Chapter 11
Understanding Digital Government as a Paradigm Shift
This chapter helps public managers understand the shift of ICT paradigm toward digital government, which harnesses potentials of digital transformation. Learning from the best practices in Korea, public managers will discuss the directions of national strategies for digital government and develop doable strategies for digital transformation in the public sector. They also will discuss the imperatives of the developing world to actively involve in digital transformation.
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Objectives

- To understand the concept of digital transformation in the public sector
- To understand the trend of digital government transformation
- To understand digital government transformation strategies
- To understand digital government transformation in the context of developing countries
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Structure

1. Understanding Digital Transformation
2. Government Paradigm Shift to Digital Transformation
3. Digital Government Transformation Strategy
4. Digital Government Transformation in Developing Countries
1. Understanding Digital Transformation

Conceptualizing Digital Transformation (DX)

- Definition of Digital Transformation (Perspective of Technology Determinism)

**Meaning**

- The use of new, fast changing digital technology to solve problems (Wikipedia)
- The process of using digital technologies to create new (or modify existing) business processes, culture, and customer experiences to meet changing business and market requirements (executive-education-online.mit.edu/digital/strategy)
- The integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers (enterprisersproject.com › what-is-digital-transformation)
Definition of Digital Transformation (Perspective of Technology Determinism)

The profound transformation of business, organizational activities, processes, competencies, models to fully leverage the changes and opportunities of a mix of digital technologies and their accelerating impact across society in a strategic and prioritized way, with present and future shifts in mind (i-Scoop)
1. Understanding Digital Transformation

Definition of Digital Transformation (Perspective of Technology Determinism)

Fundamental rethinking of doing, thinking, and being of organizations to thrive in the digital age (CIOpages.com)
Definition of Digital Transformation (Perspective of Digital Government)

A [business → government] activity that enhances [a company’s → a government’s] competitiveness or pursues new growth, while responding to environmental changes triggered by digital technologies.
Definition of Digital Transformation (Perspective of Digital Government)

- Digital government (government in digital transformation) drawing from the processes of government adapting to digital innovation, even though digital transformation was mainly used in the industrial context to solve social problems by utilizing existing technology or new technology.

- Many countries pursuing digital government policies by newly establishing a governing body (ministry, committee, or agency) that oversees digital innovation.

Source: https://en.wikipedia.org/wiki/Digital_transformation
Chapter 11 | Understanding Digital Transformation

Definition of Digital Transformation (OECD, 2019)

- Digitization (of information)
- Digitalization (of industry and organization)
- Digital transformation (of society)

Wikipedia: The ‘technical process’ of converting analog information into digital form

OECD (2019): The conversion of analog data and processes into a machine-readable format

Source: Going Digital: Shaping Policies, Improving Lives (OECD, 2019)
1. Understanding Digital Transformation

Definition of Digital Transformation (OECD, 2019)

- **Digitization (of information)**
- **Digitalization (of industry and organization)**
- **Digital transformation (of society)**

**Wikipedia**

The ‘organizational process’ or ‘business process’ of the technologically-induced change within industries, organizations, markets and branches

**OECD (2019)**

The use of digital technologies and data as well as interconnection that results in new or changes to existing activities

Source: Going Digital: Shaping Policies, Improving Lives (OECD, 2019)
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1. Understanding Digital Transformation

Definition of Digital Transformation (OECD, 2019)

- Digitization (of information)
- Digitalization (of industry and organization)
- Digital transformation (of society)

Wikipedia

The total and overall societal effect of digitalization

OECD (2019)

The economic and societal effects of digitization and digitalization

Source: Going Digital: Shaping Policies, Improving Lives (OECD, 2019)
Definition of Digital Transformation (OECD, 2019)

Digitization (of information)

Digitalization (of industry and organization)

Digital transformation (of society)

“Today, an ecosystem of interdependent digital technologies underpins digital transformation and will evolve to drive future economic and societal changes.”

Source: Going Digital: Shaping Policies, Improving Lives (OECD, 2019)
2. Government Paradigm Shift to Digital Transformation

DX of the Public Sector (from e-Government to Digital Government, OECD)

- Progression towards the digital transformation of governments

Analog government
Closed operations and internal focus, analogue procedures

e-Government
Greater transparency and user-centered approaches, ICT-enabled procedures

Digital Government
Open and user-driven approaches, process and operational transformations

Transformative Shift from e-Government to Digital Government

What is Digital Government Transformation?

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2. Government Paradigm Shift to Digital Transformation

Four Paths toward Digital Transformation

- INNOVATION
- DIGITALIZATION
- DIGITAL TRANSFORMATION
- DIGITIZATION

Innovation is the process of creating value by doing the same things better.
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2. Government Paradigm Shift to Digital Transformation

Four Paths toward Digital Transformation

- INNOVATION
- DIGITALIZATION

Converting analog information into a digital format or platform
Four Paths toward Digital Transformation

INNOVATION

DIGITIZATION

DIGITALIZATION

DIGITAL TRANSFORMATION

The use of digital technologies to create new value-producing opportunities for massive changes of an entity.
Four Paths toward Digital Transformation

A journey of strategically planned organizational change to stay competitive or dominate the market by leveraging disruptive technologies
Key Drivers to Digital Transformation in Government

- These can make digital transformation happen

1. Strategy
2. Leadership
3. User Focus
4. Culture
5. Workforce Development
Key Drivers to Digital Transformation in Government

- These can make digital transformation happen

Have a roadmap to address all the key elements of digital transformation; then, develop a clear strategy that moves beyond efficiency to focus on fundamental transformation of citizen services.
3. Digital Government Transformation Strategy

Key Drivers to Digital Transformation in Government

> These can make digital transformation happen

A digitally sophisticated leadership team that understands new-age trends, technologies, and their benefits is a game-changer for an organization’s digital transformation.
Key Drivers to Digital Transformation in Government

- These can make digital transformation happen

A key tenet of digital delivery is to start with the user.

Develop engagement plans for users that “attract”, “engage”, and “extend”, and employ inherently user-centric agile development methodologies.
Key Drivers to Digital Transformation in Government

- These can make digital transformation happen

Build a culture that allows room for risk-taking, collaboration, and innovation. Also learn to employ digital trends and technologies to reinforce such a culture.
Key Drivers to Digital Transformation in Government

- These can make digital transformation happen

Digital skills go beyond mere technical ones. Look at new sources of talent and build a workplace that offers an experience in line with the aspirations of the Millennials.
OECD’s 9 Actions for Digital Transformation

1. Make the digital economy visible in economic statistics
2. Understand the economic impacts of digital transformation
3. Encourage measurement of the digital transformation’s impacts on social goals and people’s well-being
4. Design new and interdisciplinary approaches to data collection

3. Digital Government Transformation Strategy

OECD’s 9 Actions for Digital Transformation

5. Monitor technologies underpinning the digital transformation, notably the Internet of Things, AI and Blockchain

6. Improve the measurement of data and data flows

7. Define and measure skills needs for the digital transformation

8. Measure trust in online environments

9. Establish an impact assessment framework for digital governments

Why DX in Developing Countries?

- Countries have the agency to act

Government, civil society and the private sector should come together to craft a shared national vision

Everyone has a role to play in major economic transformation
Why DX in Developing Countries?

- Technology

- Technology will **not guarantee success**, no matter how innovative it is, just as important as new technology is the social and economic environment in which technology is used.

- Technology will almost always be a force for growth, but technology is not automatically a force for inclusion and without deliberate effort to include everyone, digital technologies can end up entrenching existing inequality.
Why DX in Developing Countries?

Digital transformation comes with opportunities for low and middle-income countries

1. Diversify their economies
2. Create new jobs
3. Transform agriculture
4. Improve health and education
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4. Digital Government Transformation in Developing Countries

DX Roadmap for Developing Countries

1. Craft a digital compact for inclusive development
   - Collaborate with the private sector and civil society to design a shared vision of the future, a holistic national digital strategy to manage technology for inclusive development

2. Put people at the center of the digital future
   - Prepare people for the digital age by giving them the right skills to meet the demands of a continually evolving digital economy
   - Empower citizens by publishing machine-readable data on government performance, investing in platforms for citizen involvement in decision-making
   - Build trust by establishing a secure, accountable, and responsible data governance regime

3. Build the digital essentials
   - Create foundational digital systems, including digital ID and digital payments, which are interoperable and easy for others to build upon
   - Nurture an enabling investment environment by improving the supply of bankable projects in local digital industries
DX Roadmap for Developing Countries

4 Reach everyone with digital technologies

- Use policy and regulatory levers to make internet access more affordable for the poor, for instance by reviewing spectrum broadcast licensing
- Create incentives for the private sector to design for inclusion, highlighting the importance of business models and products that are affordable and accessible

5 Govern technology for the future

- Take an adaptive and flexible approach to technology regulations, making sure regulations are right for the local context and leveraging data to inform regulatory decision-making
- Coordinate internationally with like-minded countries to ensure that technology governance is designed to meet the needs of developing countries
References

- https://www2.deloitte.com/