

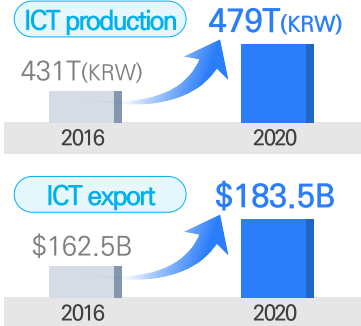
Korea's Policy and Regulatory Updates

: Plans for Nurturing Digital Talents

**APEC TEL66
Feb. 2023**

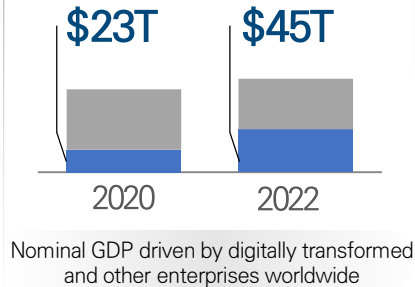
Digital transformation accelerating digital innovation

Continuous growth of ICT industry



Digital companies leading economic growth & overcoming crisis

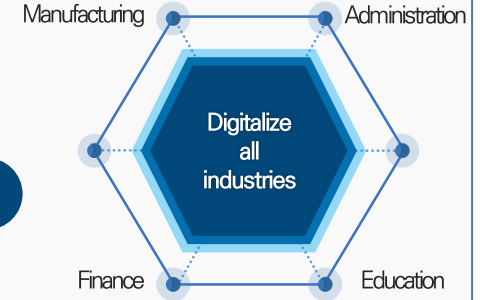
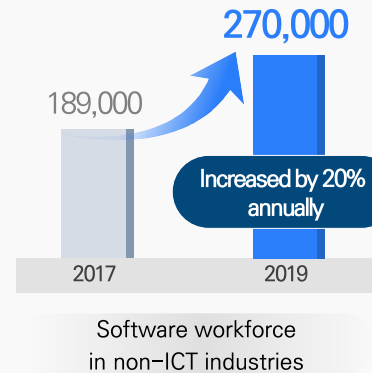
< Source : Statista >



Rising demand for digital talents in all industries

- ✓ Increase in digital workforce for non-ICT sectors including manufacturing & finance

< Source : Spri >



- ✓ Digitalize cutting-edge industries including semiconductors & future vehicles



Success of digital innovation depends on securing outstanding digital talents

Digital powerhouses to strengthen PPP & offer digital education

- USA
 - » AI initiative (2019)
 - » Pan-government ICT R&D (2020)

- PRC
 - » The 14th 5-year plan for STI (2020)

Big tech companies to secure talents & advance technology

- » Buy Deep Mind, an AI company
 - » AI-first strategy

- » Announce the plan to hire 10,000 metaverse talents in the next 5 years (2021)

Systematic talent nurturing is required for successful response to digital transformation

Master plan for fostering digital talents

(Aug 22, 2022, pan-government master plan)

Vision

Dynamic innovative growth led by digital talents

Goal



Nurture 1M digital talents
from 2022 to 2026



Promote digital education &
Capacity building of all citizens

Nurture 1M digital talents

Digitally skilled
workforce

Talents that can apply
digital tech to
their expertise

Talents that can utilize
digital tech
in daily lives

Raise digital
awareness

Facilitate Digital Badge system

Establish Talent Ladder system

Transition to digital education



Train teachers
on digital skills



Create an environment
conducive to
digital innovation







Educational revolution
using AI & Edu tech

Support system

Agencies supporting
digital education

Digital talent alliance

K-digital global network

-  **1** Establish a talent nurturing system based on public and private partnership
-  **2** Ensure universities can serve as bridgeheads for fostering talents in advanced and digital industries
-  **3** Strengthen digital capabilities of the future generation
-  **4** Support the entire cycle of fostering, maintaining & attracting talents

1-1 Expand digital talents with businesses

Private sector-led educational curriculum (2022)

1

Industry-university collaboration

Software academy on campus

Digital companies to establish academies on campus





2

Industry-university-local government collaboration

Software academy for networking

Operate courses for fostering regional industries





3

Training of SMEs & job opportunities

Software bootcamp

Consortium of SMEs & associations, Linking education and recruitment




Cooperate with companies in expanding talents

Incentivize companies for expanding training

Digital Leaders Club

Select companies enthusiastic about nurturing digital talents as “digital leaders club”

※ Provide infrastructure, give certification for excellent courses

PPP for overcoming a talent shortage in industries

Digital Talent Alliance

Institutions for nurturing talents(universities), companies utilizing talents(digital & traditional companies) government, related agencies, associations etc.

※ Joint job fair, joint development of training courses, internship, digital badges

1-2 Innovative training courses

✓ Give opportunities for young people by expanding courses

Diffuse "Innovation Academy"

Online test > Preliminary courses > Actual courses

Competition rate 16:1

Train more software experts (SW Maestro)

Application screening > Verify capacity > Interview

Competition rate 8:1

✓ Increase bootcamp training courses for digital technology

Innovation Academy	SW Maestro	Metaverse Academy	Nurture Data specialists	Security Academy	White-hacker School
750 in 2022	250 in 2022	180 in 2022	770 in 2022	2023~	2024~

1-3 Regional digital hubs

✓ Provide training for companies in regional hubs (7,300 in 2022)

Region 1

(Gangwon) healthcare, tourism
(Kyungpook) manufacturing, disaster, mobility
(Daegu) smart city

Region 2

(Busan) port, logistics, film, media, video
(Ulsan) car, shipbuilding
(Kyungnam) smart manufacturing, healthcare

4 Regional hubs (Innovation Square)

Region 3

(Daejeon) ICT, bio, water
(Chungbuk) semiconductor, bio, secondary battery
(Chungnam) display, bio, mobility
(Sejong) smart city

Region 4

(Gwangju) energy, car, healthcare
(Jeonnam) energy, agri-fisheries, logistics
(Jeonju) agri-life, finance
(Jeju) smart tourism, clean bio, green energy

✓ Create regional digital innovation hubs (2023~)

Software promotion agency

+

Metaverse hub

+

AI & data innovation center

+

Information security cluster

1-4 Nurture 'X+digital talents' for ensuring successful digital transformation

Consulting

✓ Nurture experts ("Digital Midas") in digital transformation (2024~)

Voucher

✓ Provide DX vouchers for SMEs (45 SMEs, 2023~)

Staff training

✓ Educate staff on digital transformation in non-ICT sectors including finance & shipbuilding (2022, 4,800 staff members)

2 Promote top-tier talents

Establish graduate schools in 5 digital tech

Next-generation semiconductors



Create 3 schools (~2023)

AI(convergence)



Create 9 schools (~2023)

Data



Create 10 schools (2024~2027) (goal)

Metaverse



2(2022) → 10(2026) (goal)

Cyber security



8(2022) → 12(2026) (goal)

Foster critical & emerging technology

✓ Expand ICT research centers in universities

Prioritize 5 fields

48 → 80 centers (goal)



AI



Quantum



Semiconductor



Cybersecurity



5G

✓ Expand talent nurturing programs for regional industries

14 cities nationwide
(10 → 14 universities)

Employee upskilling programs in universities

Foster highly-skilled workforce through challenging R&D

AI Innovation Hub

- Participation from 215 organizations in industry, academia & research institutes
- Enhance support for young researchers

SW Star Lab

(goal: 46 in 2022 → 60 in 2027)

- Provide fundamental software technology
- Support labs for nurturing outstanding researchers

Nurture global talents

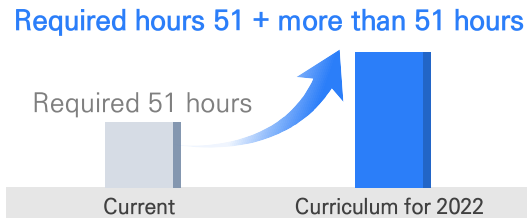
(goal: 30 in 2022 → 40 by 2024)

- Postgraduate researcher mobility
- AI research experience in CMU etc.

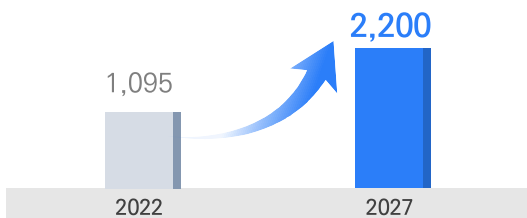
3 Innovate digital education system

Provide a universal IT education infrastructure

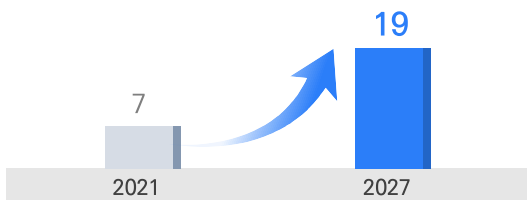
Increase
in
IT courses



AI leading
schools



ICT
textbooks



Hire skilled ICT teachers

Hire one ICT teacher in schools(MOE)

- Conduct survey to see if additional ICT teachers are required by 2022
- Reflect this to the mid-to-long term plan to hire teachers in 2023



Nurture digital tutors(770 tutors annually)

Encourage tutors to
support teachers
(in collaboration with MOE)



Train teachers in AI leading schools

Support training of IT companies



Establish a “Talent Ladder” system for supporting growth

Verify capabilities

✓ Modify system to verify digital capabilities

- » Develop a TOPCIT model to evaluate the capacity of non-majors



- » Utilize private education platforms

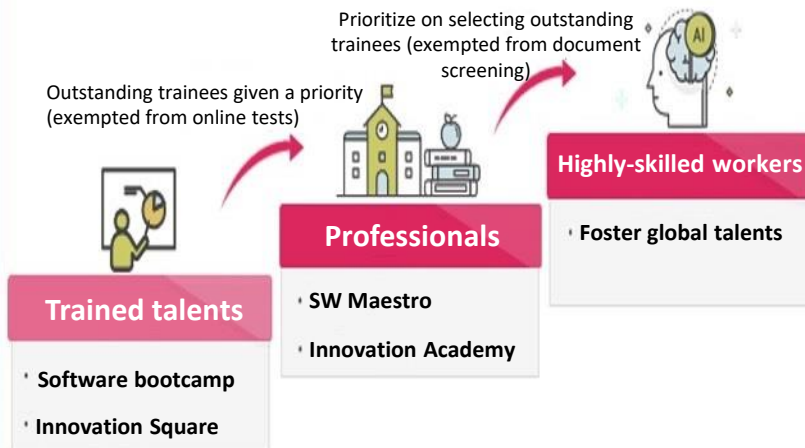
〈 Examples of private platforms 〉



Support growth

✓ Implement “Talent Ladder” project

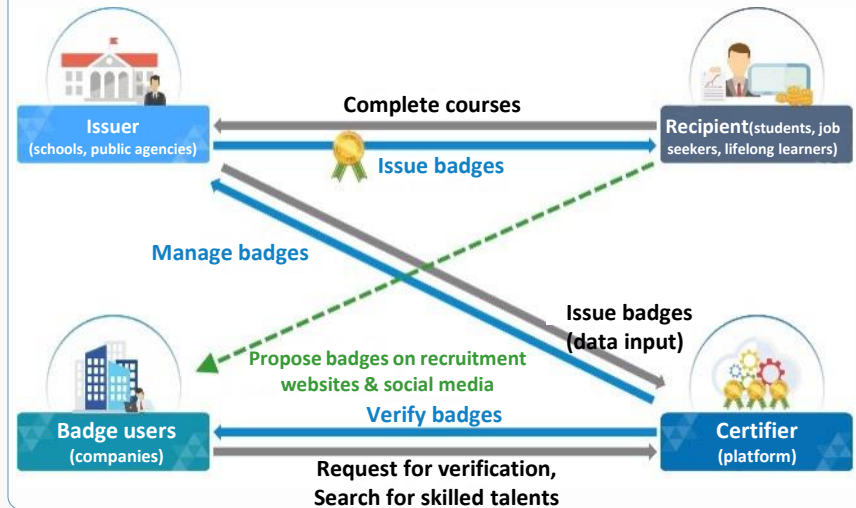
- » Systematic training of skilled workforce



Application in career development

✓ Digital Badge (in collaboration with MOE)

- » Applications of training history



Thank you!

