Digital Agency Activity Report

2023/03/30

Path Towards Cross-Border
Data Flow and Utilization

Facilitating Data Free Flow and Utilization of Data across Borders while Ensuring Trust

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In January 2019, then Prime Minister Abe first proposed the "Data Free Flow with Trust" (DFFT) at the Davos Forum. Later in June 2019, it was agreed on the Leaders' Communiqué specifying DFFT at the G20 Leaders' Summit in Osaka.

Different countries have different policies and rules on how to handle data

European Union (EU)
GDPR /June 2018
Data Governance Act /November 2020
Data Act / February 2022
Digital Service Act / November 2022
Digital Markets Act / November 2022

UK
UKGDPR / June 2018
Data Protection Act / 2018

Türkiye
Law on Protection of Personal Data /
March 2016

Nigeria
Persona Information Protection Act /
January 2019

Kenya
Data Protection Act / Submitted in
June 2019
Data localization request for sensitive
personal data

Saudi Arabia
Cloud Computing Regulatory Framework
/ Revised in March 2019
Industry data localization request

Australia
Privacy Act / Revised in 2018

India
Digital Personal Data Protection Bill
/ November 2022
Report on Amendments to Personal
Data Protection Bill in 2019 / December
2021
Non-personal Information Governance
Framework Report / Published in July
2020
E-commerce Policy Draft / Submitted in
February 2019

China
Cyber Security Law / June 2017
Crypto Law / January 2020
Data Security Law / September 2021
Personal Information Protection Act /
November 2021
Regulations on Management of
Automobile Data Security / October
2021, etc.

Japan
Act on the Protection of Personal
Information / Revised in 2021

Vietnam
Cyber Security Act / January 2019
Personal Data Protection Decree (draft)
/ April 2022

Singapore
Personal Data Protection Act / Revised
in February 2021

Indonesia
Personal Data Protection Act / 2022
Regulation on Personal Data
   Protection in Electronic Transactions
   / 2016
Government Regulations on the
Operation of Electronic Systems and
Electronic Transactions / Revised in
2019

Canada
Personal Information Protection and
Electronic Documents Act / Revised in
2018

US
Foreign Intelligence Surveillance Act /
Revised in 2008
CLOUD Act / March 2018

Brazil
Personal Data Protection Law /
Planned to be put into effect in
February 2020

Making barriers to global business with data

Inability to deliver services like real-time monitoring using IoT

Inability to transfer autonomous driving data to overseas bases

Difficulty to obtain a system-wide overview, imposing heavier corporate burdens such as costs for taking measures and risks of expansion

Toward solving cross-border data issues

Three Pillars for Operationalizing DFFT

1

Trade rule development

Starting with the Osaka Track Process, we are working on developing bilateral and multilateral rules for DFFT.

2

Regulatory cooperation

We are working on establishing bilateral and multilateral regulatory cooperation based on laws and regulations concerning the cross-border flow of personal data in each country.

3

Technological alliance

We are working on facilitating data flow by leveraging technologies like Trusted web, eID and PETs*.

Efforts to realize the cross- border data flow and utilization of data

Improving system interoperability and verifying technologies under an international public-private partnership framework

2 Regulatory cooperation

We are working on establishing bilateral and multilateral regulatory cooperation based on laws and regulations concerning the cross-border flow of personal data in each country.

3 Technological alliance

We are working on facilitating data flow by leveraging technologies like eID and PETs*.

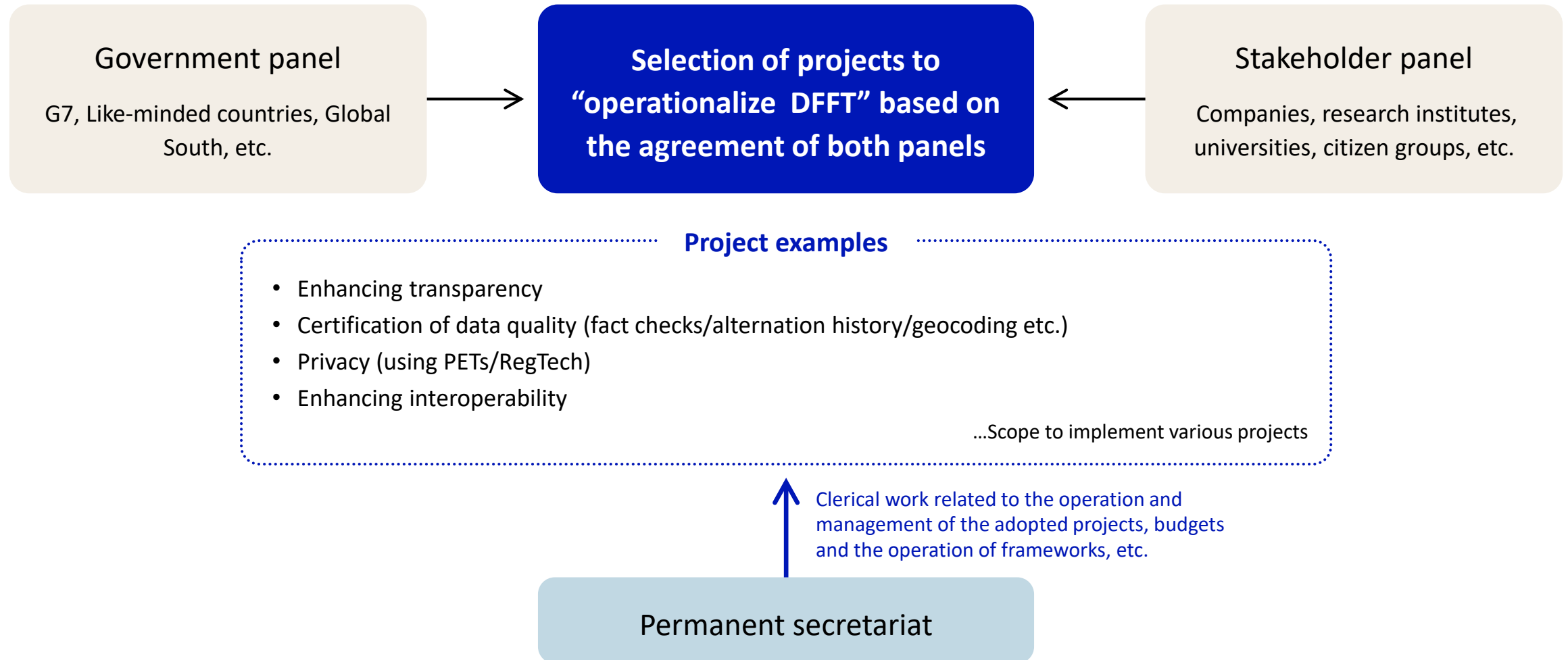There is no international framework or forum to continuously promote these efforts.

Building an international pubic-private framework

Implement projects to eliminate barriers to cross-border data flow

*PETs: A general term for technologies that solve the dilemma between privacy protection and data sharing/utilization and enable data analysis/operation and machine learning while maintaining privacy.

To eliminate barriers to cross-border data flow

Building an international public-private framework

Government panel G7, Like-minded countries, Global South, etc.	→ **Selection of projects to "operationalize DFFT" based on the agreement of both panels** ←	**Stakeholder panel** Companies, research institutes, universities, citizen groups, etc.

Project examples

- Enhancing transparency
- Certification of data quality (fact checks/alternation history/geocoding etc.)
- Privacy (using PETs/RegTech)
- Enhancing interoperability

…Scope to implement various projects

↑ Clerical work related to the operation and management of the adopted projects, budgets and the operation of frameworks, etc.

Permanent secretariat

DFFT to the execution phase

G7 Digital and Tech Ministers' Meeting to be held at the end of April

2019

Davos Forum

First DFFT proposal

G20 Osaka Summit (Japan presidency)

Leaders' Communiqué specifying DFFT adopted

2021

G7 Digital and Technology Ministers' Meeting （UK presidency）

DFFT roadmap adopted

2022

G7 Digital Ministers' Meeting （Germany presidency）

DFFT action plan adopted

2023

G7 Digital and Tech Ministers' Meeting （Japan presidency）

The objective of the G7 Digital and Tech Ministers' Meeting on April 29 and 30, 2023 is to reach an agreement on the establishment of an "international framework."

A New Info-Sharing System to Support Administrative Online Services

Initiatives in realizing better experience, new service deployment and efficient system development

Resident

Procedures are time-consuming and troublesome

Local government

The need to adjust the system each time a new digital service is released is costly and time-consuming.

National government

There is a risk of costs increasing if local and national governments develop their own systems.

Aim of administrative online services

Services friendly to users, businesses and employees

Implementation targeting FY2025

Convenience for
Residents

Administrative procedures can be completed with minimal entry via an easy-to-use UI.

Reduced burden on
Officials

New digital services can be quickly and affordably released.
Advanced services of other organizations can also be easily introduced.

Cost reduction of
the Nation

Cost-effective and safe digitalization can be achieved using common functions.

Thorough review of concept and structure of the infrastructure system for info-sharing

System architecture refinement

1. Thorough improvement of the user interface and experience

2. Development and dissemination of functions common to a digital society

3. Utilization of data

Mainly targeting the implementation in 2025, local and national governments are promoting **system development and refinement.**

Digital technology-based system design

Review of the system itself, including entries and procedures, on the premise of utilizing digital technology

In light of the progress in the way data utilized and systems developed, future challenges will also have to be reviewed.

Advantages of the new info-sharing system

# "Public Service Mesh" to improve data sharing
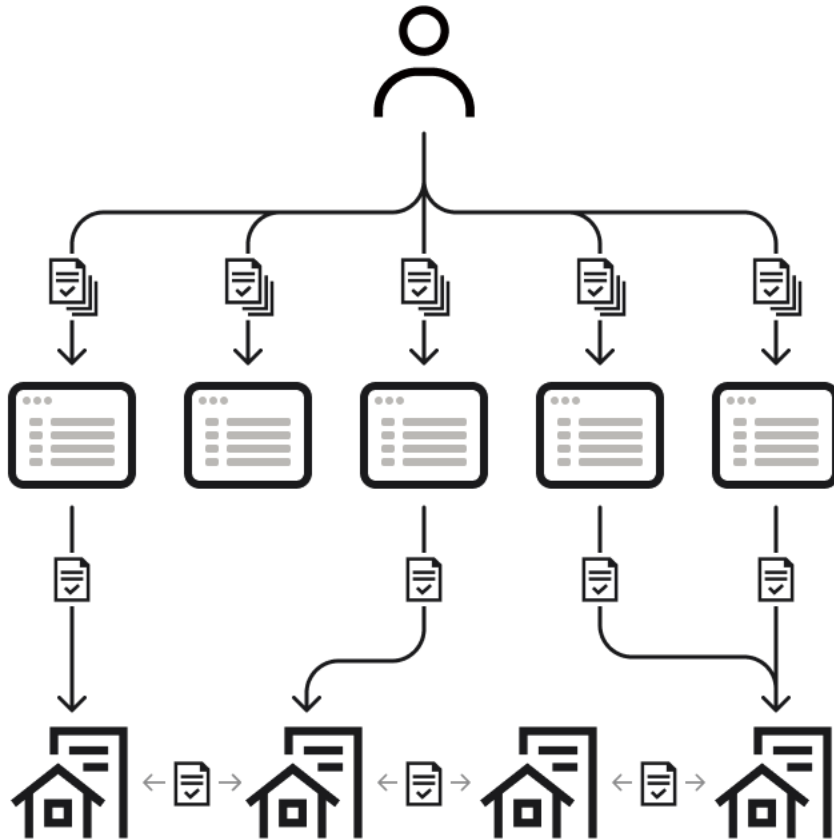
Processing capacity is insufficient for sharing data in bulk and
transferring it promptly to all citizens.
When digital services are launched, each of administrative agencies
takes considerable time and effort for setting up data.
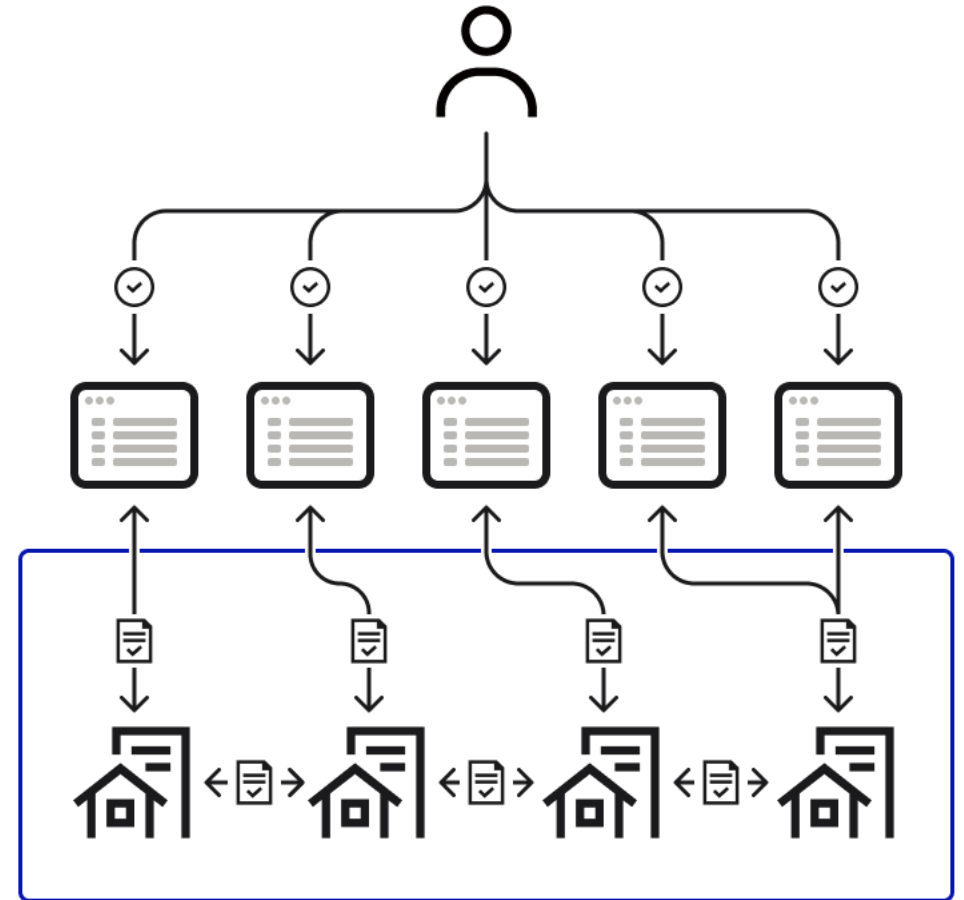
The processing capacity must be significantly enhanced to establish full
digital services for all citizens and pave the way for swift data utilization
and the smooth launch of new services with minimal system operation.

Advantages of the new info-sharing system

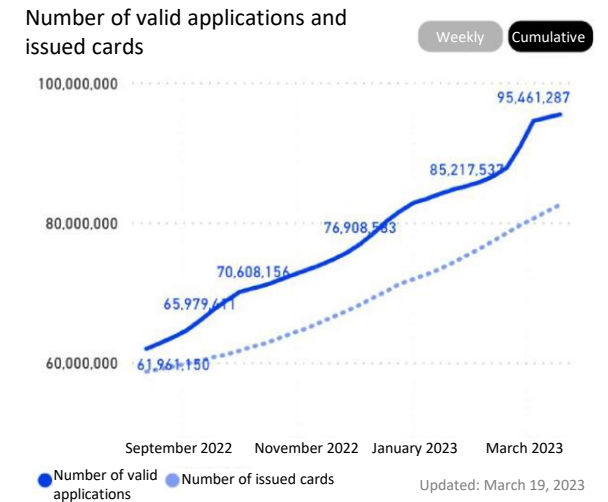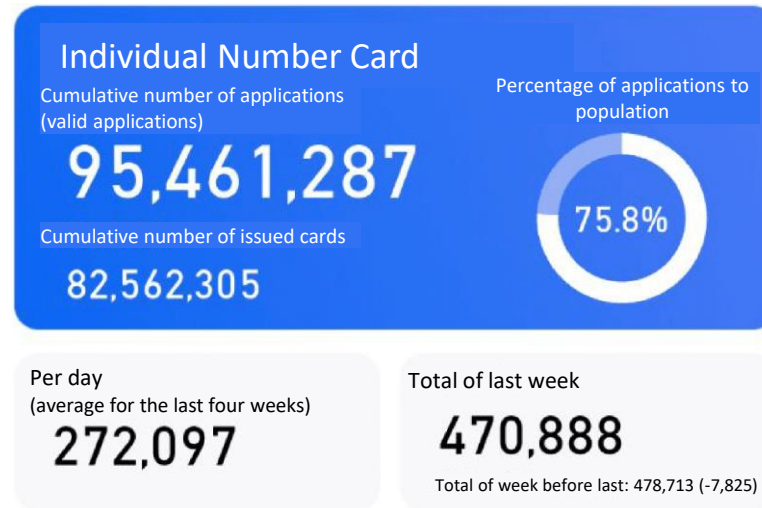# "Public Service Mesh" to optimize costs
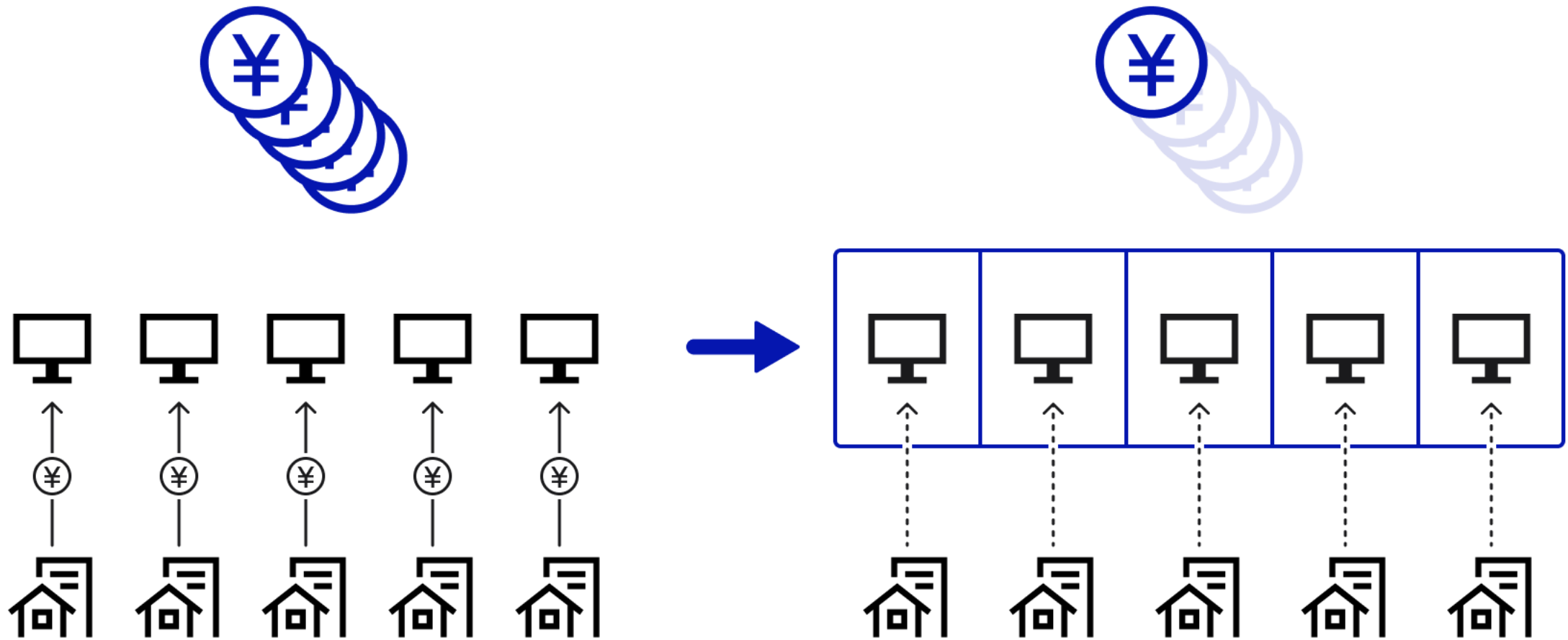
If individual administrative agencies develop their own systems, they will also bear the costs separately.

Delivery of common functions necessary for info-sharing to all administrative agencies allows optimally cost-effective system development nationwide.

More Ways to Use Individual Number Cards (My Number Cards)

Owned by over 75% of the population

Number of Individual Number Card applications

Approx. 95M cases

Individual Number Card

Cumulative number of applications
(valid applications)

95,461,287

Cumulative number of issued cards

82,562,305

Percentage of applications to population

75.8%

Per day
(average for the last four weeks)

272,097

Total of last week

470,888

Total of week before last: 478,713 (-7,825)

Number of valid applications and issued cards

Weekly | Cumulative

100,000,000

95,461,287

85,217,537

80,000,000

76,908,583

70,608,156

65,979,411

61,961,150

60,000,000

September 2022   November 2022   January 2023   March 2023

● Number of valid applications   ● Number of issued cards

Updated: March 19, 2023

17
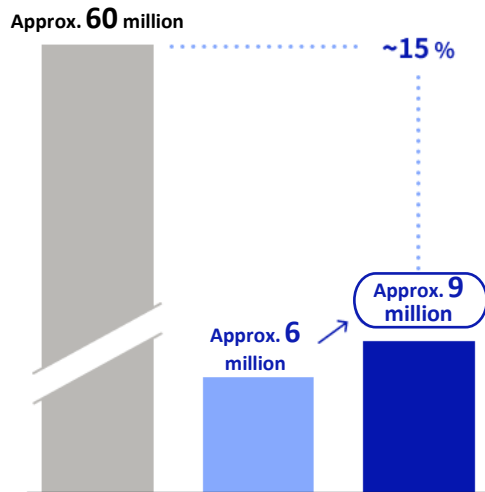
Utilization is increasing and expected to further increase in daily life

## Issuance of resident cards, etc.

Annual No.[1]

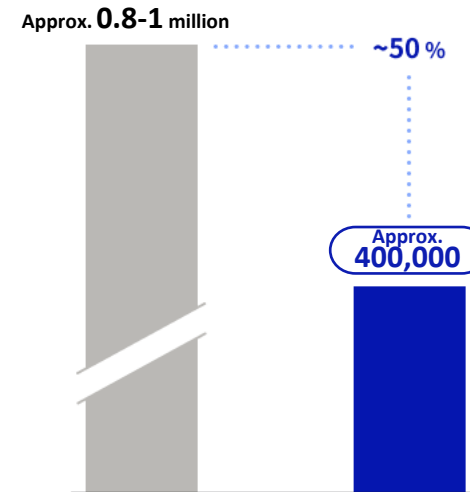Resident's card issued at convenience stores by Individual Number Card [2]

2021   2022

Approx. **60** million

~15 %

Approx. **6** million

Approx. **9** million

Use as a health insurance card at a medical institution

Monthly No.[3]

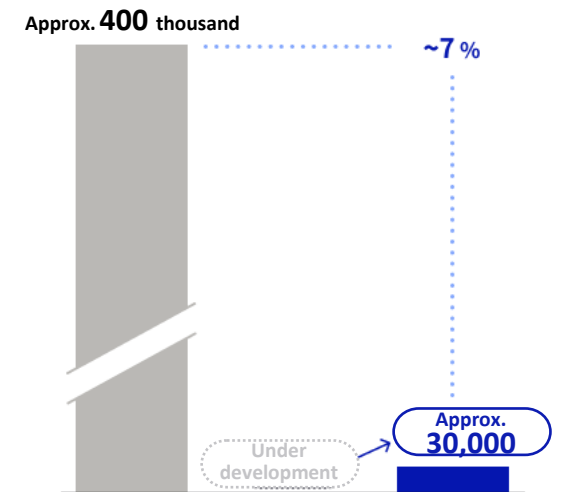Online confirmation of eligibility via Individual Number Card [4]

October 2021   February 2023

Approx. **170** million

~1 %

Approx. **60,000**

1.57 million
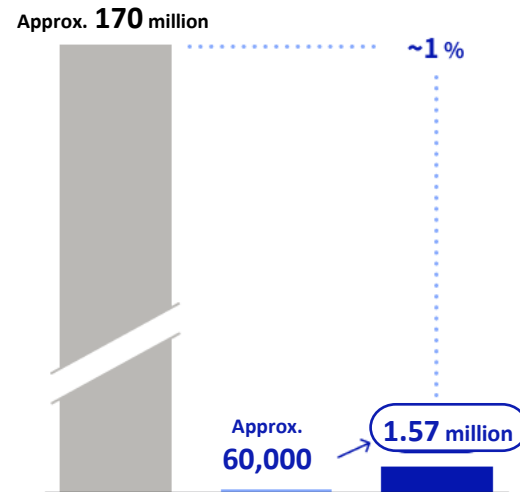
Online identity verification for private financial services

Monthly No.[5]

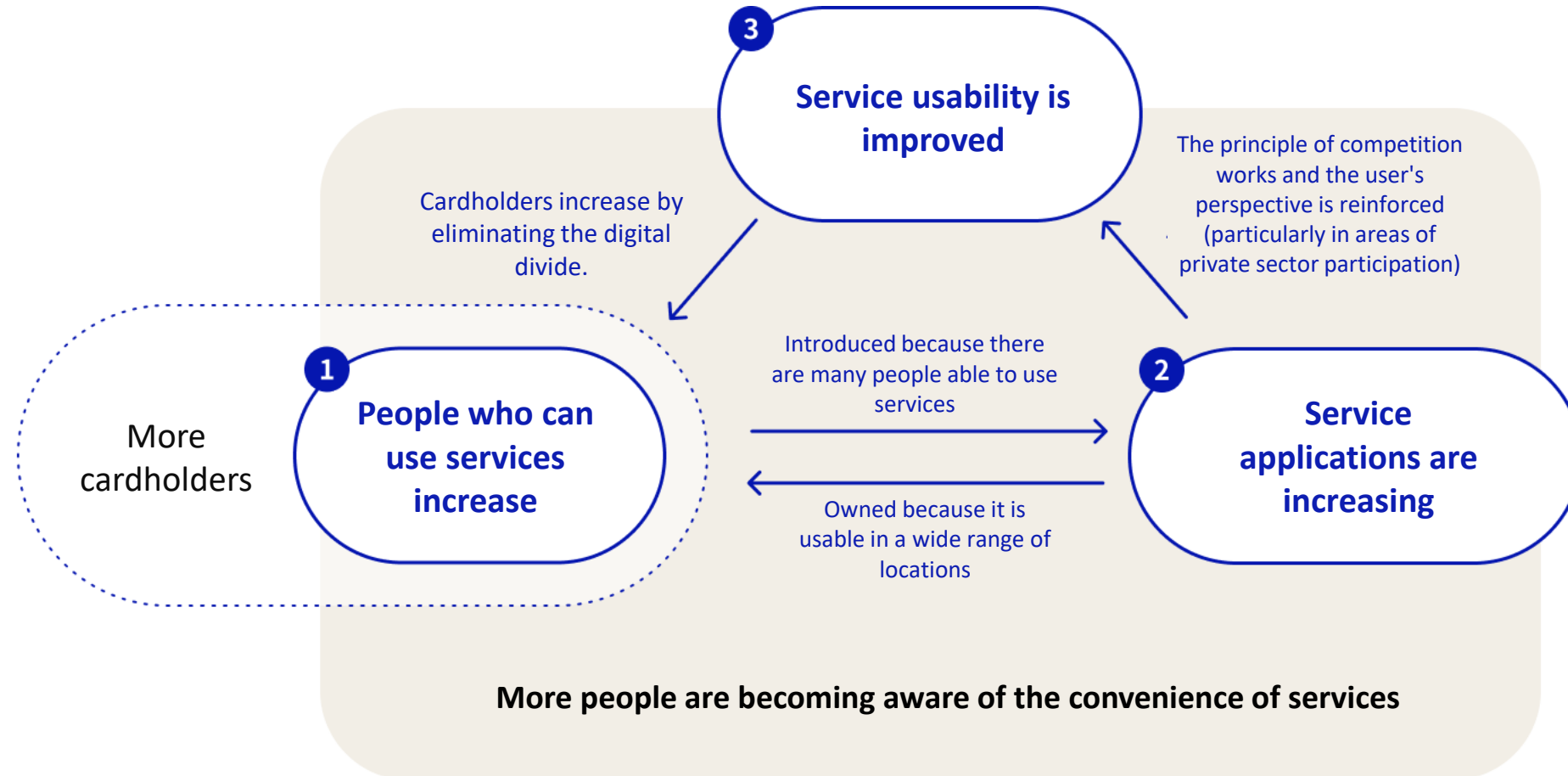Online identity verification by Individual Number Card [6]

November 2022

Approx. **0.8-1** million

~50 %

Approx. 400,000

Moving procedure

Monthly No.[7]

Moving procedure online service on Mynaportal [8]

Until January 2023   Until Feburary 2023

Approx. **400** thousand

~7 %

Under development

Approx. 30,000

† Definition of numbers and sources

*1 Annual number of resident cards issued (Ministry of Internal Affairs and Communications)／*2 Number of copies of resident cards issued at convenience stores (2020, Japan Agency for Local Authority Information Systems)／*3 Number of receipts for outpatients (medical, dental, pharmacy) (as of October 2022, Ministry of Health, Labor and Welfare)／*4 Number of online eligibility confirmations using Individual Number Card (implementing agencies)／*5 Approximate estimate from officially announced materials of the service／*6 Number of JPKI uses by the company (Japan Agency for Local Authority Information Systems)／*7 Estimated monthly average converted from 5.25 million, the number of people moving between municipalities (note: excluding people moving within the same municipality) (Basic Resident Registers Demographic Migration Report 2021, Ministry of Internal Affairs and Communications)／*8 Number of Mynaportal (online moving procedure service) users (Digital Agency)

For user-centric services with convenience users can perceive

③ Service usability is improved

The principle of competition works and the user's perspective is reinforced (particularly in areas of private sector participation)

Cardholders increase by eliminating the digital divide.

More cardholders

① People who can use services increase

Introduced because there are many people able to use services

Owned because it is usable in a wide range of locations

② Service applications are increasing

More people are becoming aware of the convenience of services

Promoting collaboration with local governments and private companies

Vision for a Digital Garden City

Promotion of over 500 applications in public and private sectors

Authentication App

Easy personal authentication in various fields, including private sector services

Face-to-face use	Online use

Affordable implementation of authentication functions in private services by integrating with Authentication App (provisional)

Administration
416 services planned

Available at convenience stores

Administrative desk DX

Use in disaster management / evacuation centers

Entry in elections and at polling venues

Administrative portals

Vaccination certificate

Quasi-public
80 services planned

Medical MaaS

Patient registration card

Online medical treatment

Health app

Maternal and child health app

Private
62 services planned

Coupon

Integration of transportation IC cards

Community money/point

Taxi, etc. Fare Discount App

Dispatch service

氏名 ●●●
住所

性別

年 月 日

1234
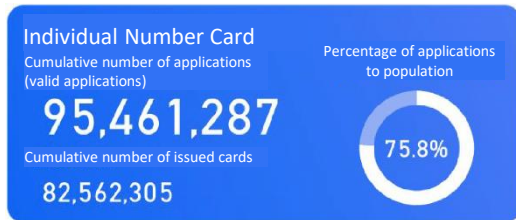
公的個人IDアプリ

ログイン可能なサービス

銀行　保険　投資

市民手続　国税　出入国

年金　仕事探し　受信箱

ホーム　コード読取　メニュー

公的個人ID

中古品買取

中古品買取サービス
へログイン

JAPAN PASSでログイン

SNSでログイン

Visualizing utilization to share information

Application/issuance

Increase in service applications using Individual Number Cards

Individual Number Card
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(valid applications)

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to population

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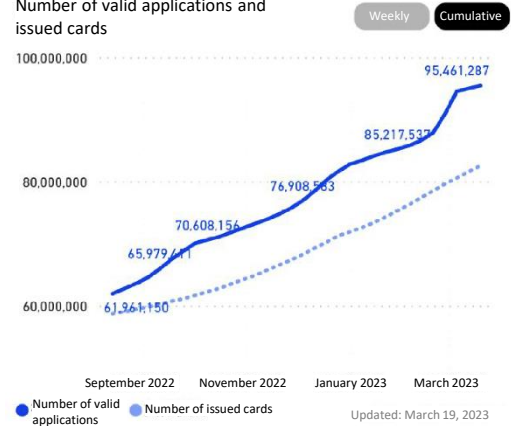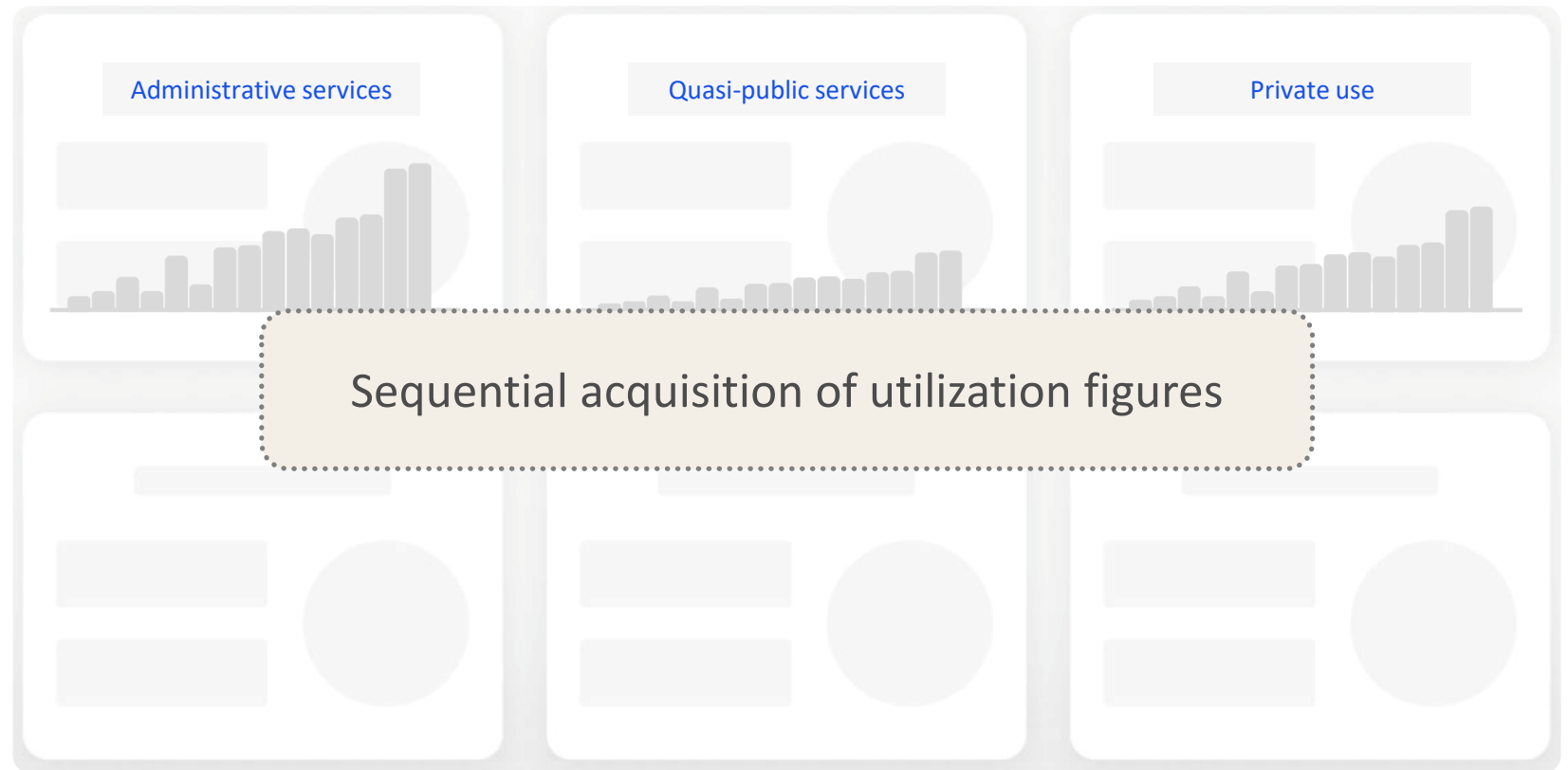
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● Number of valid applications ● Number of issued cards

Updated: March 19, 2023

Administrative services

Quasi-public services

Private use

Sequential acquisition of utilization figures

21

Providing User-Centric Administrative Services

Issues in creating administrative services

Insufficient user's perspective in service creation
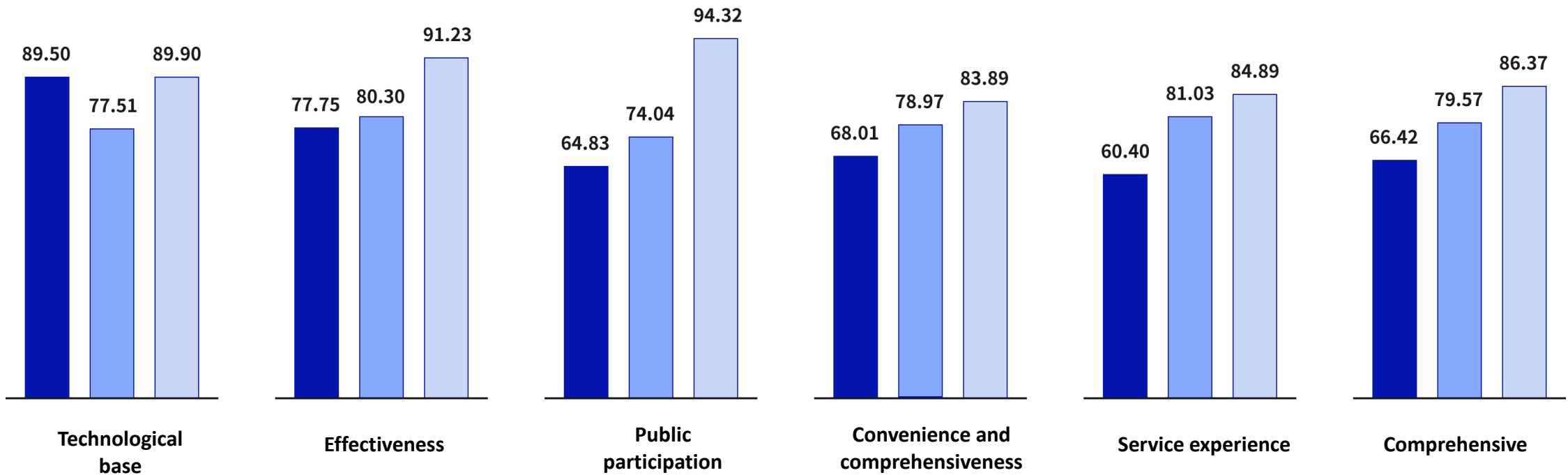
⚫ **Japan**

Asia Ranking : **5th** / 6
World Ranking : **22nd** / 30

🔵 **UK**

Europe Ranking : **3rd** / 6
World Ranking : **5th** / 30

⚪ **Singapore**

Asia Ranking : **1st** / 6
World Ranking : **2nd** / 30

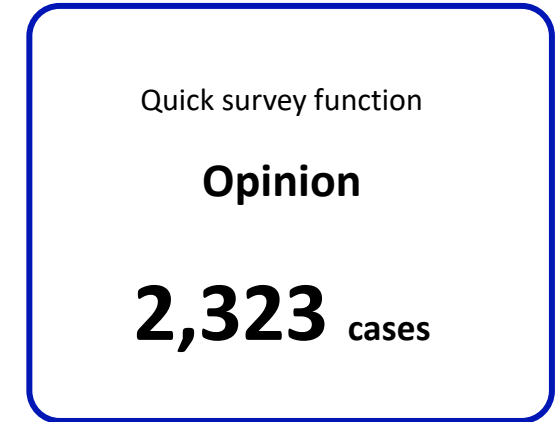|					
89.50 77.51 89.90	77.75 80.30 91.23	64.83 74.04 94.32	68.01 78.97 83.89	60.40 81.03 84.89	66.42 79.57 86.37
Technological base	**Effectiveness**	**Public participation**	**Convenience and comprehensiveness**	**Service experience**	**Comprehensive**

User-oriented service development

Development based on UX design process

Short period from development to release (three months)

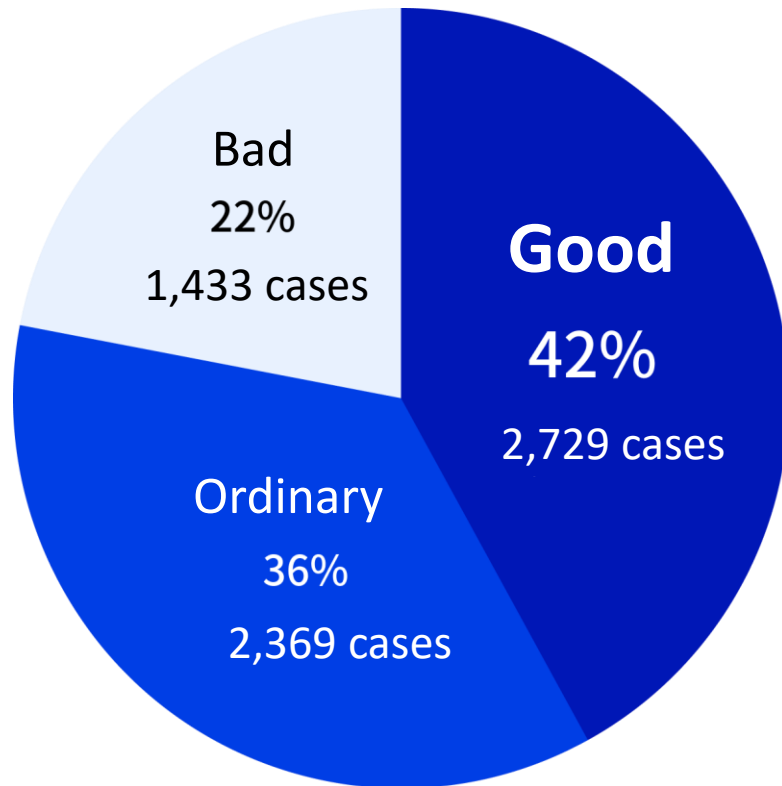The unprecedented Alpha version in administrative services

Introduction of a mechanism for directly receiving user opinions

Quick survey function

3-step evaluation

6,531 **cases**

Quick survey function

Opinion

2,323 **cases**

Real-time analysis of service utilization and feedback

Good
42%
2,729 cases

Ordinary
36%
2,369 cases

Bad
22%
1,433 cases

I want a list of personalized information on subsidies
and tax savings, etc.

I want a function for listing the status of services in use such as online applications

I want to get information on the subsidies which I can receive if I apply for.

I prefer the current version to the previous one because the current one is easier to understand. Simple is best.

Filing an income tax return is hard to understand

Administrative services created in collaboration with users

I found it cumbersome to scroll each time I answered a question	→ **Improved usability**
Isn't the application procedure for civil servants at the time of birth different?	→ **Improved procedural guidance**
Part of the "Children's Vaccinations" page is incomprehensible	→ **Improved explanations**
I got confused because the explanation differed on each page	→ **Unified to easy-to-understand explanations**
I don't think the "Creating Individual Number Card" information is necessary after logging in	→ **Modified web pages optimally to individual contents**

User-oriented service development

Not forgetting what to do

- Users can check the progress after applying for the procedure to the municipality

- When the expiration date of the Individual Number Card certificate is approaching, the procedure to update will be automatically made into a task so that users don't forget to complete it

   (only the electronic certificate for identify verification)

- Priority tasks, such as application for use as a health insurance certificate or registration for bank account for receiving allowances, are visualized to avoid the risk of overlooking them

Checking parenting records at any time

- Birth information, and maternal and infant checkup information can be reviewed online

- Vaccination information can be checked and utilized for the next vaccination

- Health insurance certificate information can also be checked to ensure your Individual Number Card is valid

Release a Beta version this summer and an official version within this fiscal year

April 2023

Summer 2023

March 2024

Alpha 2nd

Beta version

Official version
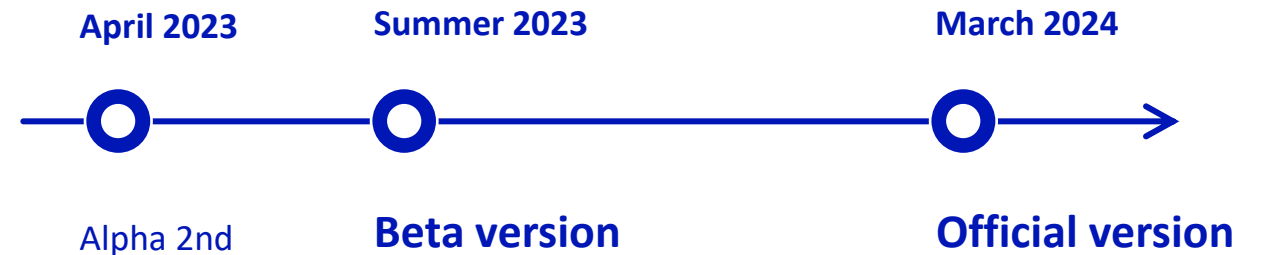
Further Strengthening the Development System

Currently, flexible development is difficult and knowledge and know-how cannot be accumulated

1

Promotion of flexible development

Flexible response and rapid development are difficult, hampering swift service delivery.

2

Accumulation of knowledge and know-how

Business know-how is not accumulated, which means DX human resource development is an issue.

Enhancing collaboration with startups and SMEs

1

Collaboration with

startups and SMEs

Started considering flexible and
diverse subcontractors for sourcing.

Enhancing collaboration with startups and SMEs
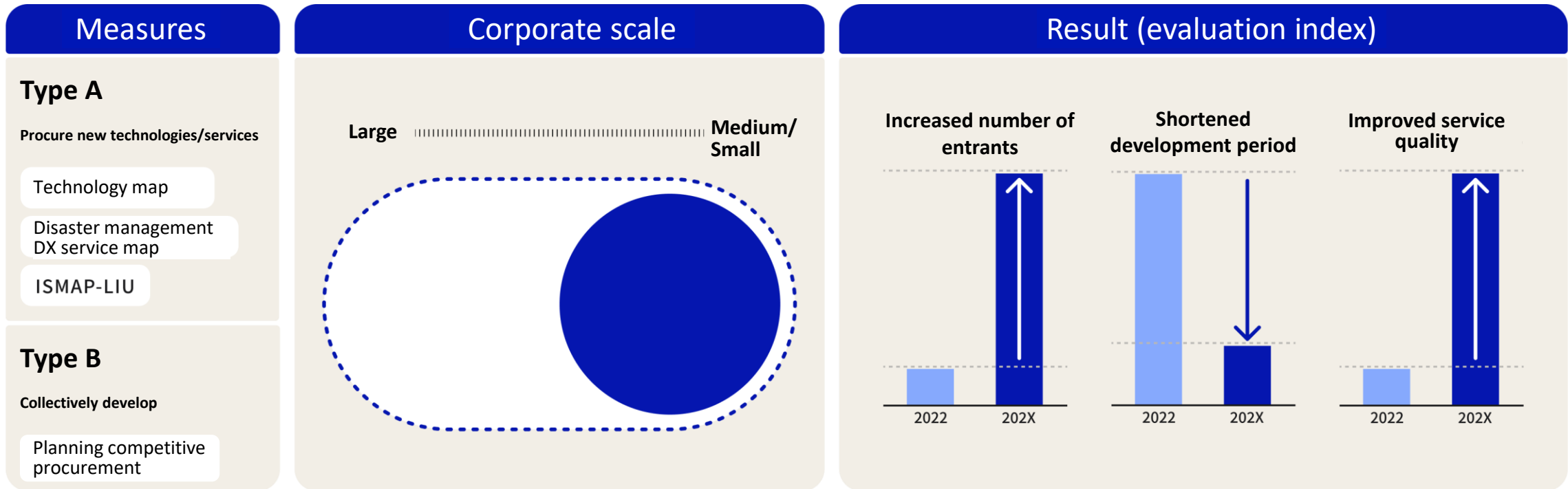
Benefits for business operators

- Development of new business partners

- Increase in reliability

Benefits for the nation/administrative agencies

Possibilities of:

- Diverse sourcing options

- Flexible and rapid development

- Improvement of service

Collaboration with startups and SMEs

Aiming to collaborate with new companies through multiple approaches

Measures

Type A

Procure new technologies/services

Technology map

Disaster management DX service map

ISMAP-LIU

Type B

Collectively develop

Planning competitive procurement

Corporate scale

Large .... Medium/Small

Result (evaluation index)

Increased number of entrants

2022	202X

Shortened development period

2022	202X

Improved service quality

2022	202X

Toward solving issues in service development

Wider scope of "internal development"

2

Wider scope of "internal development"

Expanded the scope of "internal development" and improved the system on the assumption of core projects and emergency services.

Started expanding the scope of "internal development" in multiple services

New Authentication app

New Mynaportal (Front UI)

jGrants

Public API gateway

Government agencies' systems with unified UI design

(design system)

Expanding the scope of "internal development"

Scope of "internal development" to be expanded from this fiscal year

April 2023

End of March 2024

Consolidation of "Internal development" tools and environment

Consolidate a system development environment, necessary sourcing, and security policies, etc.

Acceleration of recruitment

Regular operation of internal development in five projects

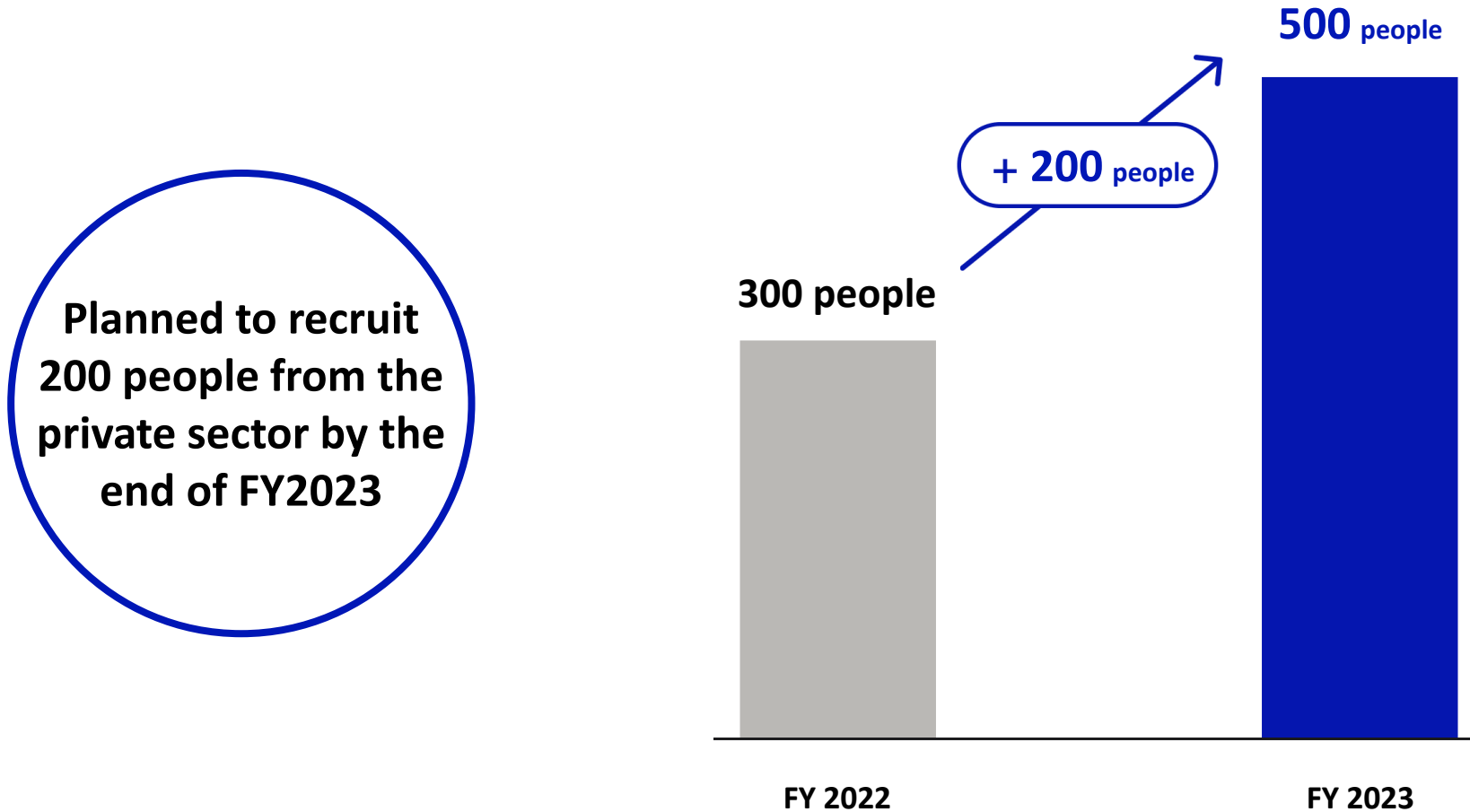Aim for the steady progress of "internal development"

The following scope of "internal development" is assumed in future system development:

1. **A system expected to be implemented earlier** (faster development)
2. **A future core system** （accumulation of know-how)
3. **A system requiring flexible development (emergency service delivery)**

Scope of "internal development" to be expanded from this fiscal year

Planned to recruit 200 people from the private sector by the end of FY2023

500 people

+ 200 people

300 people

FY 2022

FY 2023

Today's Summary

Toward international data flow and utilization

Challenges in international data flow

- **Different countries have different policies and rules on how to handle data**
- **This makes barriers to global business with data**

→

Approaches of the Digital Agency

1. Rule sharing
Rules such as regulations and systems related to data handling in each country are to be shared in an easy-to-understand manner.

2. Technological verification
Technologies helping achieve privacy and protect security are to be verified.

DFFT will be discussed at the G7 Gunma Takasaki Digital and Tech Ministers' Meeting to be held in April with the aim of reaching agreement on the establishment of an "international framework."

A new infrastructure system that supports administrative online services

Challenges in administrative online services

- **Realizing better experience, new service deployment and efficient system development**

→

Thorough review of the infrastructure system for info-sharing

1. **System architecture refinement**

2. **Digital technology-based system design**

The Digital Agency is considering a new info-sharing system, "Public Service Mesh," targeting a FY2025 launch.

More ways to use Individual Number Cards

Challenges in promoting the use of Individual Number Card

- **Further expansion of utilization in daily life**

→

For user-centric services with convenience users can perceive

1. Pursuance of "user-friendly services"

2. Promotion of more than 500 applications for expanding utilization to facilitate collaboration with private companies

3. Visualization of data on the utilization status

Creating administrative services from the user's perspective

Challenges in creating administrative services

- **Failure to provide user-centric services**
- **Poor service experience compared to other countries**

→

Introduction of user-oriented development process

1. **Introduction of a new user-oriented service development process**
2. **Short-term service improvement by consolidating and analyzing user opinions**
3. **Release of a new Mynaportal official version by the end of FY2023**

Strengthening the development system

Challenges in service development

Enhancing collaboration with startups and SMEs

Wider scope of "internal development"

- **Difficulty in flexible development**
- **Difficulty in accumulating development know-how**

→

1. **Strengthened collaboration with startups and SMEs**
2. **Started "internal development" in five projects**
3. **Scheduled to recruit 200 people with expertise from the private sector by the end of FY2023**

デジタル庁
Digital Agency