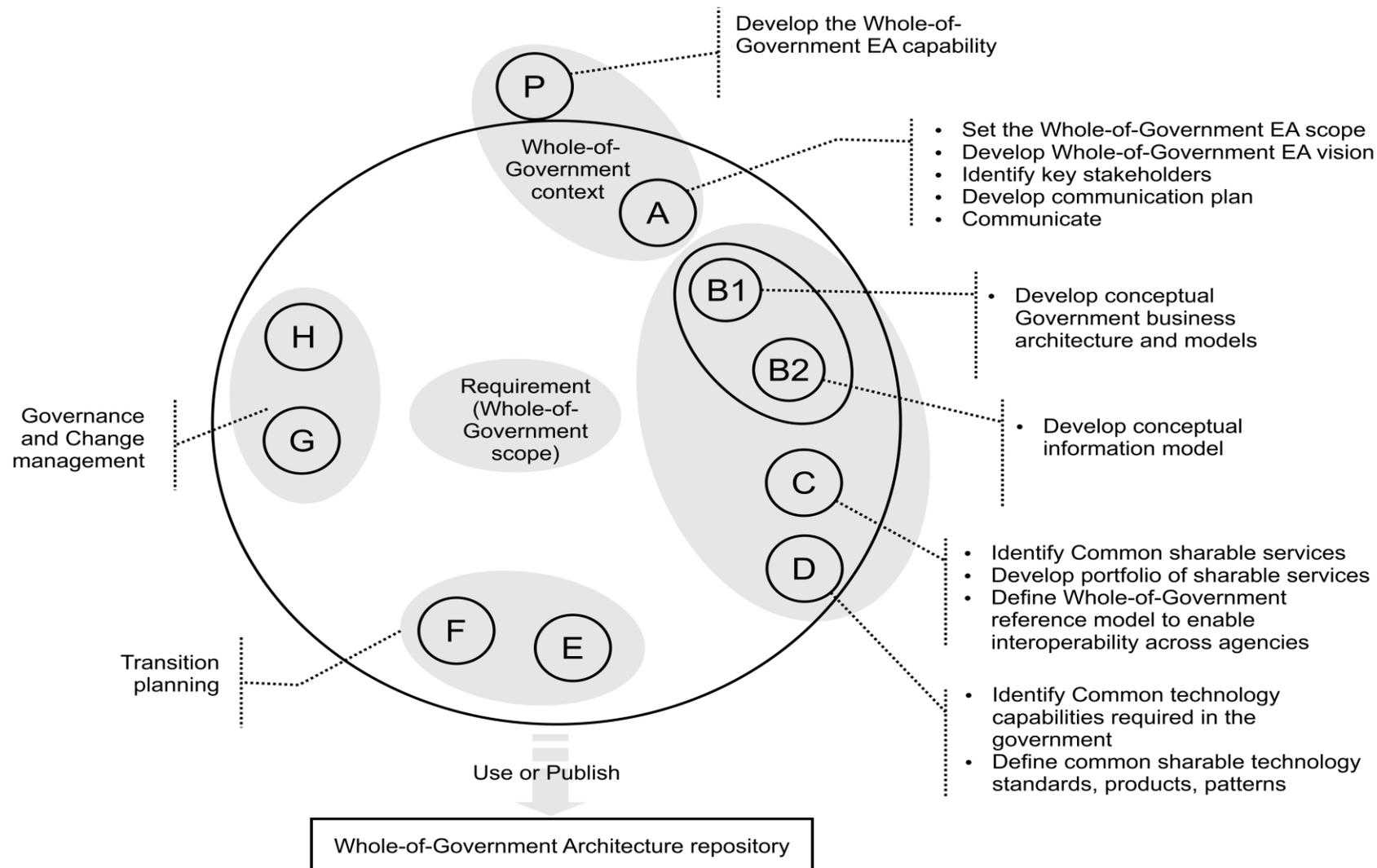


Change Space for Architecture Work

Exploring the Change Space



Whole of Government WoG Level

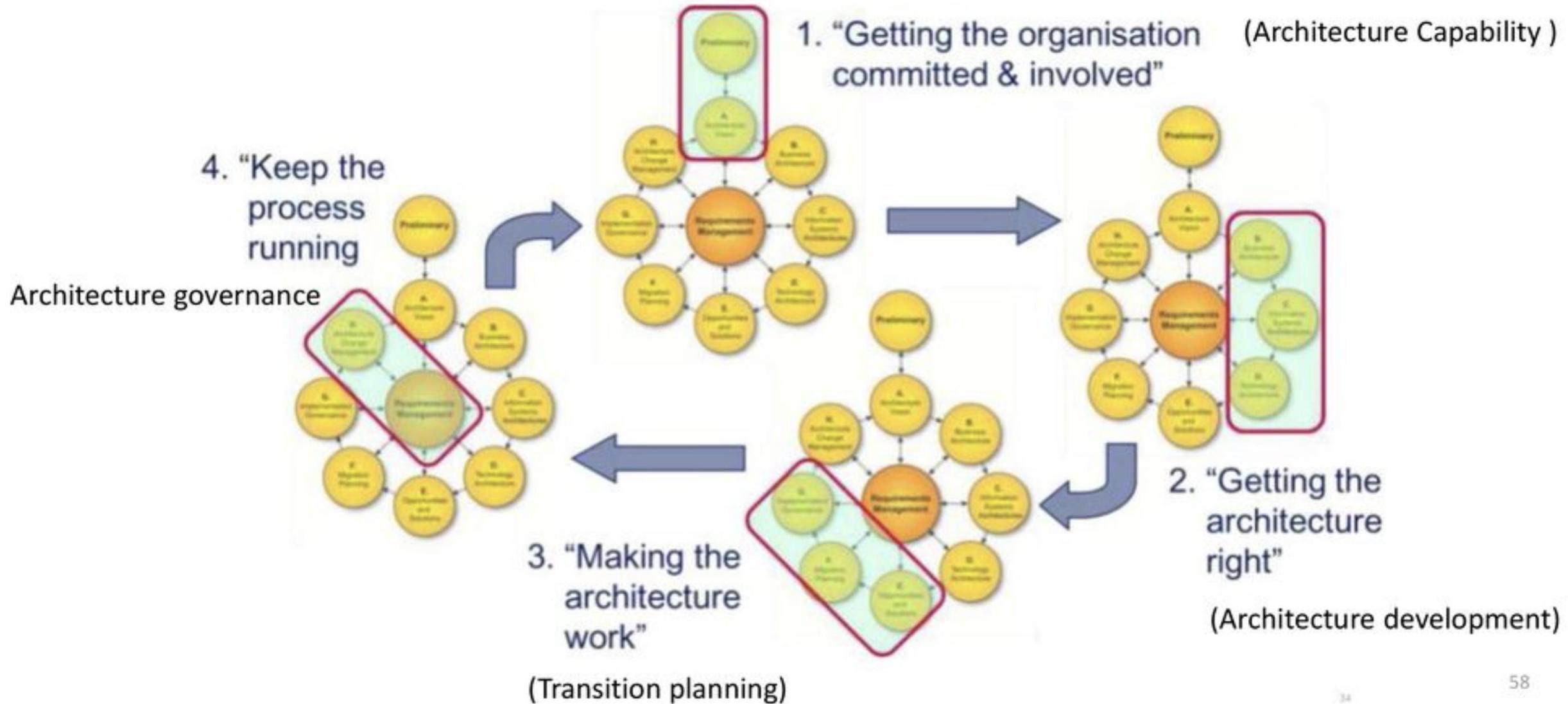


FY 22 Focus (Preliminary Phase & Architecture Vision)

- Develop the Whole-of-Government EA capability (go into early FY22)
- Set the Whole-of-Government EA scope
- Develop Whole-of-Government EA vision and principles
- Identify key stakeholders
- Develop communication plan

TOGAF- The Open Group Architecture Framework

4 Iteration cycles, based on a grouping of phases:



Building Architecture Capability

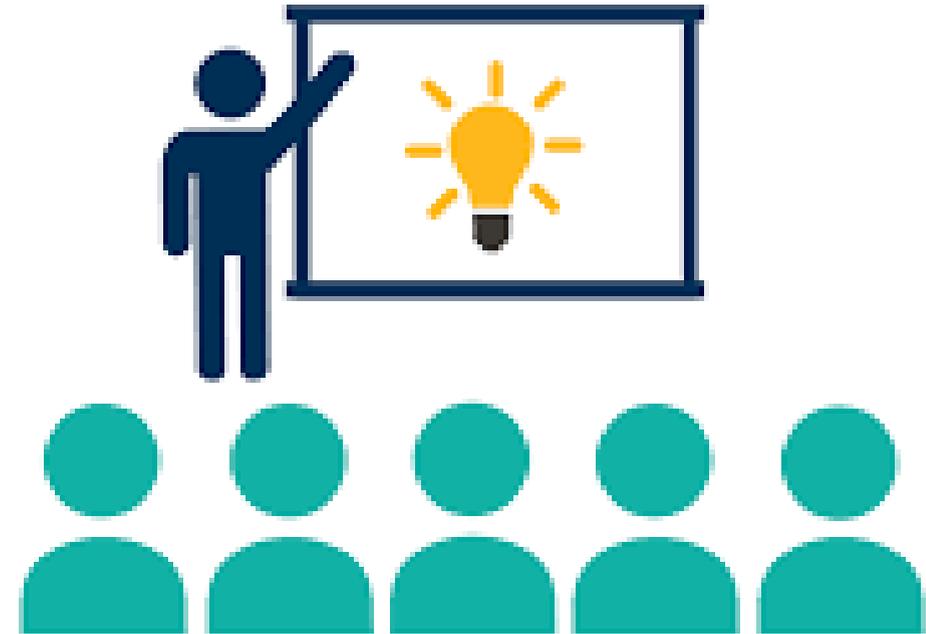
 Principles *for*
Digital Development

 ITIL®

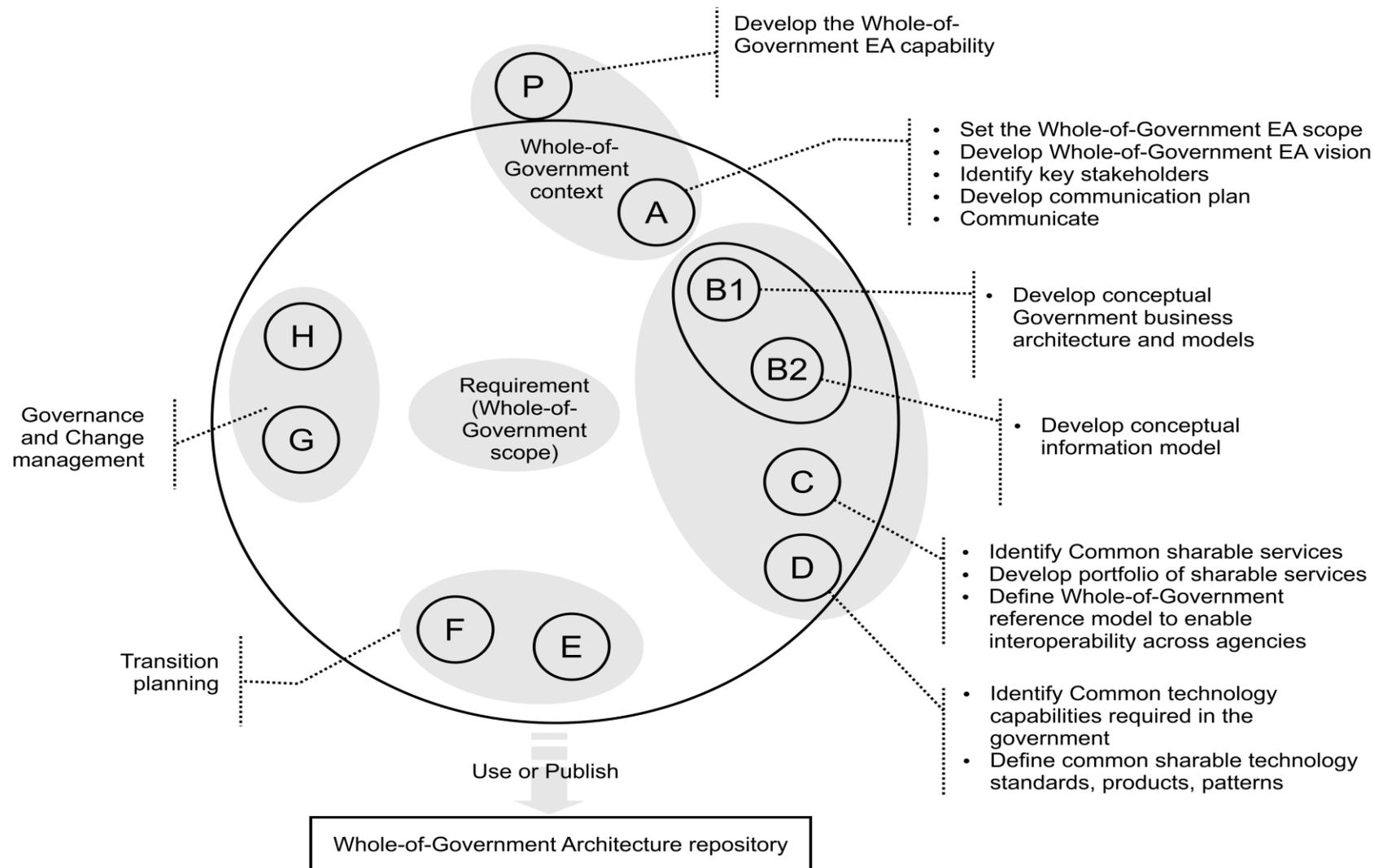
 COBIT®
AN ISACA® FRAMEWORK

 PRINCE2®

The
TOGAF®
Standard — *Version 9.2*



Whole of Government WoG Level

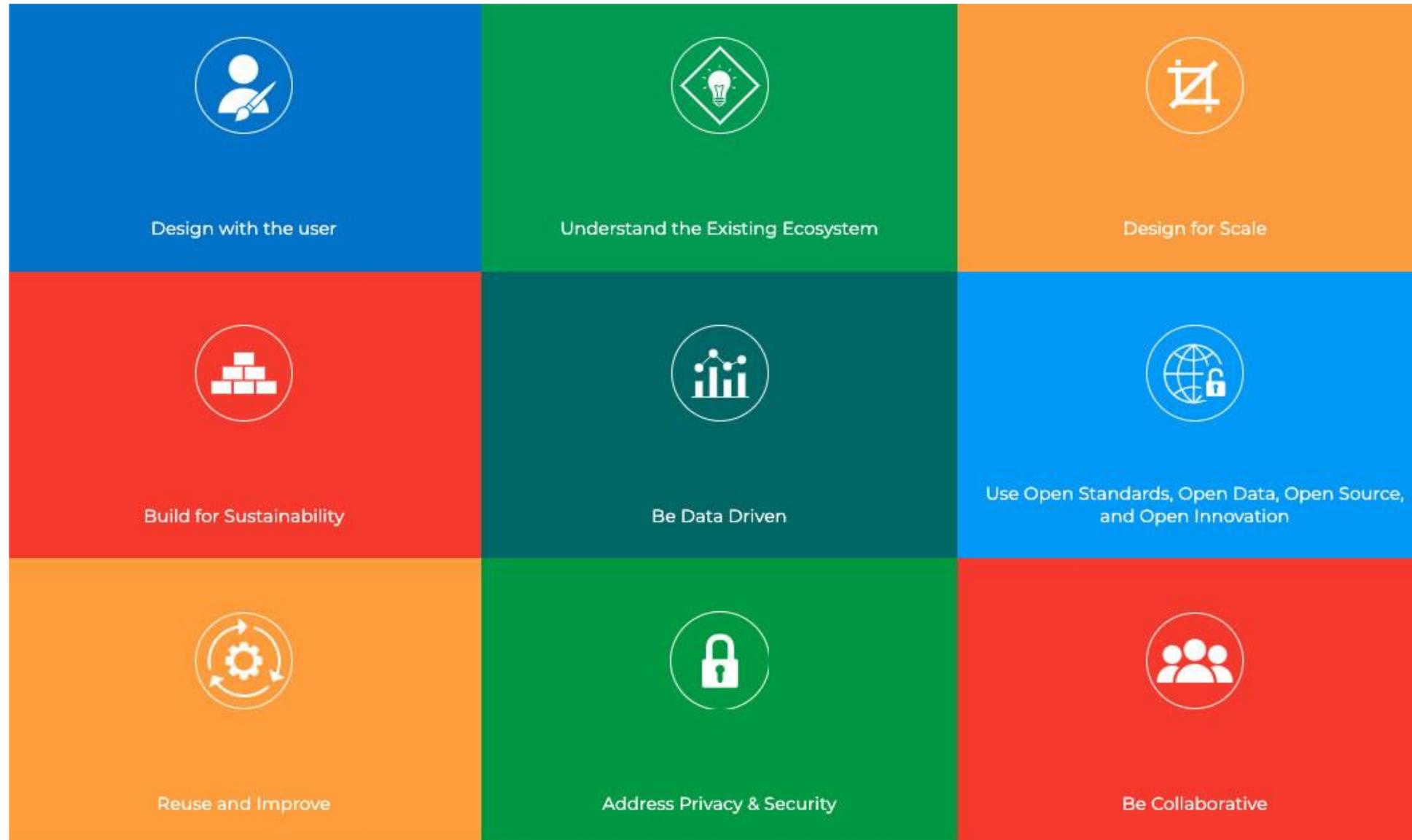


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Principles for Digital Development &

ADM Phases – Preliminary & A



Accelerating the digital transformation of government services

Our vision is that in five years, we can empower governments to take ownership of their digital futures by building more effective and cost-efficient digital government services.



Catalog of Digital Solutions

ADM Phase E (Opportunities & Solutions)

Digital Impact Alliance
Catalog of Digital Solutions

An interactive online resource to support Global Development Actors in the implementation of digital strategies.

[Launch Catalog](#) [Recommendations Wizard](#)

Avoid Isomorphic Mimicry?

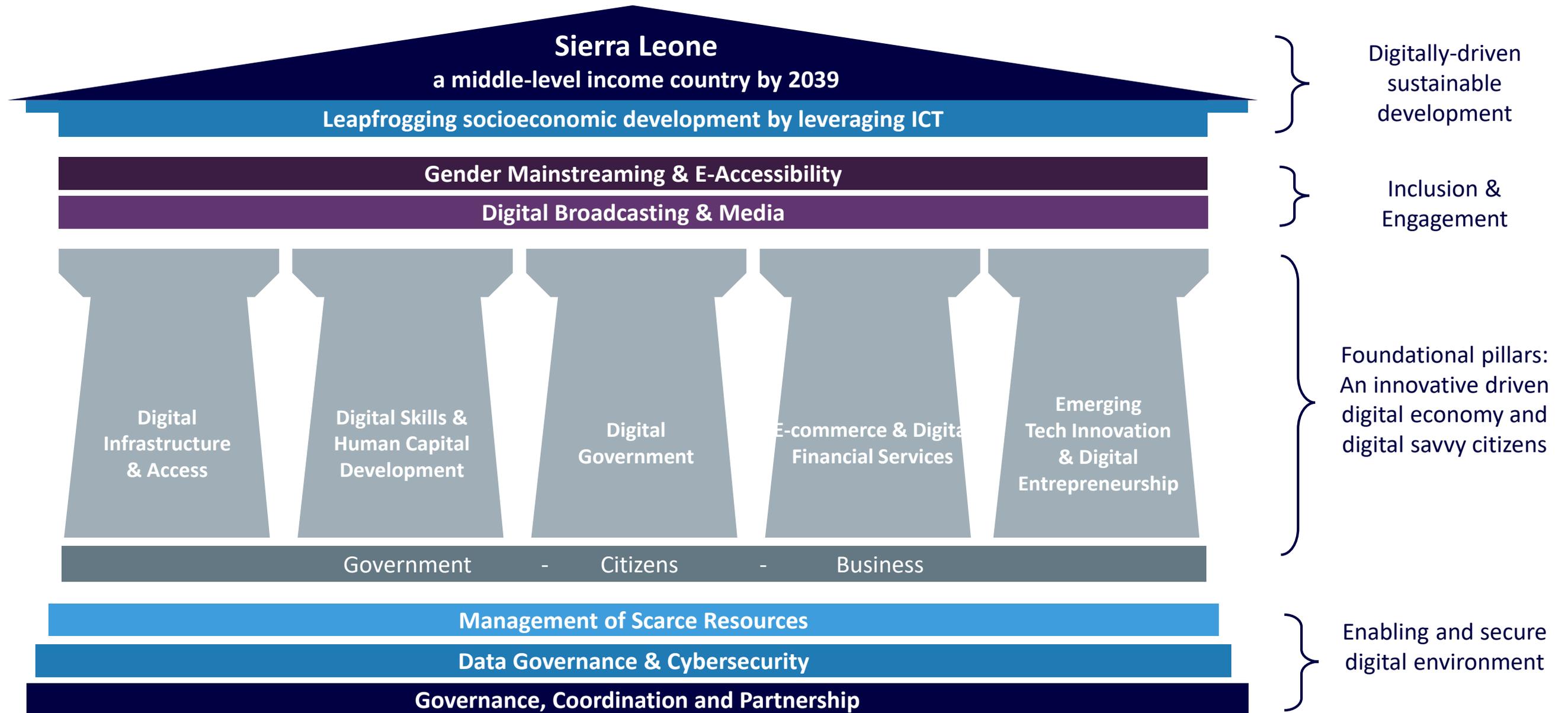
- The technique of successful failure
- “looks like” substitutes for “does.”
- Does not deliver any value

Projecting a form without the function



The National Digital Development Policy (NDDP) lays out how all digital efforts should connect.

Conceptual Framework



Sierra Leone's broader digital space already involves many donors and partners investing in various areas

NOT EXHAUSTIVE

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Global Partnership
for Sustainable
Development Data



Unlocking Public and Private
Finance for the Poor



Thank you