

Digital Transformation in the Constitutional Court of Korea: Intelligent Constitutional Court System

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1. Introduction

Distinguished participants, I am Jongmun Park, Secretary General of both the Constitutional Court of Korea and the AACC Secretariat for Research and Development (AACC SRD).

It is a great honor for me to be invited as a speaker for the International Short Course. I would like to extend my gratitude to the Constitutional Court of Indonesia including President Anwar Usman and the Secretary General Heru Setiawan for giving me this opportunity.

Although the topic of this session could be discussed extensively, my presentation will focus on sharing the actual experiences of the Constitutional Court of Korea.

Digital transformation is the process of innovating traditional social structures by building and utilizing information and communications technology (ICT) as a platform. Our Court is also witnessing “the cultural change in systems and institutions brought about by digital technologies.” I would like to elaborate on these changes by introducing you to a series of tasks our Court has undertaken under a project that we call the “Intelligent Constitutional Court System.” In the later part of the presentation, I will briefly touch on its relationship with democracy and judicial independence in this context.

2. Digital Transformation at the Constitutional Court of Korea

1) History of Informatization Tasks

Before delving into the “Intelligent Constitutional Court System” project, I would like to give you a brief overview of the history of informatization tasks carried out by the Constitutional Court of Korea. Our Court first launched its official website in 1998 and began to pursue informatization in 2002. Please refer to the diagram for more details.

What is most notable is Period 3 of building the **Constitutional e-Court system**. The system has been available since 2010, enabling citizens to file complaints online, check the documents serviced and access case records. Currently, over 50 percent of all cases are filed in electronic format.

<Development Stage of Informatization in the Constitutional Court of Korea>

Period 1 (2002-2003): Building “Constitutional Adjudication Management System”

Period 2 (2004-2006): Building “Integrated Data Search System”

Period 3 (2007-2009): Building “Constitutional e-Court System”

Period 4 (2010-2015): Enhancing cyber security including the establishment of “Cyber Security Center”

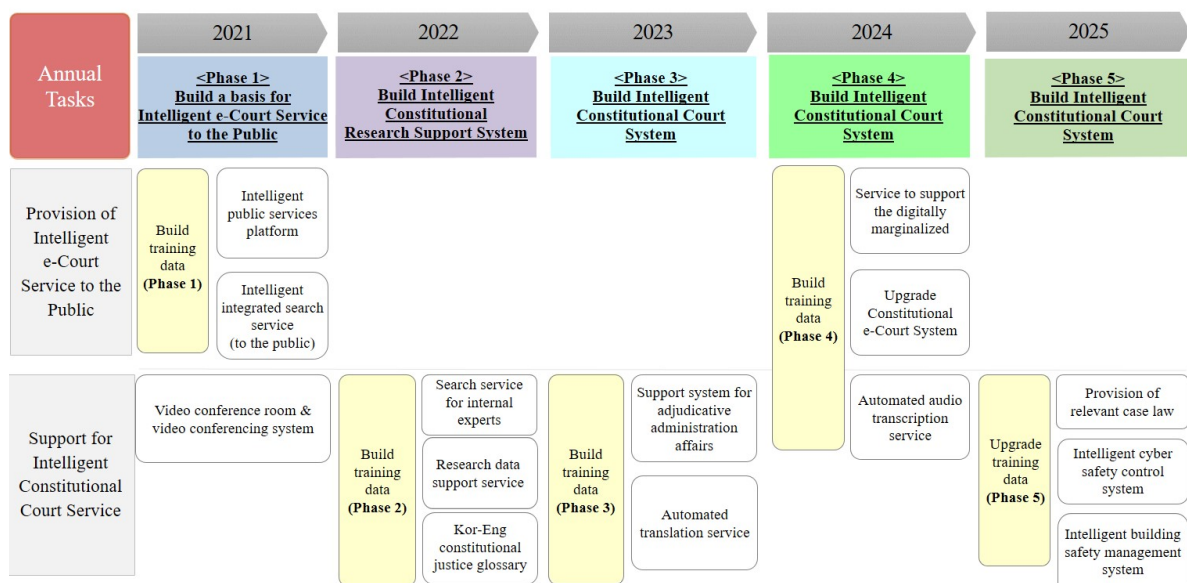
Period 5 (2016-2020): Building mobile-based services compatible with smartphones

Period 6 (2021-2025): **Building “Intelligent Constitutional Court System”**

2) Intelligent Constitutional Court System

In response to the increasing use of artificial intelligence technologies, our Court formulated an informatization strategy plan in 2019. Based on this plan, our Court is now undertaking a project to establish the “Intelligent Constitutional Court System” under a five-year plan from 2021 to 2025. We aim to implement the project in phases, depending on the level of technological development. We also plan to build training data as a basis for intelligent services, which will be upgraded every year.

<Development Stage of Informatization in the Constitutional Court of Korea>



The first phase of the plan in 2021 focused particularly on improving service to the public. First, our Court launched a **chatbot, which serves as an interactive public services platform.** It is a conversational messaging system, dealing with the public’s inquiries and providing information such as adjudication procedures 24 hours, 365 days a year. When you look at the number of conversations in the usage statistics, you will see a significant percentage of the usage is during working hours, as well as after work hours and holidays. Simple inquiries from citizens such as information on the adjudication procedure can be answered by the chatbot, reducing the workload of responding to inquiries from the public. Going forward, we will continue to enhance the quality of questions and answers to better serve the public.

< Monthly Usage in 2023 >

(Unit: user and conversation)

Category		January	February	March	April	May	Monthly Average
Number of Users		215	181	259	243	301	239.8
Number of Conversations	Total	602	606	671	860	983	744.4
	Service hours						
	Weekday working hours (9 a.m. to 6 p.m.)	363 (60%)	441 (73%)	384 (57%)	573 (67%)	637 (65%)	479.6 (64%)
	After work hours and holidays	239 (40%)	165 (27%)	287 (43%)	287 (33%)	346 (35%)	264.8 (36%)

※ Officially launched in January 2023

Our Court has also built the **intelligent case search service.** To provide easy access and search of our Court’s case law for the general public, who are not legal experts, we have built a service that utilizes intelligent technology to enable users to search case information not only in legal terms but also in everyday language and sentence structures. Furthermore, in response to the pandemic, we have built **a video conference room and a video conferencing system,** facilitating non-face-to-face video conferencing and video trials.

The second phase of the plan in 2022 focused on supporting constitutional research for adjudication.

Actively incorporating feedback from rapporteur judges of the Constitutional Court of Korea, who are the actual users, we have developed an **expert search service** with better organized data such as search keywords and sophisticated functions.

The **research data support service** enables users to easily collect relevant articles and publications by simply entering keywords. This service ensures users to have access to the latest information on a regular basis.

In addition, the Court has established **the Korean-English constitutional justice glossary**, which allow users to make suggestions and contribute to the development of translations for technical terms in the field of constitutional justice.

Now, let's move on to **the third phase of the plan in 2023**.

First, our Court is building **Robotic Process Automation** which automatically performs routine and repetitive tasks. We believe that automating repetitive documentation tasks using a robot program can enhance work efficiency and prevent human errors. Accordingly, we are identifying target tasks to which the program can be applied. We are also building an **automatic translation system**. It aims to streamline the translation of internal publications and promote the collection and utilization of foreign data for research activities.

In **phase 4 of the plan in 2024**, we intend to **improve accessibility of the digitally marginalized** by providing braille files of court decisions. We are also considering introducing an **automated audio transcription service** for court proceedings.

In **Phase 5 of the plan in 2025**, we consider introducing a service that **finds similar precedents** for newly filed cases and **provides the results and their degrees of similarity** to the bench and the research department. Additionally, we are exploring the possibility of introducing a **system** that utilizes intelligent CCTV **to manage building safety**. We are also reviewing ways to **deploy intelligent technology for cyber security**.

3. Democracy and Judicial Independence in the Era of Digital Transformation

Now, I would like to reflect on two additional keywords of this session: democracy and judicial independence.

1) Democracy

The “Intelligent Constitutional Court System” that I mentioned earlier has two primary objectives: “improving service to the public” and “enhancing work efficiency in the Court.” Among them, the chatbot and search system, which aim to “enhance service to the public,” are projects that we believe are beneficial from a democratic perspective by enhancing universal access to information and providing easy access to the Constitutional Court at a low cost. From this perspective, enhancing accessibility through digital transformation is even more crucial for the Constitutional Court, where constitutional complaints directly filed by the general public take up a large portion of cases. Furthermore, enhancing efficiency of judicial affairs in the Court will indirectly contribute to strengthening democracy by enabling the Constitutional Court to fulfill its missions more effectively.

As artificial intelligence is a rapidly developing technology, we will continue to eliminate the deficiencies of current systems. In this process, we need to be vigilant and prevent potential side effects from AI that would undermine democracy, such as surveillance, distortion of decision-making, and violation of privacy. Also, we need to develop a digital inclusion policy that ensures the digitally marginalized are not left behind in decision-making or the judicial system and anyone can benefit from digital transformation.

2) Judicial Independence

Discussions surrounding “digital transformation in the judicial system” and its impact on “judicial independence” often center on possible threats to the independence of courts and judges if court decisions are automated or influenced by AI software.

While the United States and some East European countries have already deployed AI systems in their criminal justice systems, the Republic of Korea has not yet implemented AI in its criminal justice proceedings. Moreover, constitutional justice has significant implications and demands a high level of comprehensive thinking as it binds all state organs (*erga omnes* effect). Therefore, when discussing the “automation of judgments” or the “introduction of AI,” it will be the last judicial process to adopt such technologies. The Intelligent Constitutional Court System project places emphasis on enhancing information access and improving procedural efficiency for the public and the Court’s staff.

From a general perspective, we need to closely monitor the potential negative impact on “judicial independence” caused by the adoption of AI systems in judicial rulings. This includes being vigilant about undue influence from the companies that develop these systems or from state agencies involved in their deployment.

4. Conclusion

“Digital transformation”, summed up as “innovation from analog to digital,” profoundly impacts people’s lives, and we experience these changes in our everyday work. I am grateful for this opportunity to present to you today the changes in the Constitutional Court of Korea.

Thank you for your attention.