Digital Transformation in Local Government:
Leadership, Human Resources, and Organizational Structure
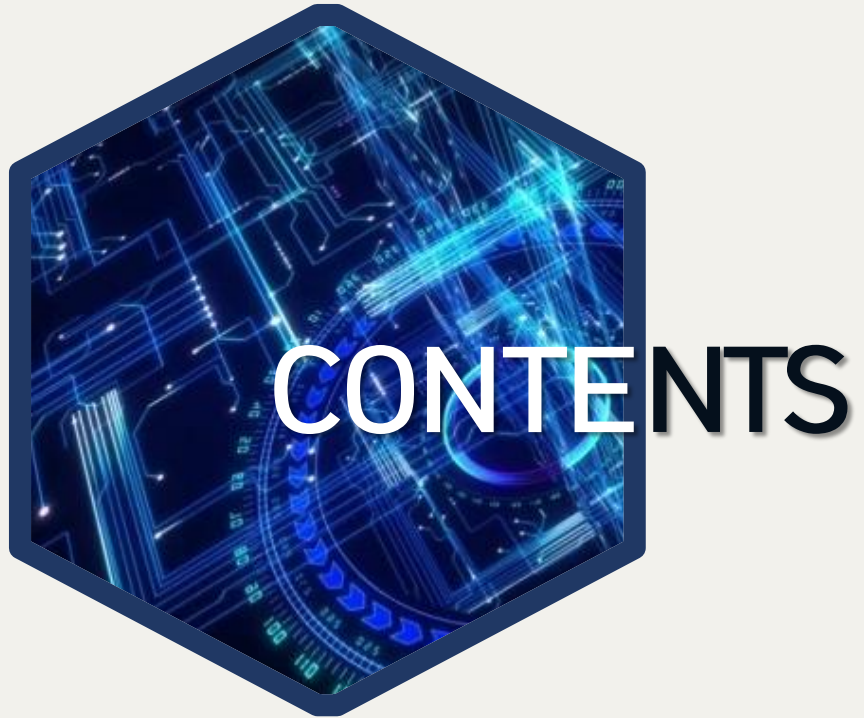
KRILA
Korea Research Institute for Local Administration

Kyung Eun, Lee

CONTENTS

Ⅰ. DT in Local Governments for SDGs

| SDGs and DT(1/2)|

➔ Progress on certain SDGs can be traced and correlated with ICT progress and Digital Transformation

| SDGs and DT(2/2)|

Goals

17

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

➔ Goal 17 seeks to strengthen global partnerships and means of implementation to achieve the ambitious targets of the 2030 Agenda through digital transformation

Ⅰ. DT in Local Governments for SDGs

Q. Why need DT in Local governments?

to adopt and utilize digital technology to simultaneously realize various public values such as transparency, fairness, equity, and effectiveness, and to localize SDGs.

to provide high-value public services to achieve SDGs in real-time based on new digital technologies that integrate diverse data.

--- | DT in Local Governments | ---

Q. What does DT in Local governments mean?

all new ways to **transform organizational processes** and **culture** driven by digital technologies and data, (1) to **collaborate with stakeholders around public value**, (2) to **build new frameworks for public service delivery**, and (3) to **create new relationships between citizens and local governments** (Mergel et al., 2019)

➔ *It must be understood at the organizational level and in terms of the entire interconnected region*

——— | Success Factors to DT | ———

Q. What are the DT success factors?

Internal Factors

- Innovators
- Leadership
- Strategic plans
- Resources
- ...

External Factors

- Stakeholders
- Governance
- Restrictions
- ...

KEY

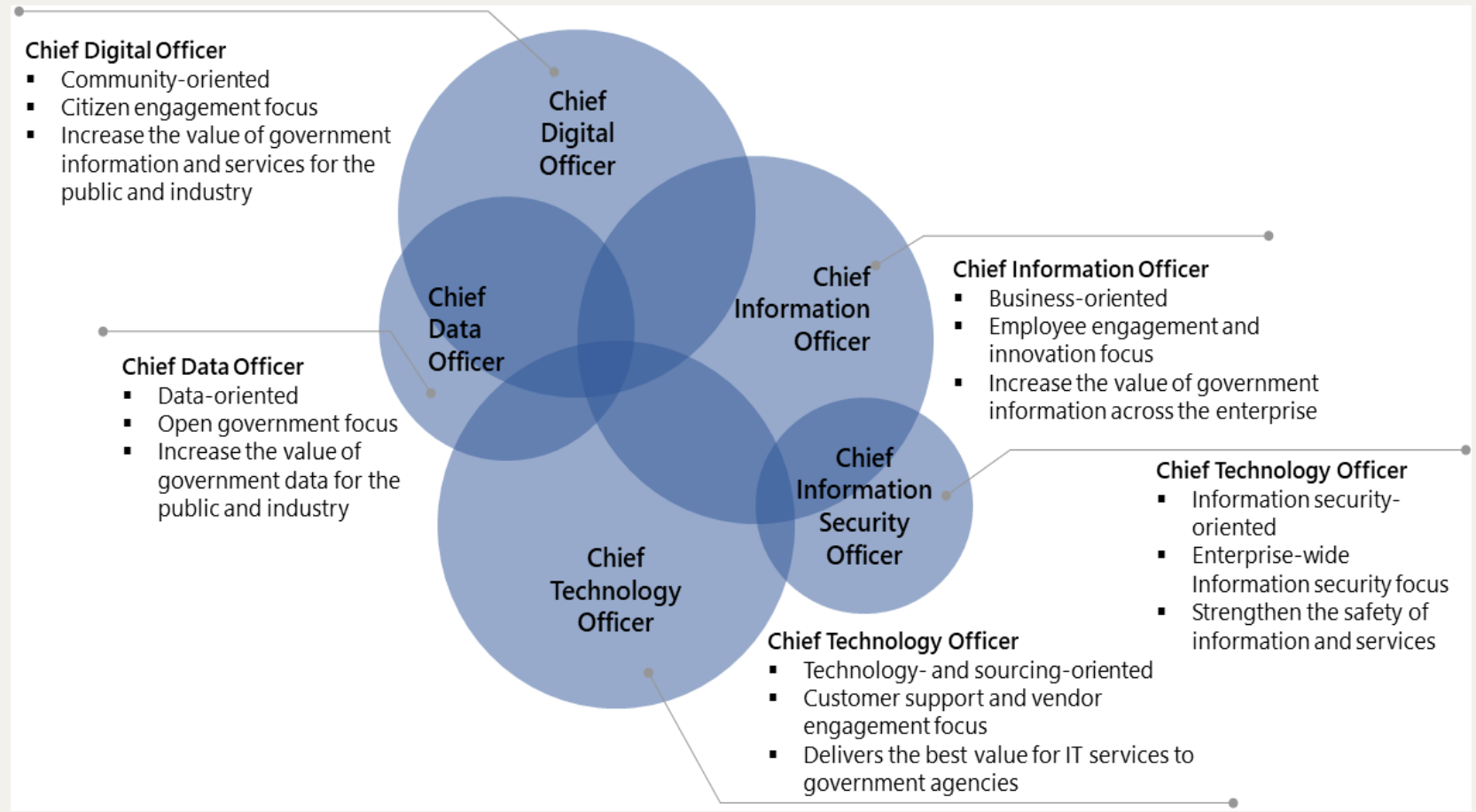*Digital Leadership, Digital Manpower, and Organizational Structure for DT*

II . Digital Leadership
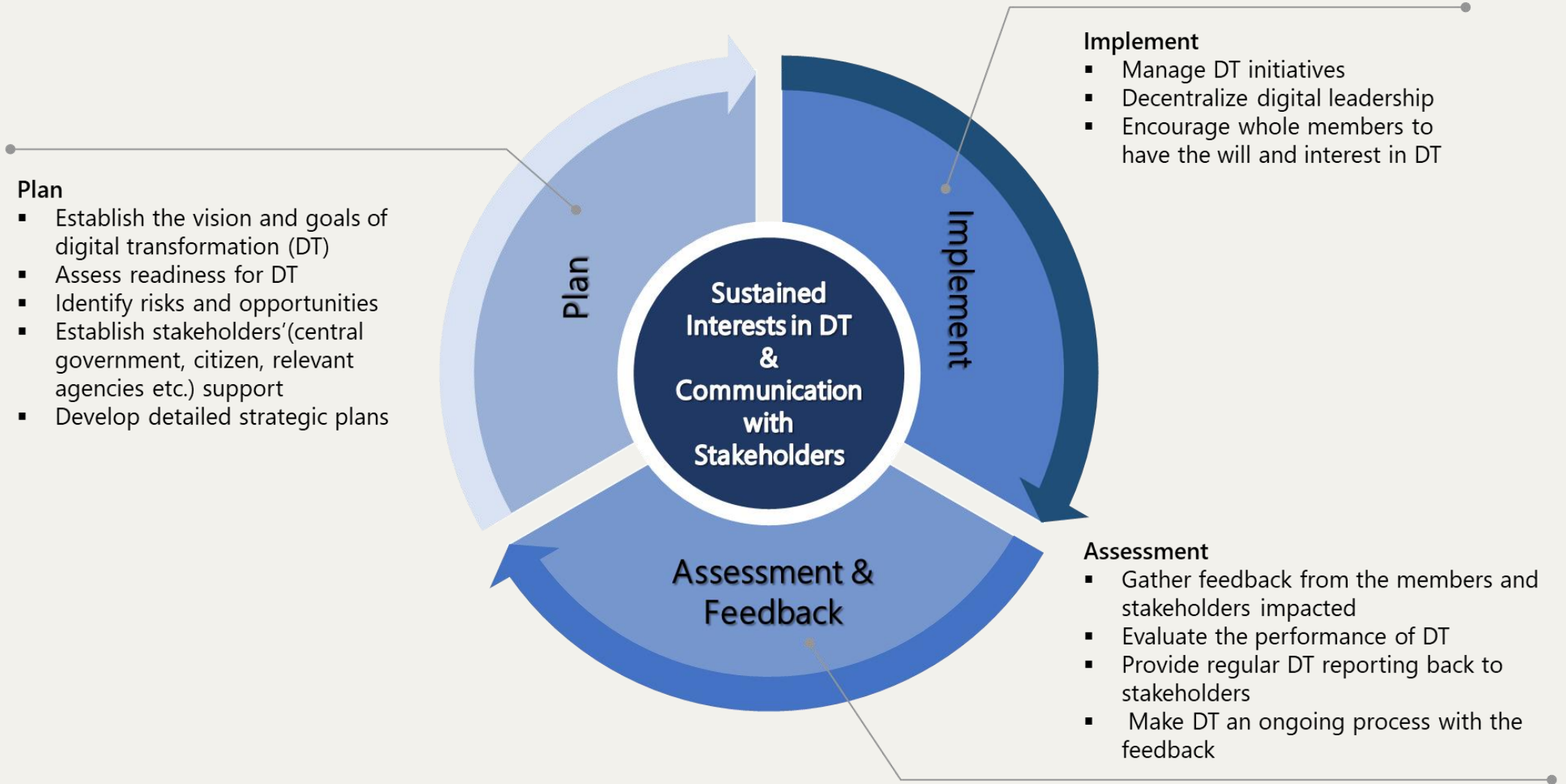
| Concept and Type of Digital Leadership|

Digital Leadership in Government is

the ability and the strategic use of governments' digital asset and technology to achieve public values.

| Types of Digital Leader Position

Chief Digital Officer
- Community-oriented
- Citizen engagement focus
- Increase the value of government information and services for the public and industry

Chief Data Officer
- Data-oriented
- Open government focus
- Increase the value of government data for the public and industry

Chief Information Officer
- Business-oriented
- Employee engagement and innovation focus
- Increase the value of government information across the enterprise

Chief Technology Officer
- Information security-oriented
- Enterprise-wide Information security focus
- Strengthen the safety of information and services

Chief Technology Officer
- Technology- and sourcing-oriented
- Customer support and vendor engagement focus
- Delivers the best value for IT services to government agencies

Chief Digital Officer
Chief Data Officer
Chief Information Officer
Chief Information Security Officer
Chief Technology Officer

| Role of Digital Leader in Local Governments |

Plan
- Establish the vision and goals of digital transformation (DT)
- Assess readiness for DT
- Identify risks and opportunities
- Establish stakeholders'(central government, citizen, relevant agencies etc.) support
- Develop detailed strategic plans

Implement
- Manage DT initiatives
- Decentralize digital leadership
- Encourage whole members to have the will and interest in DT

Assessment
- Gather feedback from the members and stakeholders impacted
- Evaluate the performance of DT
- Provide regular DT reporting back to stakeholders
- Make DT an ongoing process with the feedback

Plan

Implement

Assessment & Feedback

Sustained Interests in DT & Communication with Stakeholders

III. Digital Manpower

III. Digital Manpower

| Two Ways to Secure Digital Manpower |

Training & Education

- provide training and education programs related to digital innovation technology for civil servants at various positions within the government

Recruiting Experts

- recruit external experts into the government sector to help solve the government's lack of digital capabilities

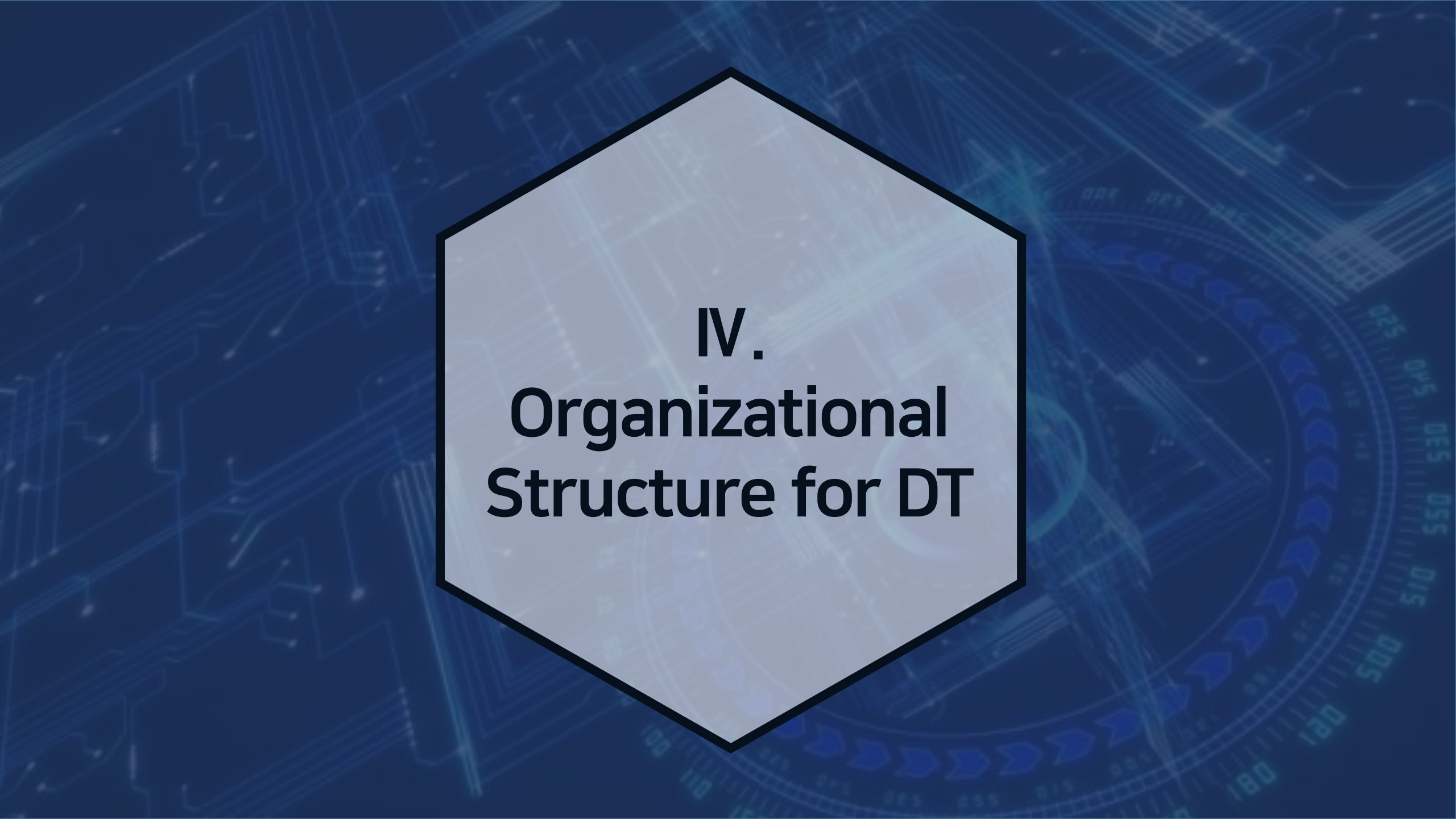# III. Digital Manpower

| Points in training and education programs |

- Skills to achieve the goals for today and the future

- Path to professional certification

- Cross-education with external groups

- Access to new digital technologies

- Benchmark best practices

- Customized training guides tailored to positions

III. Digital Manpower

| Digital Competencies Matrix |

Civil Servants Digital Competencies Matrix Model

Level	Competencies	Competencies nature	Managers	Assistants	Experts	Supporting Specialists
Basic	to use ICTs (e-mail, social networks, and mobile media) to communicate and exchange information	communication	✓	✓	✓	✓
	to work in a team through information communication channels	communication	✓	✓	✓	✓
	to work in interdisciplinary groups and projects	communication	✓	✓	✓	✓
	to follow the rules for filling out documents when working on projects with ICT	technical	✓	✓	✓	✓
	to apply data analysis in public administration, including large amounts of information analysis	technical	✓	✓		
	to apply general knowledge of working with a personal computer (office software)	technical	✓	✓	✓	✓
	to use antivirus programs	technical	✓	✓	✓	✓
	to act in accordance with the transparency and accountability principles	technical	✓			
	to use different sources to find the necessary information for solving professional tasks	technical	✓	✓	✓	
	to understand the state bodies informatization specifics in accordance with industry characteristics	technical	✓	✓	✓	
	to assume responsibility for the management of public resources, including information and technology assets	technical	✓	✓	✓	
	to understand the social networks use legal and regulatory aspects	technical	✓	✓	✓	✓
	to be able to apply the legislation on the protection of personal data during working process	management	✓	✓	✓	
	to perform universal functions for the EP services provision to interested citizens and commercial organizations	management	✓	✓	✓	
	to have skills in working with security protocols	management	✓	✓	✓	✓
Advanced	to monitor changes in information systems and adapt to them professionally	management	✓	✓	✓	
	to be able to establish communication with various categories of citizens and legal entities	communication	✓	✓	✓	✓
	to create processes based on information and communication technologies	technical	✓	✓	✓	
	to actively use ICT to solve complex applied problems	technical	✓	✓	✓	
	to coordinate the employees actions with the help of special software	management	✓	✓		
	to be able to systematize and verify the received data using ICT tools	management	✓	✓	✓	
	to apply digital technologies in working with the public procurement and contracts system	management	✓	✓	✓	

Civil Servants Digital Competencies Matrix Model

Level	Competencies	Competencies nature	Managers	Assistants	Experts	Supporting Specialists
Advanced	to plan and control key processes based on information and communication technologies	management	✓	✓	✓	
	managing risks and organizational changes associated with the use of ICT	management	✓	✓		
	to consistently manage all e-government components development, i.e. data, processes, regulatory framework, technical infrastructure and personnel	management	✓	✓		
	to work as a team in a multi-disciplinary data group empowered to develop new technologies	management	✓	✓	✓	
	to participate in the feasibility of introducing new technologies and initiatives assessment in the service in the field of ICT	management	✓	✓	✓	
	to realize the need for continuous professional development in the information and communication technologies field	management	✓	✓	✓	
	to implement ICT in the personnel management system	management	✓	✓	✓	
Special	To understand cloud technologies and their advantages	technical	✓	✓		
	to participate in the public administration new technologies development	technical	✓	✓		
	to have professional computer skills (to work with specialized software)	technical	✓	✓		
	to manage the ICT projects implementation	management	✓	✓		
	to know modeling on the IT technologies basis	management	✓	✓		
	to optimize business models in the e-government system	management	✓	✓		
	to simulate key administrative processes for the information analysis purpose	management	✓	✓		
	to solve the ICT implementation problems in various ways, including creative ones	management	✓	✓		
	to adapt digital innovations to their work functions and the service delivery technologies development	management	✓	✓		
	to identify the public administration systems innovative development reserves and design the strategic development directions	management	✓	✓		
	to formulate the information technology challenges faced by organizations and their impact on results	management	✓	✓		
	to understand how to hire, select, and manage IT consultants and staff	management	✓	✓		

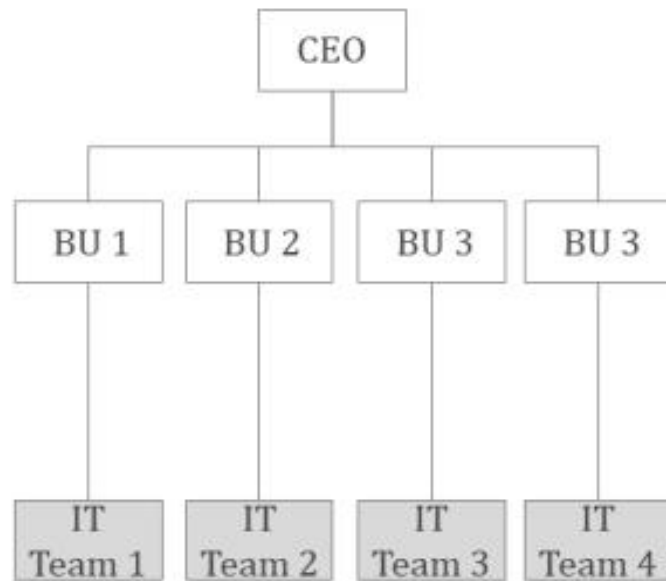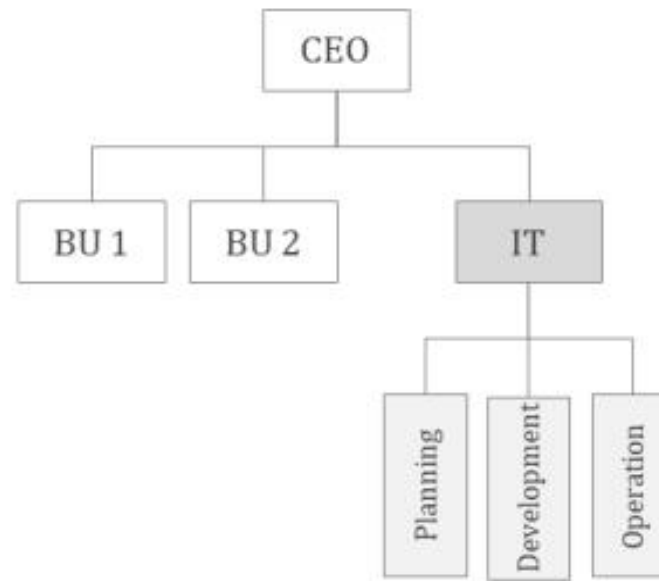# IV. Organizational Structure for DT

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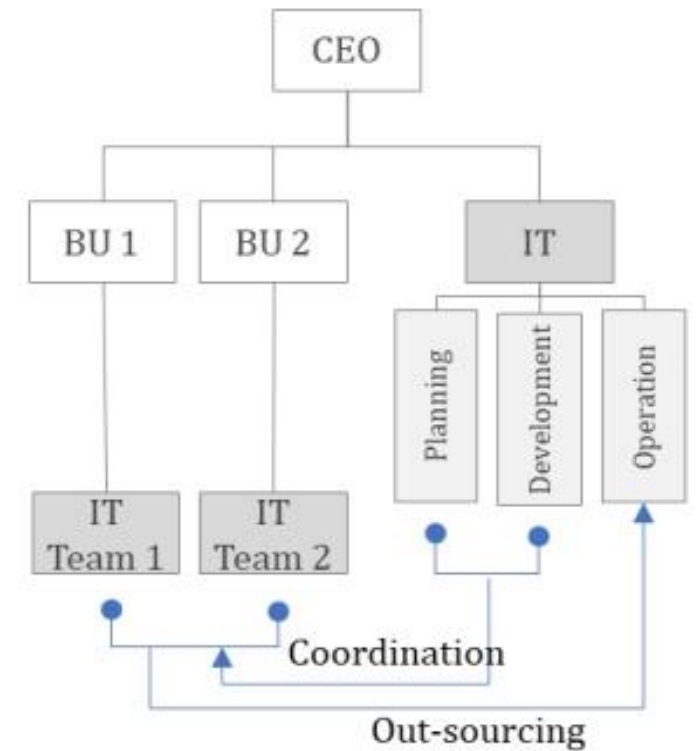
| Three Types of Digital Organizational Structure|

| Decision of Digital Organizational Structure|

Q. Which type of organization would be appropriate?

Although the decentralized structure can guarantee the diversity and creativity of digital innovation policies, in case of lack of capacity, it is required to maximize resources and capability through choice and concentration.

➔ Therefore, an integrated structure such as a centralized or federal structure is regarded as more appropriate rather than a decentralized structure for the digital organization of local governments.

V. Conclusion

Ⅴ. Conclusion

Local government's digital transformation is regarded as a key to achieve the SDGs in a local level.

In the era of digital transformation, local governments must prepare to adopt more sophisticated and advanced technologies as well as actively and preemptively use them.

Managing leadership, human resources, and organizational structure of local governments to fit into the digital age would be the first step towards a successful digital transformation and achievement of the SDGs.

Thank you!