NIA NATIONAL INFORMATION SOCIETY AGENCY

NIA's experiences to share the COVID-19 Response

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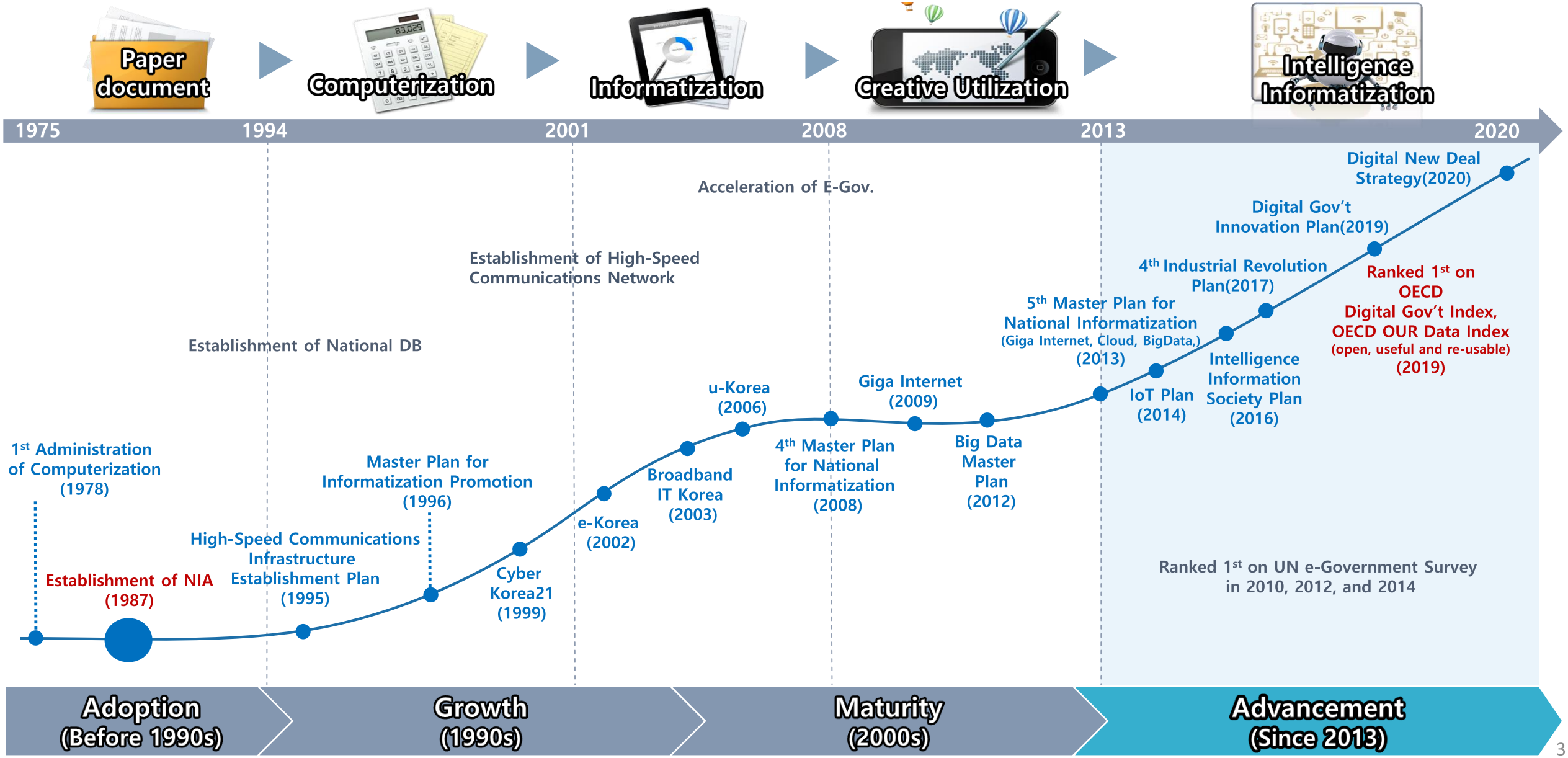
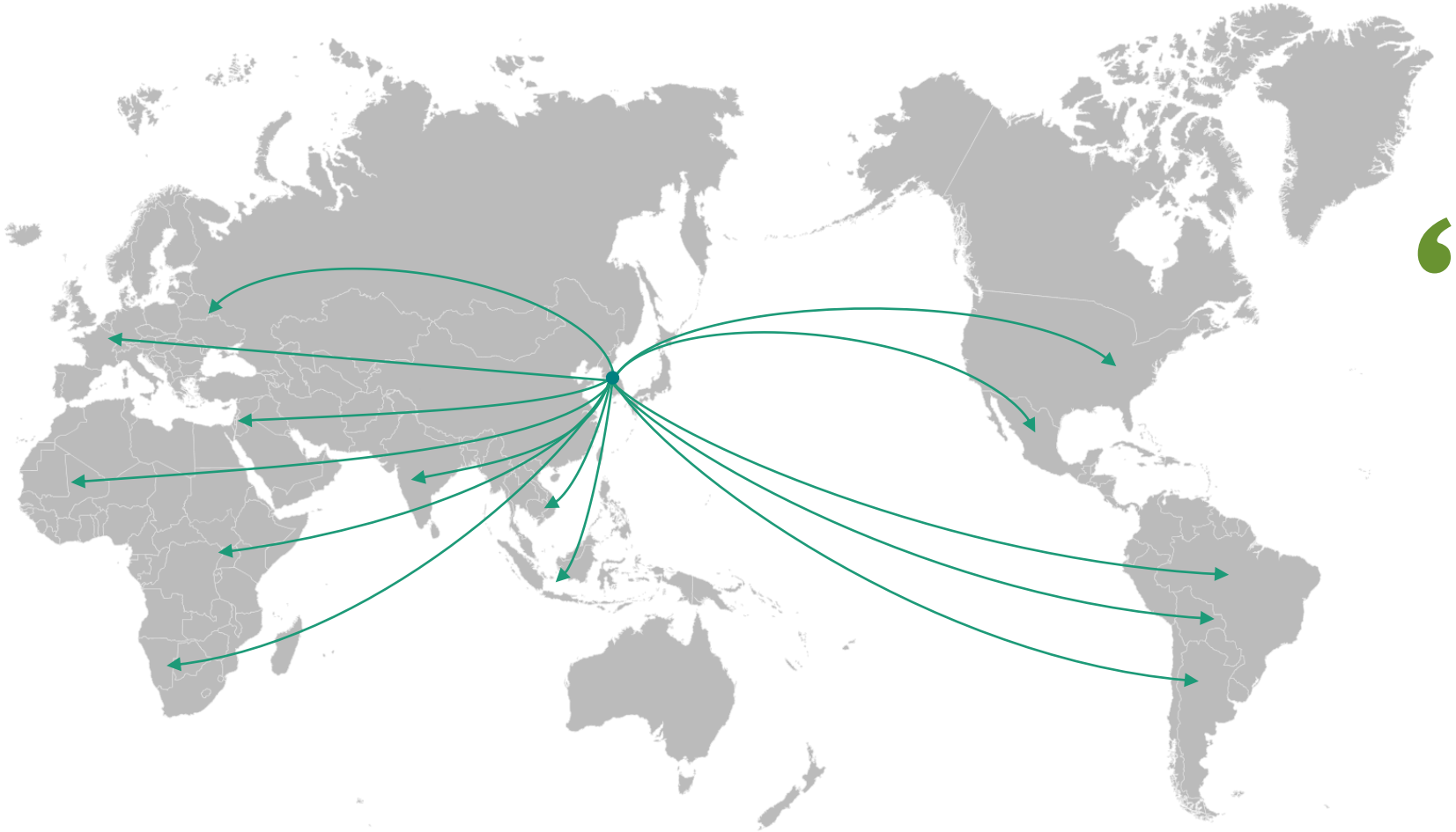


01 Introduction to NIA : Global Academy



Global Academy

NIA Global Academy was established in 2014 to provide professional training courses with the aim to share Korea's experience in digital government/ICT policy with the world.

The training courses are mainly targeted at the government officials and experts in developing countries to strengthen the policy capabilities of the digital government/ICT sectors. Since 2014, 5,688 people from 117 countries have completed the courses provided by NIA Global Academy.

A Total of 5,688 participants from 117 countries since 2014

02 Why We Share the Experience?

The New York Times

Covid-19: South Koreans keep calm and carry on testing

Nation appears to be weathering coronavirus storm well with little sign of panic among public

- Coronavirus - latest updates
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Coronavirus: South Korea reports lowest number of new cases in four weeks

23 March 2020 Share

Coronavirus pandemic

How South Korea Flattened the Curve

The country showed that it is possible to contain the coronavirus without shutting down the economy, but experts are unsure whether its lessons can work abroad.

Today's WorldView • Analysis

South Korea's coronavirus success story underscores how the U.S. initially failed

The Washington Post
Democracy Dies in Darkness

The Guardian

03 What We Share with the World? (1)

KOREAN ICT services against COVID-19 pandemic

Screening, Diagnosis

<Public Sector>

- Smart-quarantine System
- Drug Utilization Review
- International Traveler Information System
- Special Entry Procedure
- Walk-thru
- Drive-thru

<Public-Private Partnership>

- AI-based TEST Kits
- AI-based X-ray, CT Screening Solutions

Epidemiological Investigation

<Public Sector>

- COVID-19 Smart Management System

<Public-Private Partnership>

- GEPP (Global Epidemic Prevention Platform)

Patient/Contact Management

<Public Sector>

- Self-quarantine Safety Protection App
- Negative Pressure Isolation Room Information System
- Patient Management System

<Public-Private Partnership>

- AI CLOVA Carecall
- Hancom AI Check 25

Prevention

<Public Sector>

- Open Data on COVID-19
- Pathogens Information Management System
- Cell Broadcasting System
- COVID-19 Micro Page
- Global Research Collaboration on COVID-19

<Public-Private Partnership>

- KMA Corona Fact
- Goodoc
- Corona NOW
- Corona Map
- Corona Ita
- Corona Board
- COVID-19 Chatbot

KOREAN ICT services against COVID-19 pandemic
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03 What We Share with the World? (1)

Introduction

Introduction to ICT services to respond to COVID-19

Background

Background and purpose about development of ICT service

Pre-requisite

Description of pre-requisites(e.g. technology, infrastructure, data etc.) to build similar systems/services

System Structure

Description of system configuration, process, HW/SW

Function

Description of key functions of system, web/app

Contact Point

COVID19@nia.or.kr, the Ministries and public agencies, business partners

03 What We Share with the World? (1)

PPP | Patient and Contact Management

Clova CareCall

01 Introduction

Clova CareCall, developed by a Korean ICT company Naver, is an AI solution for telephone counseling and automatic response to health inquiries via the company's AI platform called Clova. Previously, the public health centers made calls to those under active monitoring in order to check their daily health condition. Now, this AI platform monitors them by making automatic calls twice a day (at 9am and 3pm) to check whether they have developed any symptoms and their health state is directly reported to the public officials of local governments.

Naver provides technical support for the operation of Clova CareCall and Sejong Telecom, a key telecom service provider, pays communication expenses. Clova CareCall is currently used in Seongnam City, Gyeonggi Province on a pilot basis.

02 Background and Purpose

In March 2020, when the COVID-19 was in full swing, the Ministry of the Interior and Safety (MOIS) developed the 'self-quarantine safety protection app' for those under self-isolation and made every effort to stop the spread of COVID-19. As for those under active monitoring, however, employees at public health centers had to make phone calls manually to check their health condition. Therefore, Naver introduced the AI CareCall service for the first time in Korea in cooperation with Seongnam city, where its headquarter is located, with the aim of contributing to local community with its advanced technologies (Mar 9, 2020).

Also, Naver applied the 'face mask inventory information' function to its Smart Call service since April 7, 2020 in order to reduce much workload in pharmacies that were busy responding to customers regarding COVID-19. When a customer asks Smart Call for face mask inventory, Smart Call informs the real-time mask inventory based on pharmacy information registered on Naver's 'Smart Place'.

03 Pre-requisite

Database of monitoring targets is needed to operate the Clova CareCall service. Based on the data, Clova Carecall, which is applied with AI technology such as voice recognition, makes an auto-call to the target via wired, wireless, and Internet networks, and all calls are stored in the cloud.

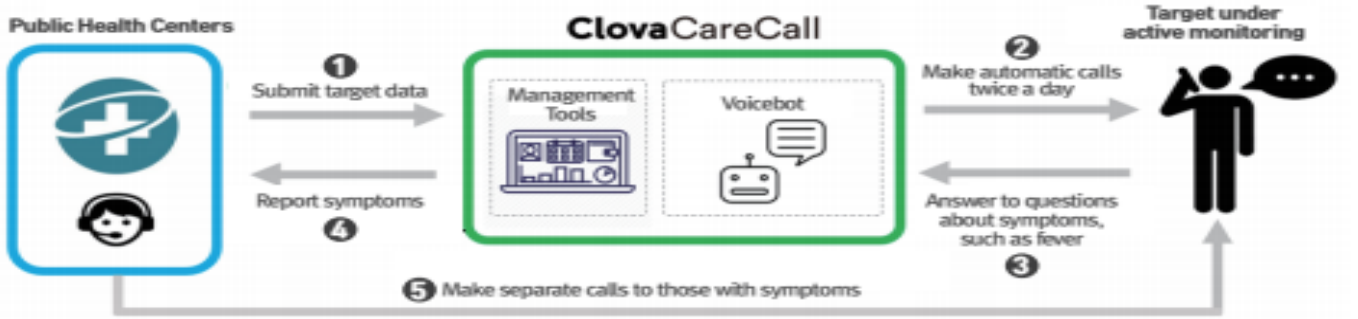
Type	Requirement
Used Technology	▪ AI (Speech Recognition, Natural Language Processing, Speech Synthesis, Text Analysis, etc.) ▪ Cloud

04 System Configuration

1. System Process

Clova CareCall automatically calls those under active monitoring for potential infection of COVID-19 twice a day to check their health condition and whether they have any symptoms related to the disease.

First, the public health centers submit data on those under active monitoring to Clova CareCall system and the system makes phone calls to them and check their health state based on automated scenarios. The results are reported to the public health centers so they can take measures deemed necessary.



04 What We Share with the World? (2)

ICT-based Response to COVID-19 of Korea

<Course Description> *online course

- This course aims to improve policy capacity to respond to the infectious disease using ICT.

(Modules of the course)

① Korean healthcare and infectious disease management policy

② Digital government systems for COVID-19 response

③ ICT Services for COVID-19 response

<Target>

- Anyone who are interested in COVID-19 Response of Korea

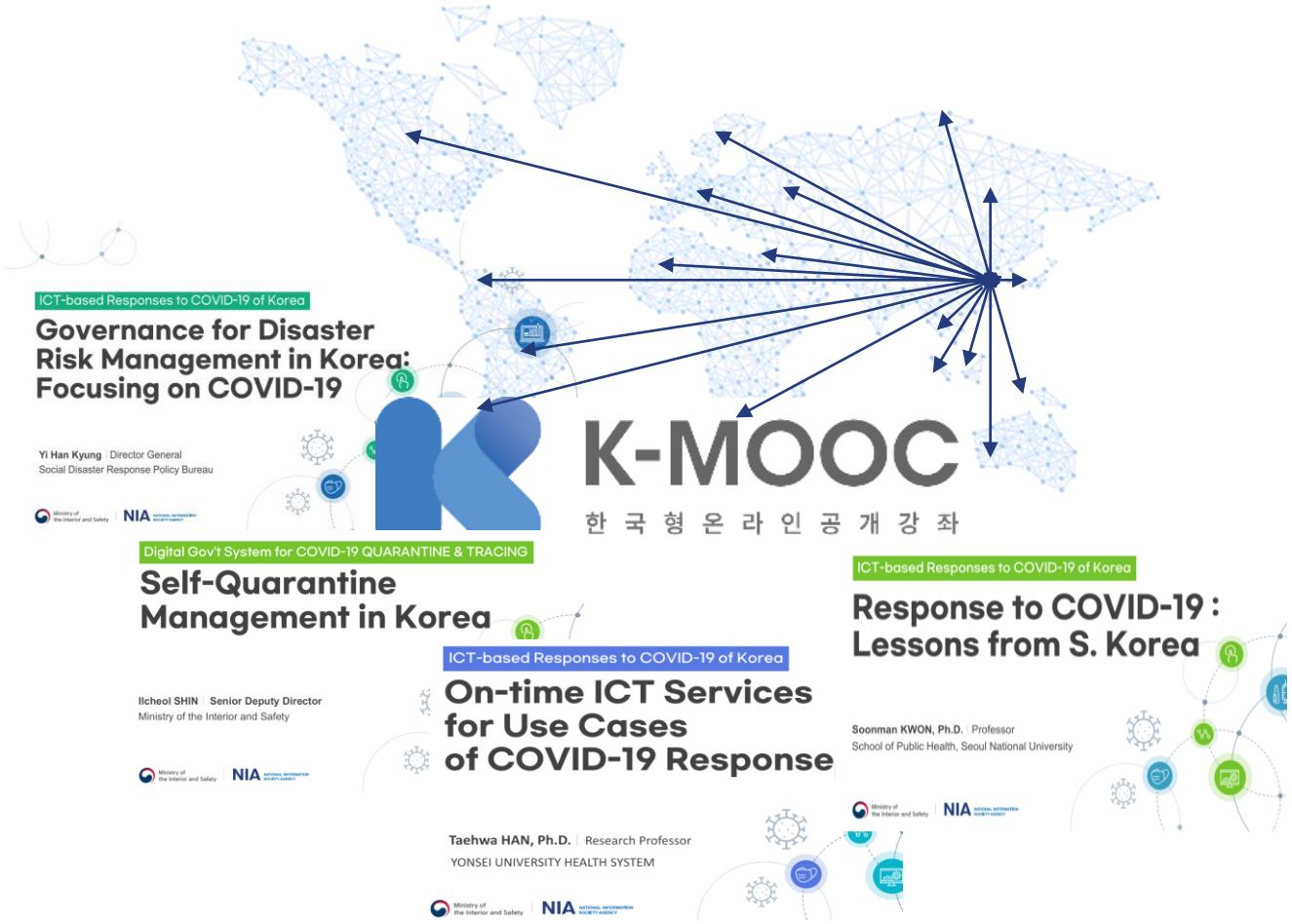
<Registration>

- K-MOOC* (http://kmooc.kr)

* Korean Massive Open Online Course

※Please contact asd@nia.or.kr if you're interested.

356 participants from **45** countries



04 What We Share with the World? (2)

Collaboration with relevant ministries/ public agencies and private companies to respond to COVID-19

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건강보험심사평가원 HEALTH INSURANCE REVIEW & ASSESSMENT SERVICE · h·well 국민건강보험 · KIHASA 한국보건사회연구원 · KAIA 국토교통과학기술진흥원

서울대학교 SEOUL NATIONAL UNIVERSITY · 연세대학교 의료원 · VUNO View the Invisible, Know the Unknown · Lunit

NAVER · goodoc · WISEnut · DASH Don't Awkwardly Stay Home · kt

04 What We Share with the World? (2)

Nguyen Thi Van Anh / Vietnam

"The course was very useful as I got to know not only the ICT services in the pandemic but also the healthcare system and policies which enabled Korea to successfully contain the disease."

Kwaku Marfo / Ghana

"I learned how Korea proactively responded to the COVID-19 based on its highly developed ICT."

04 What We Share with the World? (2)

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Thank You

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