

Korean e-Government Innovation for Better Governance



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01

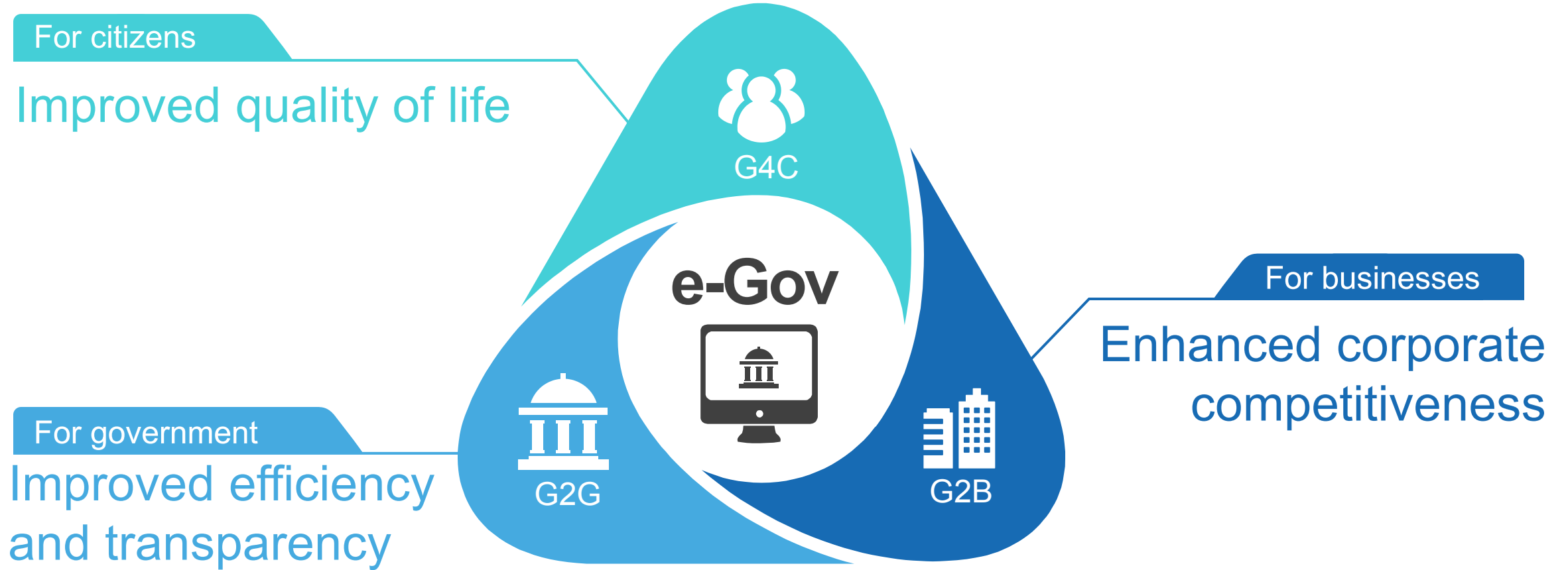
Goal of e-Government



01

Goal of e-Government:

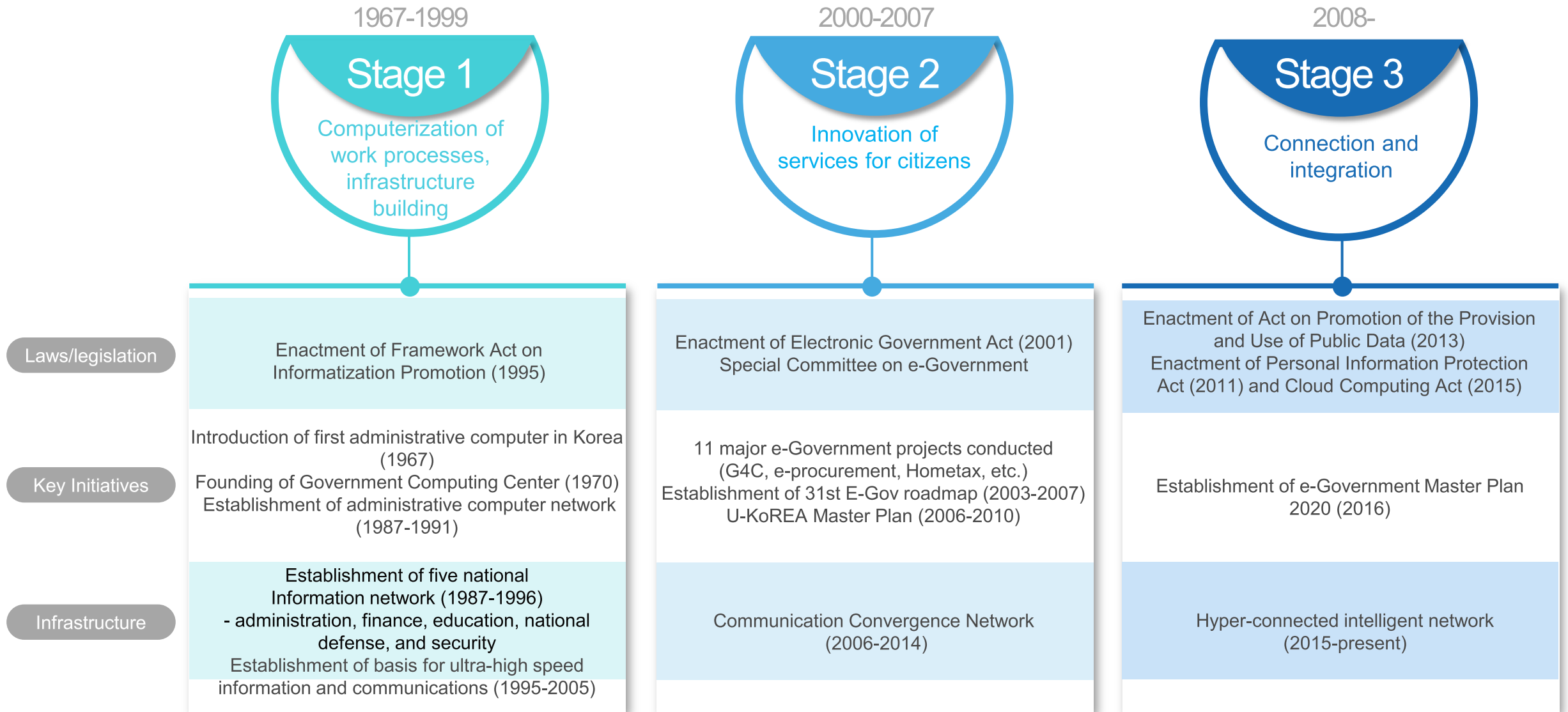
strengthened government capability and public service innovation

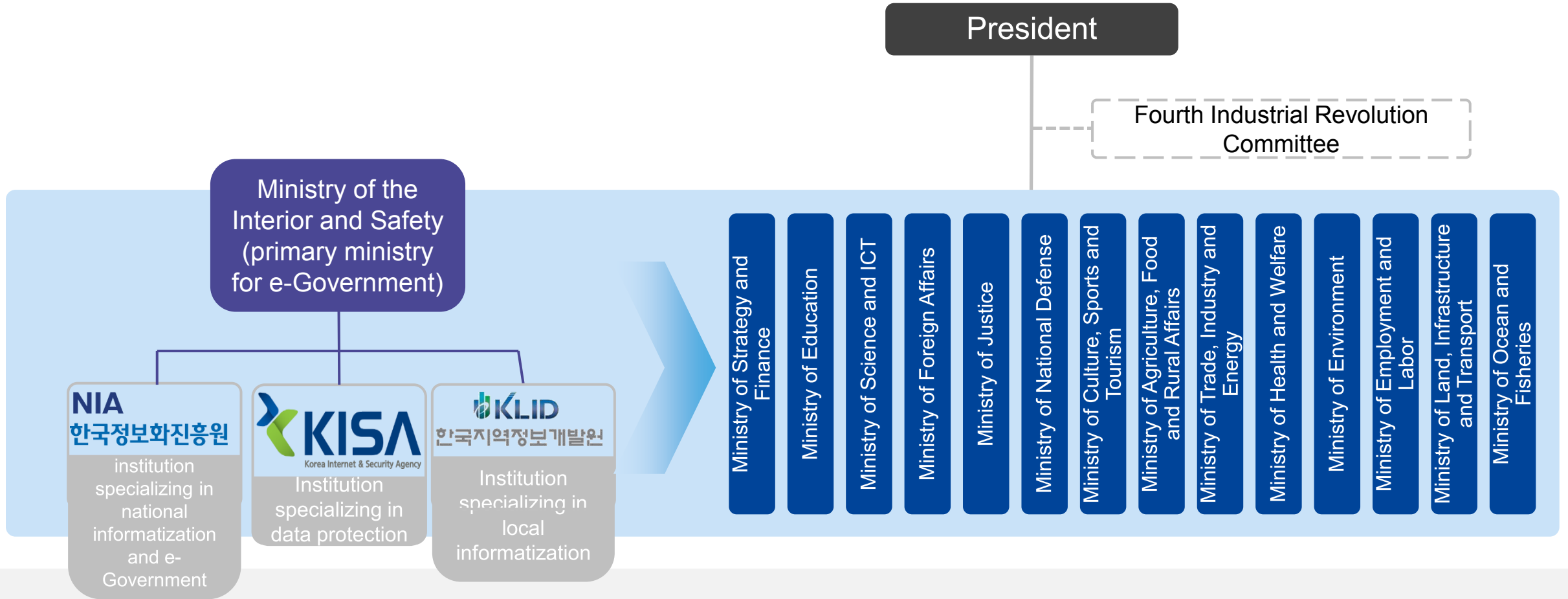


02

Development of e-Government in Korea







Ministry of the Interior and Safety
 Oversees pan-governmental projects (e-Government planning, mobile, certification, cyber security, personal data protection, etc.)



Other ministries
 Operate e-Government in respective areas (welfare, education, transportation, labor, environment, tourism, etc.)

Establishment of roadmap/governance

- Clarify national e-Government roadmap
- Establish e-Government governance

Simultaneous realization of systematic and technological innovation

- Reform/establish systems for new work processes
- Make proactive and flexible response to changes and introduction of new technologies

Bold investment

- Build basic infrastructure through early investment of large budget

Innovative change

- Minimize duration of parallel operation of manual and electronic tasks

Mitigation of adverse effects

- Respond to cyber threats accompanying the expansion of new technologies (security, personal data protection, etc.)
- Reduce digital divide

03

Outcomes of Korean e-Government



Service-oriented
government

Capable government

Transparent government



G2G

Public Information
Sharing Center (PISC)Mobile
e-Government

dBrain

On-nara BPS

Resident registration
systemPersonnel policy
support systemKorea Information
System of
Criminal-Justice Services

G2B

UNI-PASS

KONEPS

eGovernment
Standard Framework

KIPOnet



G2C

Minwon 24

Open Data
Portal

ICIS

Hometax

e-People

NEIS

112 Integrated
Reporting System

ITS

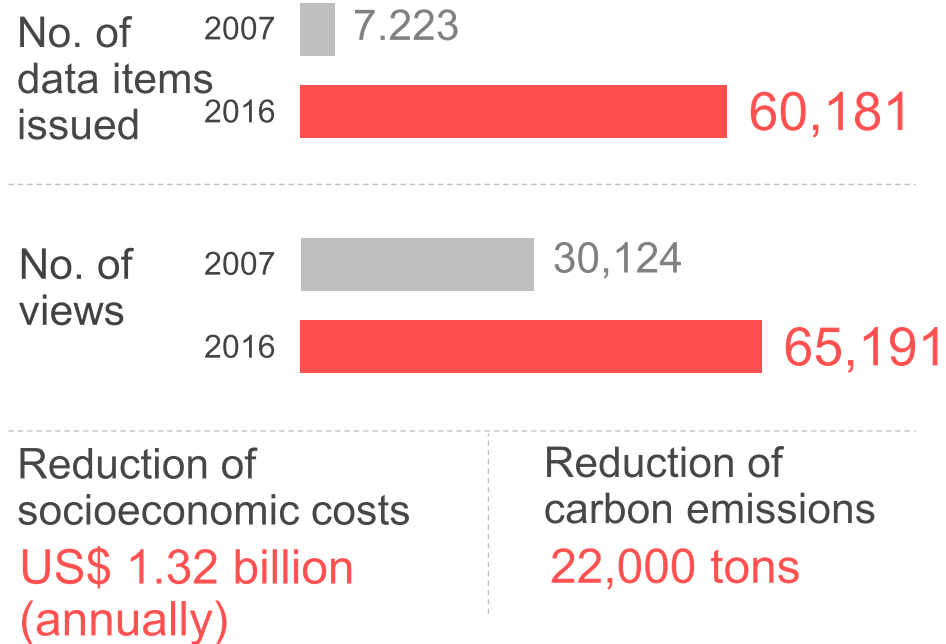
Over 20,000 systems (total)

Infrastructure

National Information Resources Service
(former Government Integrated Data Center)

Minwon 24

Civil petition portal that enables online viewing of, submission of applications for, and issuance of civil documents regardless of time or place



Awards received: 2nd place winner of 2011 UN Public Service Awards

dBrain (Digital Budget & Accounting System)

Real-time management system for all national finance activities, from tax revenue to budget allocation, execution, settlement, and results management

Management of national finances (contracts, collection of national taxes, capital transfer, etc.) through connections with **45** institutions and **65** external systems (Public Procurement Service, National Tax Service, Bank of Korea, etc.)

Increased work convenience due to automation of financial tasks and reduced chances of corruption

Awards received: 2013 UN Public Service Award

UNI-PASS

Fastest system among 180 WCO(World Customs Office) countries that automatically processes all customs-related tasks (export/import declarations, tariff refunds, etc.)

Time required for
export/import customs

Export customs One day → **1.5 min.**

Import customs One day → **1.5 hr.**

※ Significantly lower than UNCTAD-recommended time of four hours

Awards received: World Bank Doing Business Best Practice (2009) and AFACT e-ASIA Award (2007)

Hometax

Electronic tax system that allows taxpayers to handle tax-related tasks online without having to visit a local tax office or bank

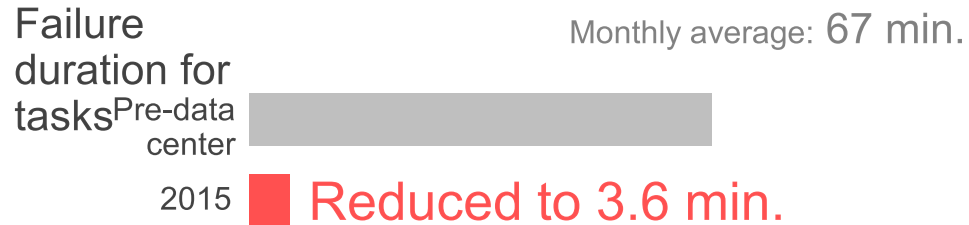
No. of tax reports **26 million**
(92.5% of total cases in 2015)

Hometax usage rate
When requiring public certification documents **70%**

Awards received: OECD Best Practice for e-tax administration (2006)

NIRS(National Information Resources Service)

World's first government-exclusive data center based on advanced IT infrastructure and operational expertise that integrates the data systems of all central administrative organizations



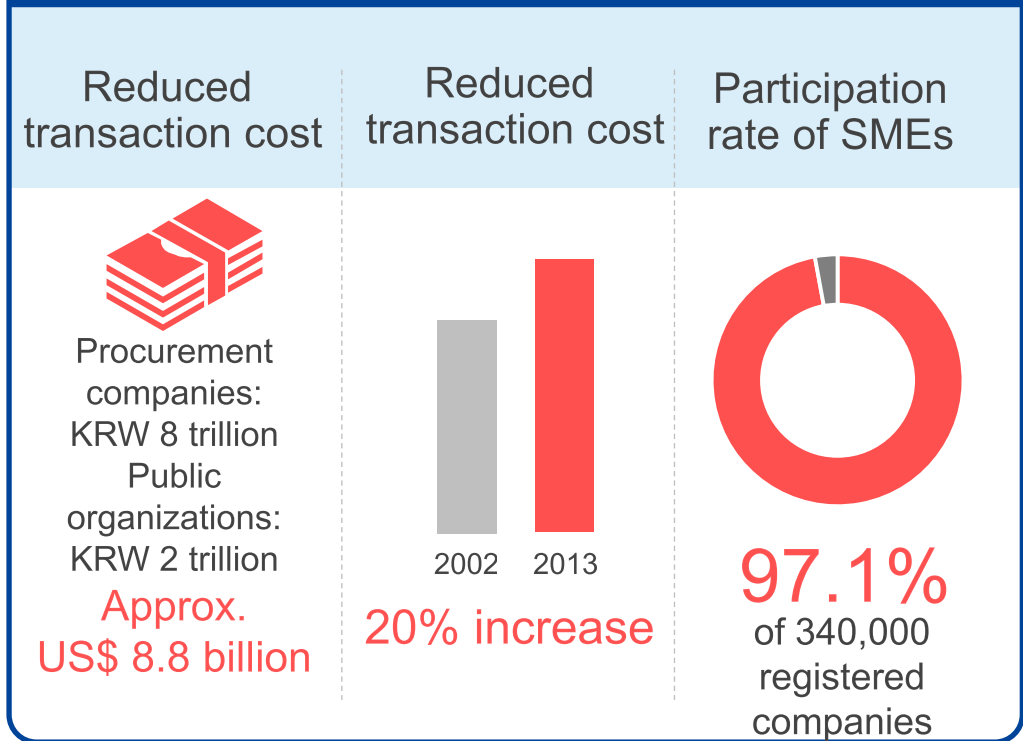
Time required to detect/block DDoS attack **Under 10 min.**

Budget reduction for national informatization compared to development of individual systems **30%**

Awards received: 2010 FutureGov Data Center (grand prize), 2011 IT Governance Excellence Award, ITSMF Awards, and 2016 Red Hat Innovation Awards APAC

KONEPS(Korea Online E-procurement System)

One-stop electronic procurement system that handles entire procurement process (bidding, contract signing, payment) online



Awards received: 2003 UN Public Service Awards and 2006 WCIT Global Excellence Award

Smart City

Comprehensive urban development technology that creates smart eco-friendly cities by combining urban infrastructure with cutting-edge technology

Energy Efficient Building Up to **63%** decrease in energy usage 2016

2015



KRW 1.5 trillion in electricity fees saved annually

Smart Parking

Real-time parking data, reduces traffic congestion

Awards received: 2010 FutureGov Data Center (grand prize), 2011 IT Governance Excellence Award, ITSMF Awards, and 2016 Red Hat Innovation Awards APAC

Intelligent Transport System(ITS)

Cutting-edge traffic system that applies data, communications, and control technology to transportation means and facilities to optimize traffic operation and provide appropriate traffic data

Driving speed **15%-20%** increase

Decrease in time required to detect a highway accident

2006 90 min.

2015 **50 min.**

Decrease in traffic congestion

20%

Reduced accident processing time

2006 2 min. 36 sec.

2015 **20 sec.**

Cost reduction

(annual) **USD 360 million**

Awards received: Hall of Fame winner at ITS World Congress Tokyo (2013, Seoul TOPIS) and Hall of Fame winner at ITS World Congress Detroit (2014, Korea Expressway Corporation)

04

Future strategies of e-Government



Society

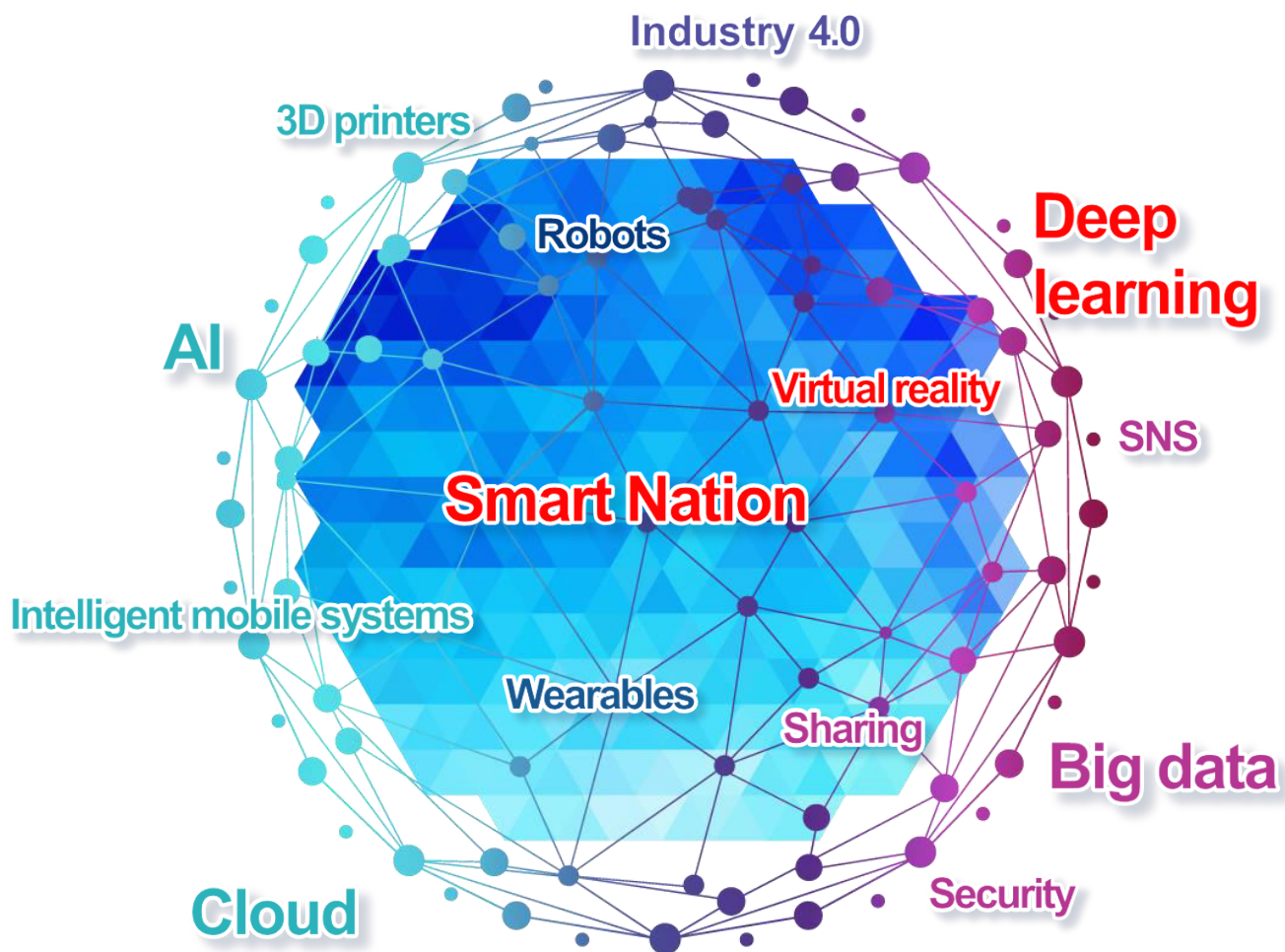
- ✓ Demand for **greater ability** to solve complex problems
- ✓ Increased public demand for **direct democracy**

Administration

- ✓ Demand for fundamental reform of administrative services for an efficient and effective government

Technology

- ✓ Conversion to e-Government paradigm based on technologies of the Fourth Industrial Revolution



Realization of intelligent government, smart nation, and big data-based government

through the application of technologies of the Fourth Industrial Revolution (AI, big data, IoT, cloud, mobile, etc.)



Intelligent government

- Provides services customized to individual citizens through the use of technologies of the Fourth Industrial Revolution (AI, big data, IoT, etc.)
- Example: a robot consultant that determines the services an individual needs the most and notifies the individual of such services



Smart nation

- Provides services closely connected to the everyday lives of citizens (transportation, safety, environment, welfare, education, etc.) based on intelligent data that applies ICT technology
- Example: smart cities, automatic facial recognition CCTV, sharing of government vehicles for socially vulnerable groups



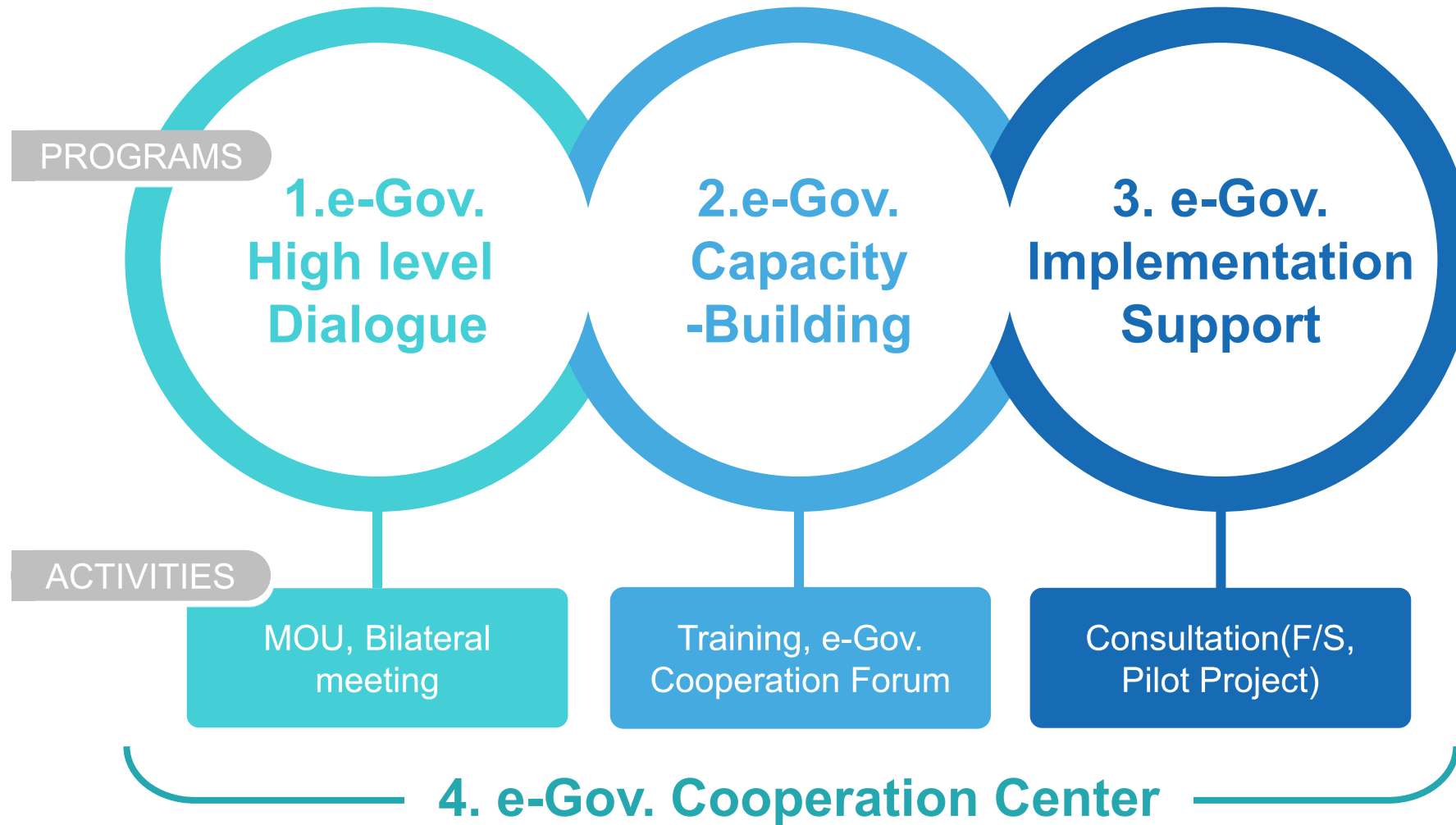
Big data-based administration

- Carries out optimal decision-making and appropriate policy-making through big data analysis
- Early prediction and prevention of accidents, errors, and disasters based on big data


05


International Cooperation on e-Government






e-Gov. Cooperation MOU signed with 47 countries
Co-founded Digital-5 with the U.K, Estonia, New Zealand and Israel

 Capacity Building Program	Asia-Pacific	LAC	Sub Saharan Africa	CIS	Europe	North Africa	Middle East	Int'l Orgs.	Total
	3,619 (35)	1,622 (23)	391 (34)	350 (11)	671 (13)	11 (6)	166 (11)	42 (11)	6,972 (144)

 Consulting / Feasibility Study
<ul style="list-style-type: none"> As of 2016, total of 63 e-Gov. consulting projects have been carried out in 34 countries. ※ Peru-Immigration sys., Dominican Republic-task management sys.

 e-Government Cooperation Center
<ul style="list-style-type: none"> Establish 'e-Gov. Cooperation Center' to provide in-depth support in developing e-government strategies and projects ※ Uzbekistan Center ('13 - '15), Indonesia Center ('16 - '18) Peru Center ('17 - '20), Kenya Center ('17 - '20)

MOU and bilateral meetings on e-Gov. Cooperation



Workshop & Training

Provide a customized training workshop on Korea's e-Government to overseas public officials in charge of e-Government.

Training program consists of expert lectures, study tour to outstanding e-Gov. system, meeting with private companies, etc.



Serbia National Pension Service, Peru Immigration system, Constitutional Court of Mongolia Informatization



e-Gov. Cooperation Forum

Dispatch delegation of e-Gov experts and Hold e-Gov Cooperation Forum to share knowledge and experience



(2016) Argentina, El Salvador, Serbia, Turkey, Albania, Azerbaijan
(2015) Mongolia, Mexico, Panama (2014) Peru, Chile



Consultation

Provide consultation to establishing informatization strategies and master plans of e-Government through utilizing Korea's knowledge and experience.



Serbia National Pension Service



Peru Immigration system



Constitutional Court of Mongolia
Informatization

Establish e-Government Cooperation Center for building e-Government systems of a partner country, intensively

Location

Partner Country

Period

3 years

Budget

Joint Fund (2 Million USD in Total, 1 Million USD per Country)

Function

Joint Projects, Policy consultation, Knowledge exchange, Capacity building

Korea-Indonesia e-Government Cooperation Center ('16~'18)

Korea-Peru/ Korea-Kenya e-Government Cooperation Center ('17 - '19)





Peru

- **2015** MOU on e-Government cooperation
- **2016** Joint drafting of eGCC project concept paper
- **2017** Opening of Peru e-Government cooperation center



Ecuador

- **2013** Korean custom clearance system(Uni-pass) deployed in Ecuador, named 'Ecuapass'.
* It won Innovation Award for the successful implementation in 2013 World Custom Organization conference .
- **2014** Signing MOU on e-Government Cooperation
- **2015** e-Government cooperation forum
- **2015** Capacity building program for Ecuadorian cyber security director

Hyper-Connected Society is Coming



