Policy Advices for the Success of Digital Platform Government in South Korea

¹Sen Zhan, ^{2*}Choong-Sik Chung

Abstract

South Korea is now recognized as a world leader in the field of digital government thanks to a president who had insight in the field of e-Government more than 20 years ago. Today, many countries around the world are establishing various strategies to cope with the great digital transformation beyond the industrial society and the information society. The Korean government is also establishing and promoting digital government policies to respond to such a global digital transformation.

In South Korea, the digital platform government policy began in 2022. Therefore, it is an early stage of policy formation, and many details are not well known yet. Recently, the Korean government announced the vision, three goals, and five strategies for realizing a digital platform government. And specific digital platform government projects that can be implemented are selected. In order to successfully implement a digital platform government, the following three policies should be prioritized.

First, the digital platform government should be approached from the perspective of total government innovation, not industry revival. Second, the political perspective should be excluded from ICT policy. Third, the vision and strategy of the digital platform government should be established and clearly presented to the public. And based on this, strong governance should be formed and strongly promoted centered on the leadership of the president.

Keywords: Digital Transformation, Digital Government, Digital Platform Government, Electronic Government, Digital Governance, Presidential Leadership.

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¹PhD. Researcher. Department of Public Administration, Henan Academy of Social Sciences, China. 228569986@ag.com

^{2* Corresponding Author} Professor, Dept. Public Administration. KyungSung University, Korea, cschung@ks.ac.kr

I. Introduction

Today, South Korea is recognized worldwide as a global leader in the field of e-Government. This is because South Korea ranked first in the world three times in a row in 2010, 2012 and 2014 in the past UN e-Government Evaluation Survey [1, 2, 3]. However, while South Korea is now settling for the e-government of the past, many countries, including Denmark and the UK, are recognized as leading countries in the field of digital government. In the recent UN e-Government Evaluation Survey, Denmark ranked first in the world in 2018 and 2020 consecutively [4, 5].

The UK and Denmark have established and implemented national digital strategic plans since the mid-2010s [6, 7, 8]. As such, many countries around the world today are promoting the transition to digital government in order to preemptively respond to environmental changes in the new future digital transformation by utilizing 'Information and Communication Technology (ICT)' and intelligent information technology, which are rapidly developing.

This digital government is not an extension of the e-government of the past, but requires a completely new approach strategy. In this way, when e-government is converted to digital government, all services can be used by providing information once, and all services are provided digitally. In particular, in the rapidly changing age of intelligent information technology, the government must have the ability to effectively discover, plan, build, and operate various digital government services to meet technological and environmental changes and user requirements.

The Korean government is also establishing and promoting digital government policies to respond to such a global digital transformation [9, 10]. In particular, the new government that came to power in 2022 presented the implementation of a digital platform government as one of the national agendas [11].

In this paper, success factors are derived by analyzing the contents and implementation process of the digital platform government policy of the Korean government, and policy advices are made based on this.

II. The advent of the digital transformation era

2.1. The meaning of digital transformation

Today, many countries around the world are establishing various strategies to cope with the great digital transformation beyond the industrial society and the information society. This digital transformation is currently being interpreted and defined in various meanings.

Digital transformation can be defined in a variety of ways, but generally refers to transforming a service or business that relied on existing digital or analog technologies using completely new digital technologies. Changes in technology and its application are always happening on a daily basis, but the expression 'digital transformation' is not just a replacement for technology, but also implies innovation and creation that cuts off from the past.

In addition, digital transformation is a phenomenon in which a complete change in production, consumption, and distribution patterns using digital technology spreads throughout the economy and society, but is defined in various ways depending on the individual level, the organizational (company) level, and the social level.

According to the OECD definition in 2019, Digitisation is the conversion of analogue data and processes into a machine-readable format [12]. Digitalisation is the use of digital technologies and data as well as interconnection that results in new or changes to existing activities. Digital Transformation refers to the economic and societal effects of digitization and digitalisation. Today, an ecosystem of interdependent digital technologies underpins digital transformation and will evolve to drive future economic and societal changes.

As of 2022, eight of the world's top 10 companies are digital-related companies. Therefore, companies that cannot adapt to the digital transformation are disappearing, and only those companies that can properly respond to the digital transformation are developing.

Originally, Digital Transformation is defined as a business activity that enhances a company's competitiveness or pursues new growth while responding to environmental changes triggered by digital technologies such as mobile, cloud, big data, AI and Internet of Things(IoT). However, although Digital Transformation was mainly used in the industrial context, in order to solve social problems by utilizing

existing technology or new technology, the concept of Digital Government was derived from the process of government adapting to digital innovation. As a result, many countries around the world are pursuing digital government policies by newly establishing a ministry that oversees digital innovation [13].

2.2. Government changes in the era of digital transformation

Likewise, in the field of government, e-government, which was applied to the existing information society, is rapidly changing to digital government in order to respond to the digital age. According to the data of the OECD in 2014, the government has developed as shown in Figure 1 in response to the development of ICT [14].

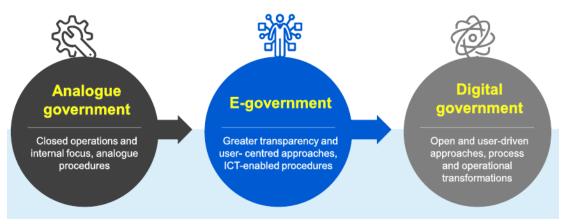


Figure 1. Government changes in the era of digital transformation

III. What is Digital Platform Government?

3.1. From e-Government to digital government

This change from e-government to digital government, as shown in Table 1, shows a big difference in various fields, from its core values to the technology used [15]. First of all, the biggest difference is the development of applied technology. Unlike the information and communication technologies of the past, the use of big data and artificial intelligence technologies is highlighted in digital government. Furthermore, by using these technologies, it is possible to provide personalized services and preemptive services that were difficult to try in the past. And in this process, the most important emphasis is on the role of citizens. In the past, e-government simply emphasized citizen participation through government-led projects. However, in digital government, a citizen-led & driven perspective is emerging beyond citizen participation.

| Electronic Government | | Digital Government |
|--|-------------|--|
| StreamingOptimizingProvide personalized service | Core Value | Digital Transformation Establish governance (openness, transparency, citizen participation) |
| Utilizing digital technology for efficient national administration | Contents | Digital transformation to all areas of society using digital technology to reflect user demand |
| Service based approach | Perspective | Data based approach |
| Electronic service delivery | Scope | Service delivery and application |
| Citizen and consumer oriented Consumer involvement in service delivery | Citizen | Citizen and consumer Driven Citizen participates in policy making process |
| • www | Technology | Al, IoT, Cloud Computing & Big Data |
| Ensure interoperability Support organization integration | Task | Management system change Digital Governance |

Table 1. Comparison between e-Government and Digital Government

3.2. Definition of the concept of digital platform government

The concept of digital platform government can also be defined in various ways. First of all, in a microscopic approach, it refers to the functions of all digital administrative services that create new services by accessing the platform built by the government and increase the added value of users who use them.

Then, from a macroscopic point of view, it seeks to realize intelligent science administration based on prediction and analysis by sharing and integrating all data not only from the government, but also from businesses and civil society. And based on this, it means a governance-type government that provides personalized and inclusive total services to the people in one place, and aims to solve national social problems through the participation and cooperation of the private sector [16].

Such a digital platform government means a paradigm shift in government operation. From this perspective, the definition of digital platform government should be understood as an evolved model of digital government and a shift in national governance that focuses on strengthening the role and function of government as a platform.

IV. Digital Platform Government Promotion Plan in South Korea

In South Korea, the digital platform government policy began in 2022. Therefore, it is an early stage of policy formation, and many details are not well known yet. However, based on the recent announcements, it can be summarized as follows.

4.1. Main processes of digital platform government policy

The Yun Suk-yeol government, newly launched in May 2022 in South Korea, announced the implementation of a digital platform government as a pledge during the presidential election campaign. Specifically, in early January 2022, then-Presidential candidate Yoon Suk-yeol made a pledge to implement a digital platform government if he came to power. Then in February 2022, the implementation of a digital platform government was adopted and announced as an official pledge of the party. At that time, the slogan was "We will create a digital platform government of the Republic of Korea that serves smartly and fairly".

Then, after he was elected president in March 2022, the Digital Platform Government Task Force was established under the Presidential Transition Committee. In this digital platform government task force, Korea's digital platform government policy was specifically established.

Then, in May 2022, in line with the inauguration of the 20th president of South Korea, the 110 major national agendas of the new government were announced. Among the 110 national agendas of the Yun

Suk-yeol government, the 11th is "realization of the world's best digital platform government where all data is connected".

4.2. Main contents of digital platform government policy

Among the 110 national agendas announced by the Yun Suk-yeol government on May 3, 2022, the details related to the implementation of the digital platform government are as Table 2 follows [17].

Division Contents Vision The world's best digital platform government where all data is connected Goals Comfortable People, Innovative Companies, Scientific Government ① Promotion of the innovative 'People's Experience Leading Project' that allows the public and companies to experience the improvement effect in a short period of time 2 Implementation of 'Preemptive First Public Service' so that anyone can use it easily, in one place, and at once 3 Reorganize the working method of public officials, who have relied on customs and Major **Strategies** experiences, into 'Artificial intelligence/Data-based Scientific Government Operation' the government provides data and core functions as a platform and the private sector creates creative services ⑤ Guaranteeing a 'Safe and Reliable Environment for Use'

Table 2. Details related to the digital platform government

As such, the Yun Suk-yeol government announced the vision, three goals, and five strategies for realizing a digital platform government. And specific digital platform government projects that can be implemented are selected.

As digital platform government projects to be promoted in the future, real estate transactions using electronic contracts and customized public services through the sharing and utilization of pangovernment data were presented.

In addition, the government plans to promote data-based government operation by expanding the openness of public data, disseminating My Data, and improving the public informatization business system.

4.3. Legal system and governance for digital platform government policy promotion

As of July 1, 2022, the Korean government enacted the regulations on the establishment and operation of the Digital Platform Government Committee as Presidential Decree No. 32750. Based on this, the Korean government established the Digital Platform Government Committee under the leadership of the President. First of all, the contents of the regulations related to the Digital Platform Government Committee are as follows [18].

Article 1 (Purpose:) This regulation is based on a digital platform that integrates, links, and analyzes various data using technologies such as artificial intelligence, to solve social problems and create new values for the people, businesses, and the government together. The purpose of establishing a digital platform government committee is to stipulate necessary matters for its composition and operation, etc.

Article 2 (Installation and Functions) ① In order to efficiently deliberate and coordinate matters related to major policies, etc. for the realization of the digital platform government, the Digital Platform Government Committee (hereinafter referred to as the "Committee") is established under the jurisdiction of the President.

- 2) The committee deliberates and coordinates the following matters:
- 1. Basic direction for the implementation of digital platform government

- 2. Matters concerning the establishment, change and implementation of national strategies for the realization of digital platform government;
- 3. Matters concerning the coordination, evaluation, and support of major policies and projects of central administrative agencies, local governments and public institutions for the realization of digital platform government;
- 4. Matters concerning the inspection of the implementation status of policies, etc. for the implementation of digital platform government
- 5. Matters concerning cooperation between the private sector and the government and vitalization of private participation for the realization of digital platform government and establishment of the foundation for digital innovation industry
- 6. Matters concerning the establishment and operation of core infrastructure for the implementation of digital platform government
- 7. Matters concerning the innovation of the government's working method for the realization of digital platform government
- 8. Matters concerning the management and operation of digital government, such as support for scientific policy decision-making using artificial intelligence and data;
- 9. Matters concerning the provision of innovative public services for the realization of digital platform government
- 10. Matters concerning the opening, linking, and utilization of data and technical processing for the realization of digital platform government
- 11. Matters related to regulatory innovation for the realization of digital platform government, enactment and revision of laws and regulations, and improvement of systems
- 12. Matters concerning securing budget for the implementation of digital platform government
- 13. Matters concerning the enhancement of digital capabilities of public officials and citizens
- 14. Matters concerning securing safety and reliability, such as safe use of personal information by the digital platform government
- 15. Matters concerning education, research, investigation and monitoring for the implementation of digital platform government
- 16. Matters concerning the creation of an environment for the provision of digital platform government services without discrimination
- 17. Matters concerning the prevention and resolution of problems arising from the implementation of the digital platform government
- 18. Matters concerning the formation of public consensus on the implementation of digital platform government and the spread of its use
- 19. Matters concerning international cooperation and overseas expansion for the realization of digital platform government
- 20. Other matters related to the implementation of digital platform government, which the President deems necessary to advise the Committee or which the Chairman of the Committee deems necessary
- Article 3 (Composition) ① The committee shall be composed of no more than 30 members, including one chairperson.
- ② The members of the Committee shall be the following persons. In this case, gender shall be considered when appointing the members under subparagraph 2.

- 1. The Minister of Strategy and Finance, the Minister of Science, Technology and Information and Communication, the Minister of Public Administration and Security and the Chairman of the Personal Information Protection Committee
- 2. A person appointed by the President (hereinafter referred to as "commissioned member") as a person with abundant expertise and experience for realizing a digital platform government
- 3 The chairperson of the committee (hereinafter referred to as the "chairperson") shall be a person designated by the president from among the commissioned members.
- ¶ In order to support the work of the committee, one secretariat member shall be appointed to the committee, and
 the secretariat member shall be appointed by the chairperson from among the members.

The Digital Platform Government Committee is an organization directly under the president, and since it is composed of ministers of many ministries, the status of the organization is quite high. In addition, it has a wide range of work areas ranging from the implementation of digital platform government to the creation of the foundation and ecosystem of the digital innovation industry.

As of the end of August 2022, the Korean government has appointed a chairperson and is currently selecting civilian members. Then, on September 2nd, the Digital Platform Government Committee was officially launched. The committee included government members, including the Ministry of Strategy and Finance, the Ministry of Science and ICT, the Minister of Public Administration and Security, and the Chairman of the Personal Information Protection Committee. In addition, 19 experts with extensive experience in digital technology, public administration, and industrial ecosystem participated as private members. The committee is composed of six sub-divisions: ① artificial intelligence and data, ② infrastructure, ③ service, ④ innovation of working methods, ⑤ industrial ecosystem, and ⑥ information protection.

V. Success factors of digital platform government

Governments in every country in the world want to be successful. But historically, it is true that governments in many countries are more likely to fail than to succeed. Therefore, for one government to succeed, it will be more realistic to learn from failures than from success stories of other governments.

The Korean government has also promoted various e-government projects and digital government projects during the past government era. In this process, the Korean government also experienced both successes and failures [19]. Therefore, the success factors derived from the historical experience of the Korean government's digital government projects can be summarized as follows [20].

5.1. President's leadership

The first is the leadership of the president. Now, the projects of e-government and digital government are being developed as convergence projects of several ministries, going beyond the single ministries of the past. Therefore, from this point of view, it is most important for Korea to secure the leadership of the president while promoting digital platform government policies [21].

In the process of implementing ICT policies, the leadership of the president appears through two major stages. The first is for the president to express interest in ICT policy. As such, if the president recognizes the importance of ICT policies and shows continuous interest in them, ICT policies can naturally be elevated to the presidential agenda and promoted.

5.2. Delegation of authority

The second step is the delegation of authority. This is because no president of any country can have deep expertise in ICT, so it is necessary to hand over authority to experts. In other words, it is necessary for the president to designate a national Chief Information Officer (CIO) or a national Chief Digital Officer (CDO), transfer the authority of ICT policy, and empower experts.

The second success factor is the establishment of strong governance. In order to promote digital platform government, it is necessary to establish whole-of-government governance that can exercise strong coordination among various ministries. Currently, in Korea, a committee to promote the digital platform government has been formed under the direct control of the president. However, even in the past governments, there have been cases in which the presidential committee failed to exert its coordination power properly, so a plan must be prepared to establish the status of the organization.

In order for the governance that promotes the digital platform government policy to gain strength, it is necessary for the president to attend meetings frequently, listen to the current status of policy implementation and give instructions to the ministers of relevant ministries. Especially in the case of countries like Korea where the culture of the imperial presidential system still remains, the participation of the president is even more essential.

5.3. Clear vision & goals

Third, a clear vision and goals should be set for policy implementation. And in this process, specific projects should be defined. The tasks of the 4th Industrial Revolution Committee attempted by the Korean government in the past failed because they did not set clear goals [22]. The reason was that the goals and tasks of the 4th industrial revolution were pursued centered on industrial promotion, not government innovation. The Government 3.0 policy, which was promoted by the Park Geun-hye administration in the past in Korea, also failed due to the ambiguity of the concept.

VI. Policy Advices for Success

The current digital platform government policy in Korea also has the same dilemma. If the focus is on the promotion of the digital platform industry as in the past, the policies of the digital platform government are also highly likely to fail. The introduction and use of digital technology is in itself a means, not a goal. In particular, in the promotion of digital platform government, the participation and initiative of the private sector is essential rather than the role of the government. Therefore, if government-led policies are implemented as in the past, success will not be achieved.

In order to successfully implement a digital platform government, the following three policies should be prioritized.

First, the digital platform government should be approached from the perspective of total government innovation, not industry revival. Until now, digital government projects have been promoted in a technology-oriented way. However, the digital platform government should focus on innovating administration by using artificial intelligence and big data as means.

Second, the political perspective should be excluded from ICT policy. South Korea is now recognized as a world leader in the field of digital government thanks to a president who had insight in the field of e-Government more than 20 years ago [23]. However, since Korea implements a five-year single-term presidential system, it is unable to maintain policy sustainability due to the change of government between the Conservative and Progressive parties. Therefore, the policies of the digital platform government should be continuously pursued, inheriting the policies of the previous government, regardless of the ideology and power of the political party.

Third, the vision and strategy of the digital platform government should be established and clearly presented to the public. And based on this, strong governance should be formed and strongly promoted centered on the leadership of the president. In this process, it is necessary to choose a method in which citizens and businesses actively participate rather than the government-led method as in the past.

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Authors



Sen Zhan

2017: MA Business Administration. Pukyong National University, Korea 2021: Ph.D. Dept. Public Administration. KyungSung University, Korea

2022 : PhD. Researcher. Department of Public Administration, Henan Academy of Social

Sciences, China.

Research Interests: Smart City, Digital Government, Information Policy.



Choong-Sik Chung

1992: MPA Sungkyunkwan University.

1997: Ph.D. Dept. Public Administration. Sungkyunkwan University

1998-2022: Professor, Dept. Public Administration. KyungSung University, Korea

Research Interests: Electronic Government, Digital Government, Digital Governance