2024 13th Korea Internet Governance Forum (KrIGF) Results Report

2024. 09.

Korea Internet Governance Forum Program Committee





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0. Introduction to the Korea Internet Governance Forum (KrIGF)

The IGF was first held in 2006 in Athens, following Paragraph 72 of the Tunis Agenda, a document resulting from the 2005 World Summit on the Information Society (WSIS). Since then, it has been held annually in various countries.

The IGF facilitates dialogue between governments, businesses, civil society, academia, the technical community, international organizations, and other stakeholders on public policy issues related to the internet. It has been recognized for playing a significant role in raising issues related to the internet and in strengthening the policy capacities of developing countries and new participants.

On the other hand, the IGF is not just limited to policy discussions but is also being called upon to produce more concrete outcomes, such as "recommendations" on key internet policy issues.

At the NetMundial meeting held in São Paulo from April 23 to 24, 2014 (a multi-stakeholder meeting on the future of internet governance), the need to strengthen the IGF was once again recommended.

The Korea Internet Governance Forum (KrIGF) aims to promote dialogue and discussion among various domestic stakeholders, including governments, businesses, civil society, academia, the technical community, and users, regarding key internet-related

public policy issues. In addition, through education and outreach on key internet governance issues, it seeks to enable more citizens to participate in the internet policymaking process.

Furthermore, by strengthening connections with regional and global IGFs, KrIGF aims to facilitate more active participation of Korean stakeholders in regional and global internet governance discussions.

The Korea Internet Governance Forum (KrIGF) has been held annually since 2012, and the 13th event will be held in 2024. Since 2014, a Program Committee composed of multi-stakeholders has been organizing the event. Since 2017, the final report of the event has been published, and KrIGF has been officially registered as a National IGF with the global IGF. The final report for 2024 will also be published following the previous year, and it will be submitted to the global IGF Secretariat.

If you have any comments on this report, please contact us at the details below.

o Contact: KrIGF Secretariat (Tel. 02-3446-5934, E-mail. krigf@kiga.or.kr)

- 1. Overview of the 2024 13th Korea Internet Governance Forum (KrIGF)
- o Theme: "The Age of Artificial Intelligence, Multi-Stakeholder Governance for Safety and Human Rights"
- o Date: Friday, June 28, 2024, 9:30 AM 6:00 PM
- o Venue: FRANCISCAN EDUCATION CENTER, 2F, 4F
- o Organizer: Korea Internet Governance Alliance (KIGA)
- o Co-organizers: Korea Internet & Security Agency (KISA),
 GABIA, MetaFlag, Byeonhyeok Legal Policy Research Institute,
 Cyber Security Research Center, Cyber Commons Korea,
 OpenNet, Aablesquare, ImpactUs, Institute for Policy and
 Legislation, Korean Progressive Network Jinbonet, Kakao, True
 Networks, Korea Game Users Association, Korea Institute of
 Science and Technology Information, Korea Internet Corporations
 Association, Korea Hosting and Domain Association (Total 17
 organizations)
- o Sponsors: Ministry of Science and ICT (to be confirmed), GABIA, Cyber Security Research Center, Kakao, True Networks (Total 5 organizations)
- o Homepage: www.krigf.kr
- o Total Participants: 219 people (On-site participants: 159 people (73%), YouTube viewers: 60 people (27%))
 - * Confirmed stakeholders: 145 people
 - * Technology sector: 5 people (4%), Industry sector: 18 people (12%), Civil society: 23 people (16%), General users: 39 people (27%), Public sector: 26 people (18%), Academia: 31 people (23%)
 - * Each participant included in the panel for each workshop session
 - * YouTube participation counted only by the number of viewers; there may be duplicate participants across different sessions

o Key Results

- Under the theme 'Multistakeholder Governance of Safety and Human Rights in the Age of Artificial Intelligence,' a total of 12 workshop sessions were held across the cybersecurity, artificial intelligence, and governance tracks.
- By providing real-time captioning services, accessibility to KrIGF for individuals with hearing impairments was ensured.
- Active online promotion by supporters before and after the event, YouTube channel uploads, and archiving of videos, among other efforts, were systematized for the Korea Internet Governance Forum (KrIGF).

2. Preparation Process

1) Program Committee

- o The Korea Internet Governance Forum (KrIGF) is managed by the Program Committee of the Korea Internet Governance Forum (KrIGF), which is a working group under the Korea Internet Governance Alliance (KIGA). The current Program Committee consists of participants from various fields, including the government, industry, academia, technical sectors, and civil society.
- o The 2024 Program Committee is composed as follows:
 - Oh Byoung-il (Chair), Korean Progressive Network Jinbonet, Civil Society
 - Lee Soo-young (Chair), Policy and Legal Research Institute, Academia
 - Kim Kyung-seok, Pusan National University, Technical Sector
 - Oh Kyung-mi, OpenNet, Civil Society
 - Lee Jong-hyun, Asia Venture Philanthropy Network (AVPN), Industry Sector
 - Lee Jin, Cyber Security Research Institute, Civil Society
 - Lee Hwa-young, Cyber Security Research Institute, Civil Society
 - Cho Bu-seung, Korea Institute of Science and Technology Information (KISTI), Technical Sector
 - Jeon Sun-min, Korea Information Society Development Institute (KISDI), Government
 - Jeon Young-gyun, Kakao, Industry Sector
 - Choi Hyun-ah, Korea Internet & Security Agency (KISA), Government

2) Program Committee's Preparation Process

- o In 2024, the Program Committee held meetings as follows to discuss the event preparations. Please refer to [Attachment 1] for detailed discussions and meeting outcomes.
- o January 26: First meeting of the 2024 Program Committee (77th Meeting)
 - Selection of agenda items (KrIGF77-1)
 - Review of the previous meeting minutes (KrIGF76-2b)
 - Confirmation of KrIGF committee members and election of the committee chair for 2024 (KrIGF76-4)
 - Sharing of the proposed venue for the 2024 KrIGF (KrIGF77-3)
 - Discussion of the date and location for the 2024 KrIGF
 - Sharing of survey content for the 2024 KrIGF (KrIGF77-4)
- o February 23: Second meeting of the 2024 Program Committee (78th Meeting)
 - Selection of agenda items (KrIGF78-1)
 - Review of the previous meeting minutes (KrIGF77-2b)
 - Sharing of the venue reservation status for the 2024 KrIGF
 - Review of issues related to the 2024 KrIGF workshop session call for proposals
 - * Workshop session evaluation schedule, evaluation criteria, etc.
 - Discussion on the promotion and organization of the 2024 KrIGF workshop session call for proposals
 - Discussion on the 2024 KrIGF workshop session-related matters (planning sessions, etc.)
- o March 29: Third meeting of the 2024 Program Committee (79th Meeting)
 - Selection of agenda items (KrIGF78-1)
 - Review of the previous meeting minutes (KrIGF78-2b)

- Sharing of the venue reservation status for the 2024 KrIGF
- Mid-term check of the status of the 2024 KrIGF workshop session call for proposals
- Discussion on co-organizers and sponsorship for the 2024 KrIGF (KrIGF79-3)
- Discussion on supporters for the 2024 KrIGF (KrIGF79-4)
- Discussion on simultaneous interpretation and budget heck for the 2024 KrIGF, and other miscellaneous matters
- o May 9: Fourth meeting of the 2024 Program Committee (80th Meeting)
 - Selection of agenda items (KrIGF80-1)
 - Review of the previous meeting minutes (KrIGF79-2b)
 - Mid-term check of the recruitment status of 2024 KrIGF supporters (verbal report)
 - Mid-term check of co-organizers and sponsorship for the 2024 KrIGF (KrIGF80-3)
 - Sharing of the status of workshop session proposals and evaluation results for the 2024 KrIGF (KrIGF80-4)
 - Structuring of the overall program schedule for the 2024 KrIGF (KrIGF80-5)
 - Discussion on the slogan for the 2024 KrIGF event (KrIGF77-4)
 - Discussion on opening speeches and congratulatory remarks by multistakeholders
 - Review of future schedules and discussion on the date of the next meeting

- o February 13 April 30: 2024 KrIGF Workshop Session Call for Proposals Period
- o April 15 May 13: 2024 KrIGF Supporters Recruitment Period
- o May 24: Fifth meeting of the 2024 Program Committee (81st Meeting)
 - Selection of agenda items (KrIGF81-1)
 - Review of the previous meeting minutes (KrIGF80-2)
 - Final confirmation of co-organizers and sponsor participating institutions for the 2024 KrIGF (KrIGF80-3b)
 - Status check on updates to the 2024 KrIGF workshop session proposals (KrIGF81-3)
 - Status check of the opening ceremony and program timetable for the 2024 KrIGF (KrIGF80-3b)
 - Review of the necessity for a pre-event inspection meeting before the 2024 KrIGF (scheduled for June 28)
- o July 26: Sixth meeting of the 2024 Program Committee (82nd Meeting)
 - Selection of agenda items (KrIGF82-1)
 - Review of the previous meeting minutes (KrIGF81-2)
 - Report on the results of the 2024 KrIGF event (KrIGF82-3)
 - Sharing of the 2024 KrIGF supporters' activity report (KrIGF82-4)
 - Sharing of the 2024 KrIGF workshop session results report (KrIGF82-5)
 - Discussion on the self-evaluation and improvement plans for the 2024 KrIGF

3) Secretariat

- o The following individuals have diligently worked on the preparation and execution of the 2024 Korea Internet Governance Forum (KrIGF):
 - Jeong Gil-won, KOICS
 - Park Eun-ha, KOICS
 - Kim Hak-jin, KOICS
 - Seo Yoon, KOICS
 - Yang Ho-won, KOICS
 - Bang Ho-jin, KOICS
 - Lee Shin-hyung, KOICS
 - Lee Jun-soo, KOICS
 - Hwang Yoo-bin, KOICS
 - Hwang Eun-seo, KOICS

o (Supporters)

- Kim Young-bin, Handong Global University
- Kim Hyun-jae, Korea Communications University
- Nam Chul-woo, Yonsei University
- Moon Pil-seop, Seoul Metropolitan University
- Moon Ha-eun, University of Dublin
- Park Sun-min, Myongji University
- Park Soo-jin, Keimyung University
- Eom Jung-woo, Sungkyunkwan University
- Lee Soo-young, Ewha Womans University
- Jeong Su-min, Sookmyung Women's University

4) Facebook Page

- o Although a Facebook group already existed, it was managed under a personal account. Therefore, to strengthen organized promotion through KrIGF's official account, a Facebook page was established in 2019.
- o Facebook page: https://www.facebook.com/krigf.kr/
- 5) YouTube Channel Launch and Systematic Management of KrIGF Videos
- o Decided to systematically manage the YouTube channel, including videos filmed in the past.
 - o YouTube channel: https://www.youtube.com/@2024KrIGF

6) Text interpretation

- o It was decided to provide text interpretation to ensure accessibility for people with disabilities and to keep a transcript for record-keeping purposes
- o The real-time captioning service was provided by the social cooperative AUD.

3. Program

	Track 1	Track 2		Track 3		
Cybe	ersecurity(Room 211) Ar	ificial Intelligence	(Room 420)	Governance(Room 410)		
Time		Content				
			Ceremony			
09:40 ~10:20	 ☐ Host: Lee Soo-young (KrIGF Co- ☐ Opening Remarks: Lee Dong-ma ☐ Congratulatory Message: Yeom Yeol (Ministry of Science and ICT [Video] Jeon Gil-nam (KAIST Emeritus Professor) Kim Hee-jung (Member of the National Assertional A	n (KIGA Chair) Director of ICT Policy)	Agency) - Civil Society: Yoon	ress: Sang-jung (President, Korea Internet & Securit Bok-nam (KIGA Section Head) to Yong-wan (Professor, Kangwon National University)		
	1. Quantum Science and Cybersecurity	(You 2. The Age of Tech Political Review of Data Gov	no-Nationalism: A of Transnational	3. The History, Present, and Future of .kr		
10:30 ~12:00 (90')	☐ Host: Lee Chul-woo (Korea Game User Association / Givil Society) ☐ Presentation: Lee Hwa-young (Cybersecurity Research Institute / Technical Sector) ☐ Discussion: Cha Moon-seok (Seoul Cyber Universi / Academia) Lee Jin-woo (Dong-A University / Academia) Lee Socyaung (Rdicy and Legislative Research Institute / Givil Society) Lee Ye-rim (Lpful/Inclustry)	☐ Host: Min Byung- (Ewha Womans Univer ☐ Presentation: Parket (Ewha Womans Univer (Ewha Womans Univer ☐ Discussion: Kim Ju (Korea Internet & Sec Public Sector) Oh Kyung-mi (OpenN Jeon Young-gyun (Kal Yang Ji-soo (Ewha Ins Sciences / Academia)	rsity / Academia) So-hee rsity / Academia) Ing-joo urity Agency / et / Civil Society) Ing / Industry)	☐ Host: Park Jung-seop(Korea Internet & Security Agency / Public Sector) ☐ Presentation : Jeon Gil-nam(KAIST/Academia) Park Hyun-je (Hanlim University / Academia) Song Kwan-ho(Sungshin University / Academia) Lee Jung-min(Korea Internet & Security Agency / Public Sector) Lee Young-eum(Korea Communications University / Academia) ☐ Discussion : Yoon Bok-nam(KIGA Section Head)) Kim Su-jin(Chung-Ang University / Youth) All Presenters		
12:00 ~13:00		Bro	eak			
	4. The Current Status of Globa Cybersecurity Governance and Korea's Role	5. Generative Al Techno		6. Is the Internet Regulation by the Broadcasting and Telecommunications Deliberation Committee Appropriate?		
13:00 ~14:30 (90')	University / Academia)	☐ Host: Lee Soo-young (Policy and Legislative Research Institute / Gvil Society) ☐ Discussion: Yeon In-p.yo (Meta-Flag / Inclustry) (Online) Jo Yong-ho (Institute for Digital and Policy Innovation / Gvil Society) Lee Chul-woo (Korea Game User Association / Gvil Society) Min Jæ-myung (KAIST / Academia) Bæ-Jung-chul (Pusan National University / Academia) Park Min-kyung (Chung-Ang University / Academia)		Host: Oh Kyung-mi (OpenNet / Civil Society) Presentation: Son Ji-won (OpenNet / Civil Society) Discussion : Kim Dong-chan (Media Innovation Citizens' Coalition / Civil Society) Shim Young-seop (Kyung Hee University Cybersecurity / Academia) Kim Ye-ra (National Assembly Legislative Research Office / Public Sector) Heo Yu (Jinbo Network Center / Civil Society)		
14:30 ~14:40		Br	eak			
	(Tutorial) 7. UN Digital Cooperation Agenda: Global Digital Compac (GDC)	8. EdTech: Al ar		9. 3rd Phase of .kr Domain: Public 2nd Phase Area New Creation Policy Proposal and Opinion Collection		
14:40	Presentation: Jeon Sun-min (KISDI / Public Sector)	☐ Host: Lee Soo-young (Policy and Legislative F	Research Institute /	☐ Host: Kang Kyung-ran (Ajou University /		
~16:10 (90')	7-1.(Tutorial) A Path to Digital Safety: Building Security and Trust in Internet Routing	☐ Discussion : Kim Bo- (Impactus / Industry) Kim Joon-ho (Letuin Ec Song Chae-il (Korea De / Academia)	kyung lutech / Industry)	Technical Sector) ☐ Presentation: Lee Jung-min (Korea Internet & Security Agency / Public Sector) ☐ Discussion : Min Byung-won (Ewha Womans University / Academia) Kim Sang-min (Gabia / Industry)		
	☐ Presentation: Park Chan-jin (KISTI / Public Sector), Han Sang-woo (KISA / Public Sector)	Kim Tae-kwon (Tax accountant / Civil Kim Yoon-ji (Busan Dai Jang Woo-chan (Chung-A	ly Economy / Media)	Yoon Bok-nam(ClassHangyeol/Civil Society) Oh Ji-won (Dankook University / Youth)		

16:10 ~16:20	Break				
	10. Digital Security Directions for Civil Society Organizations	(Youth) 11. Data Sovereignty – The Threat to Human Dignity Posed by Technological Development	12. Digital Governance for Human Rights and Inclusion		
16:20 ~17:50 (90')	☐ Host: Chang Yeo-kyung (Institute for Digital Rights / Civil Society) ☐ Presentations: Byun Kyu-hong Skelter Labs / Technical Sector) Ko Ah-chim (Developer / Civil Society) ☐ Discussion: Jo Kyung-suk (Developer / Technical Sector) Jung Hong-soon (Developer / Public Sector) Cha Ji-ae (Human Rights Foundation Saram)) Kim Ja-yoo (CEO, Nuguna Data)	☐ Host: Jung Kyo-eun (Sookmyung Women's University / Academia) ☐ Presentation: Cha Yoo-jin (Sookmyung Women's University / Academia) ☐ Roleplay Discussion: Kang Ji-yoon, Kim Hae-in, Kim Min-seo, Kim Do-yeon (Sookmyung Women's University / Youth)	☐ Host: Min Jae-myung (KAIST / Public Sector) ☐ Discussion: Jung Jae-hwan (Law Firm Dagam / Civil Society) Song Chae-won (Korea Defense Policy Institute / Academia) Kim So-ri (Jiggeumjigu/ Industry) Yoo Kyung-seok (Saeharam / Technical Sector) Kim Ji-yoon (Korea University / Academia) Park Ki-tae (Chungchoon Mookongso / Civil Society) Geum So-dam (Ewha Womans University / Youth)		

o For detailed workshop session discussion results, please refer to [6. Workshop Session Detailed Contents].

4. Event Evaluation

1) Participant Statistics

- o Total Pre-registered Participants: 253 / Survey Respondents: 41
- o Total Participants: 219 (Pre-registered attendees: 145 (67%), On-site registration: 14 (6%), YouTube participants: approx. 60 (27%))
- * A total of 145 confirmed stakeholders
- * Technical sector: 5 (4%), Industry: 18 (12%), Civil society: 23 (16%), General users: 39 (27%), Public sector: 26 (18%), Academia: 31 (23%)
- * Each workshop session included a panel of participants
- * YouTube participants were counted based on the number of viewers, and there may be duplicate participants across different sessions.

2) Satisfaction Survey Results

1. Survey Participant Distribution	Public Sector (7)	Academia (9)	Industry (7)	Civil Society (2)	Technical Sector (2)	Users (14)
(41 respondents in total)	17%	22%	17%	0.5%	0.5%	33%

2. Experience in	Participants (9)	22%
Participating in the Korea Internet Governance Forum	Non-participants (32)	78%

i Olulli			
	Workshop Session	Content Relevance	Timing Appropriateness
3. Workshop Session Satisfaction	Session 1: Quantum Science and Cybersecurity (13 responses)	92%	89%
(Morning Session)	Session 2: (Youth) Techno-nationalism (11 responses)	85%	87%
	Session 3: .kr History (13 responses)	90%	87%
			I
	Session 4: Global Cybersecurity (13 responses)	90%	90%
4. Workshop Satisfaction (Afternoon Session)	Session 5: Al Deepfake (17 responses)	90%	88%
	Session 6: Broadcasting and	82%	80%

	Communications Review Committee						
(8 responses)							
	Session 7: GDC, Routing (12 responses)	95%	93%				
5. Workshop Satisfaction (Afternoon Session 2)	Session 8: EdTech (13 responses)	90%	89%				
	Session 9: 3rd Phase Domain (11 responses)	90%	90%				
	Session 10: Civil Society Organizations (8 responses)	95%	95%				
6. Workshop Satisfaction (Afternoon Session 3)	Session 11: (Youth) Data Sovereignty (15 responses)	97%	96%				
	Session 12: Digital Governance (10 responses)	88%	86%				
7. Event Venue and Service Satisfaction	Venue Facilities (38 responses)	90%					
7. Other Opinions	 - (Academia): It seems various perspectives related to the finar sector are needed. - (Academia): The lunch was a buffet, but it was a bit lack which was disappointing. - (User): The session was not carried out properly, and I wor how it would have been if the presentations were conduct with all the panelists seated on the stage. - (Academia): The time for the .kr session was too short. I war to hear more of the discussion. - (Technical Sector): There haven't been many security-relaseminars, so I appreciate being able to gather at this on think it would be good if it could be held once every months rather than once a year. Additionally, it would be nicmore recent issues, such as OT security, were covered in future. - (Industry): The chairs in Room 410 were uncomfortable, session lasted for a long time, and "The content felt like matheoretical discussion.", which was unfortunate. - (User): It was good to have a variety of programs to choofrom, but it seemed like many were scheduled at the settime, which was challenging. - (Technical Sector): It was a very positive experience. 						

3) Program Committee Self-Evaluation

o 2024 KrIGF Program Committee Self-Evaluation and Improvement Suggestions

- (Oh Byung-il): There is concern about the number of participants. As time went on, there were fewer people in the last sessions, which made it seem unfortunate given the budget. It is believed that next year there should be efforts to have at least 200 offline participants.
- (Oh Byung-il): There was a discussion about organizing sessions in a 4x3 format instead of 3x4. Additionally, I hope that the next KrIGF will at least roughly count the number of attendees for each workshop session.
- (Lee Soo-young): There were some inconveniences with the venue. For the next KrIGF, it would be better if the event is not held at the Franciscan Education Center but rather at a school venue or the Irum Center in Yeouido.
- (Cho Boo-seung): It seems necessary to strategically define whether the KrIGF is an event that focuses on key issues or an event where more people come to discuss and negotiate.
- (Lee Soo-young): It was very difficult to recruit panelists for the sessions. To maintain sustainability, it seems that reducing the number of sessions while improving their quality and providing incentives for panelists would be beneficial.
- (Lee Hwa-young): Should the evaluations for experts and youth be conducted at the same level, or should they be handled differently? I think it's important to discuss this and to prepare materials in advance rather than doing everything last minute at the event.

- (Jeon Young-gyun): It seems more effective to organize the panel in a 3x3 format with around 5 to 6 members, concentrating the budget. For tutorial sessions, there could be opportunities to reduce panel fees, and it is estimated that paying around 50,000 KRW per panelist might be possible.
- (Jeon Young-gyun): It seems necessary to consider holding the event on a Thursday or Wednesday. For tutorial sessions, recording them in advance and releasing them beforehand might also be a good approach.
- (Oh Byung-il): It would be nice if the participants could easily identify which staff members are supporting each session by preparing in advance for this.

5. KrIGF Event Photos

1) Opening Ceremony



Lee Soo-Young, Co-Chair running opening ceremony.



Lee Dongman KIGA Committee Chair, during his opening speech.



KISA President Lee Sangioong, making a speech representing the public groups.



Group Photo for 2024 KrIGF Opening Ceremony.

2) Track 1



Session for Quantum Science-Technology and Cybersecurity.



Session Group Photo for Quantum Science-Technology and Cybersecurity.



Session for Global Cybersecurity Governance.



Group photo of Civil Society Digital Security Directions.

3) Track 2



Session for Techno-Feudalism.



Group photo for Tecno-Feudalism Session.



Al Deep Fake Session.



Group Photo for Edutech Session.

4) Track 3



".kr" History Session.



".kr" History Session.



Digital Governance Session for Human Rights and Inclusion.



Step-III kr domain session.

7. Workshop Session Report

Prepared by Lee Yae-rim

Session Title	Quantum Science and Cybersecurity					
Date & Time	June 28	3, 2024 (Friday), 10:30-12:00	Venue	Room 211, Franciscan Education Center		
	Moderator	Lee Soo-young (Director of Policy and Legislative Research Institute/Civil Society Moderator)	Presenter	Lee Hwa-young (Deputy Director of Cybersecurity Research Institute/Technology Department)		
Participants		Lee Cheol-woo(Korea Ga Association/Civil Society)	me User	Cha Moon-seok(Professor, Seoul Cyber University/Academia)		
	Panelists Lee Jin-woo(Lecturer, Department Political Science and Diplom Dong-A University/Academ		rtment of nacy, ia)	Lee Yae-rim(CEO, UPFUL/Industry)		

Quantum Science and Cybersecurity Session

- Introduction to Quantum Science and Cybersecurity Session
- Social Impact and Awareness of Quantum Science
- Positive and Negative Effects of Quantum Science

Quantum Science and Cybersecurity Discussion

- Attendance of CEO Lee Yae-rim
- Arrival of Chairman Lee Cheol-woo from the Korea Game Users Association, coming from Busan
- Presentation on Quantum Science and Cybersecurity

Concept of Quantum Computing and Quantum Cryptography

Summar

y

- Emergence of Quantum Computers for Communication and Encryption
- Superposition and Entanglement Phenomena Based on Quantum Cryptography
- Quantum Computer Algorithms and Principles of Quantum Cryptography

Principles and Applications of Quantum Computers

- The computational utility of quantum computers operates in qubits, which exist in multiple states simultaneously.
- Quantum mechanics deals with the invisible world and is based on tangible objects and substances.
- The principles of quantum mechanics include wave-particle duality and superposition.

The Intersection of Quantum Physics and IT Technology

- Quantum physics enables quantum computers and ultra-fast computation.

- Quantum computing utilizes quantum physical properties to reduce the size of quantum computers.
- The convergence of IT technology and quantum physics allows for ultra-fast and ultra-precise measurements.

Importance of Cybersecurity

- Cybersecurity is a crucial means of protecting the nation and its citizens from cyber threats.
- Through quantum technology, cybersecurity can overcome the limitations of time and space.
- Quantum technology can fundamentally block illegal wiretapping or hacking, thereby enhancing information security.

Advantages and Disadvantages of Quantum Technology

- In the military, quantum technology helps detect stealth aircraft and RF sensors that penetrate networks.
- Quantum detectors can increase transparency by detecting nuclear tests and missile launches.
- Quantum technology emphasizes the importance of international cooperation and standardization, while also having social vulnerabilities.

The United States as the First Nation to Establish Quantum Legislation and Set Up a Quantum Information Science Institute

- The U.S. is pushing forward large-scale research and development through the National Quantum Information Science Vision.
- The U.S. has established quantum legislation and set up the Quantum Information Science Institute.
- The U.S. has founded a Quantum Information Science Research Center to advance quantum technology.

Development of Quantum Technology and Korea's R&D Budget

- The goal is to develop 2,500 experts and further advance quantum technology.
- There is a lack of technical and economic support for the development of quantum technology.
- The importance of basic science and applied technology is recognized.

Importance of Scientific Research and Investment

- Commercialization of applied technology and its integration into daily life.
- The significance of basic research and technology for the benefit of people.
- Growth and exchange opportunities through international cooperation and partnerships.

Discussion on U.S.-China Rivalry and Technology Competition

- The scientific purpose of Galileo Galilei.

- Issues and technological advancements in AI and quantum computing.
- The importance of technology competition in the U.S.-China rivalry.

U.S.-China Rivalry and Semiconductors

- The U.S.-China rivalry began with the 2008 Beijing Olympics.
- China's GDP reaching 40% is a critical milestone.
- The U.S.-China rivalry is serious and conflict-driven.

Global Supply Chain Restructuring Due to U.S.-China Semiconductor Competition

- The new chip supply halt to China solidified the competition.
- Global supply chain restructuring leads to decoupling with allied nations.
- South Korea's overwhelming semiconductor capabilities and weaknesses.

Importance of the U.S.-Korea Alliance and Technology Transfer

- U.S.-Korea alliance: semiconductor and AI cooperation.
- Technology transfer strengthens security and economy.
- China's push for semiconductor independence in opposition.

Global Supply Chain Restructuring and the Indo-Pacific Strategy

- China struggles with technology below 28-nanometers.
- The U.S. focuses on reshaping the new order.
- Reshoring and a transition to liberal countries.

Technology Competition Centered Around Four Areas in U.S.-China Rivalry

- China forms an authoritarian regime based on AI technology.
- Digital authoritarianism and supply chain adjustments for internet segregation.
- Technology competition with the U.S. shapes a new international order.

Korea's Fate and U.S.-China Technology Hegemony Competition

- Technology-driven politics and economic geopolitics.
- Quantum science and technology development.
- U.S.-China technology competition and cybersecurity threats.

Global Supply Chain Establishment and Korea's Technological Challenges

- The U.S. and China are mutually dependent.
- Korea faces technological challenges caught between the U.S. and China.
- Korea must strengthen its own technological alliances.

Discussion on Quantum and Al by an Al Content Platform Company

- Practical global business and collaboration of the AI content platform company.
- The development of quantum science and technology significantly impacts the media content field.
- -Questions regarding the game Stellar Blade and the depiction of female characters'

hair.

Impact of Cloud Gaming Technology on the Gaming Industry

- Increasing game sizes and the development of technology separating game execution.
- The influence of authorization information within the game.
- The activation of quantum science technology and its impact on VR content.

Interest in Quantum Science Technology and Cybersecurity

- Damages caused by approval information security issues.
- The need to prepare for the commercialization of quantum science technology.
- The need to strengthen education and research on cybersecurity.

Concerns About the Future of Blockchain

- Requesting additional comments from Deputy Director Yoo Ah-yeon.
- It is expected that blockchain will be rendered powerless in the quantum era.
- The need to be cautious about certain factions.

Strategic Investment Without Alliances in the International Order

- The importance of strategic investments without alliances in the international order.
- The need for strategic investment in national cybersecurity.
- The evolution and innovation of quantum encryption and cryptographic systems.

Commercialization and Security Issues of Blockchain and Quantum Computers

- Blockchain and quantum computers differ fundamentally.
- The stability and security issues of quantum computers.
- The limitations of blockchain technology and the difficulties of commercialization.

Importance of Security Technology and Investment

- The importance of investing in capacities of 10 billion.
- Difficulties in the security market and the lure of foreign capital.
- The need for continuous investment to advance security technology.

Crisis and Opportunity in the Quantum Technology Industry

- Strategic investments are needed to overcome crises at the crossroads of choice.
- Quantum technology development is in its early stages and incurs high costs.
- The launch of China's quantum-dedicated communication satellite has heightened cyber threats.

Growth and Potential of Quantum and Al

- The growth of AI and quantum technology.
- Lack of technological discussions among Korean companies.

- The need to strengthen competitiveness in quantum and Al.

Potential Impact of Artificial Intelligence and National Strategy

- Al has the potential to be used as a lethal weapon in countries like Russia, Ukraine, and Israel.
- Technological growth has a significant impact on national security.
- Cybersecurity and national unrest affect national strategies.

Safety of Quantum Computers and Security in the Digital Society

- Building a secure digital economy that cannot be hacked.
- The fast and rapid processing speed of quantum computers.
- Developing new systems through the convergence with quantum technology.

Development and Investment in Korea's Quantum Science Technology

- The concentration of technology is intensifying.
- There is a lack of investment from both corporations and the government.
- Focused investment in quantum science technology is necessary.

China's Relations with North Korea and Understanding of Quantum Mechanics

- North Korea-China-Russia relations: South Korea's relationship with China is closely tied to China-North Korea trade volume.
- Quantum mechanics: China is still in the early stages, and it may be related to democratic systems.
- Quantum mechanics: Moving from conventional physics to a more humanistic perspective.

<u>Epistemology of the Quantum World and Technological Progress in Humanities and Social Sciences</u>

- The importance of epistemology regarding the quantum world in humanities and social sciences.
- The need for breakthroughs in conventional approaches and technological advancement.
- It is not desirable for humans to become subordinate to technology.

Humanities Discussions and Hackathons

- The importance of humanities-based discussions and hackathons.
- Providing a space where people can express their opinions even if they are not experts.
- The need for discussions on security and cybersecurity.

Strategic Perspective on Korea's Al and Semiconductor Technology Development

- A strategic approach is needed for AI and semiconductor technology development.
- IT technological innovation is essential for enhancing national competitiveness.

- Emphasizing the need for government support and investment.

Limitations in Korea's Technology Development and Commercialization

- It is challenging for companies to commercialize technology.
- There is a lack of private investment and support for technology.
- Technology development may take 10-20 years to realize.

Quantum Science Technology and Cybersecurity

- Autonomous concerns about self-driving cars.
- Technical concerns about technology development.
- Concerns about quantum science technology and cybersecurity.

Strategic Importance of Quantum Science Technology for the Nation

- The national impact of the development of quantum science technology is unpredictable.
- Cooperation between quantum centers and private technology can accelerate the commercialization of quantum science technology.
- Quantum science technology prepares for cutting-edge industries and new security threats.

Sessio	Political Exploration of Ultra-Governance in the Age of Techno-Feudalism					
n Title		Tecin	iio-i euua	113111		
Date &	June	28, 2024 (Friday),	X7	Room 420, Franciscan		
Time	10:30–12:00		Venue	Education Center		
Participant s	Moderator	Min Byung-won (Professor, Ewha Womans University/Academia)	Presente r	Park So-hee (Professor, Ewha Womans University/Academia) Shin Yu-jeong (Professor, Ewha Womans University/Academia) Eom Chae-eun (Professor, Ewha Womans University/Academia) Park Se-yeon (Professor, Ewha Womans University/Academia)		
5		Yang Ji-soo(PhD, Ewha Grad of Social Sciences/Aca		Jeon Young-geun (Kakao/Industry)		
	Panelists	Kim Jung-joo(Korea Internet Promotion Agency/Public Sector)				
		Oh Kyung-mi(OpenNet/Ci	vil Society)			

1. Examination of the Concept of Data, Platforms, and Their Relationship

Before delving into the main topic of this presentation, which can be somewhat provocative under the term "Techno-feudalism," I will briefly explain the fundamental premise of the discussion: the concept of data, digital platforms, and the relationship between the two. This is a preliminary step to better understand "what properties of data and platforms form the backdrop for the bleak political-economic outlook on the platform economy."

First, let's talk about data. Not only in various academic discussions but also in the media and the platform industry, data is often compared to goods. In some cases, it is even likened to an emerging resource, replacing oil. These discussions are all based on the fact that data generates an enormous amount of added value, far beyond what traditional goods can create. However, there is room to argue that individual data, which is being produced infinitely and at this very moment across various digital spaces, does not inherently hold much value. This is because the source of the massive wealth created by big tech companies lies in the collective patterns they analyze from the infinite amounts of data. Based on the footprints users leave on platforms, these companies statistically analyze this "probabilistic tendency" and use it to provide various platform services.

The key term to note here is "probability." The behavioral tendencies derived from large datasets are a tremendous resource. This opens the door to the possibility of constraining and controlling the behavioral patterns of many in the future.

In this context, digital platforms hold great significance as they function as the source or fundamental infrastructure for value creation through the accumulation of vast amounts of data. What we need to be cautious about is that, as an "infrastructure" in the literal sense, platforms do not produce the data, which is a key commodity in modern capitalism. As the concept of a "prosumer" (producer + consumer) suggests, individual platform users are both consumers of platform

Summary

services and producers of data. On the user interface, which defines the so-called "primitive grammar" of communication and interaction between users, individuals generate data every minute, every second, often unconsciously through their digital devices

This data, once recorded in the language of computers, becomes subject to manipulation for "strategic communication" by platform operators, with the goal of securing power within the capitalist market.

2. Data Sovereignty and the Issue of Platform-Geopolitics: Focusing on the TikTok and LINE Incidents

One of the key aspects of the political-economic dynamics within the current digital platform industry is the issue of data sovereignty and platform-geopolitics. Notable examples include the TikTok dispute between the U.S. and China, and the LINE dispute frequently reported in the news between South Korea and Japan.

First, the TikTok dispute between the U.S. and China can be seen as a geopolitical conflict involving concerns about market dominance by non-Silicon Valley digital platforms and the misuse of domestic data, leading to national security concerns. For the past two decades, the U.S. has monopolized the global digital platform market, but the rapid rise of Chinese digital platforms such as TikTok has pushed the two countries into competition over market dominance. National security concerns over personal data leaks and threats to economic hegemony are intricately intertwined, leading to a long-standing dispute between the two nations.

Another case, more closely related to us, is the LINE incident. The LINE dispute was triggered when SoftBank pursued the development of AI semiconductors as a future growth industry. The conflict arose when SoftBank sought ownership of the data of approximately 200 million Japanese users that LINE holds, along with the foreign user data it would acquire through future business expansion in regions like Southeast Asia. This clashed with Japan's national security interests, leading to an unprecedented "administrative guidance" event, in which the state intervened to order changes to the corporate ownership structure of an individual company.

In relation to the platform economy, which has emerged as a new source of power, there are theoretical discussions that capture the relationship between the state and corporations as "state-platform capitalism." State capitalism is a theoretical framework that focuses on the power the state holds over markets and corporations. The network effects, achieved through platforms' monopolistic control over data and aggressive vertical integration (corporate mergers), provide governments with significant political resources. These resources allow the state to exert influence over digital platform companies, and this political leverage is further reinforced through direct state intervention, which provides capital for selective innovation—that is, innovation that contributes to profit generation.

However, this presentation argues that approaching the platform economy solely from the perspective of national security or sovereignty is overly myopic. There is a need to deeply consider the historical trajectory that the platform economy is following within the context of the global political economy, as well as the potential historical turning points it may create.

Global political-economic inequality is not only captured by the concentration of wealth but also by the rapidly changing dimension of labor. As the phenomenon of platformization—the quick and easy integration of platform technology into jobs—accelerates, the scope and scale of platform labor are rapidly expanding worldwide.

3. Issues of Global Inequality Caused by the Platform Data Economy

Unlike traditional dependent labor based on employment contracts, platform labor involves providing services through platforms, which places it outside institutional frameworks. As a prime example of precarious labor, platform labor cannot be

considered a source of quality jobs.

Another issue of global inequality is the problem of "residual countries." The dominant power in the current platform economy is the U.S. government, while Europe is working to counterbalance this American hegemony by establishing global norms such as the Al Act and data privacy laws. However, regions located on the periphery of the platform economy—those in the residual category—are excluded from both the process of technological innovation and the formation of regulations. This exclusion further exacerbates the unequal structure of the global political economy. This issue represents a larger agenda, overshadowed by the platform geopolitics competition at the national level.

The current reality of the global political economy is that too many people work for far too long but are still unable to rise above the minimum standard of living. This situation underscores the need to actively examine the issues of platform economy and inequality on a global scale. In this context, the concept of "techno-feudalism" raises a more serious awareness of the issue.

4. The Message Techno-Feudalism Sends to the Global Political Economy

The concept of techno-feudalism was introduced by Greek economist Yanis Varoufakis. According to him, we are no longer living in a capitalist society but rather in a technologically advanced form of feudalism. This is a bold assertion that essentially overturns the long-standing history of capitalism that has persisted since the 16th century.

The reality Varoufakis observed was the monopolistic growth of big tech companies. Based on vast capital and data, big tech companies partition the internet network with their proprietary platforms. Those who lack the capital, resources, or information necessary for development—mainly other companies and ordinary users—lead their digital lives on the platforms carved out by big tech. The data they provide on these platforms feeds back into the cycle, contributing to the revenue

generation of big tech, creating a vicious cycle. In other words, the digital landscape being occupied by big tech companies resembles a return to the feudal system.

In this sense, many citizens, who have been reduced to mere platform users, are now dependent on big tech—the new rulers who generate enormous wealth through digital platforms.

Big tech platforms are rapidly increasing their wealth and power in proportion to the amount of time users spend engaging with the platform. This presentation argues that the political economy of data will lead to an era of techno-feudalism, where the power of big tech companies (that own the platforms) holds overwhelming dominance. The issue is that the operational techniques of big tech, which suppress human society and the inherent diversity within it, are likely to result in disastrous consequences. The monopolization of information and the control of innovation lead to an unequal distribution of the fruits of technological advancement, undermining the values of freedom and equality—which are the foundation of democratic politics—and destabilizing society as a whole.

The platform industry, which grows by suppressing the values of freedom, equality, pluralism, and creativity, must be seen as problematic, particularly because it could ultimately forfeit even the positive contributions that digital platforms have made to democracy. This presentation proposes a transnational governance model, involving the participation of diverse actors, as one institutional alternative to break the self-replicating capitalist mechanisms inherent in digital platforms.

5. Political Considerations on Transnational Data Governance (1): Multistakeholderism There are three reasons for proposing transnational governance as a solution to the problem. First, market-friendly solutions such as open innovation and frameworks for responsible research and innovation have proven insufficient to address the issues posed by today's digital platforms. Therefore, an approach not from an economic but a political dimension is needed. Second, the technical standards and normative principles related to digital platforms have a broad impact on global citizens, making it essential to establish a transnational decision-making model that includes a wide range of diverse stakeholders. Third, existing international trade organizations like the WTO have taken a passive stance in addressing the platform economy. In particular, with the rise of bilateralism centered around PTAs (preferential trade agreements) rather than the WTO's multilateralism since the 1990s, it has become increasingly inadequate to promote global-level regulation. In short, while the development of digital technology may be monopolized by private corporations and finance, its wide-reaching impact on global civil society necessitates a governance system to manage the issues collectively on a global scale.

Before discussing a concrete blueprint for transnational governance, it is first

necessary to critically examine multistakeholderism, which is the core model of current internet resource governance. By definition, multistakeholderism refers to "a form of transnational governance where actors belonging to two or more sectors attempt to resolve public issues under horizontal power relations based on procedural rules."

Multistakeholderism was proposed as a model to ensure inclusive and democratic governance by involving various actors—governments, corporations, and civil society—in the decision-making process. However, it has revealed its limitations as a framework, fundamentally clashing with the commons-based nature of internet technology.

6. Political Considerations on Transnational Data Governance (2): Towards Genuine Multistakeholderism

Broadly speaking, global governance is not limited to a specific issue area and can, in principle, include a variety of actors. It is important to create governance that allows for the horizontal participation of various actors who are, or are likely to be, affected by the issue. However, to address the intrinsic issues of the transnational digital platform economy—1) the privatization and commodification of data, 2) the monopolization of information technology and the control of innovation based on it, and 3) the undemocratic management of digital platforms—it is necessary to accompany not only a horizontal network of stakeholders but also a certain degree of regulatory power.

The concept related to this governance is "meta-governance," which means the "governance of governance."

Meta-governance is a strategy aimed at resolving the inherent dilemmas of governance, referring to a complex governance system that encompasses and coordinates governance across various issue areas. Unlike traditional governance concepts, which focused on the management of a single domain, particularly in crisis management, meta-governance is a coordination model suited to managing overlapping issue areas and corresponding governance systems.

According to the concept's proponent, B. Jessop, meta-governance involves seeking a balance within overlapping governance networks characterized by plurality and complexity. Under meta-governance, both horizontal and vertical orders exist, adjusted according to the degree of discipline necessary to address specific issues. In other words, capitalist market orders, hierarchical orders, and heterarchical orders coexist in the meta-governance model.

Economic historian Karl Polanyi, in his book The Great Transformation, argued that when the metamorphosis of capitalism leads to disruptive changes, and if these changes are too fast and uncontrollable, it is necessary to slow down the pace as much as possible to protect the well-being of the community. From this

perspective, to minimize the negative impact that the rapidly changing digital platform economy may have on the global political economy, transnational cooperation efforts are undoubtedly needed.

7. Conclusion: The Platform Economy and Korea's National Strategy

The global political-economic inequalities caused by the digital platform industry are difficult problems that cannot be resolved solely by major powers or a few leading nations. Particularly in the case of digital platforms, a wide range of stakeholders at various levels must participate, and their participation is essential. Therefore, the support and cooperation of various countries and transnational actors are required to establish new norms and build order. As a platform powerhouse, Korea may find itself in a paradoxical position concerning the transnational governance mentioned earlier. However, addressing the economic inequalities caused by the digital platform economy, the proliferation of precarious workers, and the extremism of political ideologies is a political necessity for the long-term goal of maintaining a sustainable Korean society. Hence, Korea's active participation in transnational governance is essential.

At this historical turning point, this presentation proposes that Korea should play the role of a "norm entrepreneur." The key principles and norms that Korea can offer for global digital platform governance are as follows: First, there needs to be an increased awareness of the political and economic problems caused by digital platforms within the political sphere and civil society. To promote various policies and civil movements related to digital platforms domestically, it is essential to foster widespread public awareness of these issues. Next, based on successful domestic policy examples, Korea should be able to present core topics in transnational digital platform governance to the international community. Furthermore, companies leading the digital industry today should be encouraged and supported by making social responsibility clauses a mandatory regulation, creating an environment where platform companies can innovate with a future-oriented mindset.

This movement will serve as a foundation for overcoming the Western-centric digital platform norms currently led by Europe and will evolve into a true multistakeholderism that encompasses the interests of global civil society.

Session Title	The History, Present, and Future of .kr					
Date & Time	June 2	8, 2024 (Friday), 10:30-12:00	Venue	Room 4F, Franciscan Education Center		
Participant s	Moderato r	Park Jung-seop (Director, KISA)	Presenter	Jeon Gil-nam (Ph.D., KAIST) Park Hyun-je (Professor, Hallym University) Song Kwan-ho (Professor, Soongsil University) Lee Jung-min (Team Leader, KISA) Lee Young-eum (Professor, Korea Broadcasting and Telecommunications University)		
	Yoon Bok-nam (Lawyer, KIG	A)	Kim Su-jin (Youth Representative, Chung-Ang University)			
	Panelists	All Presenters				

- ☐ The History of the .kr Domain
- O Dr. Jeon Gil-nam
- The first domains started with gTLD, and later, the policy of allocating ccTLDs for around 200 countries became an issue. In the early days, it was difficult to allocate one ccTLD to each of the 200 countries, so neighboring countries were grouped together for allocation. South Korea, for example, was grouped with Japan for its allocation (in 1983, there were only five ccTLDs).
- In 1986, the national domain was delegated from CSNET in the U.S., and at the time, Dr. Park Tae-ha was in charge of the practical work. By 2026, it will have been 40 years since the introduction of the .kr domain.
- I am currently designated as the .kr admin (administrative manager), but I hope to discuss where the future role of the .kr admin should be placed during the KrIGF, and reach a decision before 2026.

Summary

- I believe that the core of internet governance lies in the management of IP addresses. Initially, there were some positive examples where institutions, such as universities in the U.S., which had been allocated large blocks of IP addresses, returned unused IPs. However, these cases were rare, which is unfortunate. Moreover, countries that were connected to the internet later did not receive IP address allocations fairly. I hope KIGA will discuss the issue of IP address allocation in the future.
 - O Professor Park Hyun-je
- South Korea began internet research and development in the 1980s, and in 1986, the management and use of IP addresses and the .kr domain started.
- In 1986, South Korea attempted a direct connection to the internet and was assigned a B-class IP address (128.134), registering seven hosts in the NIC host table (August 10, 1986). The actual connection was established in 1990 through PACCOM (March 24, 1990).

- The national domain initially changed from .sdn to .kr, and second-level domain abbreviations were modified from three letters (.com, .edu, .org, .gov, .net) to two I etters (.co, .ac, .or, .go, .ne). (Example: lilac.sdn → lilac.kaist.edu.kr → lilac.kaist.ac.kr)
- Early guidelines for using the .kr domain names included ① preventing the abuse/misuse of domain names, and ② providing naming recommendations (standardizing English transliterations, using full institutional names with words of four characters or fewer, recommendations for Romanization, and preventing conflicts due to abbreviations of full institutional names).
- In addition, South Korea actively engaged in international NIC collaborations, such as with APNIC and JNIC.
- In 1992, a dedicated line for the internet was publicly managed, and KNIC (Korea Network Information Center) was established to focus on academic and research management, later renamed KRNIC in 1993. Although the three-level domain format was first introduced by the UK, South Korea played a significant role in its wider adoption.
- In 1994, the relevant responsibilities were transferred from KAIST to the Korea Information Service under government management.

O Professor Song Kwan-ho

- In 1982, while working at Geumseong Jeonseon (Goldstar Cables), I was dispatched to KAIST, and later, I took charge of building the administrative computing network at Dacom. In 1987, I transferred to the Korea Information Service, which was operated at that time with funding from the Ministry of Communications for managing KRNIC.
- In the late 1990s, I persuaded the Ministry of Information and Communication to establish both the Korea Network Information Center and Korea Information Certification Co., Ltd. In 1999, the responsibility for managing the .kr domain was transferred to the Korea Internet & Security Agency (KISA).
- From the beginning, KISA was designed to operate without government budget support, based on a domain-based revenue structure. The domain names were granted for one year, with the system requiring annual renewals.

$\hfill \square$ Management of the .kr Domain and Group Participation Status

- O Lee Jung-min (Team Leader)
- In June 1999, the Korea Internet & Security Agency (KISA) was established. In 2001, a pilot system for private sector delegation of domain name registration was introduced, leading to the establishment of a company called iNames, and in 2002, the domain name registration competition system officially began.
- In 2004, the National Internet Development Agency of Korea (NIDA) was established as a statutory body to manage internet address resources, and in 2009, the integrated Korea Internet & Security Agency (KISA) was founded.
- In 2017, KISA relocated to a regional office, and in 2019, the Internet Address

- Resource Center moved from Seoul to Naju.
- In 2022, the Internet Address Act was revised with the aim of enhancing the participation of various stakeholders.
- O Professor Lee Young-eum
- ICANN is the organization responsible for overseeing the global operation of the internet. ICANN was delegated this authority by the U.S. Department of Commerce in 1998.
- Since then, the U.S. faced criticism for controlling the internet, and in 2016, the authority was transferred to IANA.
- ICANN is composed of various organizations representing different stakeholders.
- I have participated in ICANN meetings since 2000, and from 2004 to 2021, I served as the longest-standing ccNSO (Country Code Names Supporting Organization) Council member (and as vice-chair from 2009 to 2011). Currently, 177 members are involved in ccNSO.
- Since 2016, ccNSO has been a part of the "Empowered Community", participating in all activities of ICANN, including the ICANN Board, influencing policy-making, and engaging in domain-related policy and technical activities (e.g., committees related to the introduction of IDN, committees overseeing the IANA transition, financial support committees, delegation and re-delegation of ccTLDs, participation in ICANN's SO-AC structures, etc.).
- For the internet to function smoothly, ccNSO's activities are essential, and younger generations must understand this structure and continue to participate actively.

Session Title	The Current State of Global Cybersecurity Governance and Korea's Role					
Date & Time	June 28,	2024 (Friday), 13:00-14:30	Room 211, Franciscan Education Center			
	Moderator	Lee Dong-man (Chairman, KIGA)	Presenter	Lee Chang-beom (Adjunct Professor, Dongguk University)		
Participant		Yang Jong-min (Researcher, Korea Information Society Development Institute)		Kim So-jung (National Security Strategy Research Institute)		
ร์	Panelists Lee (Dir	Lee Jin (Director, Cybersecurity Institute)	Research	Lee Won-tae(Former Director, KISA)		
		Oh Byung-il (Director, Jinbo Network C	Center)			

(Lee Chang-beom): The impact of state-backed cyberattacks and various cyberattacks using new technologies (including fake news) on national security is growing day by day. Cyberattacks are difficult to trace back to their originators, and even attacks on private companies are often related to national interests and security, making it hard to distinguish between crime and warfare, or crime and security. For example, a violation of the Personal Information Protection Act could be considered an infringement of individual rights (the right to privacy), but if used for national purposes, it could be related to national security. Therefore, there is a need for an international definition of national security to support the global response to cyberattacks, along with the establishment of international norms and effective sanction mechanisms to protect national interests from cyberattacks. South Korea, both geopolitically and technologically, serves as a kind of testbed for cyberattacks, and with its experience in operating various legal systems, it must play an active role in the international community.

Summary

(Yang Jong-min): Due to the complexity of cyberattacks, it is not easy to establish international norms and a cooperative framework for responding to them. In reality, we see situations where actions are chaotic and disorganized, or people are overly focused on insubstantial values. The idea of building governance is itself contradictory—governance should form organically. Furthermore, it is unrealistic for middle powers like South Korea to play a leading role in this field. While aspirations are good, we need to accurately assess our own capabilities. South Korea lacks both the policy/institutional experience and the capability to effectively lead in this area.

(Kim So-jung): Various approaches to cybersecurity are being discussed at different levels, including within the UN, OECD, and other international organizations. Multilateral cooperation discussions are also increasing, such as through AUKUS, Quad, and even within military frameworks like NATO. What's important to note is that cybersecurity issues are closely linked to economic aspects like trade, commerce, and supply chains. Attention must be paid to the fact that cybersecurity is expanding beyond technical aspects and increasingly overlaps with economic issues like artificial intelligence. South Korea is also expanding its cooperation on

cyberattacks through alliances like ROK-U.S. partnerships, the Indo-Pacific strategy, and South Korea-U.S.-Japan summits. The critical point is to reflect on what contributions we can make and what we can do well. However, it is concerning that despite these efforts, the Ministry of National Defense, the Ministry of Science and ICT, the Ministry of Foreign Affairs, and the National Intelligence Service still act separately without sufficient coordination.

(Lee Jin): While policy cooperation and coordination among nations are necessary for cyber cooperation, the reality is that each country's laws differ, so any agreements reached cannot be immediately applied across all nations. Additionally, in terms of international judicial cooperation, it is correct that countries should actively cooperate in responding to cyberattacks. However, since all transactions must be mutually equitable, we should only cooperate as much as the other party is willing to provide to us. In other words, our level of cooperation should be defined according to the level of engagement offered by the other country.

(Lee Won-tae): I hope today's discussions lead to productive debates that can be reflected in national policy or the global agenda of the international community. Under current laws, the role of the private sector is relatively limited compared to the roles of the government, intelligence agencies, investigative bodies, and the military, with private entities mainly serving as passive compliance entities. However, during the Ukraine war, we saw global platform companies participating in the war, where non-state actors emerged as central players in the conflict. This highlights the critical role of private companies as major actors in cybersecurity and national security. However, explicitly defining private companies as agents of cyberattacks in legal frameworks, especially in wartime, could lead to the mobilization of companies and individuals, which requires caution. The discussion about the role of private companies should focus on strengthening their responsibility for defense and security, and we need to carefully consider allowing any offensive actions beyond self-defense. To address this, we need clear quidelines on the scope and responsibilities of companies in self-defense, and this must be done within the framework of public-private cooperation, rather than simply leaving it to the companies themselves.

(Oh Byung-il): Whether it's cybercrime or cybersecurity, there is a risk that actions restricting individual freedoms could be easily justified under the lens of national security. For instance, when issues like technology leakage, intellectual property, and personal information are viewed through the lens of national security, it can lead to the justification of rights-restricting measures. A prominent example of this is the debate over the TikTok ban in the U.S. The call for TikTok to transfer ownership is based on concerns that the personal data of U.S. citizens could be transferred to foreign entities. From a data security perspective, threats to security are not only posed by criminals or hackers but also by companies and states. As such, there are numerous cases where individual rights have been infringed upon under the guise of security. Governments can even operate or hire hacking teams. Therefore, advancing discussions on cybersecurity law requires multistakeholder dialogues. In

South Korea, the National Intelligence Service (NIS) plays a key role in cybersecurity, but it raises the question of whether the NIS can effectively engage in such discussions with civil society organizations.

Session Title	Generative	ative AI and Deepfake Technology							
Date & Time	June 2	28, 2024 (Friday), 13:00–14:30	Venue	Room 420, Franciscan Education Center					
	Moderator	Lee Soo-young (Chairman, Policy and Legislative Research Institute / Civil Society)	Presenter						
Participant s	Panelists	Min Jae-myung (Senior Researcher, KAIST / Public Sector)		Bae Jeong-cheol (Adjunct Professor, Science and Technology Research Center, Pusan National University / Academia)					
		Lee Cheol-woo (President, Korea User Association / Lawyer / Civi	Yeo In-pyo (CEO, MetaFlag (ON) / Industry)						
		Park Min-kyung (Student, Chun University / Youth)							

Discussion on the Session on Generative AI and Deepfake Technology

- Held a session on generative AI and deepfake technology.
- Sought countermeasures to address the impact and challenges of deepfake technology.
- Introduced and discussed the participation of panelists.

Cooperation Between the U.S. and Korea in Policing

- Discussions on securing online safety.
- The U.S. is considering responses to deepfake technology.
- Issues with financial losses caused by voice phishing.

Deepfake Videos and the Right to Publicity

- Deepfake videos are causing social controversies.
- Gaps in punishment for exposing minors' personal information.

Summar

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Ethical Issues with Deepfake

- Legal precedents for protecting the right to publicity.

- Lack of legal systems protecting the right to publicity.

- Legal issues with using deepfake videos.
- Need to separate the negative and positive aspects of deepfake.

The Future of the Metaverse and Deepfake Technology

- Voices of dissent may be silenced.
- Expression of diversity and self-identity will increase.
- Democratic and policy changes driven by technological advancements.

Adjusting Laws and Regulations in Line with Technological Advancements

- Technological advancements reduce job numbers.
- Addressing the social impacts of deep learning technology.
- Addressing the misuse of deepfake technology in financial fraud.

- Limitations of Deepfake Fraud and Defamation
- Legal limitations in dealing with deepfake fraud.
- Possibility of fraud charges for investment companies.
- Issues with producing false information and defamation charges.

Legal Issues and Remedies for Deepfake Technology

- Challenges in identifying the source of deepfake videos and proving intent in the creation process.
- Even if it's a fact, it's difficult to punish for defamation.
- Legal enhancements are needed to address the problems of deepfake technology.

The Social Impact of Deepfake Technology

- Explained deepfake using the example of Generative Adversarial Networks (GANs).
- Deepfake can be used for identifying and tracking criminals.
- Consider both the negative and positive impacts of deepfake.

Al Use and the Right to Publicity

- Provided positive examples of using AI for emotional impact.
- Need for guidelines regarding the use of the metaverse.
- Discussed face usage and the need to protect the right to publicity.

Discussion on Alternatives to Deepfake

- Discussed institutional measures to handle deepfake.
- Discussions on deepfakes in a similar context to the internet real-name system.
- Discussed freedom of expression as an alternative to deepfake regulation.

Legal Responses to Prevent Fraudsters

- Development in law enforcement tracks fraudsters' advancements.
- Technological tracking of fraudsters is possible.
- Lawmaking to prevent fraudsters.

The Social Application of Deep Learning Technology and Legal Regulation

- Deep learning technology enables the synthesis of images and sound.
- Creative content can be offered through educational applications.
- Legal regulations are needed to prevent misuse, such as in pornography.

The Relationship Between AI Technology and Education

- Emphasized the need for legal adjustments.
- AI technological advancements and global competitiveness.
- Importance of preventive education for negative outcomes.

The Social Problems and Regulatory Measures of Deepfake Technology

- Deepfake analysis, tracking, and detection using adversarial algorithms.
- Strengthening spam filtering on mobile phones and considering preventive measures for deepfake-related damage.
- Guaranteeing accurate information through AI watermarks and manufacturer labeling.

<u>Corporate and Government Response Methods: Content Filtering and Ethical</u> Guidelines

- Restricting user-generated content inputs.
- Need for limitations and discussions on the processing of deepfakes.
- Periodic discussions and agreements on the changing IT environment.

Future Outlook on AI and Technological Advancements

- The boundary between AI and deep learning may become blurred.
- The distinction between AI and humans could become ambiguous.
- Algorithmic technology will significantly influence the future.

2035, ChatGPT's Advancements, and the Singularity of Deep Learning

- ChatGPT's advancements have already begun.
- By 2035, human intelligence and computing technology may be connected.
- Deep learning technology is rapidly advancing.

Discussions on Deepfake Videos and the Right to Publicity

- Difficult for the general public to judge technical aspects.
- Need for discussions on regulating deepfake videos and the right to publicity.
- Legislative discussions regarding the duty to disclose and probabilistic items.

The Early Stage and Various Applications of Deepfake Technology

- Deepfake technology is moving from the early to intermediary stages.
- Demonstrating and using deepfake technology in elementary schools.
- Various uses of virtual characters.

Concerns About YouTube. Deepfake Technology, and Ethics

- Elementary and middle school students are quick learners.
- Increasing number of people broadcasting with virtual characters on YouTube.
- The need to focus on the importance of online ethical education.

Discussion on the Risks and Regulation of AI-Based Photos

- AI-based photos make it difficult for people to make judgments.
- Deepfake videos can be misused due to the influence of personal information

and big data.

- Discussions needed on establishing a legal system for regulations.

The Problem of Deepfake Technology and Crime

- Issues with deepfake technology and voice phishing.
- Importance of technological and legal regulations.
- Raising public awareness about crimes related to deepfake.

Concerns About Technological Regulations and Security Technologies

- -The need for technological advancement and investment in security technologies.
- -The dilemma between protecting personal information and responding to crimes.
- -The importance of technological advancement and competition.

Ethical Issues with Deepfaker Technology

- Developing technology that can detect invisible blood flow using deepfaker.
- Ethical and social responsibilities when developing algorithms using deepfaker.
- Strengthening ethical awareness and responsibility in private use.

Utilization and Restriction of Deepfake Technology

- The importance of protecting human dignity and rights when utilizing deepfake.
- Systems that notify and provide users with options to recognize their actions are needed.
- Rather than outright bans, careful suggestions and cooperation are required for deepfake utilization.

Promotion and Regulation of Deepfake Technology

- Viewing deepfake technology from both promotion and regulation perspectives.
- U.S. company Lyrebird's voice synthesis technology.
- Promotion methods that consider both technological advancement and social benefits.

International Cooperation and the Use of Deepfake Technology

- Deepfake technology should grow, despite its negative aspects.
- South Korea should develop deepfake technology.
- Combating fraud while considering collaboration and social impact.

Personal Information Protection Act and Deepfake Video Regulation

- Consent is required for using deepfake videos under the Personal Information Protection Act.
- Facial images are considered personal information, thus requiring permission for use.
- Regulations should include prior consent procedures.

The Misuse of Deepfake Technology and Police Response

- Concerns about the collaboration between thieves and police in the potential misuse of deepfake technology.
- Concerns about the severity of deepfake and phishing fraud.
- Questions regarding the development of police technology for detecting deepfake fraud.

Real-Time Conversion of Call Records into Text and Blocking Suspicious Calls

- Real-time conversion of call records into text.
- Capability to block suspicious calls related to voice phishing.
- The need for discussions on personal information issues and technology.

Technological Advancement and Social Ethical Responsibility

- Advancing technology to address fundamental problems and prevent harm.
- The role of deepfaker technology and AI in technological advancement.
- The dual aspects of technological development and the importance of social ethical responsibility.

Domestic Legislative Trends on Digital Sexual Crimes

- Legal punishment for domestic digital sexual crimes.
- Three types of illegal synthesized content.
- Policies for addressing digital sexual crimes.

<u>Discussion on Legal Punishment for Deepfake Pornography and the Nth Room</u> Incident

- Discussion on whether to punish the production and distribution of synthesized content.
- Strengthening punishment for sexual crimes involving children and adolescents.
- The characteristics of deepfake pornography and the absence of legal regulations.

Concerns About Deepfake Technology, Cyber Money, and Internet Crime

- Deepfake technology could become a major crime, just as it was in the past.
- Focus should be on how to detect fake videos and images.
- Safe verification of fake videos and images through distributed atomic blockchain technology.

The Positive Impact and Ethical Issues of Deepfake Technology

- Deepfake technology can positively influence high-quality content and democracy.
- The damage caused by deepfake technology is immediate, and victims lack institutional and technical solutions.
- Access to AI technology has lowered, enabling users to create deepfake videos.

Discussion on Al Model Warning Systems

- Developing devices that can display warning signs.
- Difficulty in accessing AI models.
- The difficulty of creating deepfake videos has decreased.

Institutional Measures to Overcome Technical and Cultural Delays

- Overcoming challenges brought by technological advancements.
- The usefulness and negative aspects of new technologies.
- The direction of deepfake technology development and the integration of social values.

The Threat of Digital Dictatorship and Deepfake

- The rise of digital dictatorship and technological advancement.
- The importance of data-based decision-making.
- The need for ordinary people to respond to digital dictatorship.

Session Title	Is the Kore Acceptable as		Standards	Commission's Internet Censorship	
Date Time	June 28, 202 2:30 PM	24 (Friday), 1:00 PM	Francisco Education Center, Room 410		
	Moderator	Oh Kyung-mi (Researcher, OpenNet) Presente		Son Ji-won (Lawyer, OpenNet)	
Participant s		Kim Dong-chan (Policy Chairman, Citizens' Alliance for Press Reform)		Sim Young-seop (Adjunct Professor, Department of Media, Video, and Public Relations, Kyung Hee Cyber University)	
	Panelists	Kim Yeo-ra (Team Leader, Science, Broadcasting, and Communication Team, Legislative Research Service)		Hee Woo (Activist, Progressive Network Center)	

The Korea Communications Standards Commission (hereinafter referred to as 'KCSC') operates a communication review system that assesses the content of information on the internet. While it is not a strictly legal form of "prior" censorship in the legal sense, it effectively functions as administrative censorship of expression by allowing the administrative authority to evaluate the 'content' of expressions and decide on prohibitions of distribution without judicial review.

Summary

Similar systems exist in a few countries, but most only have authority over clear and serious illegal information, such as child and adolescent sexual exploitation materials. In contrast, the KCSC in South Korea reviews not only illegal information but also a wide range of expressions based on criteria such as "harmfulness." This results in approximately 200,000 internet pieces of information being deleted or blocked annually, making it one of the few instances of extensive online administrative censorship worldwide. This communication review system poses a significant risk of hindering the free flow of information online and infringing on citizens' fundamental rights, such as freedom of expression and the right to know. The constitutional issues surrounding the KCSC's communication review system include 1) the ambiguity of review criteria, 2) the administrative nature of the KCSC, and 3) its political composition.

The communication review system delegates the judgment of review subjects and criteria entirely to the KCSC as an administrative body by setting the review criteria

as "necessary matters for fostering healthy communication ethics." Consequently, the KCSC reviews not only illegal information but also "harmful information," leading to requests for deletion or blocking of access not only for minors but also for adults regarding information deemed harmful. This system, which uses "necessary matters for fostering healthy communication ethics" as a standard, violates the constitutional principle of clarity and has a high degree of unconstitutionality in terms of infringing on freedom of expression.

Additionally, as an administrative agency, the KCSC's review of expressions carries a high risk of abuse to suppress legally critical expressions and control public opinion, which is a practice forbidden in democratic societies. Furthermore, the KCSC's composition is influenced by political recommendations, with 6 members recommended by the ruling party and 3 by the opposition, which exacerbates the risk of "political review" that favors the government. This concern is evident in various actual case studies.

To address these issues, the following measures are necessary: 1) transfer the authority of communication review to a private self-regulatory body and require court orders for decisions on deletion and blocking of illegal information; 2) clarify review criteria and subjects, limiting the scope to clearly illegal information with significant harm; 3) restructure the KCSC to ensure maximum independence from the government and political power by abolishing the current recommendation system and adopting a recommendation process from relevant organizations and expert groups, increasing the number of committee members, adding criteria to guarantee expertise, and establishing mechanisms to oversee appointments and activities of members.

Session									
Title	7.1 UN Digital Cooperation Agenda: Global Digital Compact (GDC)								
Date & Time	June 28, PM - 3:20	2024 (Friday), 2:40 PM	Venue	Francisco Education Center, Room 000					
			Tutorial	Session					
Dontininanta		Jeon Sun-min (Res	search Asso	ciate, KISDI, Public Institution)					
Participants	Presente r								
	•								
Summary	in earn establis eradical Goals (\$\footnote{S}\$ The UN to establish cooperate benefits the SDO The efficience cooperate the upon the upon the paid as digit - The future	est at the World Schment of the Miltion in 2000, and le SDGs) in 2015. I Secretary-General ablish an agendation, including address of digital technologies by 2030. Orts to establish an agenda are experienced by a second and a second all connectivity and a second connectivity	ummit on I llennium D d to the addimed at essing the gy and minimal implemental Compact governance d principles ng goals, i	role of ICT for global prosperity began nformation Society (WSIS) following the evelopment Goals for global poverty doption of the Sustainable Development ging efforts from multiple stakeholders enhancing various forms of digital digital divide, in order to maximize the mize its adverse effects while achieving and the international community's digital experience of the international attention should (GDC), which will address issues such of the internet and AI. for an open, free, and secure digital implementation principles, commitments, of the digital cooperation agenda.					

Prepared by: Han Sang-woo

Session Title	A Path to	A Path to Digital Safety: Security and Trust in Internet Routing								
Date &	June 28,	2024 (Friday),	Venu	Francisco	Education	Center,	Room			
Time	3:20 PM -	- 4:10 PM	е	211						
	Moderat	Park Chan-jin (KISTI,	Prese							
	or	Researcher)	nter							
		Park Chan-jin (KISTI,	Han Sang-woo (KISA, Senior							
Participants		Researcher)	Researcher)							
	Panelist									
	S									

	Presentation 1: Vulnerabilities of the Internet Routing System and Introduction to MANRS MANRS provides essential modifications to reduce threats such as incorrect routing information, traffic interception, and malicious route hijacking, aimed at enhancing the security and stability of the global internet routing system. The main components of MANRS include filtering, anti-spoofing, coordination, and global validation.
Summary	 Presentation 2: Sharing Trends in RPKI at Home and Abroad and Domestic Promotion Plans RPKI is a verification framework for internet address resources, necessary to ensure the integrity and interoperability of BGP. The United States and Europe emphasize the adoption of RPKI through their national cybersecurity strategies and digital decade implementation strategies, respectively. South Korea currently has a low adoption rate of RPKI and is working on plans to expand its implementation.

Session Title	EdTech: AI and Educational Innovation								
Date & Time	June 2: PM - 4:	8, 2024 (Friday), 2:40 10 PM	Francisco Education Center, Room 420						
	Moder ator	Lee Soo-young (Chair, Policy and Legislative Research Institute / Civil Society)	Presente r						
Participant s		Kim Bo-kyung (CEO, Impacters)		Kim Jun-ho (CEO, Let You In Edu)					
J	Paneli sts	Song Chae-won (Korea Policy Association)	Military	Kim Taek-won (CEO, Kim Hyun-joo & Kim Taek-won Tax Consultants)					
		Kim Yoon-ji (Reporter, Ilbo)	Busan	Jang Woo-chan (Student, Chung-Ang University)					

Importance and Characteristics of EdTech

- Introduction of various experts
- Concept and features of EdTech

Current Status of the EdTech Industry and Response Strategies

- Specialized problem-solving in areas of student interest
- Discussion on global research trends and future opportunities
- Expectations for providing exam opportunities utilizing AI

Utilization and Contributions of EdTech

- Interest and utilization by EdTech companies
- Presentation of action plans addressing environmental issues
- Importance of neutrality and learning assistance in EdTech

Summary

Innovations Changing the World through EdTech by the Social Venture Impacters

- Changes and successful mentoring by the education social venture Impacters
- Educational innovation and child development through EdTech

Revolutionary Changes in EdTech

- Role of education social ventures through impact forces
- Realization of personalized education and participation in the learning process
- Efficiency through platforms and confirmation of student growth

Positive Impact of EdTech and Efforts in the Public Education Ecosystem

- Realization of personalized education by identifying student difficulties
- Ways for students to become protagonists and change the world
- Overcoming challenges in semiconductor education using VR/XR

Growth and Influence of EdTech

- Enhancement of capabilities in various fields
- Expansion of rights for people with disabilities and accessibility in education

- Growth of the domestic EdTech market

Characteristics and Advantages of EdTech

- Customized education for students through online lectures and Al
- Convenience, efficiency, specialization, and usability
- Personal level customization and improvement of learning abilities

Educational Impact of Al Literacy

- In early 2023, 84% of middle and high school teachers and 78% of university professors utilized AI
- Al literacy is a core competency in education
- Negative impacts of EdTech classes identified

High School Education Reform Plan

- Despite the advantages of EdTech, high school students aim for high scores
- Reform of the college entrance exam system is needed
- Implementation of entrance exams that align with university goals and student expectations

Positive and Negative Aspects of EdTech Technology

- Potential for essay and interview evaluations
- Need for reform in the education system
- Both positive and negative impacts of EdTech technology coexist

Al Utilization and Educational Inequality

- Lack of ability to utilize AI
- Dependency on EdTech technology and adverse effects
- Negative impact of teacher capabilities and EdTech technology

Issues of EdTech Services for Instructors and Students

- Reduced interaction between instructors and students, leading to the disappearance of Q&A and lectures
- Problems arising from students using technology independently
- Need for Innovative technologies in EdTech services to help students find their own study methods

Challenges and Public Nature of EdTech Services

- Issues of technological disparity and educational inequality
- Utilization of big data and fairness
- Necessity of personalized education

Inequality and Validity in the EdTech Industry

- New inequalities arising from technological dependence and gaps

- Validity and fairness in data utilization
- Upstream and downstream industries in the EdTech sector

Effects and Concerns of Al Education

- Need to integrate technology into economic education
- Concerns about the negative effects of EdTech
- Impact of AI education on children

Positive Aspects of EdTech and Concerns About Imbalance

- Personalized learning and enhanced efficiency
- Absence of human elements and flaws in AI
- Regional and generational gaps

Bridging Educational Gaps Through EdTech

- Utilizing digital technology to address poverty issues
- Global considerations for educational gap issues
- Worsening inequality due to unequal access to the benefits of EdTech

Government support policies for EdTech companies

- Addressing educational gaps at the global GDC
- Importance of accessibility in educational content production and experience
- Support for EdTech companies through government policies

Educational Inequality and Utilization of EdTech

- Potential benefits and incentives from corporations and private enterprises
- Inequality may be alleviated or exacerbated depending on the education sector
- EdTech can contribute to alleviating educational inequality

Pros and Cons of EdTech and Its Importance

- EdTech technologies are useful but have limitations in education
- Improving education through the use of EdTech is essential
- Advancements and support in technology can pose challenges

Global Educational Issues and EdTech

- Technical barriers for the elderly and disabled
- Need for the introduction of EdTech technologies, as seen in Europe
- Exploring ways to provide benefits through corporate collaboration

Utilization of EdTech and Potential for Teacher Replacement

- South Korea's EdTech industry is considered semi-developed
- Potential for supporting developing countries with EdTech technologies
- Discussions on the potential for AI to replace teachers

Quality of Education and Teacher Responsibilities

- Various trainings, including autonomous operation
- AI's potential to replace teacher responsibilities
- Impossible to replace teacher duties in elementary education

Impossibility of Teacher Replacement by EdTech and AI

- Al cannot replace teachers
- Digital education policies should enhance communication between teachers and students
- AI can perform instructional roles and moral teachings

Potential for AI to Replace Teachers

- Role of AI in substituting teachers
- Teacher roles and student guidance
- Al serving as a teaching assistant

Thoughts on Teacher Replacement Potential

- Shared opinions leading to a discussion
- Consideration of teacher replacement potential in education
- Reflecting on the possibility of replacing teachers while performing educational duties

AI's Role and Growth Potential in Teaching

- Potential for AI to take on teacher roles
- Need for emotional support in AI
- Role of AI in special education

Current Status and Future Outlook of Multicultural Education

- Importance of bilingual education and youth support in multicultural education
- Utilizing AI to address educational gaps in multicultural schools and for youth
- The role of AI in determining future career paths for generations to come

Future Expectations for EdTech

- A future where EdTech can replace teachers
- Potential for emotional connection and motivation
- Importance of the digital experience for the "phygital" generation

Collaboration and Efforts for the Development of EdTech

- EdTech leads changes in the education sector
- Providing diverse learning paths to enhance accessibility and effectiveness

- Need for collaboration among learners, educational institutions, corporations, and government

Development Direction of EdTech and Digital Accessibility

- Possibilities of technology and its connection to education
- Utilizing deepfake technology in the education sector
- Digital accessibility as a measure of human rights protection

Development of EdTech and Equal Accessibility

- EdTech development aims to ensure continuous and equal accessibility
- Task performance assessment using CHATGPT is convenient and effective
- Big data and AI play crucial roles in the education sector

<u>Possibilities of EdTech Utilization by the National Civil Service Human Resource</u> Development Institute

- Increased education and training during public service recruitment
- Reducing administrative burdens through tailored education
- Addressing special needs children through various educational methods

Concerns and Dependency on EdTech and AI Technologies

- Importance of Google Scholar and the need for academic writing
- Lack of regulations in the education sector regarding data analysis
- Increased workload for teachers and reduced class time

Utilization of AI in Education

- Orzo Class serves as a significant learning management solution
- Math services enabling rapid problem creation
- AI reducing time spent on tasks

Purpose and Direction of Education

- Importance of distinguishing between learning dependency and utilization
- Education's purpose and direction must align
- Educational objectives and directions should evolve to improve learning utilization

Legal Basis for AI, Its Utilization, and Regulation

- AI performing roles traditionally held by teachers
- Debates surrounding AI's role in replacing administrative actions under administrative law
- Regulatory forms being developed by the European Union to govern AI.

Prepared byr: Kim Ye-chan

Session Title	Draft Policy Announcement and Feedback Collection on the Creation of New Public Second-Level Domains under the 3rd-Level KR Domain					
Date & Time	June 28, 202	8, 2024 (Friday), 14:40-16:10			Venue	Francisco Education Center, 4th Floor
	Moderator Kyun Univ		essor Kang ng-ran (Ajou ersity)		Presenter	Lee Jung-min, Head of Internet Address Policy Team (KISA)
Participants		Lawy	er Yoon Bok-na yeol, Law Firm)	m (C	Class	Kim Sang-min, Deputy Manager (Gabia)
1	Panelists	Profe	ssor Min Byung ans University)	-wo	n (Ewha	Lee Jung-min, Head of Internet Address Policy Team (KISA)
			-won (Dankook	Uni	versity).	roney reum (Nary)
	Debate 1:	Shou	ld the "me	.kr'	" domain	be added when creating
			-level KR do			S
	Yoon Bok-	nam	•(Opinion) Poi	nts	out that pe.kr	of ai.kr, io.kr, it.kr, and me.kr domains. r and me.kr domains overlap in meaning
			as personal do •(Agree) Agree			uction of the me.kr domain to invigorate
	Kim Sang-	-min	the domain m	arke	t.	_
	Min Byung	-won	•(Opinion) Not be focused on			on of ai.kr and similar domains seems to
					•	over 200 people support the addition of
					_	onsumer demand for domains already in
	Oh Ji-wo	on	use domestically and internationally. •(Opinion) Emphasizes the need to strengthen differentiation to prevent			
			confusion with the pe.kr domain.			
	Genera		•Mentioned that according to a query made to ChatGPT, addresses such			
	Attende Opinion	_	as "한글.ai.kr" structure.	were	e deemed not	t suitable for the domain address
	Ориноп	•		m) :	Suggested tha	at domains such as "한글.ai.kr" should be
Summary			considered in future stages, but currently, only English-based domains,			
Junimary	∟ Panel		in line with "co.kr," are more realistic. •(Lee Jung-min) Confirmed that "이정민.ai.kr" is not an existing domain,			
	Respons		_			t its unsuitability is correct. Continuous
			media exposure is necessary to familiarize users with ai.kr once created.			
			•(Lee Jung-min) Mentioned that introducing Korean or Chinese characters into third-level KR domains is not being considered.			
	Genera	ıl				using top-level domains like ".xyz" being
	Attende	ee	blocked and whether similar issues could arise with the introduction of			
	Opinion	2	new third-leve			that are illustrated in the control of the control
	∟ Pane		•(Yoon Bok-nam) Acknowledged that email-related issues are common security policy concerns, which extend beyond internet address policies			
	Respons		and require b			-
	Genera Attende		•Asked wheth	er d	discussions on	defining Korean for top-level domains
	Opinion		could be exte	ndec	d to include d	lomains like io.kr.
	∟ Pane		•(Yoon Bok-na	m) :	Stated that th	ne issue of Chinese characters is complex
	Respons	se	and achieving consensus is very difficult.			
	Debate 2: Initial Registration Policy and Operation Period (Three					

,	
Yoon Bok-nam	(Initial Registration Policy) Opposes giving priority to existing registrants of other domains (such as or.kr, co.kr). In case of disputes, it is more appropriate to use the dispute resolution system. (Operation Period) Supports providing a 3-month priority registration period for trademark holders.
	•(Operation Period) Believes that for new gTLDs, a 2-month period is

Min Byung-won

Oh Ji-won

Kim Sang-min

Months)

sufficient, with 1 month for trademark application submissions and 1 month for document review. If the priority registration period is too long, it may lower expectations for general registrants.

•(Initial Registration Policy) If trademark holders are given priority registration, it should be handled more strictly and with a more cautious approach compared to existing procedures.

•(Initial Registration Policy) While protecting the rights of trademark holders can prevent confusion, additional complementary policies should be considered for fairness and equity, especially for individuals or small businesses.

Debate 3: Whether to Maintain the Same Banned-Word Policy in line with co.kr Domains

Yoon •(Agree) Supports maintaining the reserved word					
Bok-nam	line with the current co.kr domain standards.				
	•(Agree) During domain registration operations, there have				
V:	been no complaints regarding the inability to register				
Kim	reserved words. Other countries also heavily restrict words				
Sang-min	like those related to gambling, which aligns with the				
	current approach.				
	•(Agree) The current 22 reserved words are not excessive.				
Min	In fact, considering the increasing number of minority				
Byung-won	groups and the rise in social sensitivity, it may be				
	appropriate to add more reserved words.				
	•If the same rules apply to the existing co.kr domain, it				
Oh Ji-won	would result in a consistent policy, and the current list of				
	reserved words has already been minimized.				
General	•Among the '.ai' domains, 'x.ai,' which is the most famous,				
Attendee	consists of a single letter. However, country domains are subject to reservation. Considering future competitiveness, it				
Opinion 1	may be worthwhile to allow registration of single-letter English				
•	strings.				

Debate 4: Opinions on Other Newly-Generated Domains including Issues for Registry Management Fees, Eligibility, etc.

Lee	•The initial registration fee for '.ai' domains is over \$100,		
Jeong-min	while it is only about 20,000 KRW for 'ai.kr' (KISA's		
Jeong-Illin	registration management fee is the same as for co.kr).		
Kang Kyung-ran	How about raising the domain fee by about 1.5 times?		
General			
Attendee	An increase in fees may lead to a reconsideration of the necessity of domain registration.		
Opinion 1	necessity of demanding of the second		
Yoon Bok-nam	I wonder whether we are going to develop the domain name discount policy.		

Debate 5: Suggestions for Activating the Use of South Korea's National Domains.

	Kang Kyung-ran	There are two aspects to activation: one refers to increasing the number of domain registrations, and the other refers to actively creating content, such as building websites using the domains.
	Park Jeong-seop	It would be good if future registrars could manage the second-level areas of the third-level kr domains individually, or if a public solicitation process for the creation of additional third-level kr domains for the public could be established.
	Kim Sang-min	From a business perspective, if there is profitability, there would be no reason to oppose registrars for the second-level areas of the third-level kr domains, and there are also plans for the creation of new gTLDs.
	Yoon Bok-nam	•Future discussions on the second-level areas of the third-level kr domains will be necessary.

Session Title	Civic Society's Direction for Digital Security						
Date&Time	June 28, 2024 (Friday), 16:20-17:50 Venue			Francisco Education Center, Room 211			
	Moderato r	Chang Yeo-kyung (Institute for Digital Rights)	Presenter	Byun Kyu-hong (Skelter Labs) Ko Ah-chim (Al Ethics Letter Operations Team)			
Participants	Panelists	Jung Hong-soon (Officer, New Technology Personal Data Division, Personal Information Protection Commission) Cho Kyung-sook (Developer) Cha Ji-ae (Human Rights Foundation Saram)		Kim Ja-yoo (<i>Nuguna</i> Data)			

- As generative AI and cloud collaboration tools become increasingly integrated into the daily lives of citizens and the operations of civic society organizations, smartphones, messengers, collaboration tools, and cloud platforms are now familiar. However, digital security tailored to this changing environment remains unfamiliar.
- In a world where all data is generated and distributed in digital form, there is a risk of data being easily copied and circulated. This poses a threat of data leaks, which can severely damage the trustworthiness of organizations, regardless of the scale of the breach.
- Personal information leaks often occur due to ignorance or negligence on the part of responsible personnel. Smaller organizations with limited expertise and resources are particularly vulnerable, as they may find it difficult to allocate sufficient knowledge and resources to address these issues.

- Civic society organizations collect, store, and use personal data during their operations and activities. Managing this data securely is a critical responsibility for these organizations.

- Although safety standards for handling personal information are legally required under the Personal Information Protection Act, there is no clear guidance on how to implement specific measures, making it challenging to approach digital security.
- Sharing a checklist for basic digital security awareness can help organizations gradually find ways to respond quickly in emergency situations.
- There is a need for a guide that provides easy and quick access to information on cloud collaboration tools and associated terminology commonly used by civic society organizations in Korea. The goal should not be to enforce uniform security levels but to ensure appropriate security based on the specific circumstances of each organization.
- It is essential to present practical solutions that reflect the unique situations of civic society organizations, helping them understand how to implement necessary measures effectively.

Summary

Prepared by: Kang Ji-yoon, Kim Do-yeon, Kim Min-seo, Kim Hae-in, Jeong Gyo-eun, Cha Yoo-jin

Session Title	Data Sovereignty – The Threat to Human Dignity from Technological Advancements					
Date&Time	June 28, 2024 (Friday), 16:20-17:50		Venue	Francisco Education Center, Room 420		
Participants	Modera tor	Jeong Gyo-eun (Deputy Director, EG@IG Research Institute, Sookmyung Women's University)	Presenter	Jung Gyo-eun (Deputy Director, EG@IG Research Institute, Sookmyung Women's University) – Presentation Cha Yoo-jin (Director, EG@IG Research Institute, Sookmyung Women's University) – Content Preparation		
	Panelist s	Kim Hae-in (Sookmyung Women's University EG@IG) – On behalf of civic groups		Kim Min-seo (Sookmyung Women's University EG@IG) – On behalf of Ministry of the Interior and Safety (MOIS)		
		Kang Ji-yoon (Sookmyung Women's University EG@IG) – Expert in Al and Data Science		Kim Do-yeon (Sookmyung Women's University EG@IG) – Head of AI Legislation Team, Ministry of Government Legislation		

In this workshop session, titled "Data Sovereignty – The Threat to Human Dignity from Technological Advancements," we delved deeply into the impact of rapid digital transformation on our lives and fundamental rights. The presenter highlighted the hidden dangers behind the conveniences brought by digital technology and emphasized the importance of data sovereignty, raising awareness about the need for discussion. Three key issues were particularly focused on: the protection of biometric information, the fairness and transparency of Al's use of data, and the reliability of government management of public data.

The civic group explained how these problems threaten individual rights and privacy through various cases and news reports. They pointed out that the indiscriminate collection and misuse of biometric information, the opaque use of data by AI, and the lack of transparency in public data management could seriously infringe on basic human rights.

Summary

The government representative responded to concerns about public data management, explaining efforts to restore public trust through protection measures like data anonymization. They also clarified the government's policy direction on Al and data management, stressing its importance.

The technology expert debunked excessive illusions about AI by explaining its actual capabilities and limitations. They warned about the security vulnerabilities of biometric data and the risks of data misuse, advocating for a more cautious approach.

The legal expert pointed out that the current legal framework is temporary and emphasized the need for a systematic and comprehensive legal structure. This was explained as a necessary measure to ensure the protection of digital information and the fair use of data.

The session concluded by stressing that protecting data sovereignty requires continuous collaboration and discussion among various stakeholders. All participants agreed on the need for societal consensus and policy efforts to strengthen data sovereignty and safeguard individual rights and dignity.

Session Title	Digital Governance for Human Rights and Inclusion				
Date Time	June 28, 2024 (Friday), 16:20-17:50		Venue	Francisco Education Center, Room 410	
Participants	Moderato r	Min Jae-myung, Senior Researcher, KAIST	Presenter	Song Chae-won, Member of the Korea Military Policy Association	
	Panelists	Park Ki-tae, CEO of Cheongchun Woodwork Studio		Geum So-dam, History Major, Ewha Womans University	
		Kim So-ri, CEO of Jigeumjigu		Kim Ji-yoon, Associate, Social Contribution Support Team, Korea University	
		Jung Jae-hwan, Lawyer, Dagaam Law Firm		Yoo Kyung-seok, General Director, Sae Haram	

Digital Governance Session: Human Rights and Digital Technology

- Session: Beginning of the Digital Governance Session
- Presentation and discussion on the topic of human rights and digital technology
- European Accessibility Act and the rights of people with disabilities

Promoting Inclusion and Diversity in the Digital Society

- The passage of the European Union's EAA is important for Korea
- Compliance with EAA regulations is required when exporting electronic devices
- Strengthening digital accessibility and securing global market competitiveness

Human Rights Response Measures in Korea's Digital Society

- Al technology is still in its developmental stage, so industry expansion is needed rather than restrictions
- Limiting fundamental rights should be kept to a minimum
- The need to provide immersive educational content utilizing digital technology

Summary

Impacts and Issues of Digital Technology

- Positive and negative impacts of technology
- Development of digital technology in real estate investment and development
- Legal and ethical issues surrounding digital advancements

Human Rights Issues and Countermeasures for Al-based Digital Technologies

- Companies are reluctant to disclose information due to confidentiality requirements
- Human rights violations by AI and unresolved human rights issues
- The need for digital governance bodies and specific solutions

Forum on Digital Technology and Human Rights

- Kim Ji-eun, External Cooperation Office of Donghaeng Lottery, the operator for the Ministry of Economy and Finance's lottery business
- Multistakeholder governance of safety and human rights in the age of artificial intelligence
- Content related to digital accessibility and human rights

ESG Practitioners' Concerns About Social Responsibility

- European countries are expanding sustainability initiatives and accessibility through ESG projects.
- European countries consider the participation of people with disabilities, including those with autism, in addressing the climate crisis.
- ESG practitioners must reflect on their social responsibility by considering the impact of digital technology and social issues.

The Importance of Inclusive Approaches to Digital Technology

- Increasing the participation of various stakeholders is essential.
- The importance of human rights on the internet is emphasized.
- An inclusive approach to digital technology is necessary.

The Importance of Expanding Diversity in Climate Crisis Initiatives

- Support for diversity expansion projects in European countries.
- Collaboration with non-profit organizations is crucial.
- Approaches that consider individuals' diverse life circumstances are needed.

The Importance and Impact of Universal Design

- Design should allow everyone, regardless of gender, age, or disability, to use universal design.
- Universal design benefits not only people with disabilities but also the general public.
- Universal design helps both disabled and non-disabled individuals.

Strengthening Digital Governance for the Social Participation of People with Disabilities

- It is necessary to resolve the issue of limitations on social participation for people with disabilities.
- While universal design is important, there is a lack of research and user experience.
- Guidelines announced by local governments are expected to raise awareness and lead to action.

Social Awareness of Digital Accessibility and Design

- Recognition of the limitations of access to digital information.
- Issues regarding the sharing and copying of designs and ideas.
- Consideration of human rights and the protection of rights.

Enhancing Digital Accessibility for People with Disabilities

- Improving the inconvenience of using websites.
- Revising the Disability Discrimination Act and enhancing digital accessibility.

- Improving digital accessibility through AI technology.

Digital Governance and Issues Regarding the Disabled Population

- Disabled population: Over 50% aged 65 and older, preference for the labor market.
- Developmental disabilities: 70-80% between their 20s and 40s.
- Discussion on policies related to digital governance is necessary.

Legislative Notice for people with disabilities, lack of recognition by the ITU

- Legislative notice for people with disabilities.
- Lack of recognition by the ITU.
- Corporate profit bias and digital transformation.

Verification of AI Businesses and Service Quality

- Some non-lawyers or tax accountants are performing lawyer duties.
- AI may allow unqualified individuals to gain recognition.
- A verification process is necessary before launching AI businesses.

Limitations of Employment for People with Disabilities and the Incentive System

- Disability employment continues through a policy path-dependent approach.
- There is a trend toward abolishing quota fines and introducing incentives in Europe and elsewhere.
- There is a lack of discussion on accessibility issues for people with disabilities in Korean companies.

Response Measures to ESG Trends Reflecting the Voices of People with Disabilities from a Diversity Perspective

- Discussions on K-ESG standards and the Alternative Chamber of Commerce.
- It is necessary to reflect the voices of people with disabilities in terms of diversity.
- Establishment of policies and systems in line with ESG trends.

Realistic Approaches to Employment and Social Participation of People with Disabilities

- Increased classification of households with disabled members as vulnerable groups.
- Practical policies are needed for social participation and social integration.
- The advancement of AI and digital technology will help resolve difficulties.

The Connection Between Human Rights and Technology for People with Disabilities Through Technological Advancement

- Superior physical and intellectual abilities.
- Development directions through connections with people with disabilities.
- Increased accessibility through technological advancements.

Infringements on the Elderly and Countermeasures Through Digital Technology

- Discussion of technical and institutional measures, with technology already in place.
- Challenges in accessing digital processes, such as electronic lawsuits, for people with disabilities.
- The need to address infringements on the elderly through decentralized digital processes.

The Impact of Digital Technology and Social Issues

- Inconveniences caused by digital technology.
- The need for digital technology design.
- Expansion of social issues due to digital technology.

The Need to Set Boundaries in Digital Governance Design

- Boundaries are necessary in a world where individuals are becoming fragmented.
- Discussions on alternatives to the issue of human alienation.
- The importance of utilizing simplified digital technologies.

The Role of Governance and Citizen Participation

- The role and improvement of governance.
- The significance and importance of citizen participation.
- The gap between society and individuals.

The Importance of Awareness-raising Activities Due to the Advancement of Digital Technology

- The convenience of digital systems like kiosks and the discomfort experienced by the elderly.
- Understanding various environments and lives through Disney movies and dramas
- The need for awareness-raising activities for human rights governance.

The Need for Organizational Governance to Address Digital Crimes

- The role of cyber investigative teams in combating voice phishing.
- Concerns about vulnerable and low-income groups becoming victims.
- The need for independent digital technology organizations.

Legal Challenges and Social Support for Digital Accessibility

- Concerns about digital dictatorship if personal information is handed over to companies or the government.
- Discussions on digital accessibility not only for people with disabilities but also within a social context.

- The need for legal constraints and social support in response to technological advancements.

EAA Response Policies and Digital Technology Accessibility in Korea

- Korean conglomerates must respond to European export requirements.
- National interest in universal technology is necessary.
- Measures to improve digital accessibility are needed.

<u>Limitations of Classes During the COVID-19 Pandemic and Concerns Over</u> Technological Advancements

- Difficulties with in-person classes for students due to COVID-19.
- Technological advancements may reduce creativity.
- The need to develop culturally human-centered projects through technological advancements.

Conclusion of the Forum on Digital Human Rights

- Conclusion of opinion submissions.
- Consideration of direction for marginalized individuals.
- Artificial intelligence and social accessibility.