



AI-related Policy in Korea

-Key milestones and main challenges-

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1. Key Milestones

Interest in the 4th Industrial Revolution and Artificial Intelligence Skyrockets in 2016

Jan 2016

Klaus Schwab, the executive chairman of the World Economic Forum (WEF), announces the arrival of the “4th Industrial Revolution” in the WEF Annual Meeting held in Davos-Klosters, Switzerland



March 2016

Google DeepMind's artificial intelligence system, AlphaGo, plays Go with South Korea's Go champion Lee Se-Dol



South Korea has been developing new AI-related policies every year since 2016

November
2016

Created the 'Intelligent Information Society Bureau',
a government task force on AI and information technology

December
2016

Established the 'Mid-to-Long-Term Master Plan in Preparation
for the Intelligent Information Society'

October
2017

Launched the 'Presidential 4th Industrial Revolution Committee'

November
2017

Announced the 'People-Centered Plan for the Fourth Industrial
Revolution to Promote Innovative Growth'

December
2018

Shared progress updates and future plans for the (above)
'People-Centered Plan for the Fourth Industrial Revolution'

November
2019

Created a 'Artificial Intelligence Policy Bureau' in the
Ministry of Science and ICT

December
2019

Announced the 'National Strategy for Artificial Intelligence'

April
2020

Proposed the a Korean 'Digital New Deal'



“ **Toward AI World Leader beyond IT** ”
- AI for Everyone, AI of Everything -

Establishment of global-leading AI
ecosystem

Innovation of AI Competitiveness

1

AI
Infrastructure
enhancement

2

Securing
competitive-
ness in AI
technology

3

Drastic
regulatory
innovation
and revision
of laws

4

Nurturing
global AI
start-ups

The country that makes
best **use** of AI

Full-scale Utilization of AI

5

Nurturing
world's best AI
talent and
educating
people

6

Diffusing AI
technology
across all
industry areas

7

Building the
best-
performing
digital
government

Realization of
people-centered AI

Harmony and
coexistence with AI

8

Establishing
an inclusive
job safety
network

9

Preventing
dysfunction
and
establishing
AI ethics

**World's 3rd largest digital
competitiveness**

now, world's 10th country (IMD)

Policy Goals(2030)

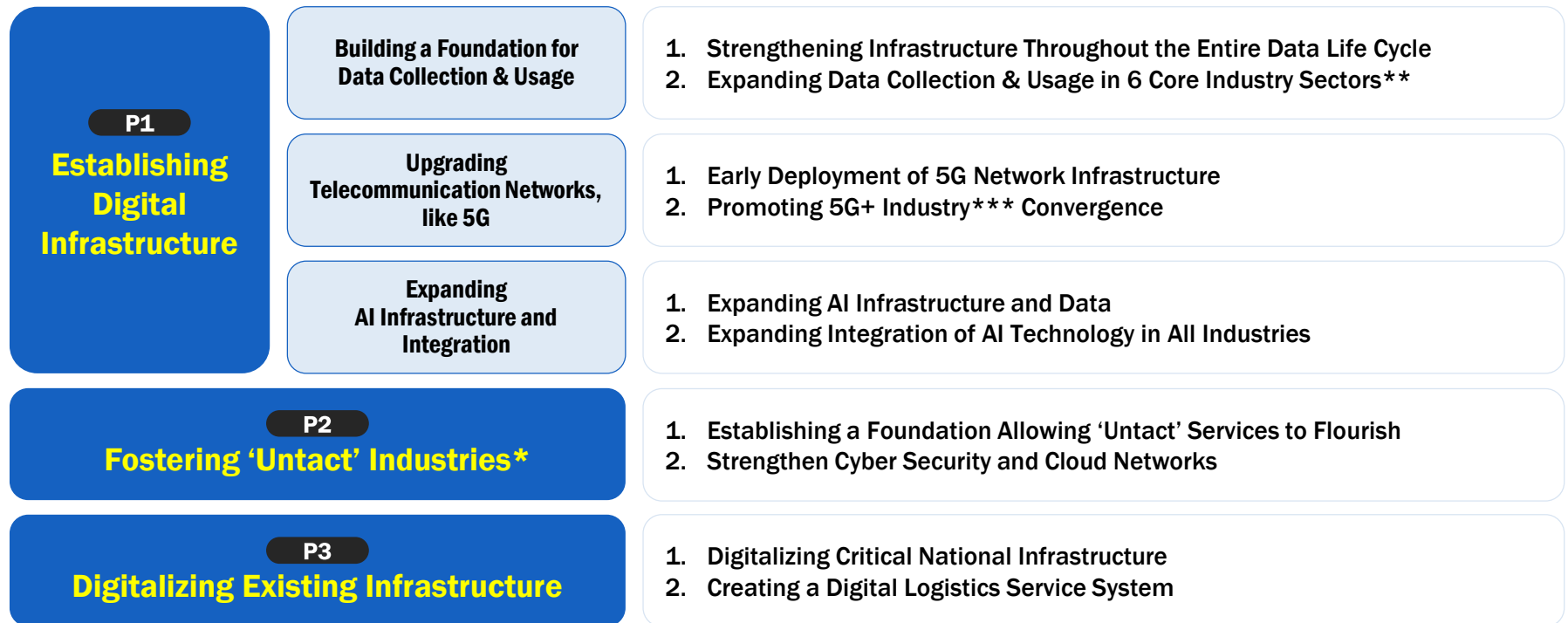
**Economic effect of AI,
Up to 455 trillion won**

McKinsey, KISDI

**Top-10 countries
in terms of quality of life**

now, top 30 (OECD)

→ 3 Pillars with 10 Key Projects



Cultivate Digital Leaders and Workforce by Investing in People

* 'Untact industries' refers to online industries or industries that do not require physical contact

** These sectors include Finance, Health Care, Transportation, Public Data, Manufacturing, and Small Businesses

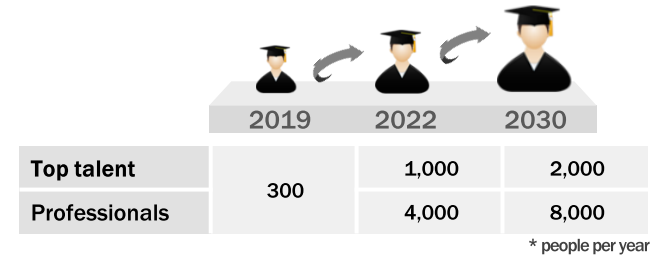
*** '5G+ Industry' refers to strategic industries that operate utilizing 5G networks, such as smart factories or virtual reality technology

2. Main Challenges

Nurturing World's Best AI Talent and Educating People

“ **Innovate the education system** so that the **world's best talent** can **grow** continuously and **all citizens** can make **good use of SW-AI** ”

Scale of nurturing human resources



AI Top Talent

Resolving AI issues,
and developing algorithm

AI Professionals

Developing AI platform and system

AI practitioners

Applying AI Tool and SW
in industrial fields (AI+X)

General public

Improving AI ability
(Ability to use, and ethics and literacy)

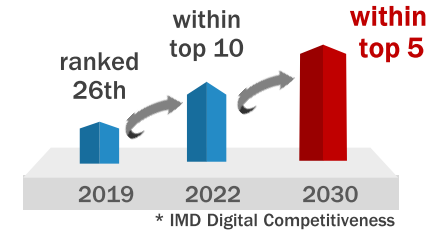
- ✓ Expansion of AI-related departments and allowing teachers to hold positions in private sector('20~)
- ✓ Expanding and diversifying AI graduate programs
* AI graduate schools(3 in 2018 → 8 in 2020), Convergence research center(4)
- ✓ Innovative educational institution, creating Innovation Academy
- ✓ creation and operation of interdisciplinary majors between AI and other majors
- ✓ Strengthening AI Capabilities of SW-centered universities (40)
- ✓ Conducting AI Education for Military Personnel and Public Officers by occupation and industry
- ✓ Expansion of Mandatory SW Education at Elementary and Middle Schools ('22)
- ✓ Strengthening Teachers' SW-AI Capabilities from the training and recruitment stages
- ✓ Providing AI lifelong educational opportunities for all people

“

Create an enabling environment where innovative companies and developers can imagine without limitations and take on challenges together

”

Regulatory environment



Shifting Regulatory Paradigm in AI Field, 'Approval first and Regulate later'

✓ Establishing a 'comprehensive negative list regulation roadmap'('20)

- Supplementing comprehensiveness and flexibility in legislation

Flexible legislation

negative list

definition of comprehensive concept

flexible classification system

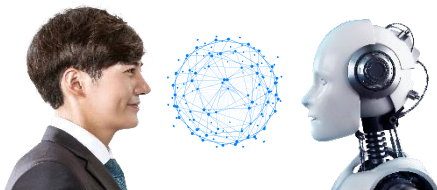
ex-post evaluation and management

✓ Spreading the case of innovation through timely revision of laws and regulations('20)

- Focusing on matters requiring revision of laws and regulations based on cases of temporary approval and case study results under the regulatory sandbox

Establishment of Future-Oriented Legal System in the era of AI

✓ Preparing framework legislation that presents a national strategic direction



✓ Launching '(temporary name) Legislative Preparation TF for the Future AI'('20)

Legal issues by sectors(example)

Finance

Responsibility for damage of investment recommendation by AI

Laws

Whether the effect of the judgment by AI can be admitted

Distribution

Criteria for applying drone delivery regulations

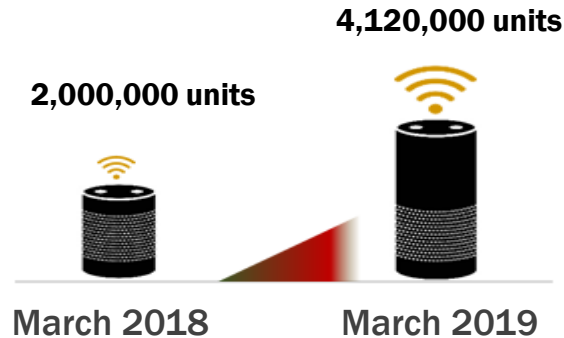
The 4th Industrial Revolution Committee will be re-established as an **AI-oriented pan-government committee**

- Establish an inter-ministerial collaborative system
- Support the establishment of follow-up plans for national strategies, and conduct inspections and evaluations
- Comprehensively check and manage the resources for implementing the action plans
- Lead in social discussions such as holding an industry-specific regulation hackathon

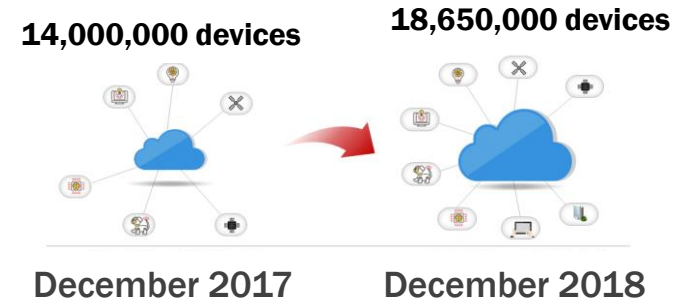


Promoting **strategic meeting** presided by the president and **with participation of citizens** at the same time

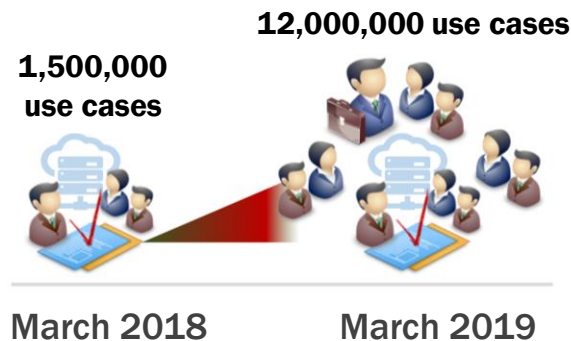
Number of AI Speakers Sold



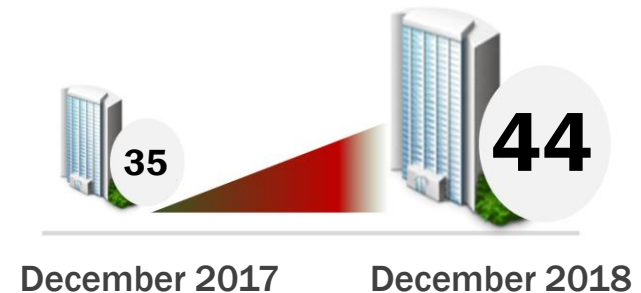
Number of Connected IoT Devices



How Frequently Open APIs for AI were Used



Number of Professional AI Firms



Other Indicators include

✓ Number of Smart Factories

✓ Sales from Manufacturing Robots Produced

Thank You
