

NEC IR Day 2022

# Core DX

September 7, 2022

Senior Executive Vice President and CDO (Chief Digital Officer)

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# \Orchestrating a brighter world

NEC creates the social values of safety, security, fairness and efficiency to promote a more sustainable world where everyone has the chance to reach their full potential.

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# **01 Business Overview**

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## Improve profitability of the Domestic IT Business through transforming the base business by leveraging Core DX Business

### Core DX Business

Revenue (Adjusted Operating Margin)

FY2020    **¥141.0bn (-3%)**

FY2025    **¥570.0bn (13%)**

Total Revenue Breakdown\*

	Consulting-based business	Shared Platform	New business opportunities
FY2020	¥90.6bn	¥42.8bn	¥7.6bn
FY2025	<b>¥165.0bn</b>	<b>¥230.0bn</b>	<b>¥175.0bn</b>

\*Some revisions have been made to the categorization since NEC IR Day 2021(the totals remain unchanged).

Digital ID: Shared Platform → New business opportunities,

Digital Process Innovation: Consulting-based business → New business opportunities

### Domestic IT Business

Revenue (Adjusted Operating Margin)

FY2020    **¥1.33tn (8%)**

FY2025    **¥1.6tn (12.5%)**

Improve Profitability  
through SI Model Transformation  
(including Base Business)

### DX Talents Development

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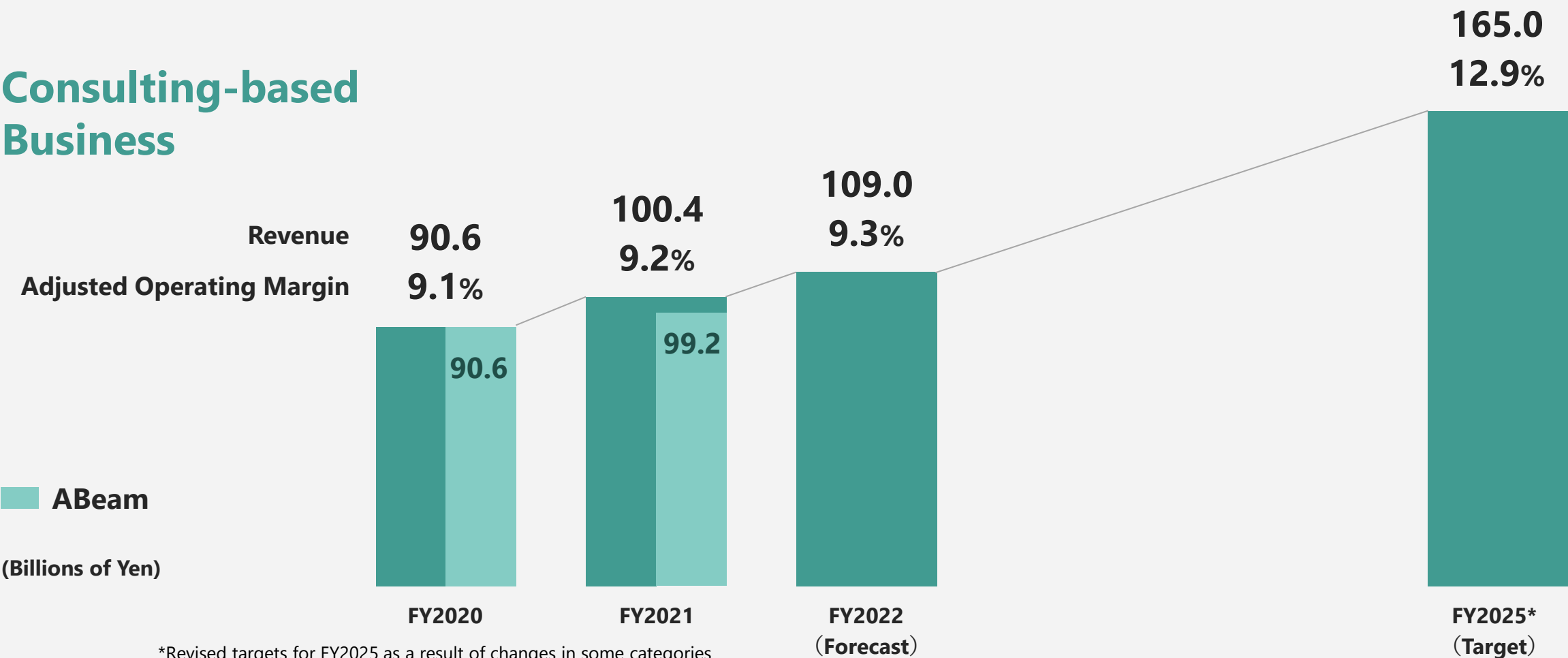
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**ABeam Consulting is growing steadily**  
**Aim at revenue and profit expansion by strengthening synergies**

Consulting-based Business



\*Revised targets for FY2025 as a result of changes in some categories  
(Digital Process Innovation: Consulting-based business → New business Opportunities)

## Measures for Expand the Consulting-based Business Expansion

**Execute and strengthen value co-creation approaches to social, industrial and management issues as well as the business expansion**

### Strategic account approach







**Formulate and promote account plans for generating new value capable of resolving social, industrial and management issues for strategic customer through co-creation.**

**7 companies**

### Project-driven approach

**Develop projects through co-creation focused on the specific transformation themes, such as ERP & cloud platform implementation, data-driven management, CX\* and GX\*, etc for each client.**

**7 companies**

	Automotive/ Manufacturing	<b>1 company</b>
	Materials/ Chemicals	<b>2 companies</b>
	Consumer business	<b>3 companies</b>
	Finance	<b>3 companies</b>
	Trading companies	<b>2 companies</b>
	Infrastructure	<b>3 companies</b>

\*CX: Customer Experience Transformation  
GX: Green Energy Transformation



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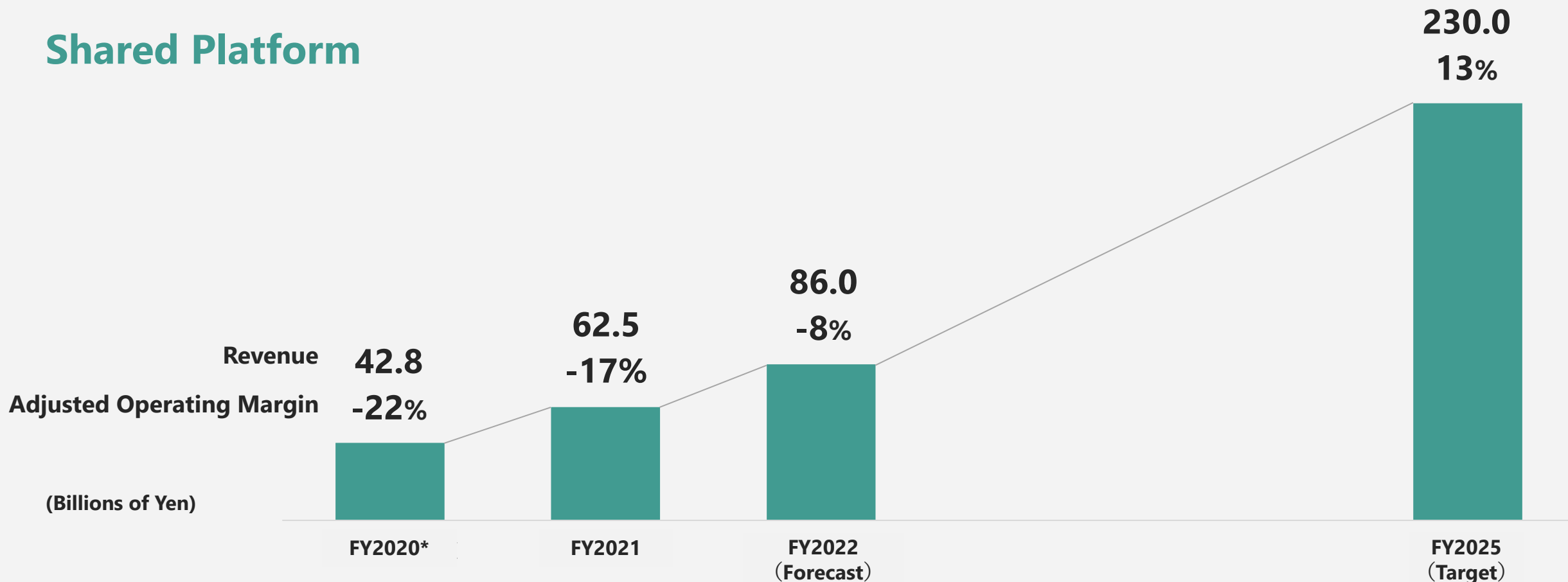
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## Performance of Shared Platform

**Achieved revenue of 62.5 billion yen in FY2021, 146% of the previous year**  
**FY2021 has progressed as originally planned**

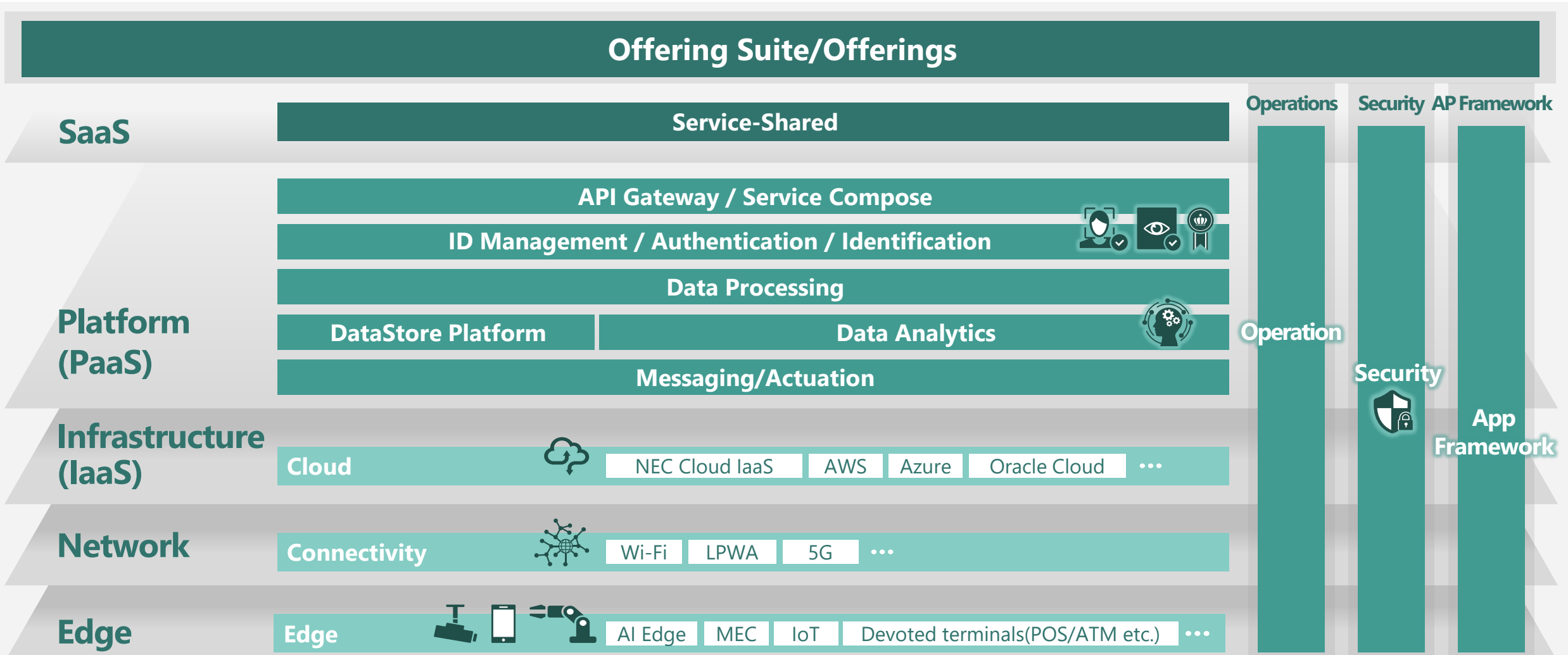
### Shared Platform



\*Revision from the financial results (FY2020: 46.0 billion yen → 42.8 billion yen) as a result of a revision of the product and service mix.

Reinforce the core set of IT and networking as a shared digital platform

Develop hybrid IT through alliances and in-house optimization sequentially

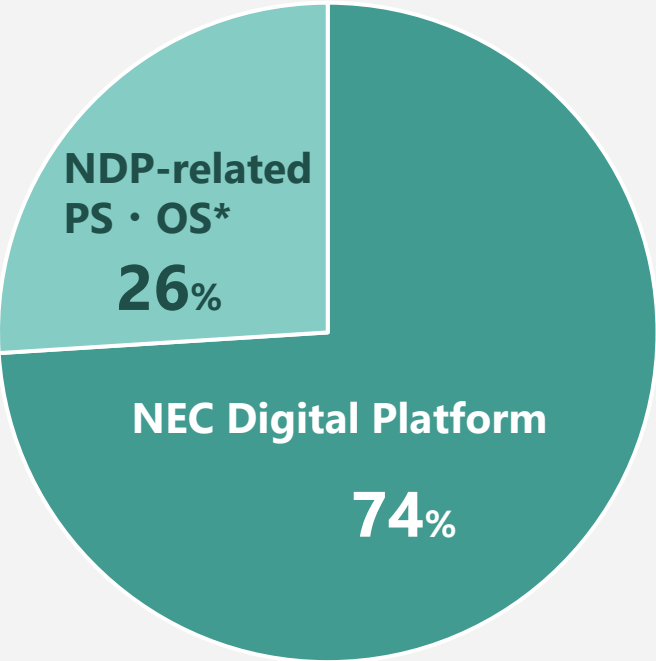


## Breakdown of Shared Platform

Expanding IaaS mainly led by “cloud lift” and “cloud shift” is the current pillar

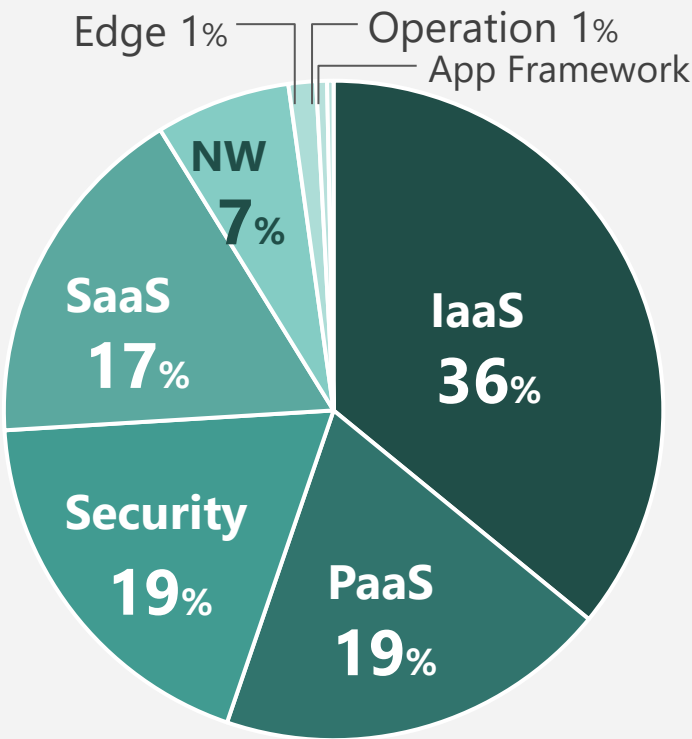
Aim to develop digital utilization by leveraging cloud services

Breakdown of Shared Platform



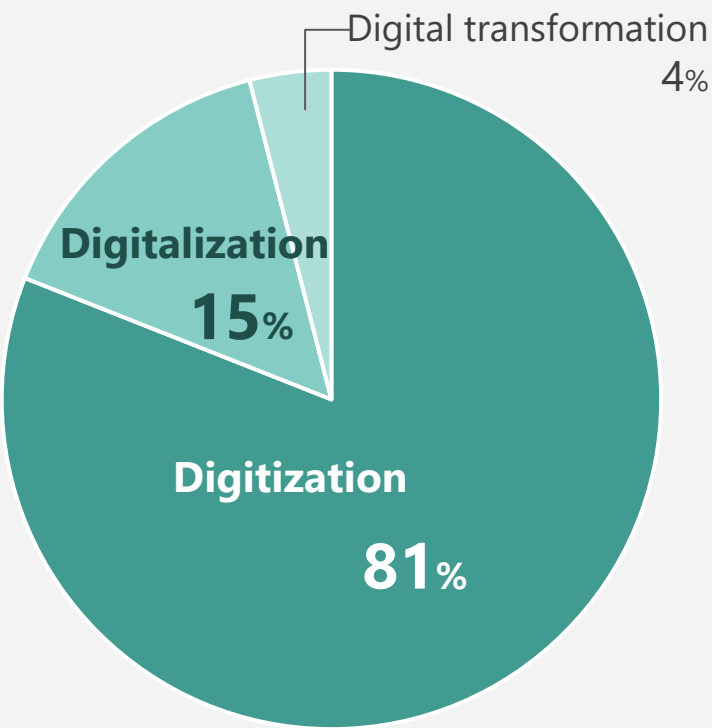
\*NDP: NEC Digital Platform    OS: Outsourcing services  
PS: Professional services

Revenue Breakdown of NEC Digital Platform



\*IaaS: Infrastructure as a service    SaaS: Software as a service  
PaaS: Platform as a service    NW: Network

Breakdown of Shared Platform by DX Area\*



\*Categorization based on DX Report 2 issued by the Ministry of Economy, Trade and Industry

### Continued enhancement of alliances aimed to maintain competitiveness

#### Amazon Web Services ( AWS )

**Acquired a large number of AWS-certifications in Japan  
Achieved the target of “developing 3,000 staff in 3 years” set in  
November 2020 ahead of schedule**

June 1, 2022 Press Release

#### Microsoft

**Opened a dedicated private network fiber for Microsoft  
Azure at the NEC Inzai Data Center**

June 6, 2022 Press Release

#### SCSK

**Reinforced cooperation in data centers and networks,  
founded SCSK NEC Data Center Management, Ltd.**

March 10, 2022 Press Release

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A close-up of a smartphone screen displaying a digital ID interface. The screen shows a camera viewfinder with a person's silhouette and the text "Please look at the camera". Below the viewfinder, there is a QR code and the text "Scan your boarding pass".

### Digital ID



A close-up of a hand holding a smartphone, with a digital waveform and data points overlaid on the screen. The text "Digital Process Innovation" is centered over the image.

### Digital Process Innovation



A cityscape at sunset with a network of glowing lines and nodes overlaid, representing a smart city infrastructure. The text "Smart City" is centered over the image.

### Smart City



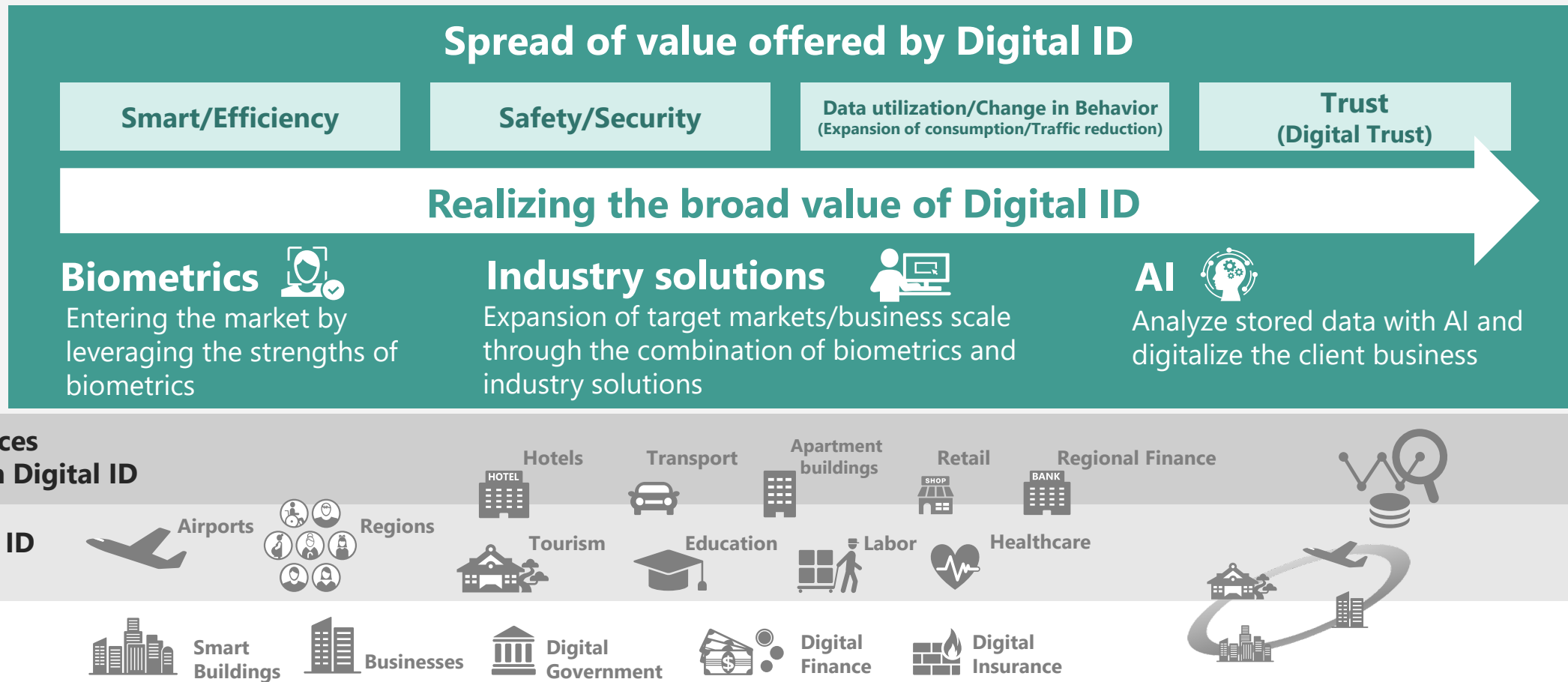
An aerial view of a city with a network of glowing lines and nodes overlaid, representing a smart city infrastructure. The text "Cooperated Mobility with Infrastructure" is centered over the image.

### Cooperated Mobility with Infrastructure



Digital ID utilizing biometrics can offer a broad range of values in a variety of fields  
Services for airports, office buildings, and hotels in FY2021 have been launched

Revenue FY2020 : ¥3.2bn → FY2021 : ¥8.3bn





Provide advanced BPO services with digitized operational processes to develop businesses, centered on the utilization of facilities. Expanded the services for logistics industry in FY2021

**Revenue**    **FY2020 : ¥4.0bn → FY2021 : ¥8.4bn**

Facilities  
Planning

Facilities  
Installation

Facilities  
Operation

Facilities  
Removal

Temperature sensors/  
temperature controls

Store hygiene  
management

Smart  
controllers/electricity  
control (energy  
efficiency)

Power  
Management  
services (PM)

Supply and  
demand/emissions  
forecasting/simulation

Energy/  
environment  
management

Maintenance  
center  
services (MC)

Incident  
management/operation  
sensors/facilities control

Processing  
Center  
services (PC)

Workflow/RFID

Facilities  
Management  
services (FM)

Dashboard/  
Analytics/AI

Facilities  
Operational  
video sharing

Video and image editing/QR,  
tag and text search/task  
distribution/needs analysis

**Facilities**



**Logistics** (Convenience stores/  
supermarkets)  
Refrigerators/Copy machine/  
Air conditioning



**Manufacturing(Factories)**  
Production lines/Facilities



**Telecommunications**  
Base stations/Network machinery

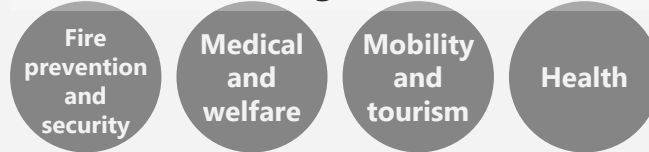
# Smart City Business Strategy

Expand businesses with our competitive NEC City OS taking momentum of “Digital Garden City Nation” policy program  
Established a New Consortium in May to boost Social implementation by 2025 with Public and Private members

## Macro Tailwind : The Government’s “Vision for a Digital Garden City State” (By FY24: Implement Digital Technology in 1,000 municipalities)”

### NEC City OS and services in high demand from local governments

#### Services in high demand from local governments



Citizen portal

Well-Being Indicators

AI

NEC the WISE

Data analytics

Biometrics

Bio-IDiom

Personal identification

ID Connect Services

NEC Smart Connectivity

ID management  
ID coordination

Full layer security

Secret calculation

Blockchain

AI-enabled privacy

Open API (NGSI)

Data utilization base services

FIWARE

Data distribution and storage management

Personal data utilization services

Data distribution management

Consent management (Opt-In)

Data storage management

Various IoT networks to meet the circumstances



Sensors/devices



### Developing to be a digital garden city state vision business

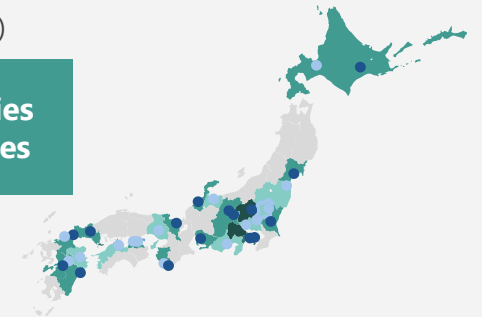
Subsidies for the digital garden city state vision  
Execution type (whole) – over 21 local governments

FY2025 target  
200 local government bodies

Participating as a proposal making business in the public offering business (as of June 2022)

Smart cities – 15 local government bodies  
Super cities – 17 local government bodies

Participating as a proposal making business



### Smart City Social Implementation Consortium

Established: May 2022 (NEC participated as founder)

Goals: Development, implementation, spread of services.

Build a sustainable framework

\*FY2025 Target: Plan to build a partnership with 200 organizations

# Cooperated mobility with infrastructure Business Strategy

"Advancing traffic infrastructure DX" aims to realize safe and secure mobility services through cooperation between infrastructure and vehicles

Establish a consortium of public-private partnerships and promote social implementation

Participating in the "FY2021 Preliminary Study into the Construction of 5G System Networks Utilizing Traffic Signal" as part of the PRISM

PRISM : Public/Private R&D Investment Strategic Expansion Program

- Installing 5G base stations & sensors in traffic signal
- Examination of 4K camera image processing by using MEC\*/AI

Measuring  
traffic state

Incident  
detection

Watching for  
safety

5G-enabled high-volume  
low-latency communications

Edge computing-enabled  
high-speed, low-latency AI

4K camera-enabled  
wide-area sensing



\* MEC : Multi-access Edge Computing

January 6, 2022 Press Release

Leading the establishment (with four companies\*) of "the Consortium for advancing traffic infrastructure DX"

Promoting public-private partnerships between industry and academia to achieve safe, secure and sustainable mobility

- Promote to implement DX platform(mainly 5G system networks utilizing traffic signal) and applications
- Collaborating with external parties

Public Services



Private Services

Working towards advancing traffic infrastructure DX

Upgrading traffic signal pole

the Consortium for advancing traffic infrastructure DX

Traffic management/  
distributing traffic signal data

Examination of utilization  
of collected data

Industry

Academia

Government

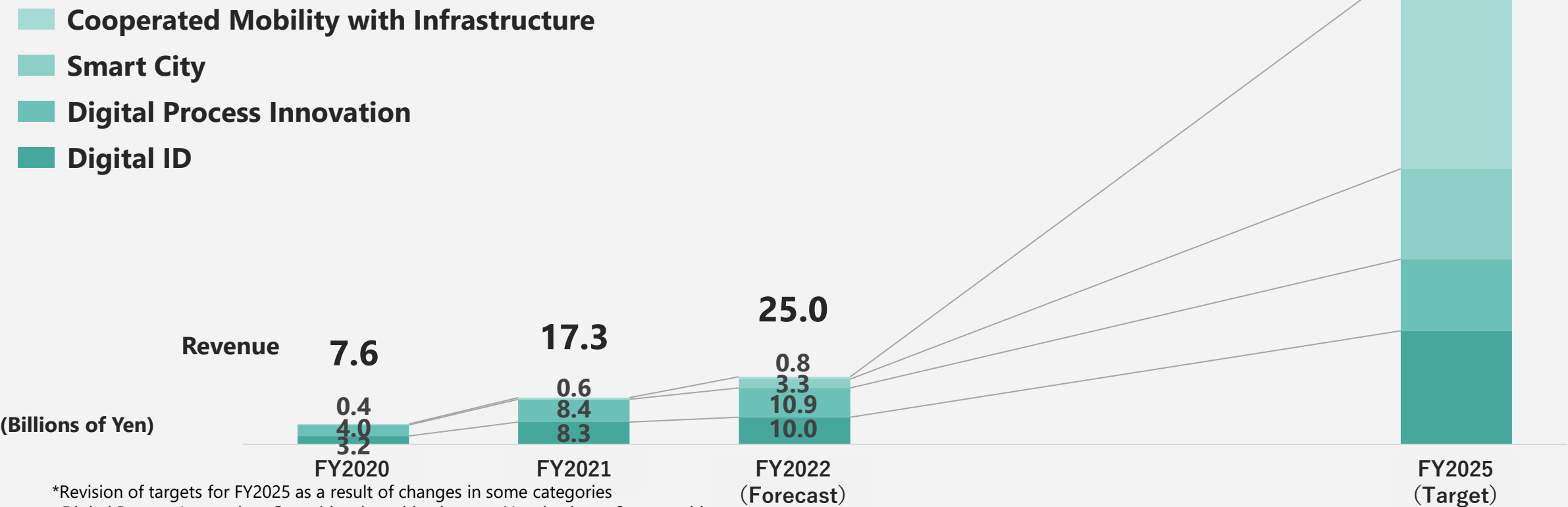
\*JTOWER Inc.  
Sumitomo Electric Industries, Ltd.  
NIPPON SIGNAL CO., LTD.  
NEC Corporation

August 22, 2022 Press Release

# Performance of New Business Opportunities

Launched Digital ID, Digital Process Innovation with visibility of growing steadily and sequentially  
Progressed the preparation for rapid growth of smart cities and mobility from FY2024 onwards

## New Business Opportunities



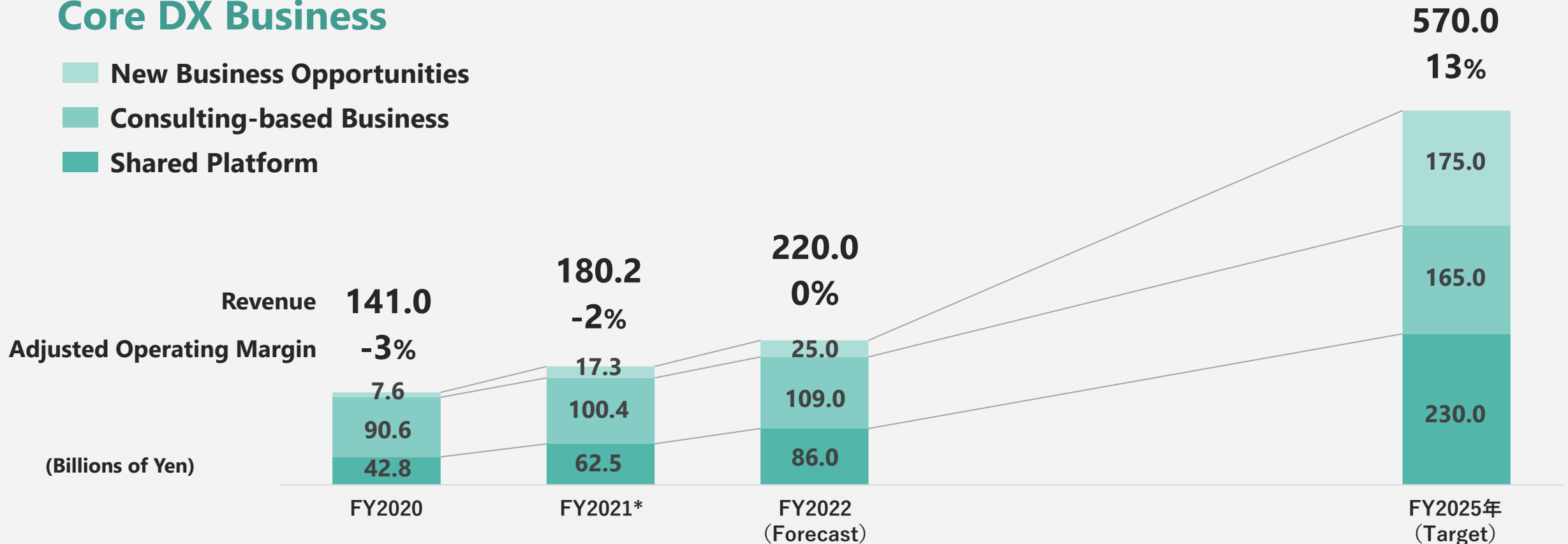
\*Revision of targets for FY2025 as a result of changes in some categories  
Digital Process Innovation: Consulting-based business → New business Opportunities  
Digital ID: Shared Platform → New business opportunities

## Summary of Core DX Performance : Three Areas

All the three areas progressed in FY2021 as planned

Expected to progress in accordance with the initial plan in FY2022 as well

### Core DX Business



\*Revised from the April 28, 2022 results presentation (173.7 billion yen → 180.2 billion yen) as a result of the latest reclassification of the product/service mix in the shared platform.

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# Working on developing and improving recruitment of DX talent to achieve our targets of having 10,000 DX-focused personnel by FY2025

### Consultants

Personnel who provide insight and direction, and show the directions to promote client innovation through counselling, proposals and suggestions for the enhancement of client management, business and IT strategy



### Architects

Personnel who take the lead on logic design, implementation design, sizing, and system construction, evaluation and fault analysis through the process of drawing out the hidden requirements of a system from their knowledge of market and technological movements, as well as client dialogues, proposing system architectures and implementation technologies to put those requirements into practice, and participating in system development projects



### Agile Engineers

Personnel who take the lead in raising the value of products and services and improving the value of client and NEC businesses by autonomously and cross-functionally carrying out the design, implementation and testing needed to achieve client requirements using Agile or DevOps methodologies, on the basis of their knowledge of system development



### Data Scientists

Personnel who create value for clients by designing approaches for testing hypotheses and developing analytical models on the basis of their knowledge of data science (i.e., knowledge of statistics and mathematics)



### Cloud Professionals

Personnel who have knowledge of the “mega cloud” services and who plan, coordinate and maintain cloud services, and also carry out SI and delivery of cloud services/cloud systems that fulfill client requirements



### Biometrics/Video Analysts

Personnel who possess specialized skills in all the technologies needed for the analysis of biometric/visual data beginning with cameras and lighting, and who can calibrate client environments and optimize settings at time of PoC/commercial operation, and who can plan the secure operation of systems



### Cybersecurity Professionals

Personnel who understand the necessity of logic underpinning security by design (approach that takes security into account from the planning and design stage) and who can design, build and operate secure systems using optimal means

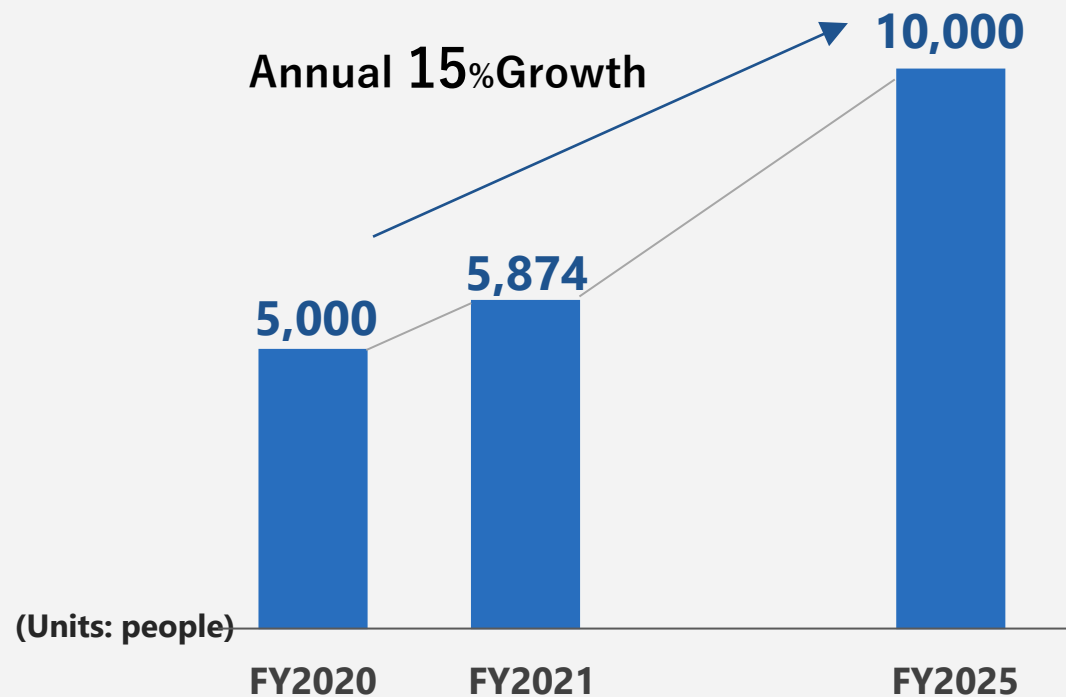


## Status of Development of DX Talent

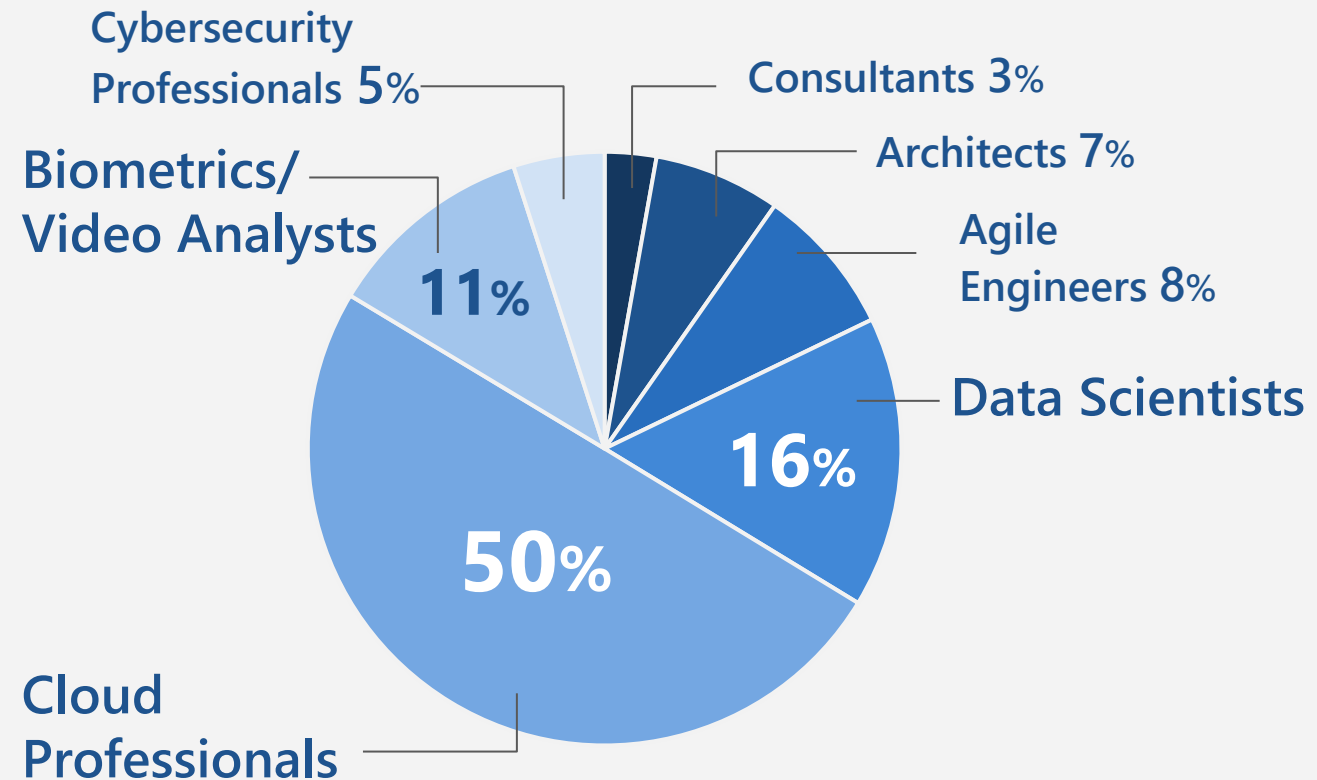
Developed 5,874 DX talents as of FY2021

DX specialized development has been progressing at roughly 15% growth per year

### Cumulative Number of DX Talents



### Breakdown of DX Talents Development (FY2021)





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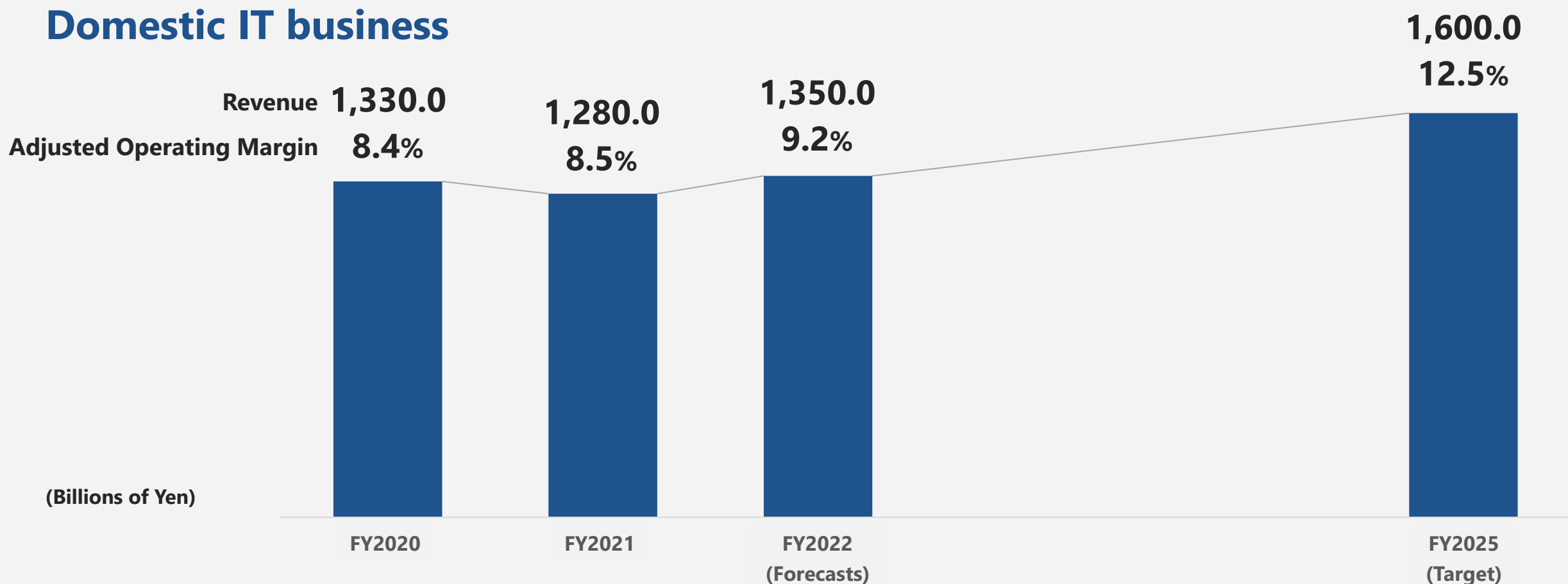
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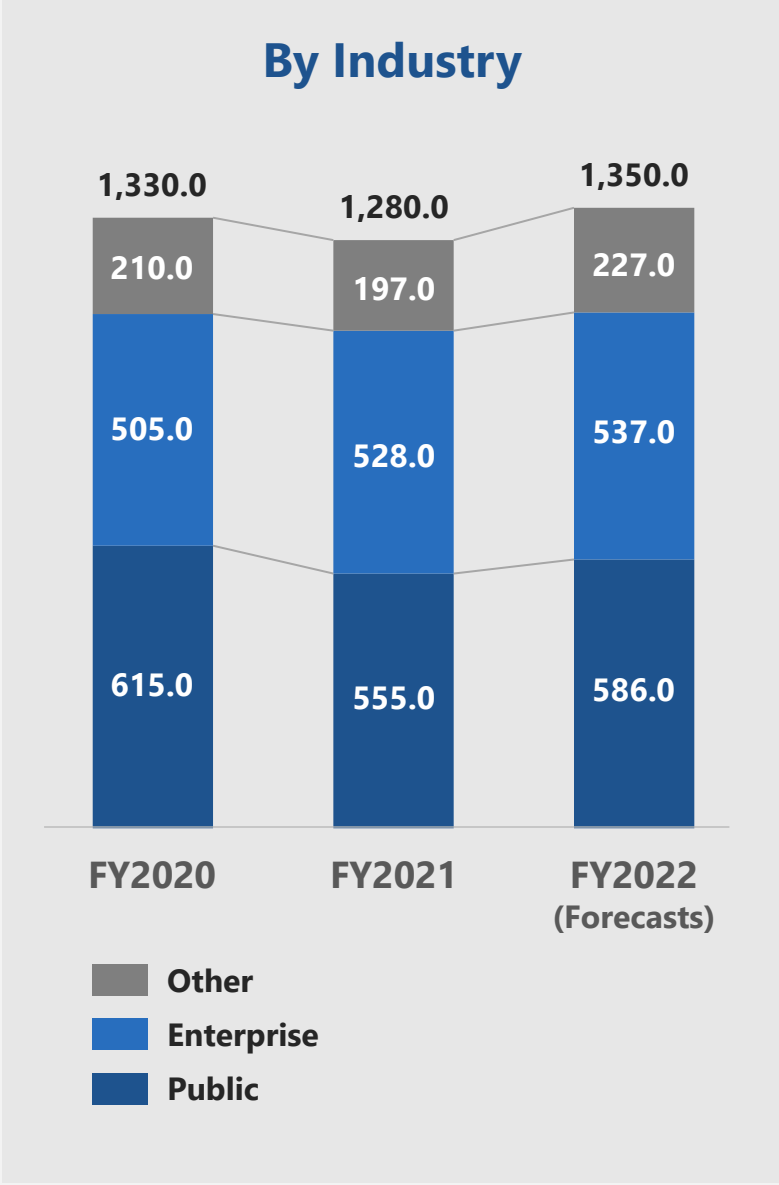
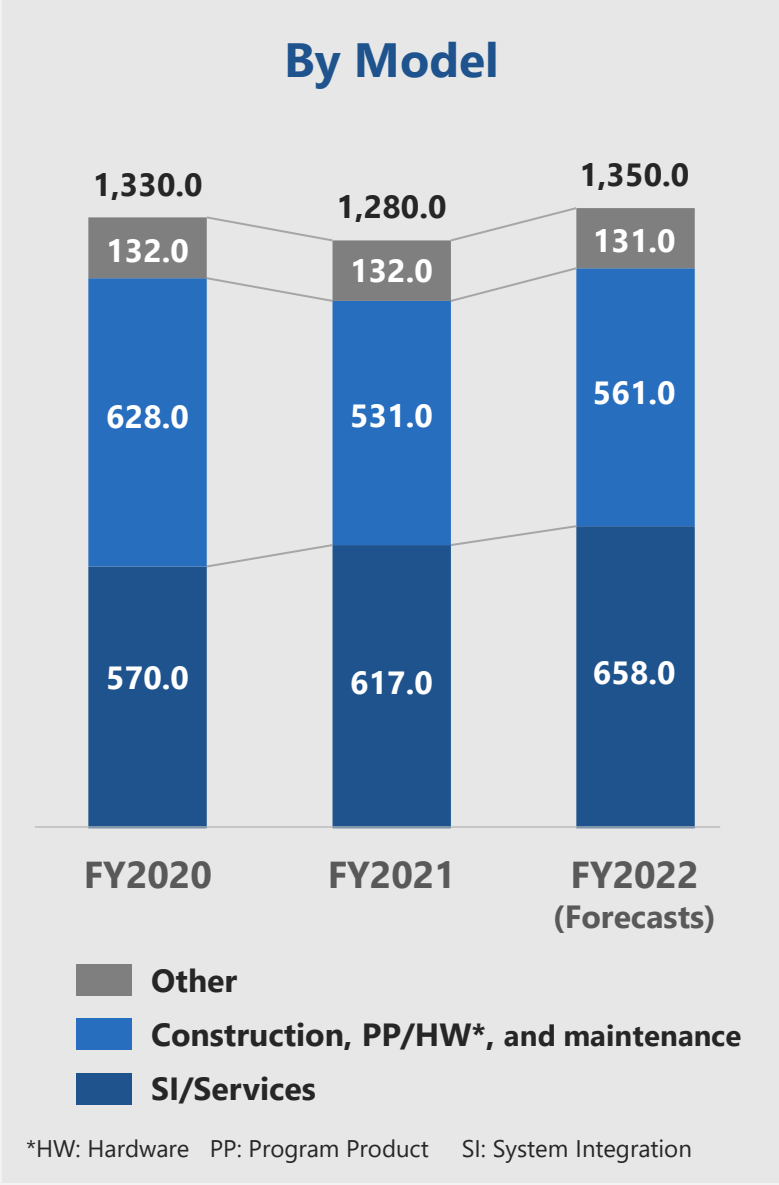
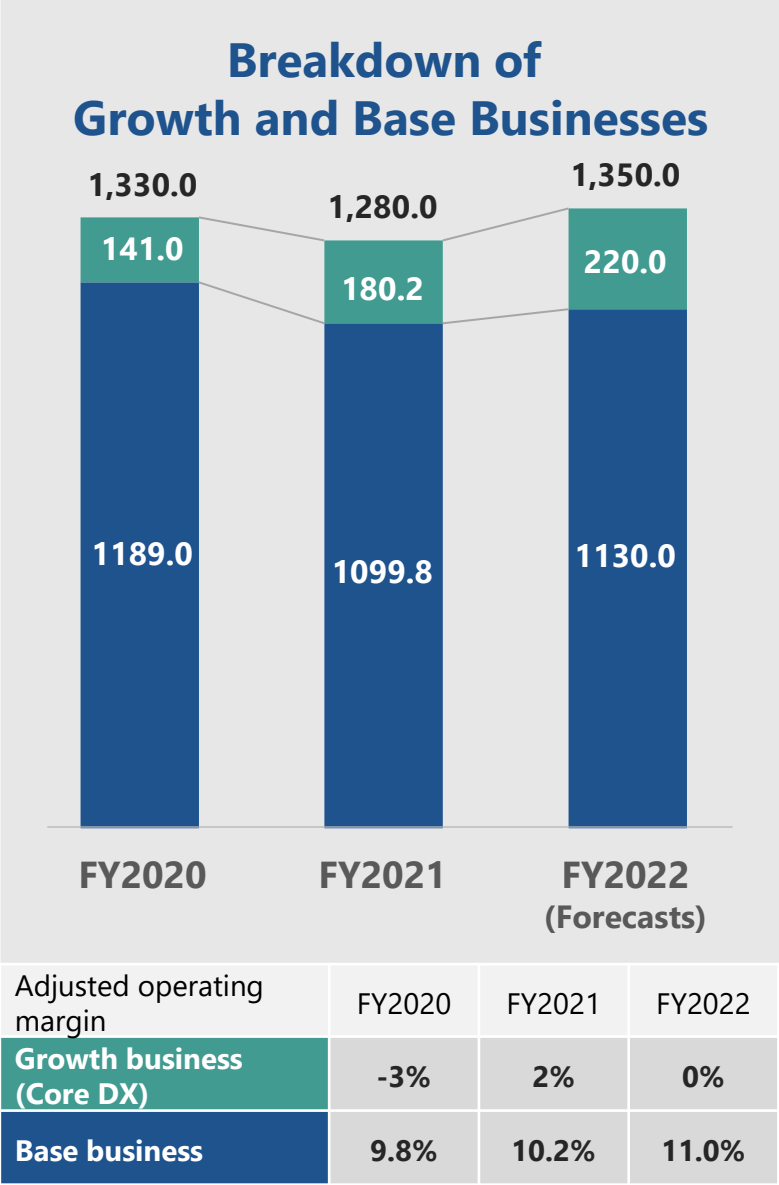
## Performance of Domestic IT Business

In FY2021, the SI services and enterprise areas grew while platform, public and SME base business areas declined relative to our expectations

In FY2022, we expect to partially remedy the foremined causes for the decline, and overall achieve the businesses to grow



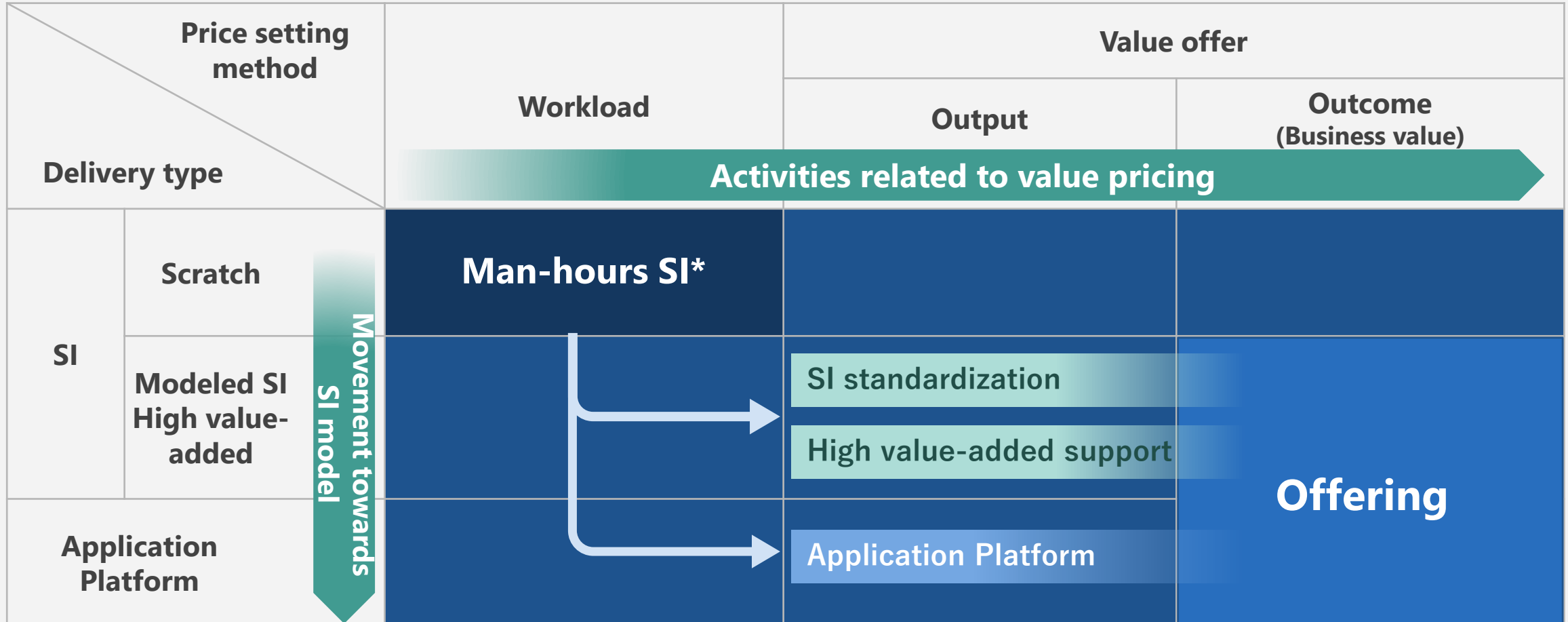
# Domestic IT Business: Data by Categories



## Efforts to SI Model Transformation in order to Improve Profitability

Enhancing high value-added, modeled, platform-based SI and switching to a value-offer model

We are in the process of moving ahead with this in Enterprise field



\*SI that is priced based on the operating man-hours (man-months)

### Progressed as planned in growth areas (Core DX)

- ABeam is growing steadily. Commenced a joint target approach for synergistic growth
  - NEC Digital Platform has been growing centered on the cloud as a shared platform
  - Digital ID and Digital Process Innovation launched steadily in FY2021 as new businesses
- We have been making progress on social implementation of Smart City and Mobility with the goal of establishing businesses in FY2024

**SI business and services in Domestic IT business are growing steadily  
Resolved the cause of the temporary decline in FY2021, and we expect overall growth in FY2022**

- SME markets had a delayed recovery in FY2021 due to stagnation stemming from component shortages and price spikes, but these factors are expected to be resolved in FY2022

**We are continuing to make progress towards the goal of  
¥1.6tn in revenue with adjusted operating margin at 12.5%  
by FY2025 for the Domestic IT Business**

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**NEC**

# Cautionary Statement with Respect to Forward-Looking Statements

This material contains forward-looking statements regarding estimations, forecasts, targets and plans in relation to the results of operations, financial conditions and other overall management of the NEC Group (the "forward-looking statements"). The forward-looking statements are made based on information currently available to the Company and certain assumptions considered reasonable as of the date of this material. These determinations and assumptions are inherently subjective and uncertain. These forward-looking statements are not guarantees of future performance, and actual operating results may differ substantially due to a number of factors.

The factors that may influence the operating results include, but are not limited to, the following:

- adverse economic conditions in Japan or internationally;
- foreign currency exchange and interest rate risks;
- changes in the markets in which the NEC Group operates;
- the recent outbreak of the novel coronavirus;
- potential inability to achieve the goals in the NEC Group's medium-term management plan;
- fluctuations in the NEC Group's revenue and profitability from period to period;
- difficulty achieving the benefits expected from acquisitions, business combinations and reorganizations and business withdrawals;
- potential deterioration in the NEC Group's relationships with strategic partners or problems relating to their products or services;
- difficulty achieving the NEC Group's growth strategies outside Japan;
- potential inability to keep pace with rapid technological advancements in the NEC Group's industry and to commercialize new technologies;
- intense competition in the markets in which the NEC Group operates;
- risks relating to the NEC Group's concentrated customer base;
- difficulties with respect to new businesses;
- potential failures in the products and services the NEC Group provides;
- potential failure to procure components, equipment or other supplies;
- difficulties protecting the NEC Group's intellectual property rights;
- potential inability to obtain certain intellectual property licenses;
- the NEC Group's customers may encounter financial difficulties;
- difficulty attracting, hiring and retaining skilled personnel;
- difficulty obtaining additional financing to meet the NEC Group's funding needs;
- potential failure of internal controls;
- potentially costly and time-consuming legal proceedings;
- risks related to regulatory change and uncertainty;
- risks related to environmental laws and regulations;
- information security and data protection concerns and restrictions;
- potential changes in effective tax rates or deferred tax assets, or adverse tax examinations;
- risks related to corporate governance and social responsibility requirements;
- risks related to natural disasters, public health issues, armed hostilities and terrorism;
- risks related to the NEC Group's pension assets and defined benefit obligations; and
- risks related to impairment losses with regard to goodwill.

The forward-looking statements contained in this material are based on information that NEC possesses as of the date hereof. New risks and uncertainties come up from time to time, and it is impossible for NEC to predict these events or how they may affect the NEC Group. NEC does not intend to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Note: In this presentation, the accounting periods of the fiscal years for March 31, 2022 and 2023 were referred as FY2021 and FY2022 respectively. Any other fiscal years would be referred similarly.