



MINISTRY OF INFORMATION AND COMMUNICATIONS  
NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATION STRATEGIES

CICC conference on Digital Strategies in Asian Countries

# DIGITAL STRATEGIES IN VIETNAM

*Tokyo, January 2025*

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# 01 VIETNAM DIGITAL STRATEGY FRAMEWORK



# VIETNAM DIGITAL RANKING

**Network Readiness Index (NRI) 2024:** Vietnam ranked 45/133 economies, jumped 11 steps compared to 2023 and ranked first among the group of lower-middle-income economies.

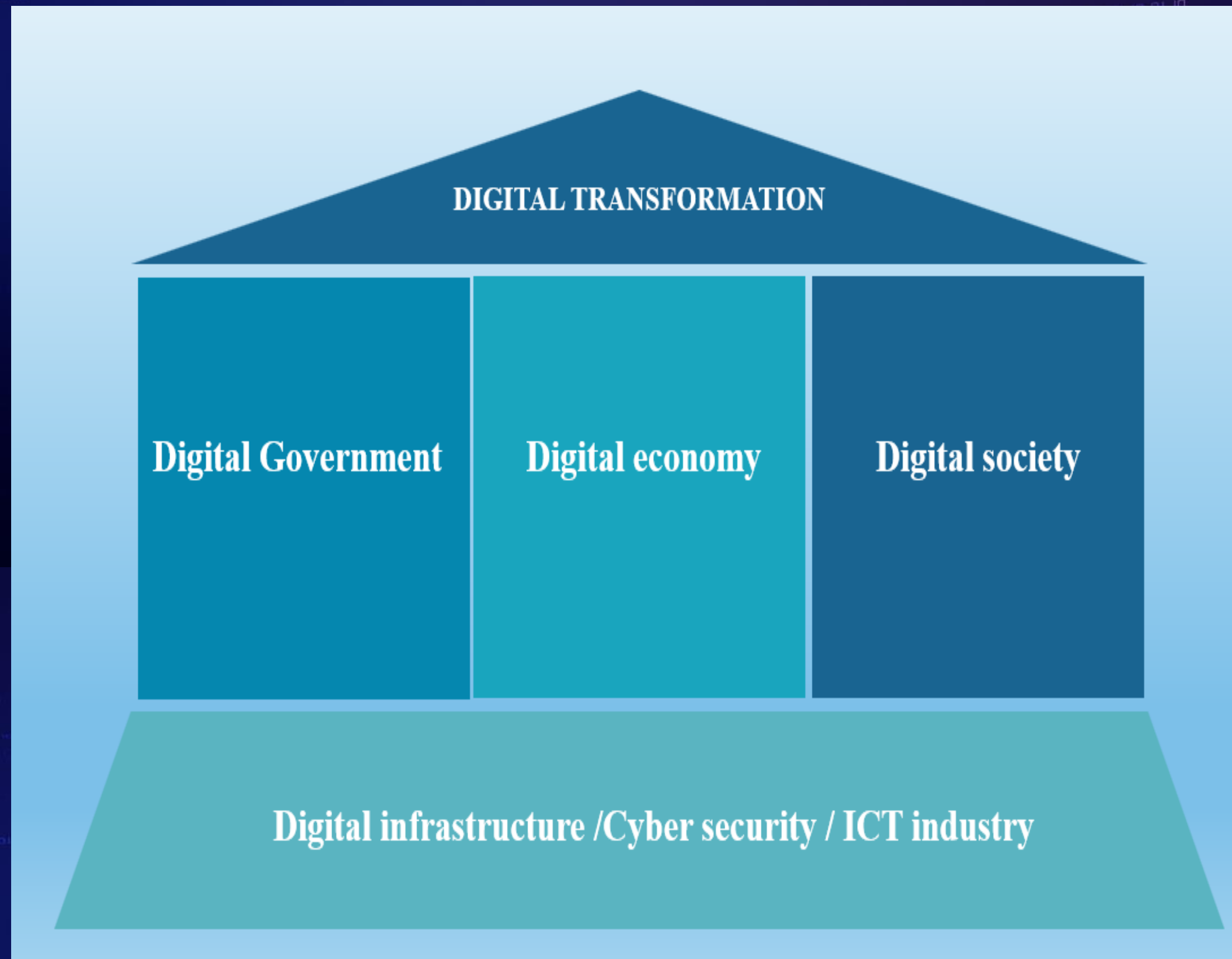
**EGDI 2024:** Vietnam was ranked 71<sup>st</sup>/193 countries, in the very high EGDI group, advanced by 15 positions



**Global Cybersecurity Index 2024:** Vietnam was ranked among 46 countries, in Tier 1, the highest of the five tiers, reserved for "role modeling" countries that demonstrate a strong commitment in all five cybersecurity pillars

**Digital economy:** Vietnam led Southeast Asia in digital economic growth in 2022 and 2023, posting average growth three-times higher than GDP growth.

# VIETNAM DIGITAL STRATEGY FRAMEWORK



## 9 key strategies:

1. Digital infrastructure (2024); Vietnam's international optical cable system development (2024)
2. Data strategy (2024)
3. E-government development strategy towards the digital government (2021)
4. National strategy on developing digital economy and society (2022)
5. Vietnam's semiconductor industry development strategy (2024)
6. Other strategies (National cyber safety and security strategy, proactively responding to challenges from cyberspace (2022); National Blockchain Strategy (2024); Application AI Strategy (2022))

# VIETNAM'S APPROACH TO DIGITAL TRANSFORMATION

*Decision No. 749/QD-TTg of the Prime Minister approving the "National Digital Transformation Program to 2025, with a vision to 2030"*

**2020**

**Kickstart digital transformation awareness**

**2019**

*Some policies and strategies to proactively participate in the Fourth Industrial Revolution*

**2021**

**Start implementing and experiencing digital transformation**

*Decision No. 942/QD-TTg of the Prime Minister approving the Strategy for e-Government development towards digital Government for the period 2021 - 2025, with a vision to 2030*

**2022 ONWARD**

**Promoting digital transformation with a people-centered approach, aiming to serve all individuals comprehensively**

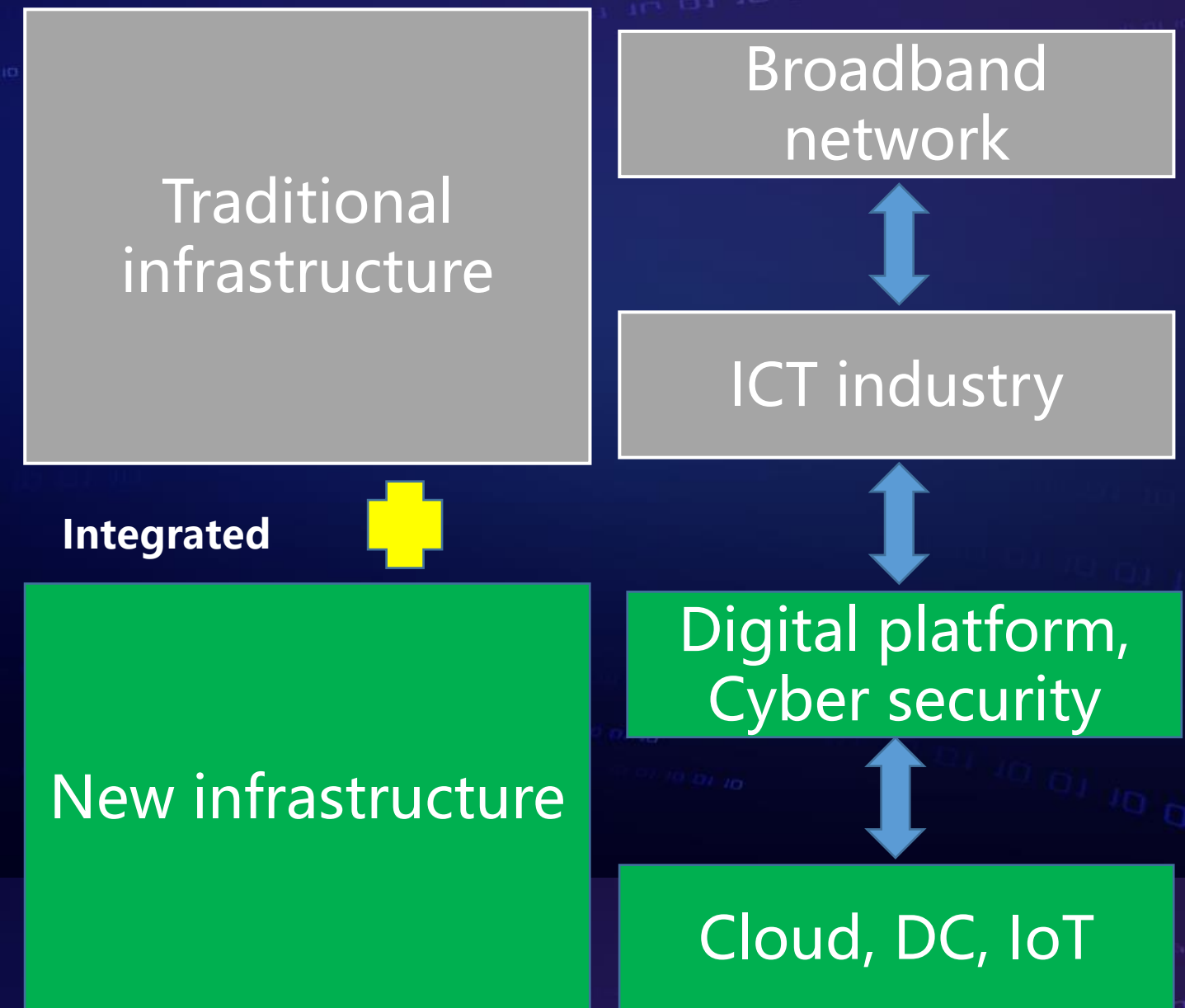
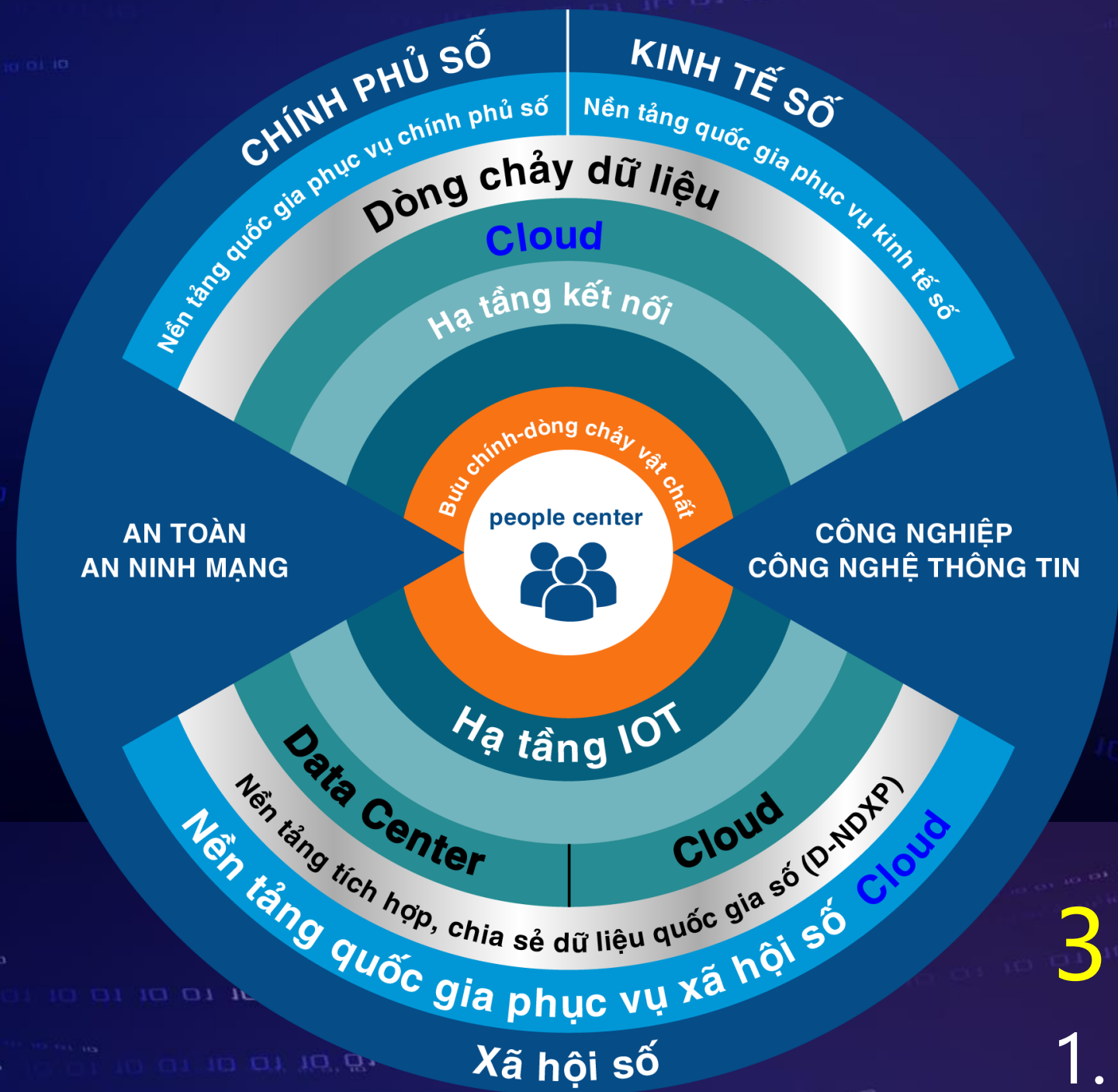


*Decision No. 411/QD-TTg of the Prime Minister: Approving the National Strategy for Development of Digital Economy and Digital Society to 2025, with a Vision to 2030*

# 02 VIETNAM DIGITAL STRATEGIES



# 2.1 VIETNAM DIGITAL INFRASTRUCTURE STRATEGY



## 3 key strategies:

1. Digital infrastructure strategy to 2025 and vision to 2030 (2024)
2. Vietnam international optical cable development strategy to 2030 (2024)
3. National ICT infrastructure master planning for the period 2021 - 2030, vision to 2050 (2024)



# DIGITAL INFRASTRUCTURE: CURRENT STATUS AND VISION

## VISION

Super capacity, super bandwidth

Universality

Stability

Green, Smart

Open and security

Give priority for digital infrastructure investment and modernization

## 2024

The population coverage of 5G services nationwide has reached **25.5%**

The rate of households using broadband optical cable Internet **82.9%**

09 companies providing DC services, 40 DC

Transition from 2G to Smartphones

# DIGITAL INFRASTRUCTURE: DEVELOPMENT GOAL

- ✓ Fixed broadband network: 100% of households have access to fiber optic cable when needed; 90% of users can access fixed Internet, with an average speed of 200 Mb/s; 90% of socio-economic organizations in urban areas have Internet access with an average speed of 01 Gb/s.

2025

- ✓ 02 - 04 international fiber optic cable lines, international bandwidth capacity increases by 50%/year.

- ✓ 100% of essential infrastructure such as transportation, energy, electricity, water, urban areas have the ability to integrate sensors and IoT applications

2030

- ✓ Fixed broadband: speed over 1Gb/s

- ✓ 5G covers 100% of the population; develop next generation mobile network

- ✓ 04-06 international submarine optical cable lines.

# DATA CENTER DEVELOPMENT PLAN

DC system planning aligns with energy planning and utilization of regional strengths, connecting infrastructure, transportation, and human resources network.

**National DCs** (Scale 70,000 m2, power capacity about 79 MW; Uptime TIER 3 or ANSI/TIA 942-B rated 3 or higher)

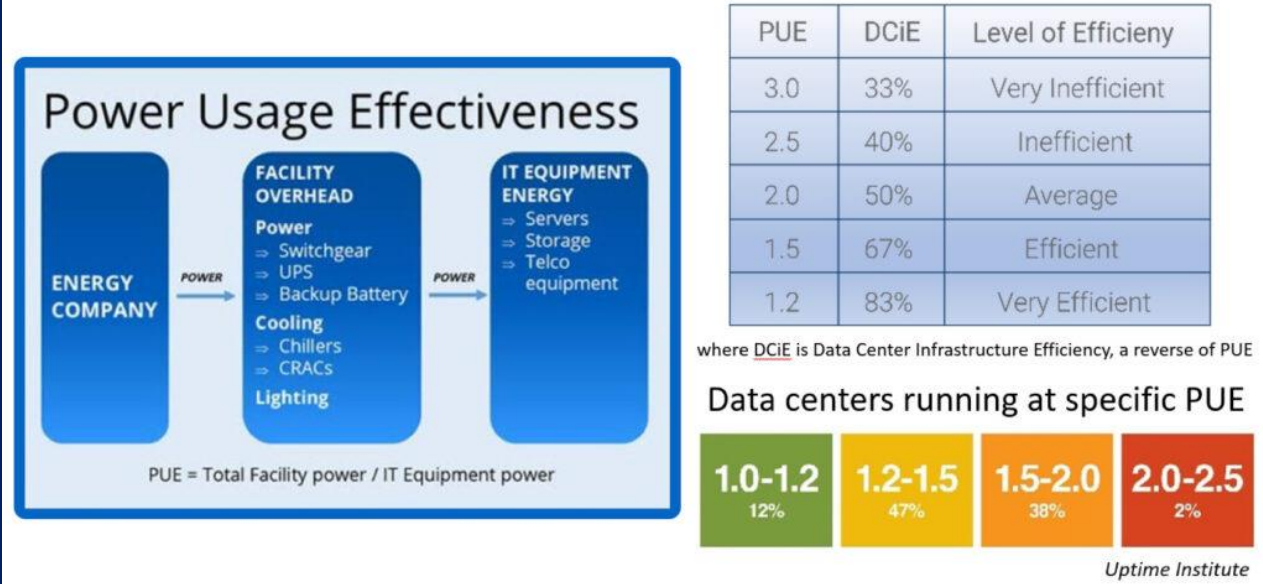
**At least 03 national multi-purpose DC clusters:**  
(Scale 310,000 m2; power capacity about 375 MW, Uptime TIER 3 or ANSI/TIA 942-B rated 3 or higher)

Regional multi-purpose DCs

Edge data centers (close to users)

**01 - 02 international DCs (Digital Hub,** scale 170,000 m2; power capacity about 413 MW)

PUE new DC =<1,4



# 2.2 DATA STRATEGY

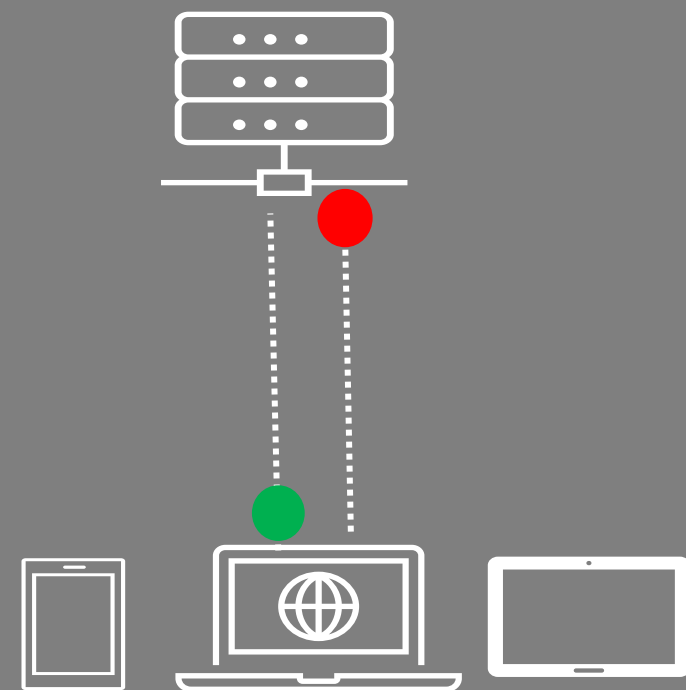
## Accumulation is key

- + Master data in national databases (old - shared, interconnected)
- + Open data, big data (new - development focus)



## Decentralization is disruptive

Collect data at terminals and edges



COMBINED 2 SPIKES

# DEVELOP SKILLS, BRIDGE THE DATA GAP

Provide economic benefits

## PEOPLE

- Provide data to State
- Self-study, self-research upon clear benefits/potential profits, participate in E-commerce platform,...

## STATE

- Lead and drive results.
- Create forums that resonate with people's interests.
- Share and provide valuable data analysis results for people to use.

Provide data

## STORAGE - DATA CENTERS



Data of Vietnam, by Vietnam and  
for Vietnam

## CREATE DATA MARKETPLACE



Using economic benefits to promote the  
development of private data groups

# 2.3 E-GOVERNMENT DEVELOPMENT STRATEGY TOWARDS THE DIGITAL GOVERNMENT

With two main focuses:

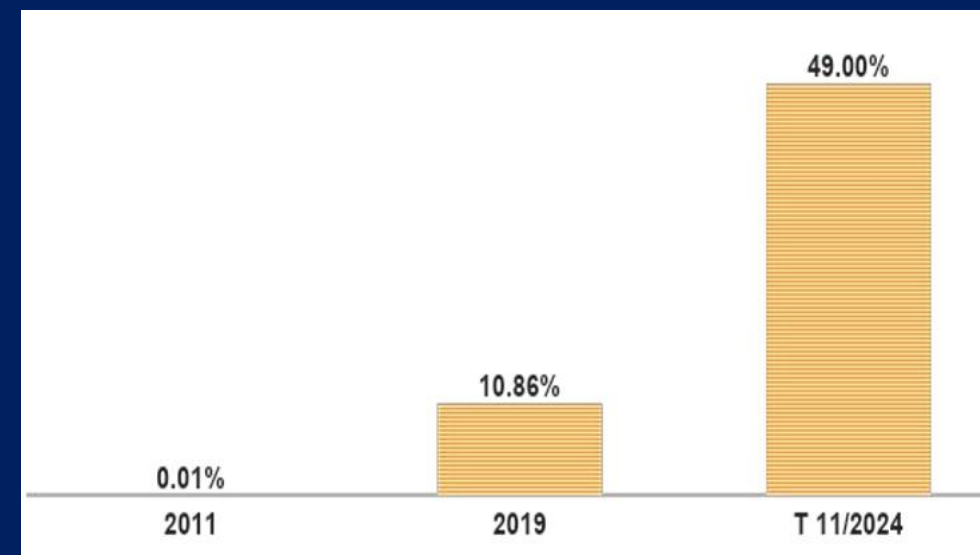
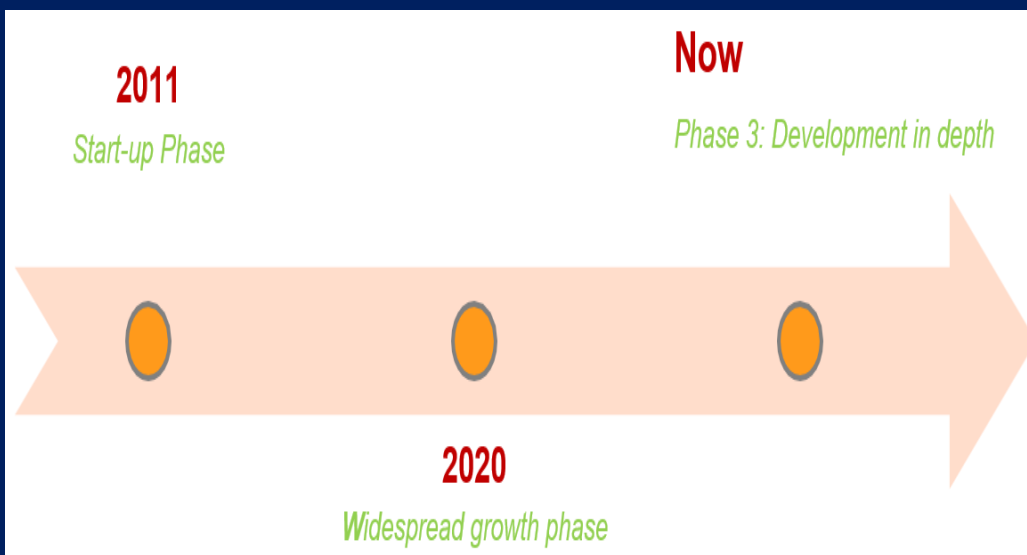
(1) Online public service provision

(2) Application of AI and virtual assistant supporting activities of cadres, civil servants, and public employees

Stages of online public service development nationwide (more than 20 years)

**Virtual assistant:** Vietnam's strategic initiative to prioritize the development of virtual assistants for each state agency, with the goal of eventually providing virtual assistants for each civil servant.

The focus is on enhancing administrative procedures with a people-centered approach, aiming to increase transparency within state agencies through the deployment of virtual assistants.

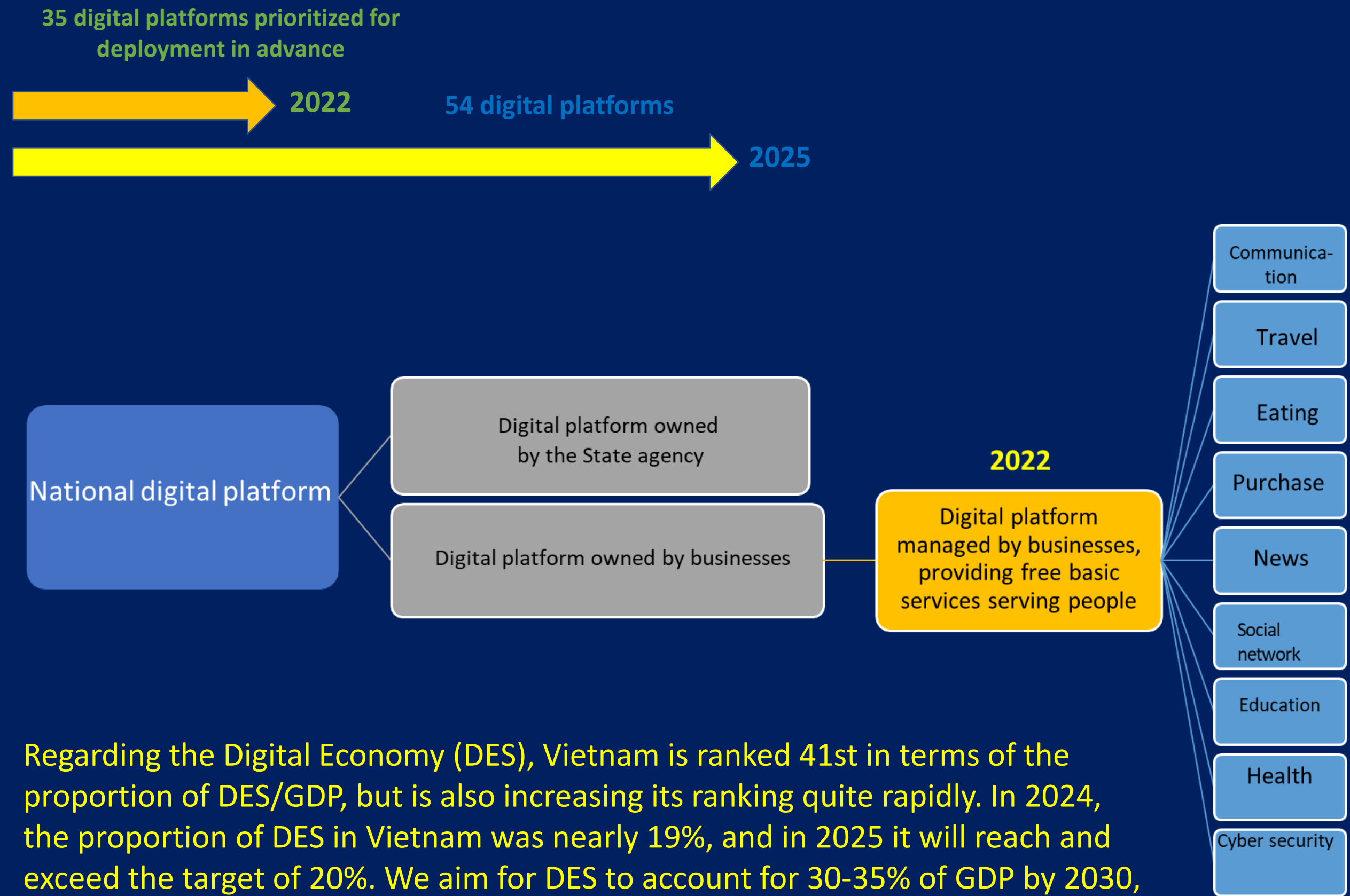


Court virtual assistant

Ratio of online applications/total applications  
Ratio of whole process online applications/total applications

# 2.4 NATIONAL STRATEGY ON DEVELOPING DIGITAL ECONOMY AND DIGITAL SOCIETY

Vietnam's approach: The core, unique and different point of Vietnam in developing the digital economy and digital society is to **bring the activities of people and businesses into the digital environment using Vietnamese digital platforms**



The increasing proportion of digital economy in Vietnam GDP 2024

Regarding the Digital Economy (DES), Vietnam is ranked 41st in terms of the proportion of DES/GDP, but is also increasing its ranking quite rapidly. In 2024, the proportion of DES in Vietnam was nearly 19%, and in 2025 it will reach and exceed the target of 20%. We aim for DES to account for 30-35% of GDP by 2030, at which time, Vietnam will be in the global top 30.



# 2.5 SEMICONDUCTOR INDUSTRY DEVELOPMENT STRATEGY

Semiconductor industry development strategy formula (2030-2050)

$$C = SET + 1$$

**C**

Chip (Semiconductor chip)

**S**

Specialized (Specialized chip)

**E**

(electronics, electronics industry)

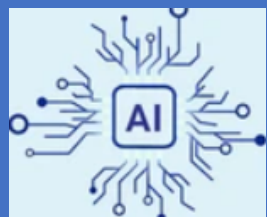
**T**

(Talent)

**+ 1**

Vietnam (Vietnam as a secure new destination for the semiconductor industry's global supply chain.)

## Task and solution groups



Specialized chip development



Electronic industry development



Developing human resources and attracting talent in semiconductor field



Attracting investment in semiconductor sector

## TARGET

TARGET	2024-2030	2030-2040	2040-2050
Design business	100	200	300
Manufacturing plants	01	02	03
Packaging and testing factory	10	15	20
Semiconductor industry revenue, value added	25 billion USD 10-15%	50 billion USD 15-20%	100 billion USD 20-25%
Electronics industry revenue, value added	225 billion USD 10-15%	485 billion USD 15-20%	1045 billion USD 20-25%
Human resources (engineers)	> 50,000	> 100,000	appropriate quantity, meet demand

Vietnam is emerging as an attractive destination for investors in the semiconductor industry, with **174 FDI projects in the semiconductor sector** with a total registered capital of nearly **11.6 billion USD** by end of 2024

### 3. SOME BREAKTHROUGH SOLUTIONS

#### Energy

Policy allows DC to apply direct electricity purchase mechanism at source

Apply green standards and specifications when investing in new or upgrading DCs

#### Connection infrastructure

Developing Broadband Superhighway connectivity between DCs

Develop Internet exchange stations near DCs

- Open data promotes the development of big data industry.
- Digital Hub: ICT industry ecosystem, sand-box at Vietnam financial centers
- Supervising, forecasting, issuing warnings, and generating annual reports on the implementation result of digital strategies

# Politburo's Resolution No. 57-NQ/TW on breakthroughs in the development of science, technology, innovation, and national digital transformation



Resolution No.57-NQ/TW, signed by Party General Secretary To Lam on December 22, considers science and technology, innovation and digital transformation as the decisive factor for development.

## GOALS TOWARDS 2030

<b>Digital economy size in GDP</b>	<b><math>\geq 30\%</math></b>
Ratio of online public services	$> 80\%$
cashless payment rate	80%
5G network will be accessible	Nationwide
Attracting more leading tech organizations/companies in the world to set up headquarters/invest in research and production in Viet Nam	at least three

Funding for R&D will reach 2% GDP, in which the State will allocate at least 3% of budget annually for science and technology development, innovation, and digital transformation and the figure will be increased annually to meet development requirement

## VISION TOWARDS 2045

<b>Digital economy size in GDP</b>	<b><math>\geq 50\%</math></b>
The rate of tech companies will be equivalent to that of developed countries	at least 10
Attracting tech giants in the world to set up headquarters, invest in research and production in Viet Nam	at least five
Vietnam among top 30 countries in the world in terms of innovation and digital transformation	



# 4. COOPERATION OPPORTUNITIES

Cooperate and share experiences in building digital strategies

Network development, service provision

Research, training and technology transfer

Coordinate the implementation of initiatives in digital transformation, digital economy, and society, as well as digital infrastructure

Engaging in research and developing new technologies supports the advancement of digital government, the digital economy, and digital society



**THANK YOU AND  
HAPPY NEW YEAR!**

