Capacities for Digital Government Transformation

Online Training Workshop

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Training Toolkit on "Capacities for Digital Government Transformation"

Basic Syllabus

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3.1 Introduction to situation analysis
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Basic Syllabus

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Overview of the Training Toolkit

Introduction

- **Information and communications technology** enabled breakthroughs in Government

- Governments are using **digital technologies** to innovate

- Many countries **remain ill-equipped** to effectively leverage digital technologies and provide accessible, reliable, fast, personalized, secure and inclusive services

Introduction

Training Toolkit

- A set of comprehensive frameworks, practical strategies and tools.

- Step-by-step guideline on how to conduct a situation analysis, undertake a visioning exercise, and devise a strategy and road map.

- Examines how to develop capacities at institutional, organizational, individual and societal level.

- Provides concrete methodologies and collect innovative cases from across the world.

- Each chapter includes a set of quiz, exercises, lessons learned and reflections.

Why a Training Toolkit on "Capacities for Digital Government Transformation"?

- The challenging situation of the **"New Normal"** in the post COVID-19 Era

- Digital transformation has created **many challenges** for governments

- Digital government transformation is about public governance transformation, creating a digital **ecosystems and innovation** as part of overall **national development vision and strategy**.

Purpose of the Training Toolkit

A better understanding:

· **WHY** a holistic approach to digital government transformation is important?

· **WHAT** capacities are required for digital government transformation?

· **HOW** to develop capacities for digital government transformation?

How can the Training Toolkit be used?

- Enhance the understanding of key concepts
- Learn digital government transformation experiences of selected Member States
- Develop government capacities towards digital transformation from situation analysis and envisioning to developing national strategy and the roadmap
- Highly interactive with a set of exercises for users to reflect and practice

Target users of the Training Toolkit

The Training Toolkit is primarily intended for national and local governments, and public institutions at all levels.

International organizations　　　**media**
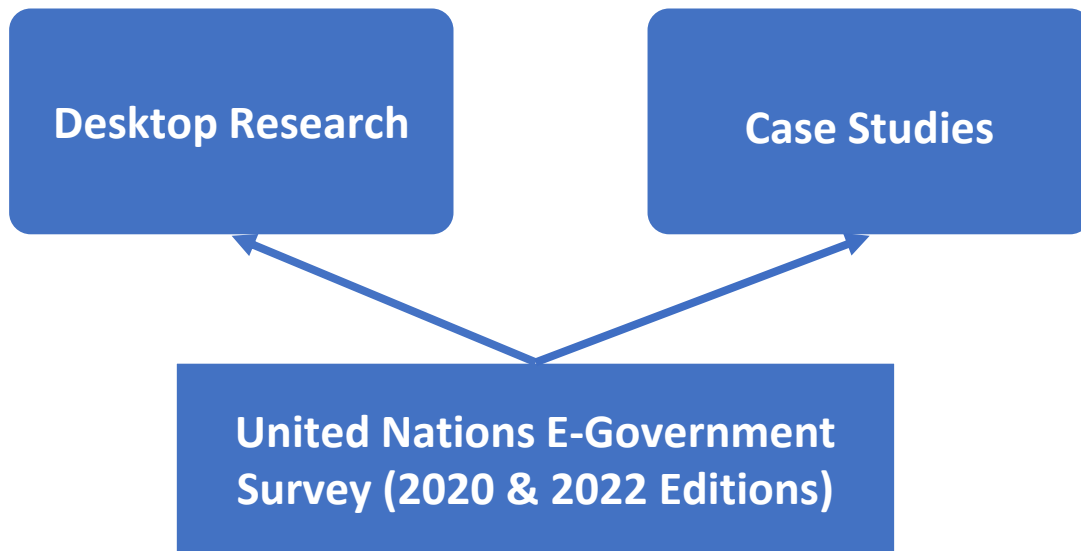
civil society groups　　　**students**

business groups　　　**academia**

private sector　　　**NGOs**

Agenda

Capacities for Digital Government Transformation

Online Training Workshop – Chapter 1

Chapter 1

General introduction on the importance of promoting and accelerating digital government transformation for realizing the 2030 Agenda for Sustainable Development

1.1 Key definitions

Digital Government Transformation

The process of transforming governance models and interaction mechanisms between government and society and innovating government policymaking, organizations, services and programmes by leveraging digital technologies.

- A process of fundamental change
- Not just about technologies
- A continuous journey

Digital Government Transformation Capacity

- **Capacity:** the ability of people, organizations, and society as a whole to manage their affairs successfully.

- **Capacity Development:** the process whereby people, organizations and society as a whole unleash, strengthen, create, adapt, and maintain capacity over time.

- **Digital government capacity** reflects the ability of Governments and society to transform policies, programmes, processes and services by leveraging innovation and digital technologies.

Digital Government Transformation Capacity

- Broad capacity development is needed at the institutional, organizational, and individual levels in government as well as at the societal level
- Political commitment at the highest level of government
- Transformational leadership and change mindsets
- Best digital talents
- Comprehensive institutional and regulatory framework
- Integrated approaches, effect organizational change, and enhance people's participation in public affairs
- Mobilize resources, manage data, promote effective public communication, and address issues related to technology access and ICT infrastructure and affordability

The capacity, output and impact of digital government transformation
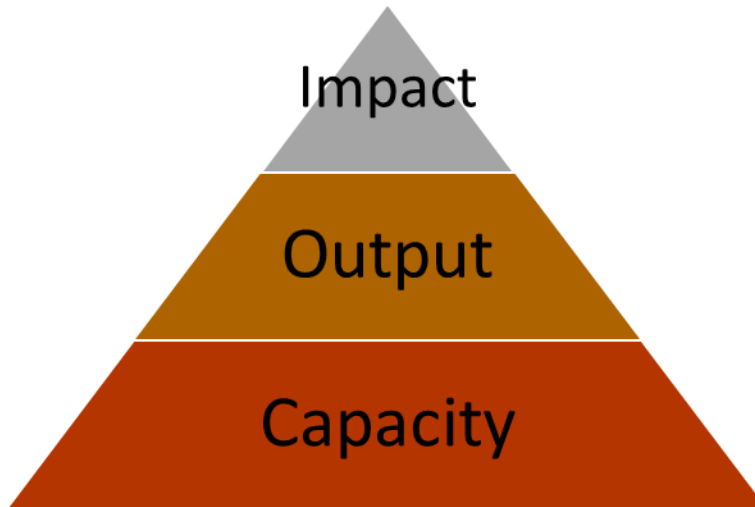
Figure 1.1 The relationship among capacity, output and impact

The capacity, output and impact of digital government transformation

- Alignment of institutions, organizations, people, technology, data, and resources
- An ecosystem approach that leverages systems thinking and integrated approaches
- Building deep capability and capacities at institutional, organizational and individual levels in government as well as at the societal level

Break

1.2 Digital government transformation for achieving SDGs

Digital government transformation can promote all 17 SDGs, specifically related to Goals 4, 8, 9, 16.

- **Goal 4: ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**
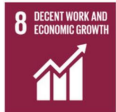
- **Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

- **Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation**

- **Goal 16: promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels**

4 QUALITY EDUCATION

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Being able to reach everyone and everywhere, **digital government transformation** can bring education services and engagement opportunities directly to people in remote or underprivileged communities, providing them with access at home or through digital kiosks in villages.

Case 1.1 Rwanda's efficacy in strengthening the provision of inclusive, user-centric online services

With financing from the World Bank Group and through collaboration with the private sector, Rwanda has launched several digital inclusion initiatives to help 250,000 households acquire digital devices and to provide 3 million people with the opportunity to improve their digital literacy. As part of its ICT for Governance cluster Strategy 2020-2024, Rwanda is planning to further expand inclusive digital services and ICT-enabled empowerment.

Source: World Bank (Press release, 30 November 2021

Case 1.2 Bhutan's ICT development

Bhutan has extended Internet connectivity to around a thousand government offices, schools and hospitals, allowing the provision of e-government services such as online business licensing and customs- trade approvals. Government officials and teachers have also benefited from ICT through the use of digital platforms to improve their digital skills. International and regional cooperation has also played an important role in the country's improved performance.

Source: M.S. Gurung and others

4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

Knowledge about the SDGs can also be spread through online education services provided by digital governments.

Case1.3 Mauritius's digital development in SDGs activation

In Mauritius, the Digital Government Transformation Strategy contains specific recommendations for government agencies on how to activate the SDGs. The strategy proposes a list of best implementation practices for every Goal and encourages cross-sectoral collaboration between public and private entities to holistically address intersectoral issues.

Source: Mauritius, Ministry of Technology, Communication and Innovation, Digital Government Transformation Strategy, 2018-2022
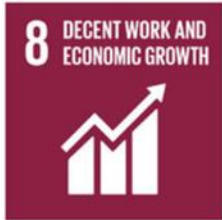
Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Digital government transformation can advance Goal 8:
- Through ICT integration, government with greater openness and interaction can better support economic growth.
- The popularization of digital literacy promoted by digital government transformation will be useful in future employment.

Case 1.4 Financial inclusion and empowerment in Bangladesh: Making Digital Financial Services Work for the Poor

Bangladesh has shown tremendous growth in terms of digital financial account access through the proliferation of branchless banking, which has taken full-service retail banking to the doorsteps of rural citizens across the country, and soaring mobile financial services (MFS), which have reached a client base of over 100 million.

Source: Snigdha Ali, Maria May

Case 1.5 Some local initiatives in South Africa

- **In South Africa**, around 150 government services have been consolidated under the national e-government portal to simplify and streamline the flow of information and ensure easy access for users. By increasing the efficacy and cost- effectiveness of the governance structure, the country hopes to be able to promote sustainable economic growth and foster inclusive innovation in accordance with SDGs 8 and 9.

- **In Armenia**, digitalization in the agriculture sector has also begun, with the Government using drone imagery and satellite technology to collect real-time data and statistics that can guide decision-making in areas relating to SDGs 2 and 8.

Source: South Africa, Department of Telecommunications and Postal Services

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States.

There has been a renewed commitment from regional and international partners to work towards the regional harmonization of legal and regulatory frameworks to accelerate digital transformation in Africa.

Case 1.6 Policy and Regulation Initiative for Digital Africa

The Policy and Regulation Initiative for Digital Africa (PRIDA), a joint programme of the African Union, European Union and International Telecommunication Union, aims to lay the foundation for and thus facilitate the provision of "universally accessible, affordable and effective wireless broadband across the continent to unlock future benefits of Internet-based services".

Source: International Telecommunication Union, PRIDA-ITU Delegation Agreement for Action

9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.

Digital government transformation promotes digital connectivity, which can enable increasing access to information and communication technology.

Case 1.7 Smart Africa

The Smart Africa initiative, established in 2013 during the Transform Africa Summit in Rwanda, aims to transform Africa into a knowledge society with wide and affordable access to broadband and ICT infrastructure and services. The initiative is guided by the Smart Africa Manifesto, which was endorsed by all African leaders at the 22nd Ordinary Session of the Assembly of Heads of State and Government of the African Union, held in Addis Ababa in January 2014.

Source: Smartafrica.org

16 PEACE AND JUSTICE STRONG INSTITUTIONS

16.5 Substantially reduce corruption and bribery in all their forms.

One part of digital government transformation is e-participation, a system where the public can complain and report corruption.

Case 1.8 Bogotá te escucha

Bogotá te escucha (Bogotá listens to you) is a system designed to manage petitions—a virtual tool people can use to submit complaints, claims, requests for information, inquiries, suggestions, concerns about possible acts of corruption, or simple requests relating to issues that affect their own interests or those of the community.

Source: Alcaldía Mayor de Bogotá, Servicio a la Ciudadanía

16.6 Develop effective, accountable and transparent institutions at all levels

- E-participation can make for a government that has more responsiveness and accountability by providing easy access to petition, complaint and reports to the public.

- Proactively sharing information and government data with the public also contributes to building effective, accountable and inclusive institutions.

Case 1.9 Digitalization of the Court of Appeals in Belize

Belize is currently updating its E-Governance Strategy and Action Plan; however, many public institutions have already benefited from various multilateral cooperation initiatives. Working together with APEX, the Caribbean Agency for Justice Solutions, the Government is moving forward with the digitalization of the court of Appeals.

Source: Belize, Press Office, press release, 23 June 2021

Case 1.10 Promoting procurement transparency in UAE and Mauritius

In the United Arab Emirates, the Digital Marketplace / Abu Dhabi Government Procurement Gate - Al Maqta'a Portal has been set up to engage micro, small and medium-sized enterprises in transparent and efficient public procurement processes.

Source: UN DESA, United Nations E-Government Survey 2022, pp.96

16 PEACE AND JUSTICE STRONG INSTITUTIONS

16.7 ensure responsive, inclusive, participatory and representative decision-making at all levels.

Digitalization greatly facilitates two-way interaction and can therefore play a key role in strengthening the relationship between local governments and various stakeholders.

Integrating emerging technologies in e-government processes allows city residents to participate in decision-making, identify local resources, and other aspects of local governance.

16 PEACE AND JUSTICE STRONG INSTITUTIONS

16.9 By 2030, provide legal identity for all, including birth registration.

Applying for a birth certificate has become one of the most common digital services offered worldwide. In 2018, there are 83 countries offer online birth certificate services. By 2020, the number grows to 149.

Break

1.3 The benefits of using digital technologies in government

People's needs for enhanced public services, engaging in policymaking, participation and people-centric practices

- Enhancing the delivery of public services.
- Facilitating people's engagement in policymaking and participation.
- Addressing the concerns and needs of different groups in society.

Case 1.11 Fiji expanding the provision of digital services to improve accessibility

In Fiji, the Digital Government Transformation Programme (digitalFIJI) is being implemented as part of the 20-year National Development Plan and focuses primarily on strengthening public administration, government services, and the telecommunications infrastructure. Aiming to enhance the quality and accessibility of public services, the Government is working to achieve full digitalization by the end of 2022.

Source: UN DESA, United Nations E-Government Survey 2022, pp.75.

Case 1.12 India people-centric services for marginalized groups

The Government of India is implementing the Digital India initiative to build people-centric services for marginalized groups. The Accessible India Campaign and mobile application has become a nationwide flagship initiative for achieving universal accessibility—one that enables people with disabilities to have access to equal opportunities, live independently, and participate fully in all aspects of life in an inclusive society.

Source: Digital India website

1.3 The benefits of using digital technologies in government

Promoting agile and risk-informed governance

Digital technologies have enabled broader sharing of knowledge, encouraging collaborative research to find solutions and provide transparent guidance to Governments and people.

Case 1.13 Togo Social protection disbursements through AI

To alleviate poverty and hardship during the COVID-19 pandemic in Togo, AI enabled by mobile data and satellite imagery was used to ensure the quick and efficient distribution of $22 million (in three monthly mobile phone payments of $20 for men and $22 for women) to 600,000 residents in urban areas. This programme was made possible through a multi-stakeholder partnership between the Government of Togo, a philanthropic organization, and academia.

Source: UN DESA, United Nations E-Government Survey 2022, pp.145.

Case 1.14 Serbia focusing on digital skills and services delivery

Serbia Government renewed commitment to the E-Government Development Programme of the Republic of Serbia 2020-2022 and the Action Plan for its implementation. Although there are still segments of the population that have never used the Internet or a computer, notable progress is being made within the realm of public administration.

Source: Serbia, Ministry of Public Administration and Local Self-Government

1.4 Risks of using digital technologies in government

Digital divide and data literacy

- **Digital divide**: refers to the gap between those individuals with access to digital devices and content and those without.

- **Data literacy:** refers to the skills and abilities needed to access and use digital devices and content confidently, safely, and effectively.

1.4 Risks of using digital technologies in government

Individual privacy and digital ethics*

- Ethics cannot always be codified in data policies
- Challenging privacy and ethics issues have emerged.
- Digital government transformation routines, interactions and practices are inextricably linked to the privacy of individual and business users.

1.4 Risks of using digital technologies in government

Data security

Data security: public demands on governments to ensure reasonable and appropriate technical and organizational safeguards are in place to prevent unauthorized disclosure or breach of data.

1.4 Risks of using digital technologies in government

Trust of people

People's take-up and sustained participation depends in part on their **trust in government institutions**, but also on their **trust of Internet** in general and of specific components of participation platforms such as **social media**.

Key messages

- Digital government transformation is fundamentally about **governance transformation and innovation** as part of a country's overall development strategy and the pursuit of sustainable development.

- Digital government capacity reflects the ability of Governments and society to transform policies, programmes, processes and services by leveraging **innovation and digital technologies**.

Key messages

- A holistic approach to public service delivery that **puts people and their needs first** is required to harness the full potential of new technologies for digital government transformation and mitigate the attendant risks.
- Digital government transformation, as an effort to promote society's well-being, peace and prosperity, support the achievement of the **2030 Agenda and the SDGs**.
- The proliferation of digital technology and data is moving the world in a **positive direction**, but it also comes with a whole host of **risks and challenges**.

Quiz/exercises:

1. What are the major needs and risks of Digital Government Transformation in your country? Please discuss and share your thoughts and comments.

2. What knowledge and experiences can you take from the above successful practices of digital government transformation and adapt them to your national contexts?

3. Which SDGs are most related to digital government transformation in your country?

Lessons learned and reflections:

1. What is digital government transformation?

2. How can Digital Government Transformation contribute to the implementation of SDGs?

3. Why is it important to use digital technologies in government?

4. What could be the potential risks of using digital technologies?

Capacities for Digital Government Transformation
Online Training Workshop - Chapter 1
Thank you

Agenda

Chapter 1 General introduction on the importance of promoting and accelerating digital government transformation for realizing the 2030 Agenda for Sustainable Development

Chapter 2 A holistic approach to digital government transformation

Chapter 3 Conducting a situation analysis to assess capacity gaps and opportunities in digital government transformation across all government levels and society

Chapter 4 Envisioning to advance digital government transformation for accelerating implementation of the Sustainable Development Goals

Chapter 5 Developing a strategy and roadmap for digital government transformation and capacity development

Chapter 6 Monitoring, evaluation, and improvement for digital government transformation

Chapter 7 Wrap-up of the whole program

Capacities for Digital Government Transformation

Online Training Workshop - Chapter 2

Chapter 2

A holistic approach to digital government

2.1 Introduction to the holistic approach

"A holistic approach" originally comes from ***New Public Management Is Dead—Long Live Digital-Era Governance.***

Ecosystem	Collaborative

Contextual	People-centric

Ecosystem

- **Systems thinking**: a way for human beings to understand systems.

- **Integrated approach**: a whole-of-government approach is needed to ensure that organizational structures can coordinate and integrate public service delivery in a way that best serve the objectives of the 2030 Agenda

Case 2.1 Singapore's holistic approach

Singapore has adopted a holistic approach for its Smart Nation programme and digital transformation. It has moved from a silo-based approach to an ecosystem approach in which effective leadership, critical mindsets, and a solid legislative and regulatory infrastructure playing a key role. Initiated in 2014, the Smart Nation programme is taking shape through a series of strategic national projects.

Source: UN DESA, United Nations E-Government Survey 2020, pp.180

Case 2.2 Belize's integrated approach

Through collaboration with the Government of China, the E-Governance and Digitalization Unit in Belize has improved the management of the entire transport sector using information technology. The project has integrated the Belize Police Department, Customs and Excise Department and Magistrates Court into the same system as the Department of Transport, facilitating the sharing of data and investigations relating to accidents and violations.

Source: Belize, Press Office, press release, 23 June 2021

Contextual

- **Be home-grown** and leverage local knowledge while also taking into account **good practices from across the world.**

- **National or regional levels:** taking good practice from across the world while tailoring them in a home-grown way.

- **Individual level:** suit people's needs wisely

Case 2.3 SMART Rwanda Master Plan

The success enjoyed by Rwanda in e-government development derives from a long-term vision that was initiated in 2000 and realized in 2020 with the SMART Rwanda Master Plan. The strategy and its focus on digital transformation are intended to contribute to the attainment of the SDGs, in particular Goal 9. the Government has expanded investment to facilitate sustainable infrastructure development and support domestic technology development.

Case 2.4 Digital India Initiative in India

- The Accessible India Campaign and mobile application has become a nationwide flagship initiative for achieving universal accessibility.
- 1,250 sign language interpreters have been trained, and 588 State government and 95 central government websites have become accessible for persons with disabilities.
- The AgriMarket app keeps farmers abreast of crop prices and discourages them from carrying out distress sales.
- MyGov is a platform created to promote and support public engagement in decision-making processes.

Source: Digital India website

Collaborative

- Providing integrated digital services requires a high degree of **coordination** among ministries and agencies and **new mindsets** in government and society.

- Transform the government into a **collaborative and interconnected** organization structured around an architecture of integrated services.

- Facilitating **public-private partnerships** and enhancing collaboration for **co-creation of public value**.

People-centric

- **Puts people first** and revolves around the needs of individuals, including those left furthest behind.

- Be **inclusive** to ensure that any transformation is aimed at creating **equal opportunities** for all people to access reliable and quality services.

- In full alignment with the principles of Goal 16 on effectiveness, accountability and inclusiveness.

Break

2.2 Significance of adopting a holistic approach in digital government transformation

- Help to promote both institutional and data interoperability and standards for using technologies

  - **Interoperability** is "the capability of two or more functional units to process data cooperatively".*

  - The institutionalization of e-participation—the process through which e-participation becomes fully integrated into the organizational culture—is crucial to its success.

- Many countries have created or modified organizational structures to better support digital government transformation.

- Shifting from "gut instinct" to data-centric policymaking.

- More Governments have started integrating new technologies, such as artificial intelligence (AI) and blockchain technology in digital government strategies.

- Open Standard

Case 2.5 United Kingdom: Increasing Accessibility by Implementing Standards

The United Kingdom's Digital Inclusion Strategy sets out how government and partners from the public, private and voluntary sectors could collaborate to help as many people as possible become capable of using and benefiting from the Internet. The accessibility standards that the government has adopted mean that public sector organizations are legally obliged to ensure their digital offerings meet agreed accessibility standards.

Source: UN DESA, United Nations E-Government Survey 2022, pp.148

2.2 Significance of adopting a holistic approach in digital government transformation

- **Promote coordination among different agencies and break silos**

Horizontal integration	Vertical integration
• High-level, comprehensive "umbrella" strategy (e.g. national sustainable development strategy) • Cross-sector coordination structures and mechanisms • Budget processes • Existence of integrated planning tools • Incentives for institutions and for staff in those institutions to work cross-sectorally (mandates, charters, rules, regulations, internal accounting, etc.) • Public procurement rules • Awareness-raising, capacity development in Government institutions incl. capacity for systems thinking, planning • Robust science-policy interface, incl. modelling, data	• Processes for "localizing" the SDGs • Legal and regulatory framework for decentralization and related arrangements in practice • Political context at the national and local levels, accountability of local governments versus national government • Budget processes and resources available to local governments • Incentives for institutions and for staff in those institutions to work across levels of government • Local and national government capacity • Existence of integrated planning tools

Source: UN DESA, World Public Sector Report 2018, pp.10

- Inter-agency and intra government data sharing, linking and exchange can increase public sector productivity, improve services, reduce data requests, strengthen evidence-based policymaking and the integration of public services, and facilitate the whole-of-government or whole-of-society responses to public needs and emergencies.

- There are both direct and indirect benefits associated with sharing government data.

Case 2.6 The data-centric online-offline integration of digital government in Shanghai

The Shanghai Municipal **Big Data Center** was established by the city government in 2018 as a one-stop-shop service platform for "cross-level, cross-department, cross-system and cross-service data sharing and exchange for government, industry and social data".

As part of Big Data Center operations, a suite of **integrated online-offline government services** was launched via mobile services.

Source: Huang Yixuan, ShanghaiDaily.com (13 April 2018)

2.3 Process of digital government transformation

Where are we now?

PHASE 1
7.3 Situation analysis

PHASE 4
7.6 Monitoring and evaluation

Process of digital government transformation

PHASE 2
7.4 Future envisioning

How far have we gone?

Where do we want to go next?

PHASE 3
7.5 Digital government transformation strategy and roadmap

How can we get there?
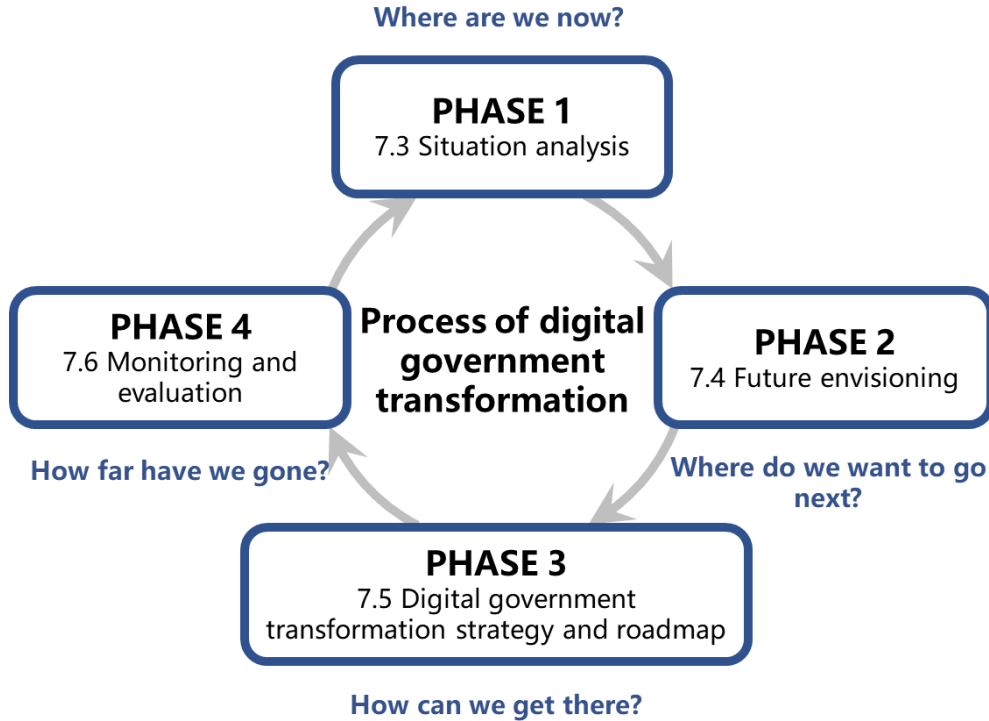
Key message

- Digital government transformation should be based on an **ecosystem approach** that leverages systems thinking and integrated approaches that can address the interlinkages among the SDGs through delivering public services.

- A holistic approach should be **home-grown and leverage local** knowledge while also taking into account good practices from across the world.

- Providing integrated digital services requires a high degree of **coordination** among ministries and agencies and new mindsets in government and society.

- A holistic approach could contribute to governmental integration **vertically and horizontally**.

Key message

- Digital government transformation should be **inclusive** to ensure that any transformation is aimed at creating equal opportunities for all people to access reliable and quality services. It should also be informed by **people-centric approaches** to service delivery and programme management, addressing concrete problems and needs experienced by different groups in society.

- Digital government transformation is actualized through a **four-step iterative process** that encompasses situation analysis (including an assessment of digital capacities within and outside of government), the development of a strategy and road map, implementation, and monitoring and evaluation for continuous improvement.

Quiz/exercises:

1. In your opinion, how can the holistic approach to digital government transformation be adopted in your country?

2. What most important capacities do you think should be developed in your country? Please share some specific examples and explain the reasons.

Lessons learned and reflections:

1. What is a holistic approach?

2. Why is a holistic approach needed for digital government transformation?

3. What concrete steps are needed in the process of digital government transformation? What is the purpose of each step?

Capacities for Digital Government Transformation
Online Training Workshop - Chapter 2
Thank you

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Chapter 1   General introduction on the importance of promoting and accelerating digital government transformation for realizing the 2030 Agenda for Sustainable Development

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Chapter 7   Wrap-up of the whole program

Capacities for Digital Government Transformation

Online Training Workshop - Chapter 3

Chapter 3

Conducting a situation analysis to assess capacity gaps and opportunities in digital government transformation across all government levels and society

The overall structure of Chapter 3

How far have we gone?

PHASE 4
7.6 Monitoring and evaluation

Process of digital government transformation

PHASE 3
7.5 Digital government transformation strategy and roadmap

How can we get there?

PHASE 1
7.3 Situation analysis

Where are we now?

PHASE 2
7.4 Future envisioning

Where do we want to go next?

PHASE 1
7.3 Situation analysis

7.3.1 Introduction to situation analysis
- What is situation analysis?
- What is situation analysis good for?

7.3.2 Tools that could be used in situation analysis
- Star profiling model
- Nine key pillars for digital government transformation
- Digital Government Capability Assessment
- Other relevant tools

7.3.3 Case studies
- Cases in developed countries
- Cases in developing countries

7.3.4 Summary

3.1 Introduction to situation analysis

- **What is situation analysis?**

  - Requires an understanding of a country's history, social norms, values, beliefs, and attitudes and of national perceptions surrounding digital technologies

  - Involves an assessment of the leadership's commitment to digital government and the state of public governance and public administration

  - Takes into account a country's future development goals

3.1 Introduction to situation analysis

● **Why is situation analysis needed?**

- Define the general development objective and how digital technologies can support the overall vision of a nation

- Provide information to identify the motivations for digital government transformation and why it is needed.

3.2 Tools that could be used in situation analysis

- Star profiling model
- Nine key pillars for digital government transformation
- Digital Government Capability Assessment
- Other relevant tools
  - ➢ The UN DESA Readiness Assessment on Institutional Arrangements for Policy Coherence to Implement the 2030 Agenda for Sustainable Development
  - ➢ Digital Government Readiness Toolkit
  - ➢ PESTLE Analysis
  - ➢ SWOT analysis

Star profiling model
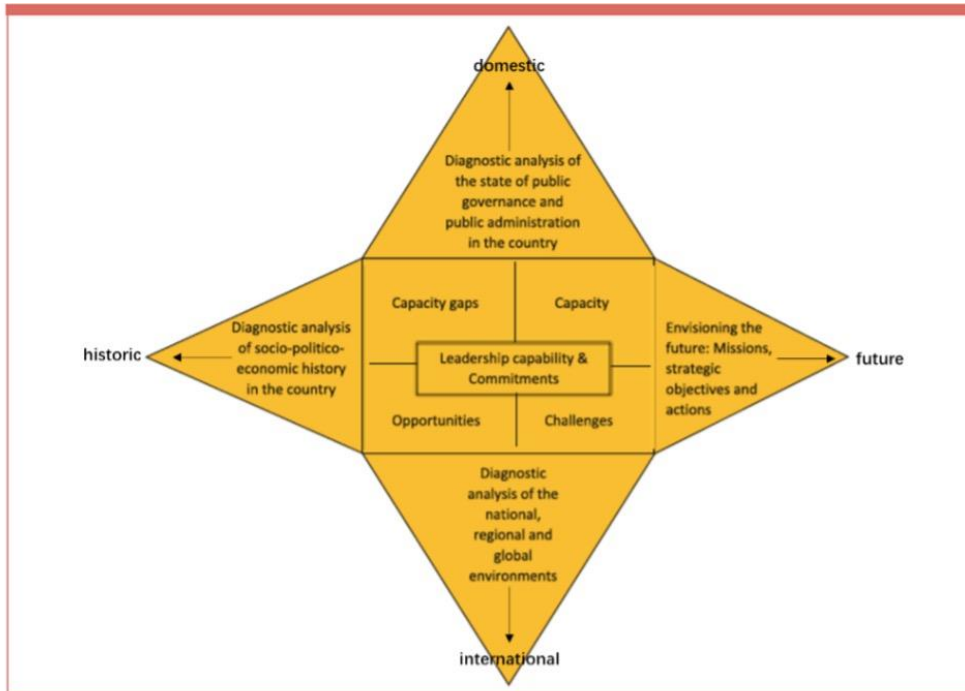
Source: UN DESA, United Nations E-Government Survey 2020, pp.183

● **Star profiling model**

- Digital government is an effective tool for supporting the implementation of a country's development vision and creating public value.

- Provides a framework for analysing government transformation capacities and leadership capacities—an essential aspect of an effective digital government transformation strategy

- **Star profiling model**

  - The core of the star profiling model – leadership capacity & commitment –include three sectors, which makes this model comprehensive:

    ➢ The commitment of government leaders at the highest level
    ➢ Be participatory in nature and engage a broad spectrum of stakeholders
    ➢ Involving individuals and members of civil society

● **Star profiling model**

- Help answer: "What are the prospects for the government transformation capacities and leadership capacities?"
- The star profiling model is holistic
- Self-assessment should include:
  - ➢ 1) diagnostic analysis of the state of public governance and public administration in the country;
  - ➢ 2) diagnostic analysis of socio-politico-economic history in the country;
  - ➢ 3) diagnostic analysis of the national, regional and global environments;
  - ➢ 4) envisioning the future which includes missions, strategic objectives and actions.

Nine key pillars for digital government transformation

	Online presence	Transactional	Connected	Transformative
01 Vision, leadership, mindsets	Individual leaders in IT department support e-government; Reactive mindsets	Some e-government champions across government	Leadership's commitment at top level creates an environment that allows people to become more involved	Transformational leadership and full support for digital government from leadership at all levels of government; digital strategy is embedded in or aligned with the national development strategy; Teams aligned around data; forward-looking, proactive/anticipatory, innovative, digital and adaptive mind-sets
02 Legal and institutional framework	Basic laws are in place	Regulators as watchdogs; some form of legal authentication of citizen ID	Most legislation in place	Regulators as facilitators; Farsighted and comprehensive legal framework; strong Digital ID; regulatory sandboxes to explore use of emerging technologies
03 Organizational set-up and culture	Not centralized	E-government coordination is under a ministry such as the ICT ministry	CIO at the central level	CIO located within the highest-ranking decision-making body in government with budgetary autonomy; multidisciplinary and cross-functional teams; network of CIOs national/local levels; Environment of continuous learning to quickly adapt to change; operational agility, e.g., analytics-enabled human resources to identify and bridge skills gaps, and procurement engages innovative start-ups; augmented workforce or human and machine collaboration, which require among other things, creativity, strategic decisions and empathy; freeing up employees to carry out higher value-added tasks which require creativity
04 Systems thinking and integration	Departments work in silos; low integration of services; information available online	Two-way communication with people; downloadable forms' some e-government projects are experimenting with integrated approaches	E-services cut across ministries and departments and services are provided in a seamless manner; from government-centric to people-centric service delivery	Strong single government website; "Digital-first principle," digital by default, digital by design and mobile-first principle; Public service delivery as an integrated system; strong National Digital ID; anticipatory people-centric and people-driven services; co-creation of services; Government easy to deal with, responsive and adaptive to people's needs
05 Data management	Limited access to accurate, timely, disaggregated and widely available data	Transaction data–based culture	Data integration and synchronization	Data governance office; once-only (data) principle; data-driven culture; evidence-informed decisions; continuous monitoring and improvement of data; open, machine-readable government data and high usage of open data
06 ICT Infrastructure, affordability & access	Low connectivity; Low availability of hardware; No strategy on ICT investment as a whole; IT centric	Customer centric	One single government website	High broadband connectivity, use of frontier technologies, big data; platform business model; decentralized and interoperability architecture; secure by design; blockchain as a security feature; ecosystem centric
07 Resources	Little or no investment for digital transformation	Investment for specific projects	Large-scale investment	Whole-of-government and long-term approach to IT investment, including sustainability in financing; public-private partnerships
08 Capacity of capacity developers	Limited capacity	Investment in computer labs	The use of ICT integrated in all curricula	Strong partnerships with academia, think tanks, private sector, i.e., innovation labs, and other national governments, e.g., regional cybersecurity training; engagement of schools of public administration in building curricula for digital capacity and other relevant skills, continuous training of trainers
09 Societal capacities	Limited programmes in place to build societal capacities	Outreach activities to some vulnerable groups		Digital literacy in society high and Internet penetration also very high at all levels; omni or multichannel approach to lifelong learning' partnerships between government and local ICT industries; maintain trust in government and ICT security, safety and privacy

Source: UN DESA, United Nations E-Government Survey 2020, pp.185

- **Digital Government Capability Assessment （DGCA）**

- https://unpan.un.org/capacity-development/otc/self-assessment-tools/digital-government-capability-assessment
- Help civil servants build new understanding of the level of digital government capability that exists in a country
- Develop an understanding of current capability and to inform decision making about where investments are needed to increase innovation and digital government capability leading to improvements in public service delivery

United Nations | Department of Economic and Social Affairs

- **Digital Government Capability Assessment （DGCA）**

- The DGCA is a set of six dimensions that are key factors in assessing the level of digital government capability.

Leadership	Strategy	Governance
Legal	**Technology**	**Professional and Workforce Development**

Break

● **Other relevant tools**

- The UN DESA Readiness Assessment on Institutional Arrangements for Policy Coherence to Implement the 2030 Agenda for Sustainable Development

- Digital Government Readiness Assessment (DGRA) Toolkit

- PESTLE Analysis

- SWOT analysis

- **The UN DESA Readiness Assessment on Institutional Arrangements for Policy Coherence to Implement the 2030 Agenda for Sustainable Development**

  ➤ Background
  ➤ Goal and objective
  ➤ Structure

Source: UN DESA, Readiness Assessment on Institutional Arrangements for Policy Coherence to Implement the 2030 Agenda for Sustainable Development

➢ Background

- ✓ The 2030 Agenda emphasizes the need for integrated approaches to realize the Sustainable Development Goals (SDGs).
- ✓ The call for integrated solutions was reiterated
- ✓ The UN Summit's political declaration called "Gearing up for a decade of action and delivery for sustainable development"

➢ Goal

- ✓ To assist Member States in strengthening their institutions for more integrated solutions

➢ **Objective**

✓ To gather information from UN Member States in preparation of case studies on policy coherence to be included in a UN capacity development training toolkit.

✓ Aimed at supporting government agencies in assessing their institutional readiness to support policy coherence.

➢ **Structure:** composed of 9 building blocks
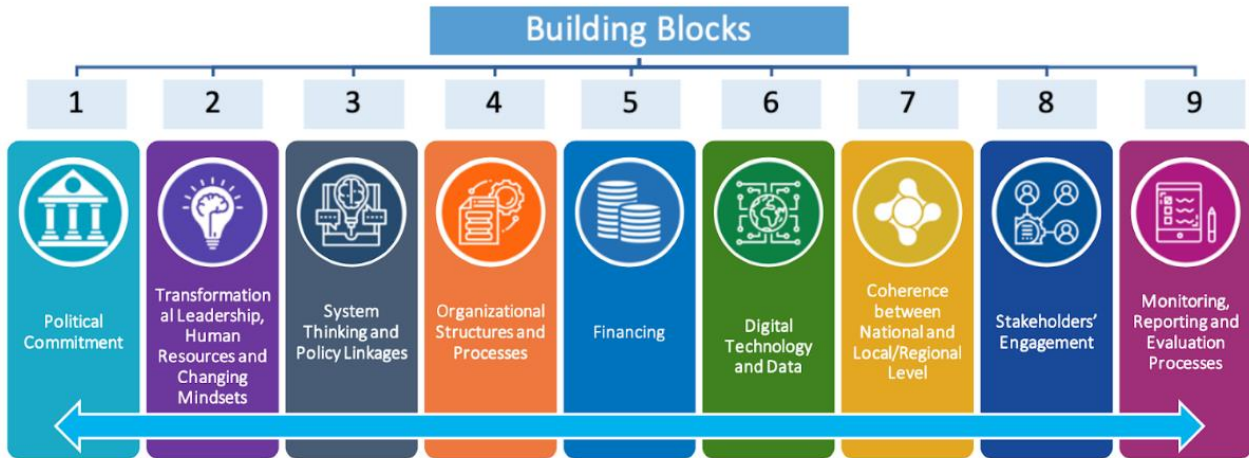
- **Digital Government Readiness Assessment (DGRA) Toolkit: Recent Approaches and Methodologies**

  ➢ Background
  ➢ Goal
  ➢ Structure

Source: World Bank. Digital Government Readiness Assessment Questionnaire, January 2019.

➢ **Background**

- ✓ A comprehensive diagnostic tool
- ✓ Aims to help governments at all levels in developing countries assess their readiness towards digital transformation
- ✓ Identifies strengths and weaknesses of the current digital government status and proposes future-looking action plans to improve and/or develop a comprehensive national ICT strategy, through both qualitative and quantitative analyses.

➢ **Goal**

Building an innovative, open, agile and accessible digital government is the first and foremost essential foundation of any digital development, including the establishment of a modern digital economy.

> **Structure:** comprised of a comprehensive set of 67 questions and delves into nine core foundations

Leadership & Governance
A clear vision, leadership, governance of digital strategy encourages the stakeholders to link the government-wide digital transformation.

User-Centered Design
Basing high-quality of agile and accessible public services around the users needs - *the public* - increase engagements and open participation of the citizens.

Public Administration & Change Management
Public administration process has to be optimized for digital delivery. Digital technologies can rapidly improve administrative operations and capabilities.

Capabilities, Culture & Skills
Technology cannot substitute all the government's operations. Hiring and training individuals for digital skills by creating a culture of innovation and creativity across the administration is crucial.
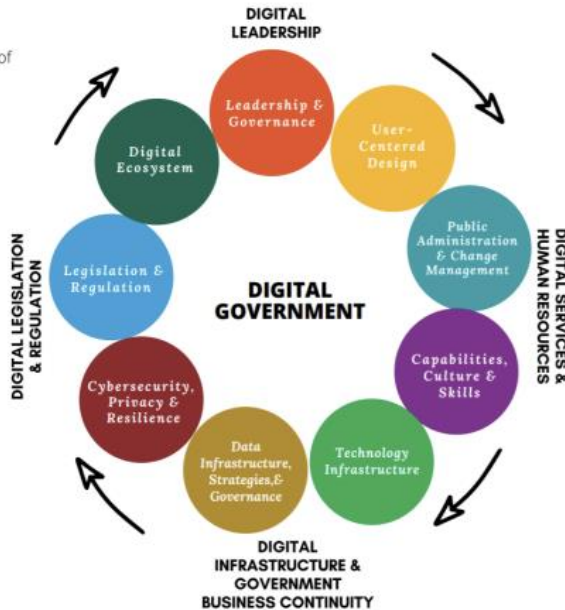
Technology Infrastructure
Rather than investing specific applications, leaders in today's digital government increasingly look to use whole-of-government standardized technology infrastructure

Data Infrastructure, Strategies & Governance
For better decision-making, public spending, and services, digital governments are improving their ability to collect, analyze and share data using new technologies

Cybersecurity, Privacy & Resilience
A specific protocol, scenarios should be prepared to ensure security and recovery, and minimize risks from any undefined cyber threats, disasters, etc

Legislation & Regulation
Legislation and regulation brings transparency to many decision-makings on public spending or any e-services that is driven by data.

Digital Ecosystem
Public digital ecosystem not only boosts innovation, education and entrepreneurship, but also contributes to the modern digital economy.

DIGITAL LEADERSHIP

DIGITAL SERVICES & HUMAN RESOURCES

DIGITAL LEGISLATION & REGULATION

Leadership & Governance · User-Centered Design · Public Administration & Change Management · Capabilities, Culture & Skills · Technology Infrastructure · Data Infrastructure, Strategies & Governance · Cybersecurity, Privacy & Resilience · Legislation & Regulation · Digital Ecosystem

DIGITAL GOVERNMENT

DIGITAL INFRASTRUCTURE & GOVERNMENT BUSINESS CONTINUITY

Source: World Bank DGRA team, 2020

- **PESTLE Analysis**

  - ➢ Background
  - ➢ Structure

Source: [Marketing: PESTLE Analysis](#)

➤ **Background**

✓ A PESTLE analysis is a tool used to gain a macro picture of an industry environment.

✓ PESTLE stands for Political, Economic, Social, Technological, Legal and Environmental factors.

✓ A PESTLE analysis allows a strategic and systematic evaluation of a business's prospects, risks and opportunities in a new environment.

✓ PESTEL focuses on analysis of external factors that can impact a project's implementation. It is good for trend identification and offers a general overview of an external context.

➤ **Structure**

P	E	S	T	E	L
- Government policy - Political Stability - Foreign trade policy - Trade restrictions	- Economic growth - Exchange rates - Un-employment rates - Disposable income	- Population growth rate - Age distribution - Health consciousness - Lifestyle attitudes	- Level of innovation - Automation - Research & Development activity - Technological awareness	- Environmental policies - Weather - Climate - Climate change	- Employment laws - Antitrust laws - Consumer protection laws - Health and safety laws

- **SWOT Analysis**

  - ➢ Background
  - ➢ Structure

Source: Dawes et al. (2004), Making smart IT choices: understanding value and risk in government IT investments. Center For Technology In Government, University At Albany, p.136

➤ **Background**

✓ A SWOT (Strength, Weaknesses, Opportunities, Threats) analysis is useful as it identifies a deeper layer including both positive and negative potentials.

✓ It is especially useful as it includes both internal factors (strengths and weaknesses) and external factors (opportunities and threats).

➢ **Structure**

- Internal characteristics that contributed to the current situation of the actor under research

Strengths	**Weaknesses**

- External factors that may affect the actor and project under question

Opportunities	**Threats**

Break

A summary of tools that could be used in situation analysis

Tools	Purposes	Key elements
Star profiling model	It is used in overall diagnostic analysis. It can analyze government transformation capacities and leadership capacities.	(1) The commitment of government leaders at the highest level; (2) A broad spectrum of stakeholders being engaged; (3) Involving individuals and members of civil society
Nine key pillars for digital government transformation	This is a diagnostic framework. The features highlighted are grounded in empirical analysis and case studies. It can help governments identify where they are with regard to each of the key pillars for digital government transformation.	(1) Vision, leadership, mindsets; (2) Legal and institutional framework; (3) Organizational setup and culture; (4) Systems thinking and integration; (5) Data management; (6) ICT infrastructure, affordability & access; (7) Resources; (8) Capacity of capacity developers; (9) Societal capacities
Digital Government Capability Assessment (DGCA)	This tool can be used at the inter-institutional level. It can help civil servants build new understanding of the level of digital government capability that exists in a country as a foundation for continued efforts to innovate and lead in the area of digital government and public service delivery.	The DGCA workshop consists of a self-assessment and a collaborative assessment with a set of six dimensions or "enablers": (1) leadership, (2) strategy, (3) governance, (4) legal, (5) technology, and (6) professional and workforce development.

A summary of tools that could be used in situation analysis

Tools	Purposes	Key elements
The UN DESA Readiness Assessment on Institutional Arrangements for Policy Coherence	The questionnaire is a tool that contains questions to facilitate a participatory dialogue process among national ministries/agencies and sub-national levels of government. It is used to gather information from UN Member States in preparation of case studies on policy coherence to be included in a UN capacity development training toolkit, and to support government agencies in assessing their institutional readiness to support policy coherence.	The assessment is composed of 9 building blocks, namely (1) political commitment, (2) transformational leadership, human resources and changing mindsets, (3) system thinking and policy linkages, (4) organizational structures and processes, (5) financing, (6) digital technology and data, (7) coherence between national and local/regional level, (8) stakeholder's engagement, (9) monitoring, reporting and evaluation processes.
Digital Government Readiness Assessment (DGRA)	The DGRA team launched an online version of the toolkit to serve as a database for analytics and visualization of the country's relative digital readiness contrasted with other countries. It is used to help governments at all levels in developing countries assess their readiness towards digital transformation.	It is comprised of 67 questions and delves into nine core foundations: (1) leadership & governance, (2) user-centered design, (3) public administration and change management, (4) capabilities, culture and skills, (5) technology infrastructure, (6) data infrastructure, strategies, and governance, (7) cybersecurity, privacy and resilience, (8 legislation and regulation, and (9) digital ecosystem.

A summary of tools that could be used in situation analysis

Tools	Purposes	Key elements
PESTLE Analysis	This tool is good for trend identification and offers a general overview of an external context. It is used to gain a macro picture of an industry environment to analyze external factors that can impact a project's implementation.	PESTLE stands for Political, Economic, Social, Technological, Legal and Environmental factors.
SWOT analysis	It pays attention to both internal and external factors. It is a business strategy tool to assess how an organization compares to its competition.	This assessment includes strengths and weaknesses as internal characteristics, and opportunities and threats as external factors.

3.3 Case studies

- **Cases of selected developed countries:**
  United Kingdom, Australia, Singapore

- **Cases of selected developing countries:**
  Romania, Brazil, South Africa

3.3 Case studies: selected developed countries

Case 3.1 United Kingdom

With the help of tools such as GOV.UK Design System, GOV.UK Notify, and GOV.UK Pay, both central and local governments have been able to ensure speedy service delivery during the pandemic. For instance, by adding GOV.UK Pay's payment link functionality, the UK Home Office was able to create an online payment portal within weeks to support payments that previously required the staff to be present onsite.

Source: UK Digital Strategy 2017, UK Department for Digital, Culture, Media & Sport

3.3 Case studies: selected developed countries

Case 3.2 Australia

Government of South Australia developed a toolkit which contains four essential parts. The toolkit contains both metrics-based tools, as well as road maps that detail the ways forward in response to the organizational needs.

Source: Digital transformation toolkit, Government of South Australia

3.3 Case studies: selected developed countries

Case 3.3 Singapore

Singapore launches a government initiative called Virtual Singapore, which is a smart city project that incorporates IoT and M2M technologies to manage urban infrastructure and resources. The project collects data from thousands of sensors installed throughout the city, which helps to improve efficiency and reduce costs.

Source: UN DESA,), United Nations E-Government Survey 2022, pp.155-156, 183.

3.3 Case studies: selected developing countries

Case 3.4 Romania

Romanian Ministry of Labour used robotic process automation (RPA) to distribute direct payments to self-employed workers impacted by COVID-19. Of the 285,000 claims processed, 96% were automated, with each claim taking 36 seconds as opposed to 20 minutes when processed manually.

Source: Ivona Stoica, etc. A Better Integration of Industrial Robots in Romanian Enterprises and the Labour Market, MDPI, pp.1-26,

3.3 Case studies: selected developing countries

Case 3.5 Brazil

Brazil has made significant progress in improving access to the Internet in recent years. Yet, 23% of the adult population had never used the Internet in 2018. Brazilian firms, particularly micro-enterprises, lag behind those in OECD countries in their use of digital technologies.

Source: Going Digital in Brazil

3.3 Case studies: selected developing countries

Case 3.6 South Africa

South Africa is still on the list of developing countries and it's economy has been further strained by COVID-19, so for businesses operating in the current landscape, digital transformation is a means of survival. Adopting digital technology, along with a digital mindset throughout the organization, allows businesses to recover as well as respond to changes quicker, as it enhances, as well as speeds up processes and enables agility.

Source: National Development Plan 2030 (pp.1 90), National Planning commission, Republic of South Africa

Key messages

- A situation analysis requires an understanding of a country's **history, social norms, values, beliefs, and attitudes and of national perceptions** surrounding digital technologies.

- It involves an assessment of the **leadership's commitment** to digital government and the state of **public governance and public administration**.

- A situation analysis should take into account a **country's future development goals**.

Key messages

- The star profiling approach provides a framework for **analysing government transformation capacities and leadership capacities**—an essential aspect of an effective digital government transformation strategy.

- Nine key pillars for digital government transformation provides a diagnostic framework that can help Governments **identify where they are**.

- Digital Government Capability Assessment (DGCA) is used to develop an understanding of **current capability** and to inform **decision making** about where investments are needed to increase innovation and digital government capability leading to improvements in public service delivery.

Quiz/exercises:

1. Conducting a quick assessment using Digital Government Capability Assessment and then discuss your country's current situation of digital transformation capacities (https://unpan.un.org/capacity-development/otc/self-assessment-tools/digital-government-capability-assessment).

2. What is the EGDI (OSI, HCI, and TII) score of your country as assessed by the UN E-Government Survey, and what is the ranking category of your country (low, middle, high, very high)? (Please check the ranking table in UN E-Government Survey 2022), and then discuss why you think some countries have strong performance while others face challenges.

3. What are the opportunities, challenges, and capacity gaps of digital government transformation in your country by applying the star profiling model?

Lessons learned and reflections:

1. What is the situation analysis?

2. What is the Star profiling model?

3. What are the nine key pillars for digital government transformation?

4. What are the six dimensions of Digital Government Capability Assessment (DGCA)?

5. What are the six factors in PESTLE Analysis?

6. Which self-assessment tool in the situation analysis is the most useful in your country? Why?

Capacities for Digital Government Transformation
Online Training Workshop - Chapter 3
Thank you

Agenda

Chapter 1   General introduction on the importance of promoting and accelerating digital government transformation for realizing the 2030 Agenda for Sustainable Development

Chapter 2   A holistic approach to digital government transformation

Chapter 3   Conducting a situation analysis to assess capacity gaps and opportunities in digital government transformation across all government levels and society

Chapter 4   Envisioning to advance digital government transformation for accelerating implementation of the Sustainable Development Goals

Chapter 5   Developing a strategy and roadmap for digital government transformation and capacity development

Chapter 6   Monitoring, evaluation, and improvement for digital government transformation

Chapter 7   Wrap-up of the whole program

Capacities for Digital Government Transformation
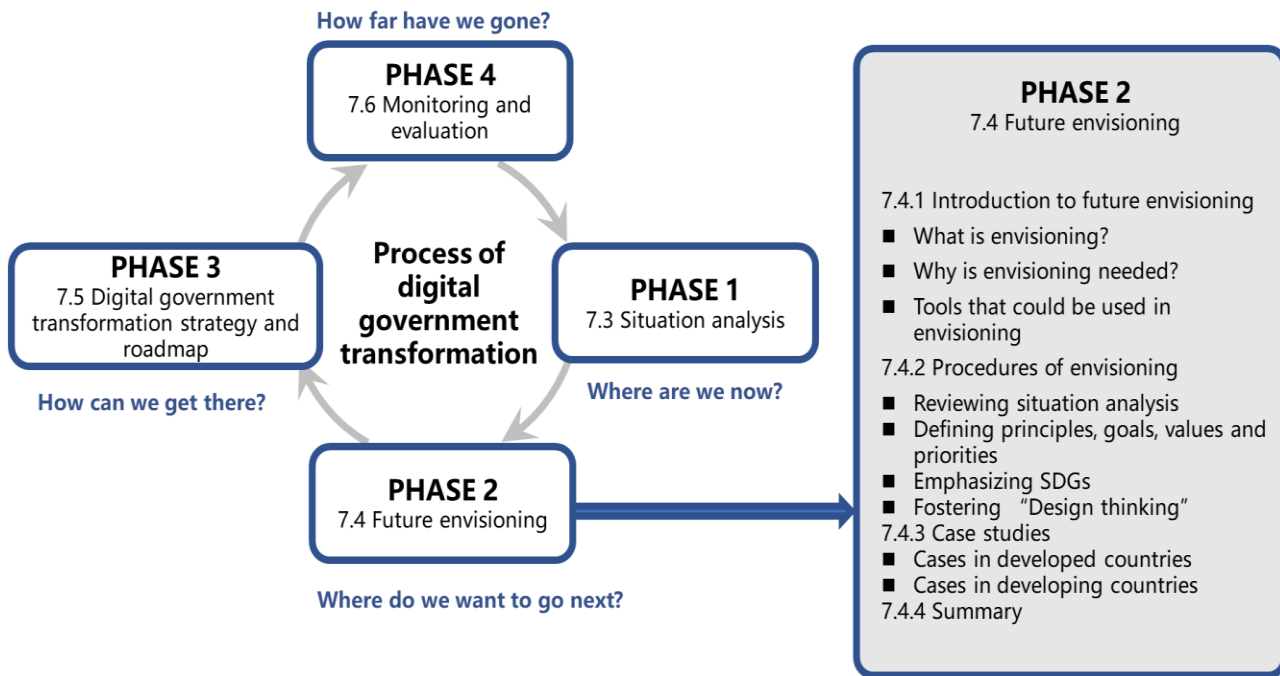
Online Training Workshop – Chapter 4

Chapter 4

Envisioning to advance digital government transformation for accelerating implementation of the Sustainable Development Goals

The overall structure of Chapter 4

How far have we gone?

PHASE 4
7.6 Monitoring and evaluation

Process of digital government transformation

PHASE 3
7.5 Digital government transformation strategy and roadmap

How can we get there?

PHASE 1
7.3 Situation analysis

Where are we now?

PHASE 2
7.4 Future envisioning

Where do we want to go next?

PHASE 2
7.4 Future envisioning

7.4.1 Introduction to future envisioning
- What is envisioning?
- Why is envisioning needed?
- Tools that could be used in envisioning

7.4.2 Procedures of envisioning
- Reviewing situation analysis
- Defining principles, goals, values and priorities
- Emphasizing SDGs
- Fostering "Design thinking"

7.4.3 Case studies
- Cases in developed countries
- Cases in developing countries

7.4.4 Summary

4.1 Introduction to future envisioning

- **What is envisioning?**
  - A tool to establish an image of what you want your organization or project to look like in the future
  - A way to stretch your thinking
  - Can be completed by various methods
  - Revolve around a country's strategic development objectives

4.1 Introduction to future envisioning

- **Why is envisioning needed?**
  - Developing shared goals
  - Reflecting interests, needs, and skills
  - Team building exercise
  - Focus on a country's strategic development objectives

4.1 Introduction to future envisioning

- **Tools that could be used in envisioning**
    - **Scenario building:** a process of designing a hypothetical situation in a way that helps you predict the consequences of decisions and actions
    - **Forecasting:** used to predict future events, uses calculations based on historical data
    - **Environmental scanning:** Monitor important events in the surrounding environment to find out what will affect the future

4.2 Procedures of envisioning

- **Reviewing situation analysis**

Envisioning should base on the outcome of situation analysis. Knowing your capacity level, capacity gaps, challenges and opportunities is the basis for setting future goals and plans.

4.2 Procedures of envisioning

- **Defining principles, goals, values and priorities**
    - Governance principles
    - National goals
    - Digital government values
    - Priorities for the short term
    - Priorities for the long term

4.2 Procedures of envisioning

- **Emphasizing SDGs**

- Digital government plays an important role in the successful achievement of the 2030 Agenda for Sustainable Development and for the implementation of its 17 SDGs.

- A good envisioning for digital government transformation can accelerate SDGs.

- 11 principles of effective governance for sustainable development developed by The UN Committee of Experts on Public Administration (CEPA)

• 11 Principles of Effective Governance for Sustainable Development

Effectiveness		
Competence	**Sound Policymaking**	**Collaboration**
• Promotion of a professional public sector workforce • Strategic human resources management • Leadership development and training of civil servants • Performance management • Results-based management • Financial management and control • Efficient and fair revenue administration • Investment in e-government	• Strategic planning and foresight • Regulatory impact analysis • Promotion of coherent policymaking • Strengthening national statistical systems • Monitoring and evaluation systems • Science-policy interface • Risk management frameworks • Data sharing	• Centre of government coordination under the Head of State or Government • Collaboration, coordination, integration and dialogue across levels of government and functional areas • Raising awareness of the Sustainable Development Goals • Network-based governance • Multi-stakeholder partnerships

Source: United Nations, Economic and Social Council, "Principles of effective governance for sustainable development", Official Records, 2018

DESA | **Capacities for Digital Government Transformation**

- # 11 Principles of Effective Governance for Sustainable Development

Accountability		
Integrity	**Transparency**	**Independent oversight**
• Promotion of anti-corruption policies, practices and bodies • Codes of conduct for public officials • Competitive public procurement • Elimination of bribery and trading in influence • Conflict of interest policies • Whistle-blower protection • Provision of adequate remuneration and equitable pay scales for public servants	• Proactive disclosure of information • Budget transparency • Open government data • Registries of beneficial ownership • Lobby registries	• Promotion of the independence of regulatory agencies • Arrangements for review of administrative decisions by courts or other bodies • Independent audit • Respect for legality

- # 11 Principles of Effective Governance for Sustainable Development

Inclusiveness				
Leaving no one behind	**Non-discrimination**	**Participation**	**Subsidiarity**	**Intergenerational equity**
• Promotion of equitable fiscal and monetary policy • Promotion of social equity • Data disaggregation • Systematic follow-up and review	• Promotion of public sector workforce diversity • Prohibition of discrimination in public service delivery • Multilingual service delivery • Accessibility standards • Cultural audit of institutions • Universal birth registration • Gender-responsive budgeting	• Free and fair elections • Regulatory process of public consultation • Multi-stakeholder forums • Participatory budgeting • Community-driven development	• Fiscal federalism •Strengthening urban governance •Strengthening municipal finance and local finance systems •Enhancement of local capacity for prevention, adaptation and mitigation of external shocks • Multilevel governance	• Sustainable development impact assessment • Long-term public debt management • Long-term territorial planning and spatial development • Ecosystem management

4.2 Procedures of envisioning

- **Fostering "Design thinking"**

- What is "Design thinking"?
  - ➢ Allow people to solve almost all kinds of problems by empathizing with users, defining needs, ideating, prototyping solutions, and testing them.
  - ➢ Having a human-centered core.
  - ➢ An innovative problem-solving process rooted in a set of skills

4.2 Procedures of envisioning

- **Fostering "Design thinking"**
- What is design thinking good for?
  - ➢ Better understand the unmet needs of the people you're creating for.
  - ➢ Reduce the risk associated with launching new ideas, products, and services.
  - ➢ Generate solutions that are revolutionary, not just incremental.
  - ➢ Help learn and iterate faster.
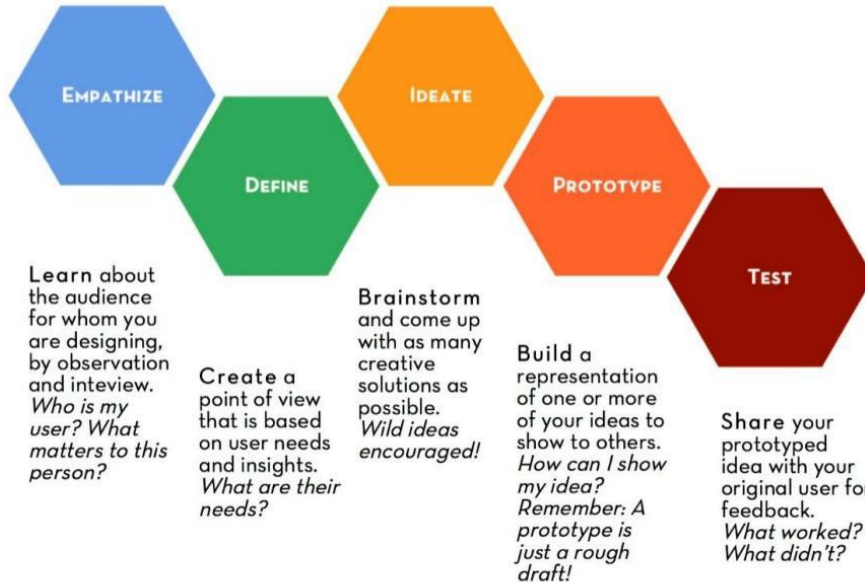
4.2 Procedures of envisioning

- **Fostering "Design thinking"**
- Specific steps involved in "Design thinking"
  - ➢ Fully understand the problem
  - ➢ Explore a wide range of possible solutions
  - ➢ Iterate extensively through prototyping and testing
  - ➢ Implement through the customary deployment mechanisms.

  Please remember design thinking is taught in a linear sequence, but practically it is not always linear.

Five steps of design thinking

We are all DESIGNERS!

EMPATHIZE

DEFINE

IDEATE

PROTOTYPE

TEST

Learn about the audience for whom you are designing, by observation and inteview. *Who is my user? What matters to this person?*

Create a point of view that is based on user needs and insights. *What are their needs?*

Brainstorm and come up with as many creative solutions as possible. *Wild ideas encouraged!*

Build a representation of one or more of your ideas to show to others. *How can I show my idea? Remember: A prototype is just a rough draft!*

Share your prototyped idea with your original user for feedback. *What worked? What didn't?*

Break

4.3 Case studies

- **Cases of selected developed countries:**
  Singapore, Los Angela

- **Cases of selected developing countries:**
  China and Shanghai, Seychelles, Cambodia, Armenia

4.3 Case studies: selected developed countries

Case 4.1 Singapore

In 2014, Singapore **launched the Smart Nation initiative** to build an information-driven, intelligent nation with a "citizen-centric" holistic government. This initiative was mainly launched by **GovTech** to collect and analyze data through nationwide sensors to better grasp real-time information on various project matters. Based on this, the Singapore government has been at the forefront of digital government development in the world through innovative practices in the areas of top-level design, data management, and citizen engagement.

Source: Smart Nation Singapore; Singapore Digital Government Journey

Case 4.2 Los Angeles

Los Angeles' **SmartLA 2028 Strategy** proposes that a smart city is **an integrated smart urban ecosystem** comprised of multiple elements that must be integrated to function together to serve the public customer experience.

It also proposes **five components of a smart city**: smart city infrastructure, smart city data tools and facilities, smart city data services and applications, smart city connectivity and digital inclusion, and smart city governance.

Source: City of Los Angeles, SmartLA 2028 Smart City Strategy

4.3 Case studies: selected developing countries

Case 4.3 China

The implementation of comprehensive digital government policies and initiatives at both the national and subnational levels in China.

Shanghai's **city-level digital transformation** has a "1+1+3+3" policy framework: one opinion on digital government transformation; one 14th five-year-plan on digital transformation; three policy actions (Shanghai Data Regulation, promotion policies, and policy on data exchange infrastructure); three-year plan in economy, society, and governance.

Source: UN DESA; United Nations E-Government Survey 2022, pp.50 ; Shanghai urban digital transformation

4.3 Case studies: selected developing countries

Case 4.4 Seychelles

Seychelles use **the digitalization momentum created by the pandemic** to introduce innovative changes in the education and public administration systems, taking the country one step closer to realizing the Goals set out in the 2030 Agenda.

the Government has been working with telecommunications services to extend **Internet accessibility** to more segments of the population.

Source: Seychelles

4.3 Case studies: selected developing countries

Case 4.5 Cambodia

In 2019, Cambodian Government adopted the **E-Commerce Law** and the **Consumer Protection Law**. Draft **legislation on information technology crimes, cybersecurity and access to information** has also been drawn up.

In 2022, the Government has committed to **expanding digital development** under the Cambodian Digital Government Policy 2022-2035. The National Council for Digital Economy and Society has been selected to lead the e-government innovation process.

4.3 Case studies: selected developing countries

Case 4.6 Armenia

The E-Health in Armenia project, now in the implementation phase, provides medical professionals with up-to-date digital records and information on patient health, allowing Armenia to move closer to achieving **SDGs 3 and 10**.

Digitalization in the agriculture sector has also begun, guiding decision-making in areas relating to **SDGs 2 and 8**.

One of the next steps is to develop an e-justice system that will contribute to the achievement of **SDG 16**.

Source: National Electronic Health Operator, E-Health in Armenia (2022)

Key messages

- Use of digital technologies in government should support the **overall national vision**; a **diagnostic analysis** can help Governments identify the purpose of digital government transformation.

- Envisioning is a tool you use to **establish an image** of what you want your organization or project **to look like in the future**.

- The envisioning of future development needs should revolve around a country's **strategic development objectives** and not around ICT and digital government.

- A good envisioning for digital government transformation can **accelerate SDGs**.

- **"Design thinking"** methodologies allow people to solve almost all kinds of problems by **empathizing with users, defining needs, ideating, prototyping solutions, and testing them**.

Quiz/exercises:

1. Check the national development plan or the equivalent in your country to see whether digital government transformation is part of the plan and how it relates to SDGs. Then, discuss how you would like to improve this plan based on the results of the situation analysis.

2. Define the governance principles, national goals, digital government values, and short and long-term priorities for your country or city with reference to the result of the situation analysis and the principles of SDGs.

Lessons learned and reflections:

1. What is envisioning?

2. Which tools could be used for future envisioning?

3. Why is it necessary to integrate SDGs into a country's national development plan and future envisioning of digital government transformation?

4. What specific steps are involved in "Design thinking"?

Capacities for Digital Government Transformation
Online Training Workshop - Chapter 4
Thank you

Agenda

Chapter 1   General introduction on the importance of promoting and accelerating digital government transformation for realizing the 2030 Agenda for Sustainable Development

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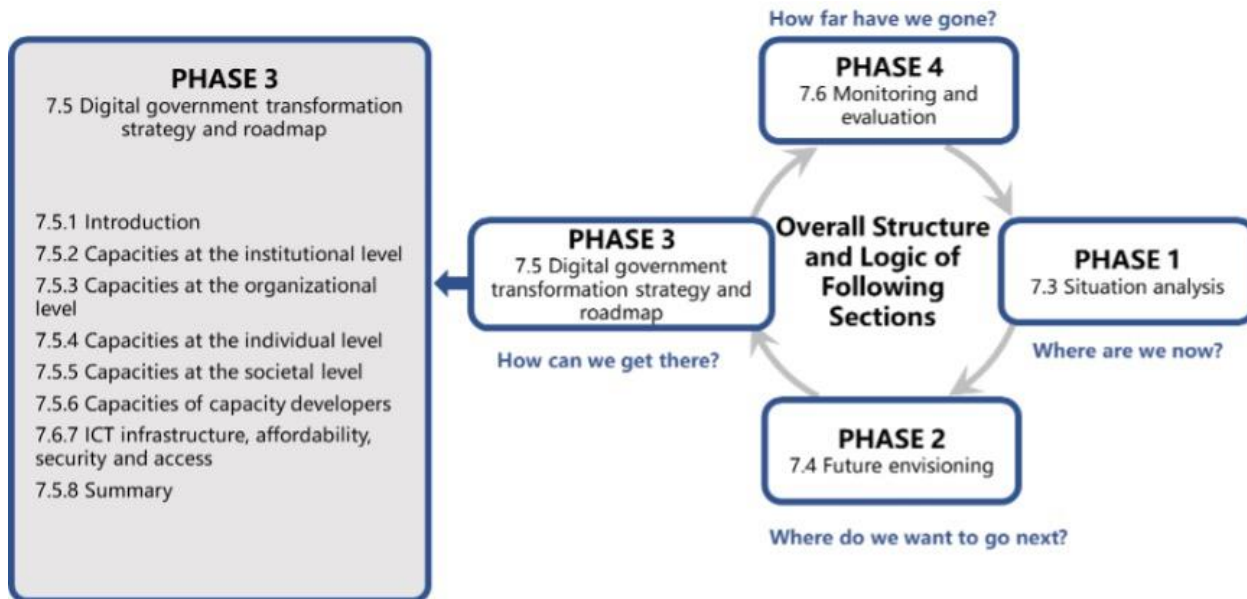
Online Training Workshop – Chapter 5

Chapter 5

Developing a strategy and roadmap for digital government transformation and capacity development

The overall structure of Chapter 5

PHASE 3
7.5 Digital government transformation strategy and roadmap

7.5.1 Introduction

7.5.2 Capacities at the institutional level

7.5.3 Capacities at the organizational level

7.5.4 Capacities at the individual level

7.5.5 Capacities at the societal level

7.5.6 Capacities of capacity developers

7.6.7 ICT infrastructure, affordability, security and access

7.5.8 Summary

How far have we gone?

PHASE 4
7.6 Monitoring and evaluation

Overall Structure and Logic of Following Sections

PHASE 1
7.3 Situation analysis

Where are we now?

PHASE 3
7.5 Digital government transformation strategy and roadmap

How can we get there?

PHASE 2
7.4 Future envisioning

Where do we want to go next?

5.1 Introduction to strategy and roadmap for digital government transformation

- **What is the strategy and roadmap for digital government transformation?**

- **Principles for developing a strategy and roadmap**

- **Tools that could be used in developing a strategy and roadmap**

5.1 Introduction to strategy and roadmap for digital government transformation

- **What is the strategy and roadmap for digital government transformation?**
  - National strategy for digital government transformation
  - Aligning the national digital government transformation strategy with local-level strategies
  - Road map and implementation plan

National strategy for digital government transformation

➢ To identify the overall purpose of digital government, how it relates to the country's SDG priorities, its key development objectives, and how it will benefit people.

➢ To specify how it is aligned with subnational-level strategies and places emphasis on both "leaving no one offline" and "leaving no one behind".

Aligning the national digital government transformation strategy with local-level strategies

➢ To align the national digital strategy and implementation road map with local and other subnational strategies and plans.

➢ To align strategic objectives at the subnational level.

➢ Approaches that involve people in the design and delivery of government policies, programmes and services.

- **The road map and implementation plan**

  ➢ A country's road map for digital government transformation should be built upon key pillars that can help promote effective, accountable and inclusive digital government.

  ➢ Nine key pillars as focal points for digital government transformation

➤ **Nine key pillars for digital government transformation**

1. **Vision, leadership and mindsets:** Strengthen transformational leadership, build digital capacities, and change mindsets at the individual and institutional levels.

2. **Institutional and regulatory framework**: Establish a comprehensive legal and regulatory framework for the development of an integrated institutional ecosystem.

3. **Organizational set-up and culture:** Transform the organizational set-up and culture.

4. **Systems thinking and integration**: Promote systems thinking and the development of integrated approaches to policymaking and service delivery.

5. **Data governance**: Ensure the strategic and professional management of data to address data access and use priorities and enable data-driven policymaking.

6. **ICT infrastructure and affordability and access to technology:** Provide access to high-speed broadband Internet and safe and secure access to new technologies for all.

7. **Resources:** Mobilize resources and align priorities, plans and budgeting, including through public-private partnerships.

8. **Capacities of capacity developers**: Enhance the capacities of schools of public administration and other capacity-building entities and mechanisms.

9. **Societal capacities:** Develop capacities at the societal level to bridge the digital divide and ensure that no one is left behind.

Source: 2020 United Nations E-Government Survey.

Principles for developing a strategy and roadmap

- Be aligned with and integrated into the Government's overall development strategy.
- In alignment with subnational strategies.
- Include actions aimed at facilitating public-private partnerships.
- Include short-term, medium-term and long-term projects that are aligned with the digital government transformation vision.

- **Tools that could be used in developing a strategy and roadmap**

  - The UN DESA DiGIT4SD Toolkit

  - The OECD Toolkit for digital development support

- **The UN DESA DiGIT4SD toolkit**

➢ Help countries to develop and implement digital government strategies and initiatives in support of SDG implementation.

➢ Includes measures for monitoring and review during both the planning and the implementation phases.

Source: United Nations Economic and Social Commission for Asia and the Pacific, Interregional Capacity Development Workshop on Digital Government Implementation Toolkit for Sustainable Development (DIGIT4SD) (2019).

- ## The UN DESA DiGIT4SD toolkit

  - ➢ Key Factors necessary for the development of digital government
  - ➢ Environmental analysis
  - ➢ Mapping stakeholders.

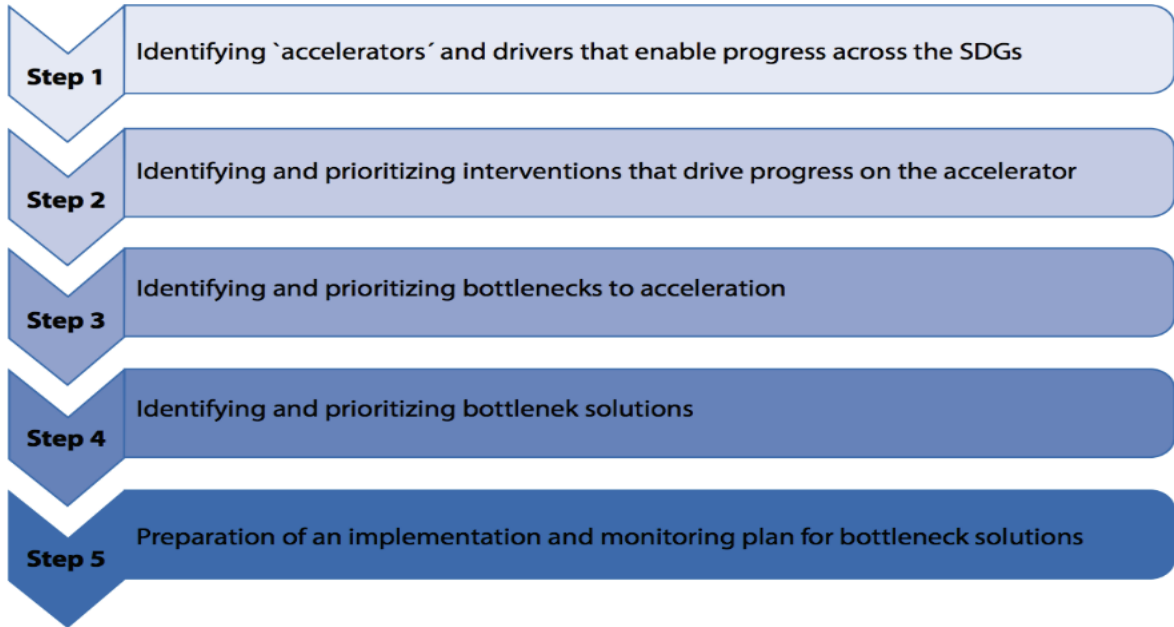➢ Key Factors necessary for the development of digital government

- ✓ Political conditions
- ✓ Organizational conditionals
- ✓ Cultural context and human capital
- ✓ Financial conditions
- ✓ Communication environment
- ✓ Technological infrastructure
- ✓ Data and information systems

➢ Environmental analysis

✓ PESTEL analysis
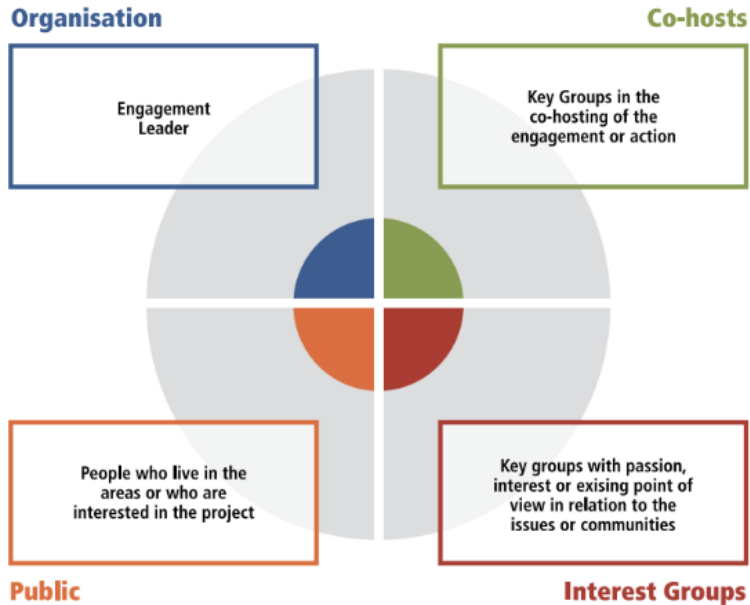✓ SWOT analysis
✓ SDG Accelerator and Bottleneck Assessment (ABA)

✓ SDG Accelerator and Bottleneck Assessment (ABA)

Step 1 — Identifying `accelerators´ and drivers that enable progress across the SDGs

Step 2 — Identifying and prioritizing interventions that drive progress on the accelerator

Step 3 — Identifying and prioritizing bottlenecks to acceleration

Step 4 — Identifying and prioritizing bottlenek solutions

Step 5 — Preparation of an implementation and monitoring plan for bottleneck solutions

Source: ABA tool steps (UNDP 2017)

➢ Mapping stakeholders

Organisation

Engagement Leader

Co-hosts

Key Groups in the co-hosting of the engagement or action

People who live in the areas or who are interested in the project

Public

Key groups with passion, interest or exising point of view in relation to the issues or communities

Interest Groups

SOURCE: IAP2AU: Engagement Essentials Module

- ## OECD toolkit

Box 7.2   Organization for Economic Cooperation and Development: Going Digital Toolkit

OECD has developed a comprehensive framework and analytical toolkit that is designed to guide and support countries in their digitalization efforts. It starts with an assessment of a country's level of digital development and aids in the formulation of policies, strategies and approaches in response to seven metrics based on thirty-three indicators, as follows:

(1) **Jobs**: share of ICT and digital-sector jobs in total employment; ICT training; new STEM graduates; public spending on labour market policies

(2) **Market openness**: cross-border e-commerce sales; share of digitally delivered services in the commercial services sector; digital services value in manufactured exports; digital services trade restrictiveness; foreign direct investment restrictiveness

(3) **Access**: fixed and mobile broadband penetration; M2M SIM card use; mobile data use; business broadband use

(4) **Trust**: abuse of personal information or privacy violations; non-use of ICT due to payment-security or product-return concerns; internal employee provision of ICT security and data protection

(5) **Society**: Internet use among older persons, lower-income households, indigenous peoples and young women; digital equipment use at work and in telework from home; high-performing youth in STEM and reading; e-waste generation

(6) **Innovation**: ICT investment; business R&D expenditure in information industries; venture capital investment in the ICT sector; share of start-ups in the business population; computer science documentation use; ICT-related patents

(7) **Use**: individual Internet users; individuals using the Internet to interact with public authorities; Internet users that have made recent online purchases; small businesses with recent e-commerce sales; businesses purchasing cloud services; adults proficient in problem-solving in technology-rich environments

Sources: Government of South Australia, "Digital transformation toolkit" (https://www.dpc.sa.gov.au/responsibilities/ict-digital-cyber-security/toolkits/digital-transformation-toolkit)

Sources: Government of South Australia, "Digital transformation toolkit"

DESA   **Capacities for Digital Government Transformation**

Quiz/exercises:

1. Use the UN DESA DiGIT4SD toolkit to identify key Factors necessary for the development of digital government to analyze national situation.

2. Use the stakeholder mapping tool to map the stakeholders in the country.

Break

What is the institutional capacity?

Governments require the right institutional capacities to harness new technologies for the realization of broader societal goals, including the achievement of the SDGs. Institutions are rules that prescribe behaviours and structure political, economic and social patterns of interaction to create order.

Putting in place an institutional ecosystem

- Put in place an institutional ecosystem for the adoption and application of digital technologies and the deployment of digital government services

- Many countries that are at a relatively advanced stage of the digital government transformation process have established legal and regulatory frameworks to support digital government services

Case 5.1 Estonia

The Government had to formulate and activate comprehensive legislation, including the Public Information Act, Personal Data Protection Act, Cybersecurity Act, Identity Documents Act, Electronic Identification and Trust Services for Electronic Transactions Act, State Budget Act, and compliance of the State Information Management System with the Estonian Interoperability Framework.

Source: Estonia, State portal

Developing a comprehensive regulatory framework

- Take stock of what laws and regulations exist and how they are interrelated in order to identify gaps and establish a point of departure for the adoption and harmonization of legislation fully supportive of digital government transformation.

- Regulatory and legal frameworks should be aligned with the broader national objectives of a country.

Taking into account the needs of vulnerable groups

- Take the needs of vulnerable groups into account from the start, with emphasis given to safety, availability, affordability and access to services.

- Use a gender lens in building and coordinating technology and data-related regulatory frameworks, and digital inclusion and digital equality should be explicit in policy objectives.

Regulators as facilitator and partner

- Digital regulators acted as watchdogs, gatekeepers and arbiters, dealing with discrete technology issues or changes;

- Their role has become that of a facilitator and partner in shaping ICT and digital regulation, as they are actively "working with other stakeholders to shape a common digital future".

New government capacities needed

- To address institutional and regulatory requirements for the integration and use of rapidly evolving technologies.

- To ensure that a solid regulatory framework translates into effective policy action, analytical, operational and political capacities are required at the system, organizational and individual levels.

Strengthening policy capacity, competencies and capabilities for digital government transformation
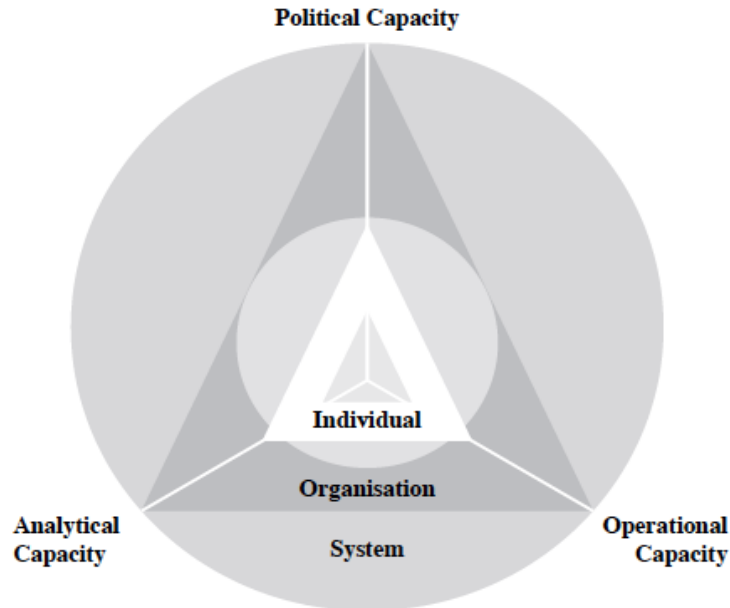
Source: Maria Katsonis, "Rethinking policy capacity, competencies and capabilities", figure 1.A, *The Mandarin* (10 June 2019), available at https://www.themandarin.com.au/109791-rethinking-policy-capacity-competencies-and-capabilities/.

Quiz/exercises:

1. How can a government develop an institutional ecosystem to harness new technologies toward the achievement of SDGs?

2. How should the government attend to the needs and demands of vulnerable groups while strengthening institutional capacities for digital government transformations?

Break

5.3 Capacities at the organizational level

- **What is the organizational capacity?**
- **A whole-of-government approach is needed**
- **Having in place a central coordinating agency**
- **Transforming the organizational culture at all levels**

What is the organizational capacity?

- Government structures that define authority, roles and responsibilities, accountability and reporting lines, and mechanisms and processes for coordination and communication.

- To move forward the digital government transformation process, there is a need for organizational structures to operationalize new rules and contribute to the development of new, critical mindsets.

A whole-of-government approach needed

- To ensure that organizational structures can coordinate and integrate public service delivery in ways that best serve the objectives of the 2030 Agenda

- To reorganize institutions and organizations and establish appropriate horizontal and vertical workflows before starting an automation process

- To understand how to adapt organizational structures to effectively address existing linkages among the SDGs is critical to achieving progress

Case 5.2 Germany

Germany has revamped its Council for Sustainable Development; Estonia, Morocco and France have set up inter-ministerial committees or task forces to monitor SDG implementation; and Norway, Samoa and Sierra Leone have strengthened mechanisms for enhanced institutional engagement with local authorities. These new structures should both support and be supported by the integrated use of digital technologies.

Source: UN DESA, United Nations E-Government Survey 2020, pp.193

Establishing a central coordinating agency

- A central coordinating agency with budgetary autonomy to define and coordinate the functions of the CIO.

- A network of CIO focal points within strategic institutions linked to the coordinating agency at both the national and local levels.

- Establishing chief innovation officers, particularly at the local level.

- Ensuring organizational processes adaptable to rapid technological changes.

Case 5.3 Colombia, India and other countries

- In **Colombia**, where digital transformation has been identified as a national priority, there is a CIO network across all agencies.

- In **India**, a Chief Information Officers Programme has been set up to create e-governance champions within line ministries and line departments; the objective is to accelerate the implementation of e-governance initiatives across all levels of government.

- The most digitally advanced countries have put in place councils or advisory groups to facilitate collaboration at the ministerial level; among these are the **Swedish National Digitalisation Council**, the **Australian Digital Council**, and the **Digital Economy and Digital Inclusion Ministerial Advisory Group in New Zealand**.

Source: Cionet Colombia, Digitxal India (2020)

Capacities needed to promote coordination

- To promote coordination at the organizational level to enable different government ministries and agencies to effectively communicate and exchange information.

- The Interoperability: "a top priority today as Governments try to integrate services across departments so as to improve effectiveness as well as efficiency".

Case 5.4 Republic of Korea

The National Information Resources Service in the Republic of Korea was established to integrate the information of central government institutions. The Service is responsible for the operation and management of 1,230 digital government services linked to 45 central government institutions and controls about 45,000 government information resources.

Source: UN DESA, United Nations E-Government Survey 2020, pp.196.

Case 5.4 Republic of Korea

The National Information Resources Service (NIRS) is the world's first pan-governmental data centre responsible for integrating and managing the data and information of central government institutions. Consolidating information resources once separately managed by individual government departments in one centralized place, NIRS was set up to address challenges associated with the operation of isolated information systems, including the inefficient use of information resources, duplication in ICT investments, the lack of IT expertise, and wide exposure to security risks. The four main functions of this government-wide data centre are as follows:

(1) integrating, operating and managing 1,230 digital government services linked to 45 central government institutions and controlling about 45,000 government information resources, including servers and storage;

(2) consolidating and retrieving information through the government-exclusive G-Cloud to facilitate interdepartmental information sharing and optimize resource utilization;

(3) operating Hye-An, the pan-governmental big data portal, for all government officers to support science- and data-driven government policymaking; and

(4) protecting national information resources against cyberthreats through an integrated security management system using artificial intelligence technologies.

Sources: Republic of Korea, National Information Resources Service (www.nirs.go.kr).

Transforming the organizational culture at all levels

- Governments establishing new organizational structures and processes also need to transform the organizational culture at all levels.

- Essential to create an organizational culture in which innovation is embraced and actively pursued.

- To stimulate creativity and innovation by an organizational culture in government that values openness and the sharing of data to guide strategic decisions.

- Essential to have in place a forward-looking organizational culture.

Quiz/exercises:

Benchmarking can be achieved by looking outside your own domain. It can also provide important lessons or improved methods that could be missed by only looking only at your own organizations. It includes four main steps:

①Pre-requisites: situation analysis and future envisioning.
②Analyze and understand the whole organizational structure and make comparisons with the examples.
③Build consensus, support, and partnership.
④Consider limitations and considerations.

Use "benchmarking" to thoroughly analyze one case mentioned above or in the previous chapter (e.g. New York, Los Angeles, Shanghai), make comparisons with your countries, and summarize what your countries can take advantage of to improve efficiency and performance. When drawing a conclusion, consider the temporal and spatial limitations and considerations.
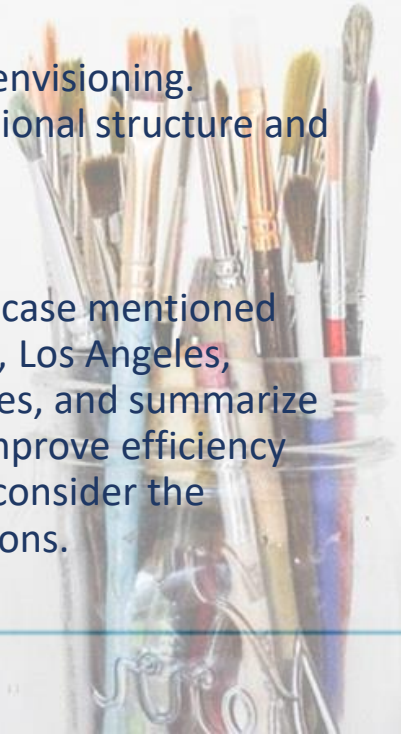
Break

5.4 Capacities at the individual level

- **What is the individual capacity?**
- **Improving individual capacities within government and across society**
- **Recruiting, retaining and motivating the best digital talent for digital government transformation**
- **Developing digital capacities within government and changing mindsets**
- **Creating multidisciplinary and multisectoral teams**
- **Ensuring safe spaces for innovation and experimentation**
- **A plan to develop individual capacities for digital government transformation**

What is the individual capacity?

- Individual capacities are the beliefs, mindsets, values, attitudes, knowledge, skills and competencies of people.

- Public servants are at the forefront of public service delivery and play a key role in ensuring national ownership and achievement of the SDGs.

Improving individual capacities within government and across society

- Changing mindsets and behaviours is just as important as changing laws and regulations.

- A growing gap between the skills of public sector employees and the skills of private sector employees, with the former often lacking competencies.

- Public servants need to have the capacity to work across different government departments and with other State institutions.
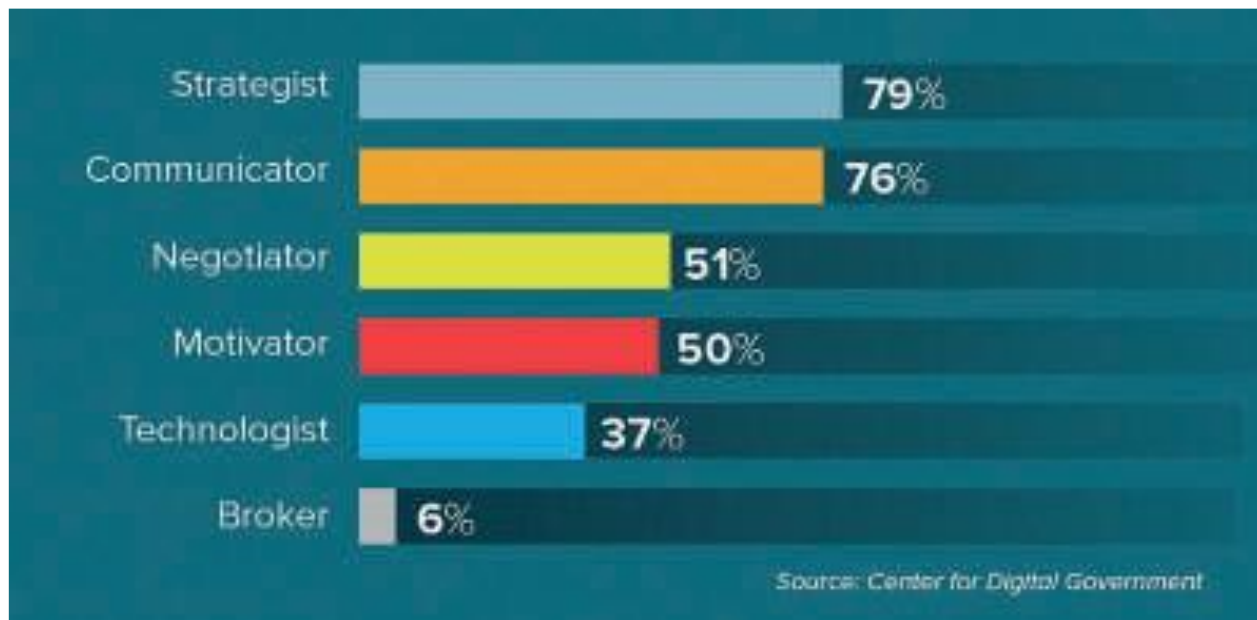
Recruiting, retaining and motivating the best digital talents for digital government transformation

- To secure the best digital talents and a multidisciplinary team of experts in government

- Leveraging frontier technologies largely depends on the digital capacities of government in data collection, storage, analysis, and management.

- To develop forecasting capacities to anticipate and address possible negative consequences and determine what skills might be needed in the future.

Case 5.5 What are the most important traits of CIOs today?

Trait	Percentage
Strategist	79%
Communicator	76%
Negotiator	51%
Motivator	50%
Technologist	37%
Broker	6%

Source: Center for Digital Government

Developing digital capacities within government and changing mindsets

- To attract and maintain a core pool of digital expertise and ensure that digital skills are embraced across all levels of government.

- Changing mindsets, including beliefs and attitudes, is one of the most difficult challenges in implementing a digital government strategy.

MINDSETS AND COMPETENCIES

DIGITAL MINDSET

An innovative digital mindset allows public servants to conceive of new and different ways ICT can be leveraged to improve processes and develop creative solutions. Those working in the public sector today must be willing and able to use rapidly evolving new technologies. They need to understand how these technologies can contribute to digital government transformation and must be able to identify relevant risks and limitations. Since new digital skills are regularly needed as technologies evolve, it is important that public employees have a digital mindset that allows them to be digitally 'nimble' and ready to embrace change. Digital skills and competencies are needed to design and deliver services with end-users in mind.

EVIDENCE-BASED MINDSET

An evidence-based mindset is vital, as it allows public servants to base policy development and decision-making on proven evidence, sound data, and established research. One key competency of those with an evidence-based mindset is data literacy, which reflects the capacity to locate, retrieve, analyse and utilize data and information for problem-solving. An evidence-based mindset and data literacy support the achievement of SDG target 16.10, ensuring public access to information and protecting fundamental freedoms in accordance with national legislation and international agreements. These capacities can also be critical for ensuring the effective use of policy screening tools to support risk-informed decision-making.

COLLABORATIVE MINDSET

Public servants need to have a collaborative mindset that will allow them to identify issues of common concern and to pursue dialogue, coordination, partnerships and networking to address those issues. One of the competencies linked to the collaborative mindset is cooperation. Public servants need the knowledge and skills to apply an integrative whole-of-government and whole-of-society approach to work across silos and to facilitate network-based governance.

Source: Tod Newcome, What are the most important traits of CIOs today?, Government Technology, Analytics (June 2019)

DESA **Capacities for Digital Government Transformation**

More to know in changing mindsets to implement the SDGs

➢ To align with the requirements of implementing the SDGs.

➢ To adopt a whole-of-government approach, encompassing behavioural changes at the individual, organizational and institutional levels.

➢ The first step is to identify and be aware of one's own limiting beliefs.

The mindsets for SDGs implementation
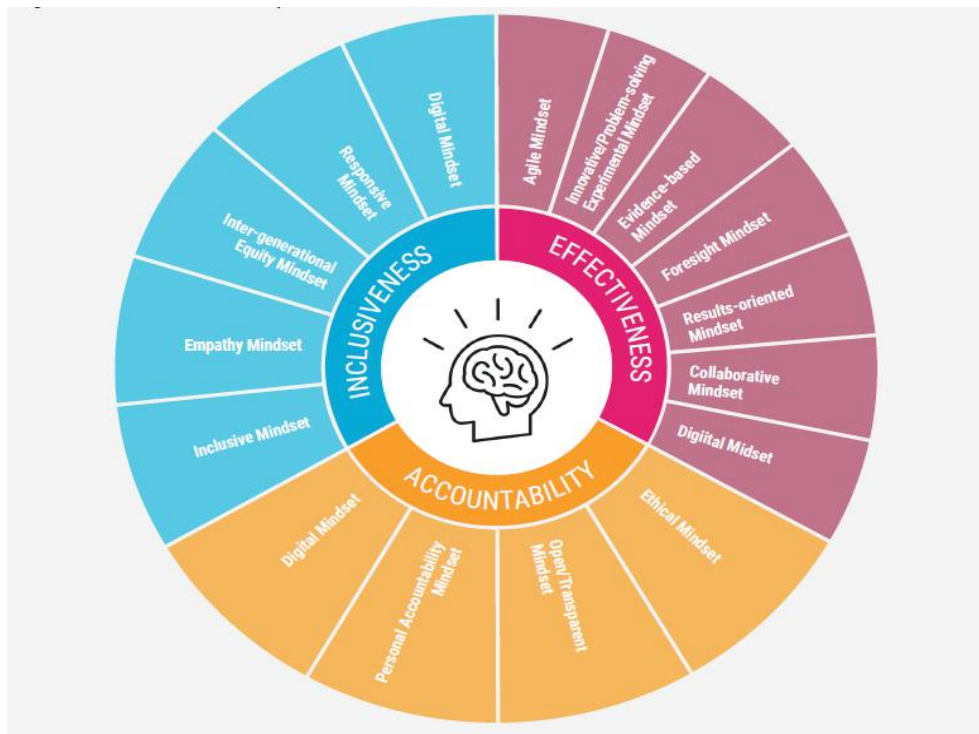
Source: UN DESA, Changing Mindsets to Realize the 2030 Agenda for Sustainable Development, 2021, pp.29.

Highlighting the following mindsets

- ✓ Inclusive mindset
- ✓ Digital mindset
- ✓ Evidence-based mindset
- ✓ Foresight mindset

MINDSETS	BELIEFS	ATTITUDES	COMPETENCIES
Inclusive Mindset	All people are equal in dignity and rights and deserve equal opportunities for a better life.	Is committed to treating everyone with dignity and respect; empathy, tolerance, solidarity, and no discrimination.	Competencies that are linked to this mindset are: respect for diversity, and non-discrimination to promote public sector workforce diversity, and in line with SDG 16.7, ensure responsive, inclusive, participatory, and representative decision-making at all levels; inter-generational equity to ensure prosperity and quality of life for all, noting especially the needs of today's children and how current actions may jeopardize the basic needs of future generations; empowerment and participation and develop awareness of own and communities' beliefs, values and expectations and ensure a culture of caring; and negotiation and facilitation to find solutions to a shared problem. Successful negotiators will analyze a problem, identify the interested parties, and reach a consensus. Communication, persuasion, planning, strategizing, and cooperating are essential skills of negotiation and facilitation.

Digital Mindset	If properly leveraged, digital technology can help address a multiplicity of challenges.	Is focused on leveraging the advantages of technology in support of governance transformation while addressing its risks.	A digital mindset is not just the ability to use technology, but it is a set of behaviors and attitudes; it is a change of public institutions' capacities needed to **keep abreast of technological developments and understand the applicability (benefits and risks)** of digital technologies to solve complex problems (digital literacy). Digital transformation requires abilities to apply technology to appropriate tasks within government, seeking effectiveness, and transparency of government processes, reorganization of work, and continuous training. It also requires the ability to secure sensitive data.
Evidence-based Mindset	Data is critical to make good decisions.	Is driven and motivated to using, validating, and documenting data.	A competency associated with the evidence-based mindset is **data and information literacy** to recognize the need to locate, retrieve, analyze, and utilize data and information for problem solving as well as to promote transparency for better public policy and service design and delivery. **Public Financial Management (PFM)** competency is also needed for effective public administration and service delivery, especially in fragile and post conflict environments (see chapter 12).
Foresight Mindset	Present and future transformation in support of the SDG is possible. The future can be influenced, and trends anticipated if we ask the right questions, plan, and prepare for the future.	Is open to using techniques and methodologies for discovering and designing future trends to anticipate challenges and solutions.	A foresight mindset includes short and **long-term planning** to develop clear goals that are consistent with agreed strategies such as the 2030 Agenda and specific SDG targets; **forward looking and proactivity** to ensure anticipatory, flexible and action-oriented behaviors to implement potential solutions and address challenges. as well as **risk-management** competencies to identify and assess issues and risks and create a plan that allows to contain or control those identified and their consequences.

➢ Steps to changing mindsets

IDENTIFY limiting beliefs through self-assessment diagnostic

TRANSFORM BEHAVIOR through changes in the rules, environment and personal actions

REALIZE the different beliefs and behaviors lead to better outcomes through case studies

Changing Mindsets

CHANGE BELIEFS personal commitment

ADOPT strategies and action plan to change mindsets through re-phrasing limiting beliefs into beliefs aligned with the 2030 Agenda (leave no one behind, innovation, problem-solving, transformation inter-generational equity)

UNDERSTAND principles and values of the 2030 Agenda and 11 effective principles of governance through a presentation

> Several key strategies to foster a change in public servants' mindsets:

(1) STRATEGIES TO PROMOTE CHANGE AT THE INDIVIDUAL LEVEL – MINDSETS

1.1 Raise awareness of the principles and values of the 2030 Agenda and of the 11 principles of effective governance for sustainable development and their underlying beliefs and enhance the understanding of how to align public servants' mindsets with those principles.

Recommendations:

a. Update public service codes of conduct and public service charters to include reference to the principles and values of the 2030 Agenda and to the principles of effective governance for sustainable development.

b. The set of guidance notes to implement the principles of effective governance could be mainstreamed in the capacity development training courses of schools of public administration and development agencies.

c. Schools of public administration[29] can undertake training on the 2030 Agenda and the SDGs to sensitize public servants to the principles and values of the 2030 Agenda.
In this respect, the Curriculum on Governance for the SDGs developed by UN DESA provides training material that can be adapted to the regional/national context and can be used to help promote effective change in public institutions.[30] In particular, the toolkit on Changing Mindsets in Public Institutions can be a reference for institutes of training to gain insights on new values, mindsets and competencies needed to implement the 2030 Agenda.

1.2 Promote socially conscious and transformational leadership values and mindsets with a focus on building inclusive societies. Socially conscious leaders have a significant role to play in the survival and long-term development of institutions that promote the principle of equity and inclusiveness. Building capacities in socially conscious leadership values and enhancing skills in empathy, social research, systems thinking, participatory planning, and team building can promote and transform the mindsets of change-agents to implement the SDGs, both within and across nations (see chapter 2).

Recommendation:

a. Establish capacity development and training activities to promote socially conscious leadership values, mindsets, and behaviors for public servants across all government levels.

1.3 Define new mindsets to implement the SDGs in the public sector through a new competency framework for the SDGs.

Recommendation:

a. See below 2.1

1.4 Adopt an innovation/ problem-solving, agile and evidence-based mindset in the public sector as well as continuous learning. Shifting mindsets involves a dynamic process – not necessarily a linear path – of constant practice and renewal (see Chapters 4 and 5). Training, both for long- and short-term change, could be more effective when focusing on problem-solving.

Recommendations:

a. Design and adopt a Public Service Charter for Innovation in Public Management.

b. Develop capacity development training on innovation, experimentation, and evidence that can promote high-level motivation and a greater propensity to embracing new mindsets.

1.5 Governments need to be able to attract, develop, and retain a dedicated workforce. Public sector human resource professionals are a key component in attracting and motivating the best talent in the public sector and hiring people with the right mindsets.

Recommendations:

a. Human resource practice should move from being transactional to being more strategic. Human resources departments should have a more strategic role in recruiting and attracting the best talent in the public sector (see Chapter 9).

b. Mechanisms to promote employee engagement is key to having a motivated, engaged workforce that embraces new mindsets and performs the critical work of government (see Chapter 9).

(2) STRATEGIES TO PROMOTE CHANGE AT THE INDIVIDUAL LEVEL – BEHAVIORS

2.1 Define new mindsets through a new competency framework to implement the SDGs and describe what new behaviors are needed to implement Goal 16. Public administration systems must define new mindsets and competencies that can advance the principles of the 2030 Agenda across public service and ensure that they are put into practice. UN DESA's competency framework (see page 25) could serve as a reference for countries that would like to focus on new competencies, mindsets, and behaviors.

Recommendation:

a. Develop a new competency framework to guide public servants' recruitment, behavior, and performance.

2.2 Instill meaning and an understanding among public servants of the required mindsets and related behaviors needed to advance the SDGs. Public servants first need to understand why a change in mindsets and behavior is needed. Second, they need to understand what change (in terms of values, beliefs and attitudes, and capacities and competencies) is required to advance the realization of the 2030 Agenda. Third, they need to understand how these changes can be triggered. (see Chapters 10 to 15).

Recommendations:

a. Schools of Public Administration and Management Institutes and Public Service Training Institutions/Units' should mainstream the SDGs and new mindsets required to realize the 2030 Agenda in their curricula (see Chapter 9).

b. Schools of public administration can promote acculturation, investment in personal socialization, and individual's ethical education to foster a change in public servant's previous patterns of beliefs and behaviors. Understanding how people behave is critical to fostering a change in mindsets.

c. Promote effective communication campaigns regarding the new competency framework within the public sector to highlight the changes needed to encourage a change in mindsets and behaviors.

2.3 Nurture champions of change in the public sector for the successful implementation of the SDGs. Organizations need to identify champions of change that can serve as role models for new mindsets and behaviors that will support change (see Chapter 9).

Recommendation:

a. Government can establish or submit initiatives to Award programmes at the national and local levels to help uncover champions of change. For example, the UN Public Service Awards, which is the most prestigious international recognition of excellence in public service, can help discover champions of change and disseminate national initiatives worldwide.

➢ **Growth versus fixed mindset**

✓ A more general preferred mindset in transformation is the growth mindset.

✓ A growth mindset is one that enables people to see opportunities to learn from all situations.

✓ A fixed mindset is like "I can't do it", but a growth mindset is like "I can't do it YET".

➢ **No excessive reliance on vendors or private sector expertise**

✓ Crucial to secure a high ratio of IT specialists to other types of expertise in government and to take on quality personnel.

✓ For example, **Singapore**, provides competitive salaries and favourable working conditions in the public sector in order to attract and retain world-class professionals.

Case 5.6 Singapore

The Government Technology Agency (GovTech), which is part of the Smart Nation and Digital Government Group within the Prime Minister's Office, operates as a company, harnessing digital technology to develop and deliver digital products and services to people, businesses and the Government as part of the public sector digital transformation process. It recovers innovation costs by including them in product pricing, which is approved by the Ministry of Finance.

Source: UN DESA, United Nations E-Government Survey 2020 pp.198

Creating multidisciplinary and multisectoral teams

- Building strong teams and communities of practice can help foster better information sharing.

[Case 5.7] In Australia, where the Digital Transformation Agency provides free training to assist government teams in understanding and meeting the Digital Service Standard.

Source: Australia, Digital Transformation Agency, Building digital skills across government

Ensuring safe spaces for innovation and experimentation

- **It is critical to ensure that individuals and teams working in the public sector can avail themselves of safe spaces for innovation and experimentation.**

[Case 5.8] In Denmark, the "Government supports a GovTech program to help tech startups deliver new solutions to create public sector value", and the Government of Finland has created a culture of experimentation with the launch of "a digital platform called Kokeilunpaikka (meaning 'place of experiment') to encourage citizens to learn about experiments and also design their own".

Source: Deloitte, Innovation accelerators: creating safe spaces for government innovation (2019)

- **A plan to develop individual capacities for digital government transformation**

Strengthen leadership capacities and the commitment to digital government transformation.
Enhance the understanding of digital trends and strengthen the digital literacy and digital competence of senior and middle-level government officials to enable them to manage the digital transformation process.
Enable the development of new mindsets and competencies through ongoing training.
Create multidisciplinary and multisectoral teams.
Attract and retain the best digital talent in the country through competitive remuneration, incentives and innovation programmes.
Design entry-level programmes to attract young talent.
Develop clear career development paths and engage in proper succession planning.
Ensure that there is a high ratio of ICT experts to other experts in government.

Quiz/exercises:

1. How can the recruiting process be changed in order to improve the general digital capacity of public servants in your country?
2. What kind of mindsets are needed in your country for digital government transformation?
3. What are the steps to changing mindsets? How do you plan to use them?
4. In your opinion, do most people in your organization tend to have growth mindsets or fixed mindsets?

Break

5.5 Capacities at the societal level

- What are the societal capacities?
- Identifying those being left behind in digital government
- Developing digital capacities for co-creation and cooperation and promoting digital inclusion
- Bridging digital divides and empowering vulnerable groups
- Barriers relating to access, affordability and ability (3As)
- The role data, design and delivery can play in ensuring no one is left behind

- **What are the societal capacities?**

- Digital government capacities are inextricably linked to the capacities of all stakeholders in society.

- Digital capacity development is a significant undertaking because all actors in society must be equally empowered.

- Vulnerable groups confront barriers that prevent them from fully participating in their nation's political, economic and social life.

- **Identifying those being left behind in digital government**

  - A vulnerable or disadvantaged person

  - Every individual — regardless of age, race, gender, ethnicity, legal status, place of residence, or socioeconomic status — is entitled to basic rights and services, including digital government services.

  - Digital divide

- **Identifying those being left behind in digital government**

  - **Those living near or below the poverty line**
  - **Women and girls**
  - **Older persons**
  - **Persons with disabilities**
  - **Youth**
  - **Migrants and refugees**
  - **Other vulnerable populations**

Case 5.9 China: online services for persons with disabilities

In China, e-government development has helped strengthen policy integration, improve the quality of public services, and increase government transparency.

To address the needs of persons with disabilities, Beijing has made continuous efforts to **improve social security and public services systems** by promoting **innovative online applications**.

Source: China, E-Government Research Center, National Academy of Governance

- **Developing digital capacities for co-creation and cooperation and promoting digital inclusion (1)**

- Including through civil society hackathons, awareness-raising workshops, targeted training, and informational meetings with an array of stakeholders.

- Governments can prioritize the provision of opportunities for digital literacy development.

Case 5.10 Zambia

Through the iSchool Zambia initiative, the Government has facilitated the development and dissemination of a public-private ICT-based "home-grown" educational programme. Learning materials in English and vernacular languages have been produced, along with lesson plans, teacher training materials and student reading books. Targeted schools receive tablets with training materials and solar-power equipment (if needed). Smart centres—local Internet-café-style facilities set up to encourage community engagement—serve as satellite communications facilities and provide digital access.

Source: UN DESA, "UNPSA winners" (2014)

● **Developing digital capacities for co-creation and cooperation and promoting digital inclusion (2)**

- Be purpose-driven and pursued with the intention of bridging gaps among different societal groups and regions.

- Essential to raise awareness through effective public communication campaigns both to inform people of the benefits of digital services and to ensure more widespread use of online platforms.

Case 5.11 India

Through the Digital India initiative, the Government has produced resources such as **banners, public campaign materials, videos for television**, and **materials for face-to-face information sessions** with people.

Source: UN DESA, United Nations E-Government Survey 2020, pp.203

Case 5.12 Canada

In Canada, the country's Policy on Communications and Federal Identity ensures that communication with the public is carried out through a variety of **media and platforms** in order to maximize reach and explore innovative ways to use technology.

Source: Canada, Policy on Communications and Federal Identity

- **Developing digital capacities for co-creation and cooperation and promoting digital inclusion (3)**

- Governments must demonstrate that they can be trusted with the data people provide and that their interaction with the public can produce meaningful change.

- Hackathon: encourage more talents and stakeholders to participate in the innovation of digital technology.

Case 5.13 EUVsVirus Hackathon by the European Commission

It was a pan-European online hackathon from April 24 to 26, 2020, connecting civil society, innovators, partners, and buyers across Europe to develop innovative solutions to coronavirus-related challenges. This hackathon was a world record with more than 21,000 participants in 3,500 teams from many nationalities. This whole initiative made possible the creation of many projects, from connected devices to software-based platforms such as 3D glasses to monitor vital signs and an online matching system for health equipment.

Source: Kiev Gama, Successful Models of Hackathons and Innovation Contests to Crowdsource Rapid Responses to COVID-19, Digital Government: Research and Practice, Vol. 2, No. 2, 2020, pp.1-7

Case 5.14 African Youth Anti-Corruption Hackathon by the United Nations Office on Drugs and Crime

As the first edition of the Coding4Integrity hackathon series, organised in 2021 for young coders from Egypt, Kenya, Nigeria, Senegal and South Africa, represents one outstanding example of how to leverage distance learning, digital innovation and social entrepreneurship to meaningfully engage youth whilst empowering them in coming up with their own innovative and creative solutions. The hackathon offered young developers the chance to come up with their own ideas on how to counter corruption through technology

Source: African Youth Anti-Corruption Hackathon 2021

DESA   **Capacities for Digital Government Transformation**

- **Bridging digital divides and empowering vulnerable groups**

  - Leaving no one behind in the evolving hybrid digital society is a challenge for both developed and developing countries.

  - Make meaningful digital opportunities available for all.

  - The digital divide is a measure of the extent to which one can benefit from online information and digital services.

● Barriers relating to access, affordability and ability (3As)

Recognizing digital exclusion exists

The first step in leaving no one behind is to recognize that digital exclusion exists, and who are those digitally excluded.

Access (the lack of)

DIGITAL EXCLUSION

Affordability (the lack of)

Ability (the lack of)
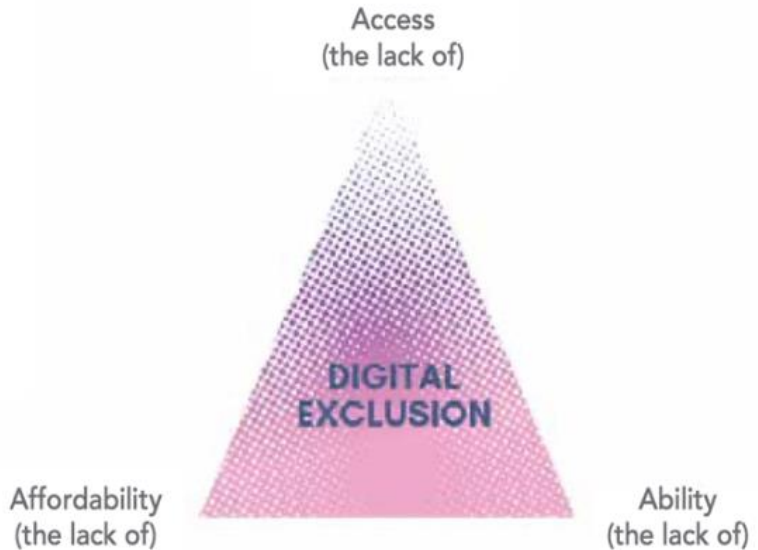
Source: UN DESA, United Nations E-Government Survey 2022, pp.124

➢ **Access**: a fundamental requirement for digital inclusion.

➢ **Affordability**: covers three areas relevant to e-government:(a) the affordability of Internet access, especially; (b) the affordability of digital devices; and (c) the affordability of e-services and the need for public access points

➢ **Ability**: Access and affordability are closely linked to digital literacy.

The role data, design and delivery can play in ensuring no one is left behind

Integrated framework in leaving no one behind

The integrated framework of data, design and delivery (3D's) in leaving no one behind seeks to have a transformational impact, making the best and optimal use of available resources in a timely manner.

Data

Design

Delivery

LNOB
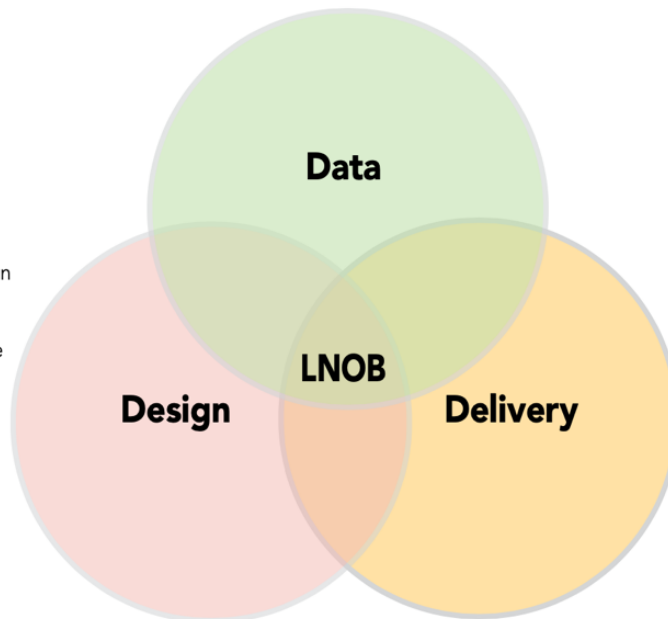
Source: UN DESA, United Nations E-Government Survey 2022, pp.136

➢ **Data** informed by the specific needs of vulnerable groups;

➢ **Design** that places people at the centre of e-government policy processes and services provision;

➢ **Delivery** approaches that focus on inclusion and the use of innovative approaches to reach those left furthest behind.

Quiz/exercises:

1. Identify stakeholders of digital government transformation in society.
2. Identify those who are being left behind in digital government transformation.
3. Try to use the stakeholder analysis to identify stakeholders such as governments, enterprises, civil society organizations, and vulnerable groups in your country; please also tell what their stakes are, and how to balance their interests in the process of digital government transformation.
4. How can the new technologies contribute to digital government transformation?

Break

5.6 Capacities of capacity developers

- **What are capacity developers?**

- **Developing the capacities of capacity developers**

● **What are capacity developers?**

- A wide range of education providers should be involved in sustainable capacity development.

- Capacity developers may include schools of public administration, management development institutes, or non-State actors such as private sector software developers.

● **Developing the capacities of capacity developers**

- Institutes of public management and schools of public administration

- Play a central role in developing curricula that provide current and future public servants with the requisite skills, mindsets and competencies they will need for effective governance.

Case 5.15 Digital Kazakhstan: providing civil servants with digitalization training

Digital Kazakhstan coordinates ongoing training programmes that strengthen the **capacities of chief digital officers and IT specialists** at all levels of government to provide government employees with the ICT skills and support they need to contribute to digital government transformation. The training workshops focus on economic sectors, new technology trends and project management skills.

Central to this programme of continuing education is the commitment to building the capacities of capacity builders through **public and private partnerships**. The objective is to ensure that individual digital government experts and leaders internalize and are able to develop in others the strategic mindsets and competencies for today and the future.

Source: United Nations Public Service Awards database

Case 5.16 UN DESA: global initiative focused on equipping public servants with the capacities to implement the SDGs

Through the initiative, UN DESA "is engaging with schools and institutes of public administration to mobilize and equip public servants for implementing the 2030 Agenda … as well as developing and updating their curricula to reflect the SDGs and the key principles and objectives of the 2030 Agenda. The overall purpose of the initiative is to develop the competencies public sector leaders and public servants require to effectively support the achievement of the SDGs.

Source: UN DESA, Building Capacity of Training Schools and Institutes of Public Administration for the SDGs (2019)

Quiz/exercises:

1. Who are the main capacity developers in your country? How could the capacity developers have an impact on digital government transformation?

2. Discuss what role of schools of public administration could play in your country and how they can help to promote digital mindsets in public sector.

5.7 ICT infrastructure, affordability, security and access

- **A robust ICT infrastructure is a critical enabling factor for effective digital government transformation.**
- **A robust ICT infrastructure can cope with the risks.**
- **A robust ICT infrastructure can increase connectivity.**
- **A robust ICT infrastructure should expand public access options.**

- **A big range of new technologies:**
  - ➢ Artificial intelligence (AI)
  - ➢ Chatbot
  - ➢ 3D printing technologies
  - ➢ Robots
  - ➢ Blockchain
  - ➢ Big data and analytics
  - ➢ Internet of Things
  - ➢ AR and VR
  - ➢ Cloud computing

> ## **Artificial intelligence (AI)**

✓ AI-powered technology has proven to be beneficial for the provision of health care services when emergency lines outpaced capacity.

✓ In **Indonesia**, the Government's Task Force for Research and Technological Innovation has been working on models to use AI to strengthen diagnostics by doctors in detecting the Coronavirus.

➢ Chatbot

- ✓ Chatbots have offered solutions in overcoming language barriers, accessing information and communicating with health practitioners.

[Case 5.17] Dubai: Rammas chatbot.

The Dubai Electricity and Water Authority (DEWA) is the first government organization in the emirate to use AI for direct, real-time interaction with customers. In 2017, DEWA launched Rammas, an online chatbot that can communicate with customers and respond to their queries in both Arabic and English.

Source: Dubai Electricity and Water Authority website

➢ **3D printing technologies**

✓ 3D printing technologies have been adopted to produce replacement valves for reanimation devices, and protective medical face shields to address the shortage.

✓ During COVID-19, Italy was one of the first countries to expand its production of valves through 3D printing technology developed by Italian engineers.

✓ The Austrian Government has been cooperating with the University of Technology Graz to produce 300 more protective masks and hospital gear items per day, which are urgently needed in hospitals and general practices.

➤ **Robots**

- ✓ Robots have been effective in providing security and sanitation, thus, reducing staff exposure to health risks.

- ✓ Governments are also using drones with similar technologies to monitor streets, deliver medical supplies or disinfect public spaces.

- ✓ In Oman, for example, the Royal Oman Police is using drones to instruct citizens and residents to stay at home and avoid stepping out unless it is absolutely necessary.

➢ **Blockchain**

✓ Blockchain is opening up a wide range of possibilities for smart services applications. The transformative potential of this technology is enormous.

✓ the United Arab Emirates developed the UAE Strategy for Artificial Intelligence and Emirates Blockchain Strategy 2021

✓ Saudi Arabia has an agreement with IBM to implement blockchain applications for government and commercial services.

✓ In 2018, Bahrain implemented Legislative Decree No. 54/2018 for the Issuance of Letters and Electronic Transactions, which provides a legal framework for the use of new technologies such as blockchain for government services.

> **Big data and analytics**

✓ Cities can use analytics to improve municipal policymaking and operations in a wide range of areas. Big data is produced from a variety of sources and is becoming critically important in the design and deployment of effective local government policies.

✓ Decision-making based on comprehensive real-time city data analysis allows municipal authorities to optimize public resources in a holistic manner.

Case 5.18 Hangzhou: real-time traffic management

Hangzhou manages its traffic through the analysis of big data. Millions of servers clustered together in a supercomputer analyse data points and use proprietary algorithms to manage traffic signals and improve traffic flows. Using analytics and artificial intelligence, the city's smart traffic system has helped reduce congestion, road accidents and crime.

Source: Du Yifei, People's Daily, 19 October 2017.

➢ **Internet of Things**

- ✓ "The Internet of Things is the concept of connecting any device (so long as it has an on/off switch) to the Internet and to other connected devices.

- ✓ The IoT is a giant network of connected things and people – all of which collect and share data about the way they are used and about the environment around them."

➢ **AR and VR**

✓ Immersive technologies such as AR and VR can provide users with engaging experiences and in the present context can improve municipal governance and the lives of visitors and local residents.

✓ These technologies are often mentioned in the context of promoting local tourism, as they can play an important role in attracting visitors, which bolsters the economy.

➤ **Cloud computing**

✓ Existing city infrastructure can be improved through increased reliance on cloud computing

✓ Offers local governments the opportunity to seamlessly implement new smart applications to improve data capture, strengthen predictive capacities, and enhance services provision—while also keeping costs down.

Case 5.19 Buenos Aires: cloud-based lighting management system

As the population of Buenos Aires has increased, so have energy consumption and CO_2 emissions. In an effort to rationalize energy use, local authorities installed a high-quality LED street lighting system supported by cloud-based lighting management software.

The system upgrade has affected 91,000 light points or 75 percent of the city lighting in Buenos Aires, saving 50 percent in operational costs and significantly reducing annual CO_2 emissions.

Source: Interact City

- A robust ICT infrastructure can cope with the risks.

- A robust ICT infrastructure can increase connectivity.

- A robust ICT infrastructure should expand public access options.

Case 5.20 China: embracing digital transformation

Chinese municipalities have been racing to set up their digital government portals.

The Shanghai Government Data Service Portal.

China is actively incorporating frontier technologies such as big data, AI and 5G into digital government to enhance the efficiency of public sector management and service delivery.

In 2020, the Government announced its intention to establish a government information resource sharing system using blockchain technology.

Social media applications have also been smartly utilized as digital tools to connect people, businesses and the Government.

Source: China, Report on the Work of the Government (2015)

Quiz/exercises:

1. Discuss the technology gaps and opportunities in your country by using the DGC assessment –TECHNOLOGY section.

2. How can frontier technologies contribute to digital government transformation?

Key messages

The key idea of this module is to help identify the capacities at different levels and find the proper models for different situations.

➢ **Identifying the capacities at different levels**

In different contexts, we need to practice different types of assessments. If we are to test an individual's performance and perceptions, the Individual Level Assessment is what we need. The difference between the organizational level and institutional level is whether there's party difference and groups. The societal level is easy to understand, which is to assess the response of the entire society. Also, there are analyses for stakeholders like developers, partners, and infrastructure.

➢ **Searching for the right tool**

For each different level to analyze, we've prepared assessment models respectively. Note that they are only some universal tools that fit certain scenes well. This doesn't necessarily mean that they are always the best choice. For real situations, we still recommend you compare and find the optimal model according to the specific question.

Key messages

- The digital government strategy and the road map for digital government transformation should be built around **key pillars**, and all targeted priorities should be addressed holistically. Governments must put in place an **institutional and regulatory ecosystem** for the deployment of digital government, employ **systems thinking and an integrated service model approach**, and establish a **central coordinating agency or mechanism** with budgetary autonomy to manage the implementation of the national digital strategy and transformation road map. Priority should be given to **recruiting and retaining the best talent** in a country, developing critical **mindsets**, and promoting **safe spaces** for experimentation.

- Another essential priority in digital government transformation is promoting **digital inclusion and ensuring that all people**, including vulnerable groups, can access **new technologies** and **e-government services** to improve their well-being.

Key messages

- Capacities that support effective digital government transformation are required at the **societal, institutional, organizational and individual levels**. Capacities for managing data, mobilizing resources, and ensuring adequate ICT infrastructure and the availability of affordable and accessible technology and high-speed connectivity are equally important.

- Digital capacities at the societal level—including **digital skills and competencies** but also the appropriate **values and norms**—are critical for the uptake and continued use of digital services and for sustained digital participation.

Quiz/exercises:

1. Summarize the challenges and opportunities at four levels and identify which entities should be responsible for addressing those challenges.

2. Develop an outline of strategy and roadmap for digital government transformation. Also outline the capacity development for your country at the institutional, organizational, individual, and societal levels.

3. Which civic group do you think is most vulnerable in your society? What is the digital divide in your country context and how to narrow it?

4. Do you think your country has a robust ICT infrastructure?

Lessons learned and reflections:

1. What are the strategy and roadmap needed?

2. What is an institutional ecosystem?

3. What are the most important traits of CIOs today?

4. What are growth and fixed mindset?

5. What are the mindsets needed for SDGs implementation?

6. What actions can the government take to help foster changing mindsets?

7. In general, who are vulnerable groups in society?

8. Who are capacity developers and how they can contribute to digital government transformation?

Capacities for Digital Government Transformation
Online Training Workshop - Chapter 5
Thank you

Agenda

Chapter 1 General introduction on the importance of promoting and accelerating digital government transformation for realizing the 2030 Agenda for Sustainable Development

Chapter 2 A holistic approach to digital government transformation

Chapter 3 Conducting a situation analysis to assess capacity gaps and opportunities in digital government transformation across all government levels and society

Chapter 4 Envisioning to advance digital government transformation for accelerating implementation of the Sustainable Development Goals

Chapter 5 Developing a strategy and roadmap for digital government transformation and capacity development

Chapter 6 Monitoring, evaluation, and improvement for digital government transformation

Chapter 7 Wrap-up of the whole program

Capacities for Digital Government Transformation

Online Training Workshop – Chapter 6

Chapter 6

Monitoring, evaluation and improvement for digital government transformation

The overall structure of Chapter 6

PHASE 4
7.6 Monitoring and evaluation

7.6.1 Why is continuous monitoring and evaluation needed?

7.6.2 How to conduct monitoring and evaluation?

7.6.3 Performance indicators for monitoring and evaluation

7.6.4 Summary

How far have we gone?

PHASE 4
7.6 Monitoring and evaluation

PHASE 3
7.5 Digital government transformation strategy and roadmap

Process of digital government transformation

PHASE 1
7.3 Situation analysis

How can we get there?

Where are we now?

PHASE 2
7.4 Future envisioning

Where do we want to go next?

● **6.1 Why continuous monitoring and evaluation needed?**

- Digital government is a journey and not a final destination, the continuous monitoring and evaluation of digital services is essential.

- An impact assessment methodology for evidence-based policymaking can help Governments evaluate progress in the medium term.

Case 6.1 Government of Scotland

In June 2008, the Government of Scotland updated its National Performance Framework to provide a unified structure for measuring sustainable, inclusive growth and the well-being of citizens.

Source: Scotland, National Performance Framework—what it is: an overview of the Framework

- **6.1 Why continuous monitoring and evaluation needed?**

- Keeping track of how digital government services are contributing to or can better contribute to the achievement of the SDGs is equally important.

- The essence of monitoring and evaluation is to track progress and measuring what is happening in relation to what was planned.

● **6.1 Why continuous monitoring and evaluation needed?**

Case 6.2 SDG Tracker

In 2018, the University of Oxford and the Global Change Data Lab launched the SDG Tracker to accurately monitor and measure progress towards the realization of each of the 17 Goals and related targets.

Source: SDG Tracker

- **6.1 Why is continuous monitoring and evaluation needed?**

- The overall structure and logic of monitoring and evaluation should be a part of cyclic process with arrows that goes "back" to the beginning.

● 6.1 Why continuous monitoring and evaluation needed?

Case 6.3 United Kingdom: The Digital Inclusion Evaluation Toolkit

The Digital Inclusion Evaluation Toolkit in the United Kingdom is a collection of resources designed to help any organization assess the impact of a digital inclusion project. The toolkit aims to enable teams to provide evidence on how successful a project has been at implementing change and show how a project could be improved or iterated to increase its impact.

Source: UK Digital Inclusion Evaluation Toolkit

The Digital Inclusion Evaluation Toolkit

This guide takes you through a four-stage process to carry out your evaluation. The four-stages are:

01 **PLAN YOUR EVALUATION**	Decide what information you need and how you are going to collect it
02 **COLLECT THE DATA**	Gather information on your project's success using surveys and other data collection tools. (Note that you need to collect baseline data before your project starts)
03 **ANALYSE THE DATA**	Find out what the data can tell you about how successful your project is and where you may need to improve
04 **USE THE DATA**	Prove and improve your project's success

● **6.2 How to conduct monitoring and evaluation?**

- Monitoring and evaluation are towards the realization of SDGs.

- Performance indicators can comprise both quantitative and qualitative.

- Multiple stakeholders should be involved in monitoring and evaluation.

● **6.3 Performance indicators for monitoring and evaluation**

- Based on tools that are mentioned in Module 3 - Digital Government Capability Assessment (DGCA) and Digital Government Readiness Assessment (DGRA)

- Checklist for the important indicators of monitoring and evaluation is designed.

Checklist for the important indicators of monitoring and evaluation

Dimension	Important Indicators
Leadership	Vision (SDGs; Effectiveness, Accountabilities and Inclusiveness)
	Policy
	Roadmap
Legal	Law and regulations
	Policies and procedures
Strategy	Integration and Interoperability
	Data
	Digital inclusion
	Standards

Checklist for the important indicators of monitoring and evaluation

Dimension	Important Indicators
Governance	Agency leaders
	CIOs
	Public servants
	Organization
	Culture
	Partnership
Technology	ICT infrastructure
	Access
	Cybersecurity
	Privacy
	Resilience

Checklist for the important indicators of monitoring and evaluation

Dimension	Important Indicators
User-centered Design (participation, inclusion, service delivery, user satisfaction)	Governments (different government ministries and agencies)
	Public servants (regulators, policymakers, chief data officers)
	partners (academia, experts, think tank, international organizations)
	private sectors
	vulnerable groups (the poor, women and girls, older persons, persons with disabilities, youth, migrants and refugees)
	Developers
Professional and Workforce Development	Training capabilities
	Digital mindsets
	Digital learning platform

Key messages

- Government capacity **for iterative feedback** is needed to ensure **continuous improvement**.

- Keeping track of how digital government services are contributing to or can better contribute to the **achievement of the SDGs** is equally important.

- The essence of monitoring and evaluation is to **track progress and measuring what is happening** in relation to what was planned.

- Digital government transformation can be understood as a **journey of constant improvement** in service of society's well-being, peace and prosperity.

Quiz/exercises:

1. What specific digital government services could contribute to the implementation of SDGs?

2. Discuss the potential challenges you might face when applying specific indicators, such as data availability and data quality. What measures could you take to mitigate these risks?

3. How would you evaluate the digital government transformation practices in your country?

Lessons learned and reflections:

1. Why is it necessary to undertake monitoring and evaluation?

2. What are the objectives of undertaking monitoring and evaluation for SDGs and stakeholders?

3. What are the indicators of monitoring and evaluation? What type of indicators do you prefer? Quantitative or qualitative? Why?

![United Nations — Department of Economic and Social Affairs]

Capacities for Digital Government Transformation
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Thank you

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Capacities for Digital Government Transformation

Online Training Workshop – Chapter 7

Chapter 7

Wrap-up of the whole programme

● **7.1 Action plan exercise**

- Develop an overall national plan of digital government transformation for your country,

- Including the situation analysis, vision, strategy, roadmap and monitoring and evaluation plan

- In line with SDGs in a holistic approach.

- # **Action plan: from thinking to action**
  - ## Trade-off between Value and Feasibility

Trade-offs between Value and Feasibility
RED is where most value probably lies

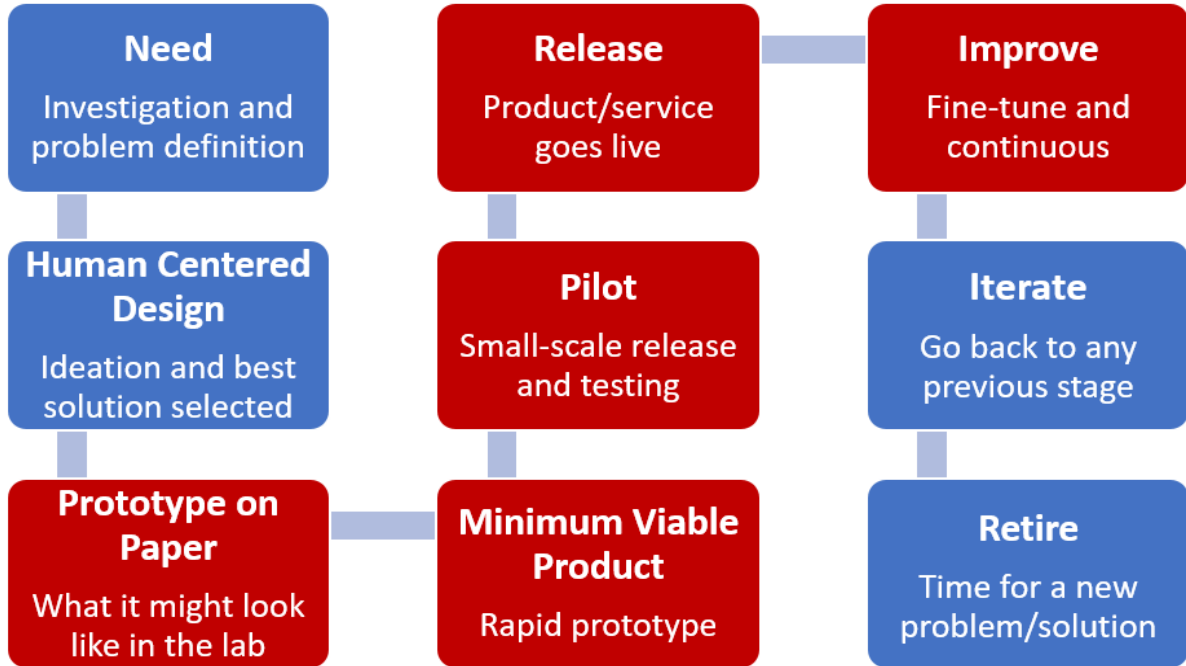|	**Low**	**High**
Easy	You should have already taken these actions.	You should be taking these actions now!
Difficult	You should postpone these actions.	You should seriously plan to make these actions happen soon.

FEASIBILITY

VALUE

- **Action plan: from thinking to action**

  - Besides Value and Feasibility, many other criteria often need to be considered, such as:
    - ➢ Impact on a specific set of people (and ensuring nobody is left behind).
    - ➢ Impact on trust and transparency.
    - ➢ Impact on learning.
    - ➢ Impact on culture.
    - ➢ Choices of timeframes for desired results.
    - ➢ … and many others according to case and context.

• Design thinking pathway to action

Need Investigation and problem definition	**Release** Product/service goes live	**Improve** Fine-tune and continuous
Human Centered Design Ideation and best solution selected	**Pilot** Small-scale release and testing	**Iterate** Go back to any previous stage
Prototype on Paper What it might look like in the lab	**Minimum Viable Product** Rapid prototype	**Retire** Time for a new problem/solution

• **Key Components of an Action Plan**

➢ Action Step: Each goal or objective needs a series of action steps with what needs to happen to achieve this goal.

➢ Responsibility: Whose job is it to perform this task? Who will support?

➢ Ownership: Who is responsible and accountable for ensuring good and timely completion and for corrective action if and when needed.

➢ Timeframe: Milestones and end date.

➢ Resources: Financial and other resources needed to complete this task.

➢ Key Performance Indicators (KPIs): Measurements of value to indicate how effectively you have achieved your goal.

➢ Information Sharing: A communication plan to keep people involved aware of what is happening all along.

● **7.2 Evaluation of the whole training**

- We've shared national initiatives and experiences from a good range of countries. We have also experimented with digital government transformation roadmap.

- What are the major takeaways have you learned from this toolkit?

- Which parts of this toolkit could be improved?

Capacities for Digital Government Transformation
Online Training Workshop - Chapter 7
Thank you