

# **FY2021 Business Unit IR Meeting**

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## **SHIFT 2023 Growth Strategy**

### **Media & Digital Business Unit**

December 2, 2021



**Sumitomo Corporation**

Enriching lives and the world

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**DX**

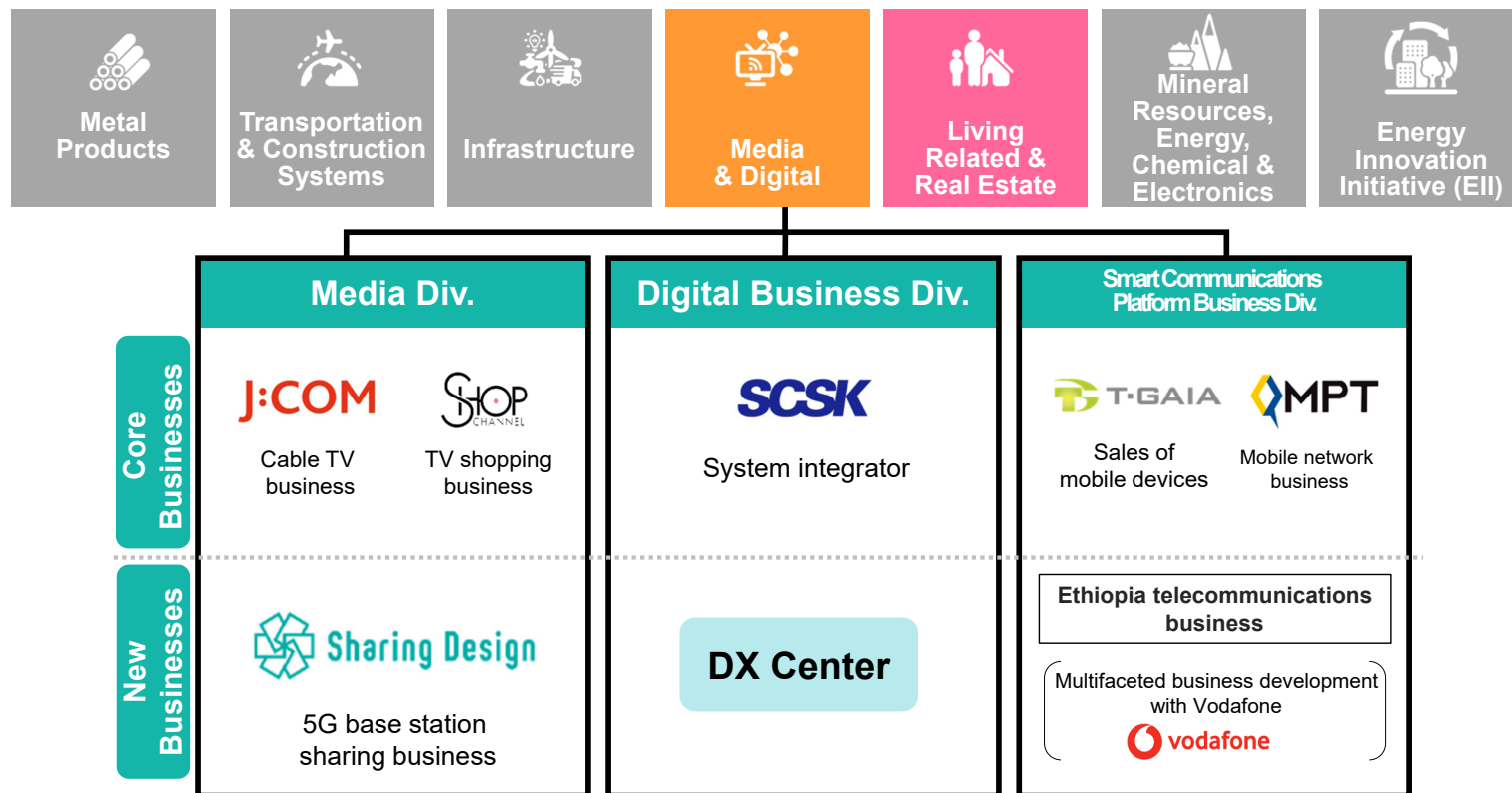
**P.35**

01

# Overall Unit Vision / SHIFT 2023 Growth Strategy

**Toshikazu Nambu, Chief Digital Officer, General Manager of Media & Digital Business Unit**

# 1. Organizations



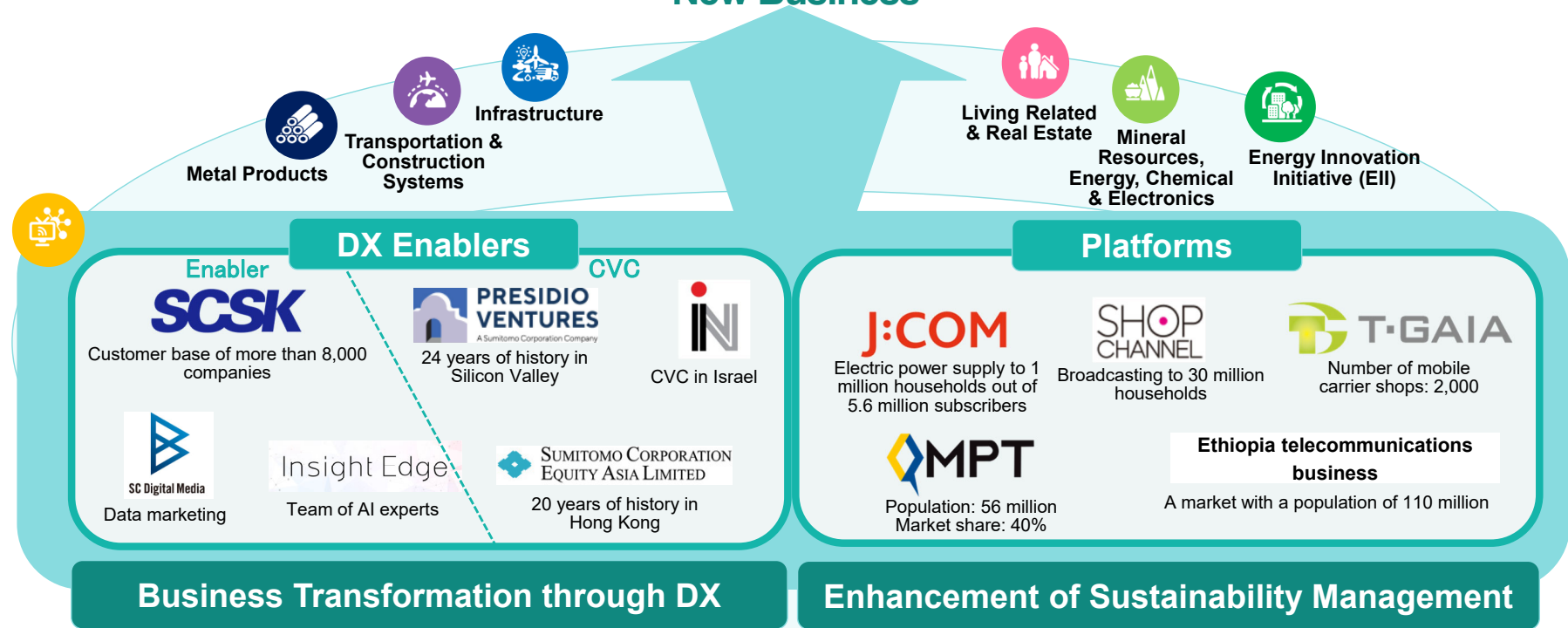
Number of employees: **450** / Number of employees in the Group: **46,000**

## 2. Unit Vision

**As a Digital Solution SOGO-SHOSHA, through the use of digital technology, create values with social impact and large scale businesses to solve social issues (SDGs, etc.) and make a smart society.**

### 3. Initiatives for Value Creation and Resolving Issues

Expand Earning Base of Existing Businesses / Creation of New Value and New Business

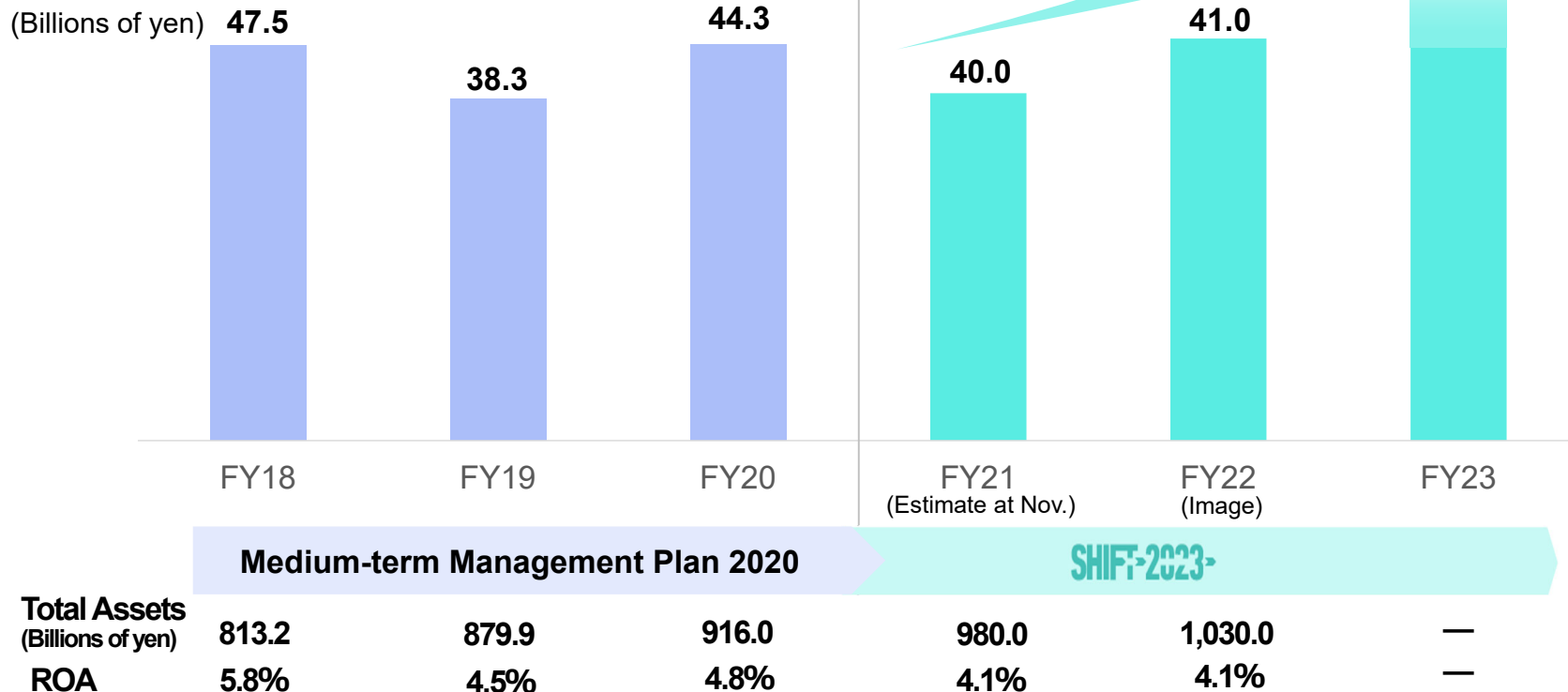


## 4. Strategy of Each Business Unit

Value Creation	<b>CATV Business</b> (J:COM)	<ul style="list-style-type: none"> <li>■ Expansion of lifestyle-related services and shift to personalized services</li> <li>■ Expansion of service areas (from limited to J:COM service area to nationwide)</li> </ul>
	<b>TV Shopping Business</b> (SHOP)	<ul style="list-style-type: none"> <li>■ Development of new products (experiential consumption, subscription services)</li> <li>■ Attracting younger generations through live-streaming services</li> </ul>
Steady Business Growth	<b>Digital Solution Business</b> (SCSK/DX)	<ul style="list-style-type: none"> <li>■ Joint promotion and commercialization of DX at Sumitomo Corporation and SCSK</li> <li>■ Upgrading of DX</li> </ul>
	<b>Overseas Telecommunications Business</b> (Myanmar, Ethiopia)	<ul style="list-style-type: none"> <li>■ Myanmar: Respond to the effects of political change</li> <li>■ Multifaceted business collaboration with Vodafone: Ethiopia telecommunications business in preparation</li> </ul>
	<b>Mobile Business</b> (T-GAIA)	<ul style="list-style-type: none"> <li>■ Respond to changes in the mobile devices distribution market (higher device prices, online stores, etc.)</li> </ul>
Seeding	<b>5G-related Business</b>	<ul style="list-style-type: none"> <li>■ Launch of 5G base-station-sharing business, nationwide expansion</li> <li>■ Local 5G: Development of 5G utilization services</li> </ul>
	<b>Data Utilization Business</b>	<ul style="list-style-type: none"> <li>■ Expand functions of data marketing business that are also utilized for DX</li> <li>■ Nurture and strengthen the branding business</li> </ul>

## 5. Net Income Plan for the Unit

**Stable Earnings Despite COVID-19 Pandemic, for Further Growth**



## 6. Advancement of Sustainability Management – Initiatives for Key Social Issues

### Improvement of living standard

#### **CATV Business (J:COM)**

Expansion of lifestyle-related services, and launch of remote medical services

#### **5G-related Business**

Early expansion of 5G communication infrastructure (base station sharing business)

### Development of local societies and economies

#### **Overseas Telecommunications Business (Myanmar, Ethiopia)**

Development of telecommunications network as social and economic infrastructures in developing countries

### Mitigation of climate change

#### **Digital Solution Business (SCSK/DX)**

Improvement of energy use efficiency (data centers, etc.)

#### **Mobile Business (T-GAIA)**

Solar power generation at docomo Shops

02

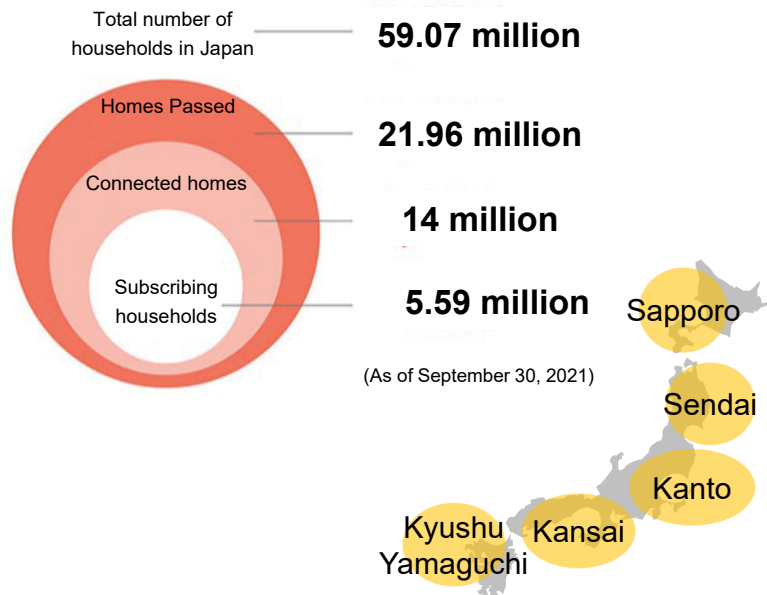
# CATV Business

**Kazumasa Watanabe, General Manager of Media Div.**

# Business Overview

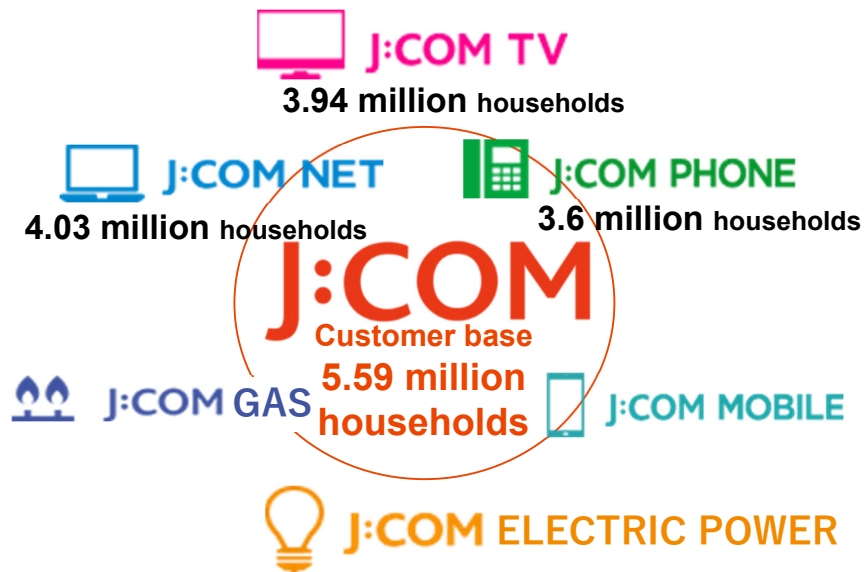
## Service Areas

Serving approximately 5.59 million households at 66 stations nationwide, mainly in major cities



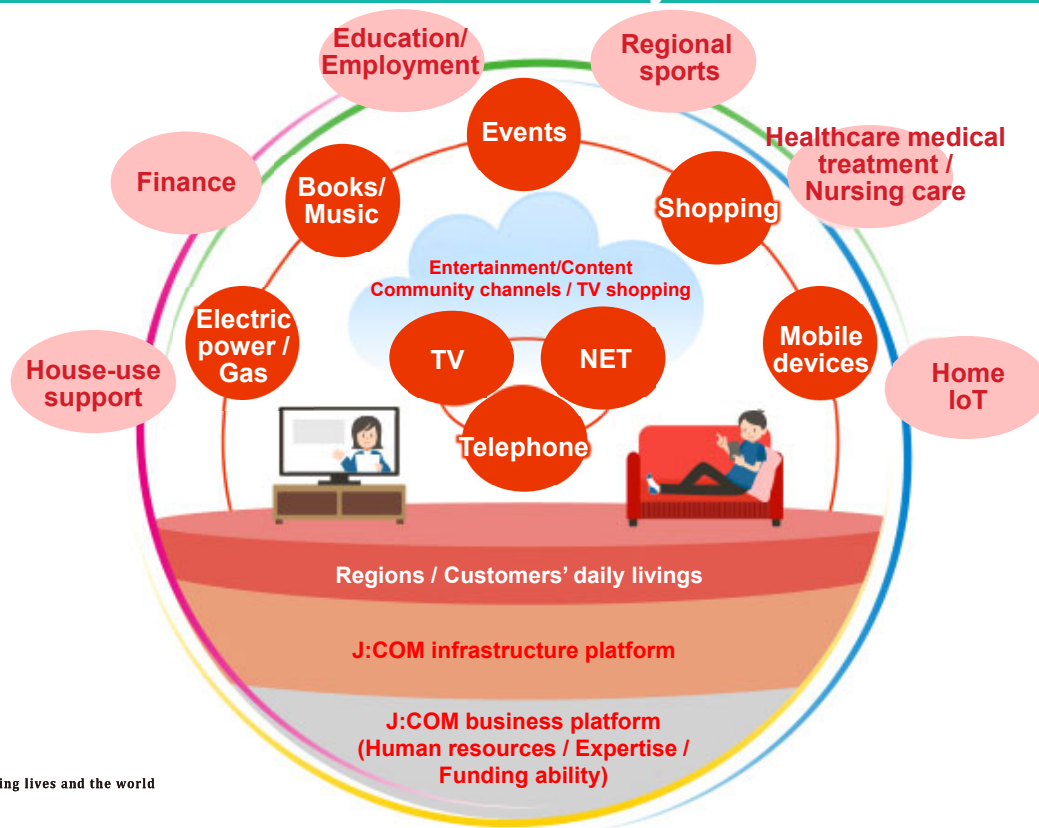
## Main Services / Number of Subscribers

In addition to TV, Internet, and landline services, the company provides lifestyle-related services.



# Vision

## Vision of “J:COM Everywhere”



# Features and Strengths

Providing Reliable and Secure Services as a Community-Based “Face-to-Face provider”

## Door-to-door Sales



Approx. 2,700  
employees nationwide

J:COM sales vehicle



explanation of services to  
customers

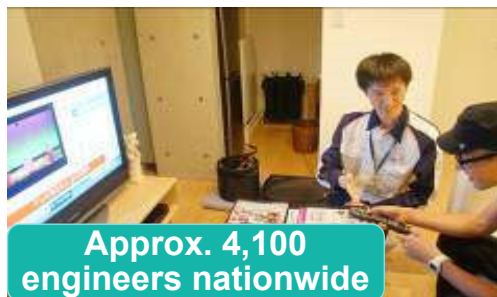
## Customer Service Center



11 locations  
nationwide

Extensive customer support

## Service Engineer



Approx. 4,100  
engineers nationwide

Technical support at customers'  
homes

## J:COM Shop



47 locations  
nationwide

Consultation desk

## Community Channel



Available to 14  
million households

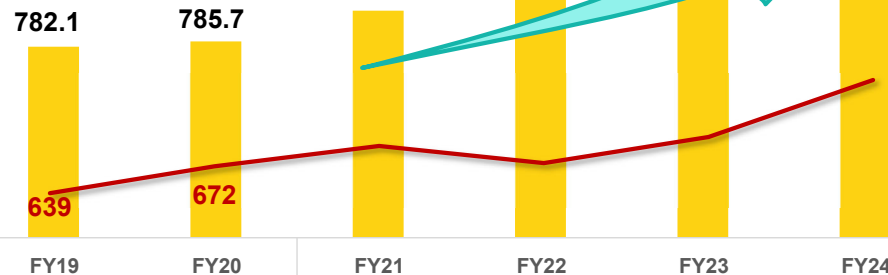
Broadcast local and government  
information

# FY2020 Initiatives

## J:COM Business Results

Net sales Net income

(Billions of yen)

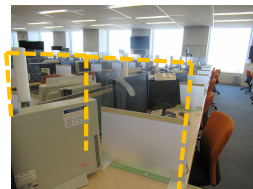


Results

J:COM Medium-term plan

## Response to COVID-19

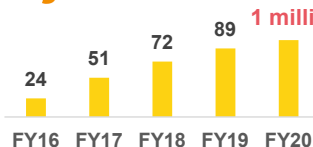
- Expansion of online sales (non-face-to-face)
- Work from home to handle incoming call center calls
- Urgent response to surge in data traffic
- Responding to the cancellation of sporting events with new programs.
- Providing COVID-19-related information on the J:COM channel



Splash-proof partition

## Initiatives in FY2020

J:COM ELECTRIC POWER



J:COM MOBILE



J:COM TVフレックス



GOLF NETWORK



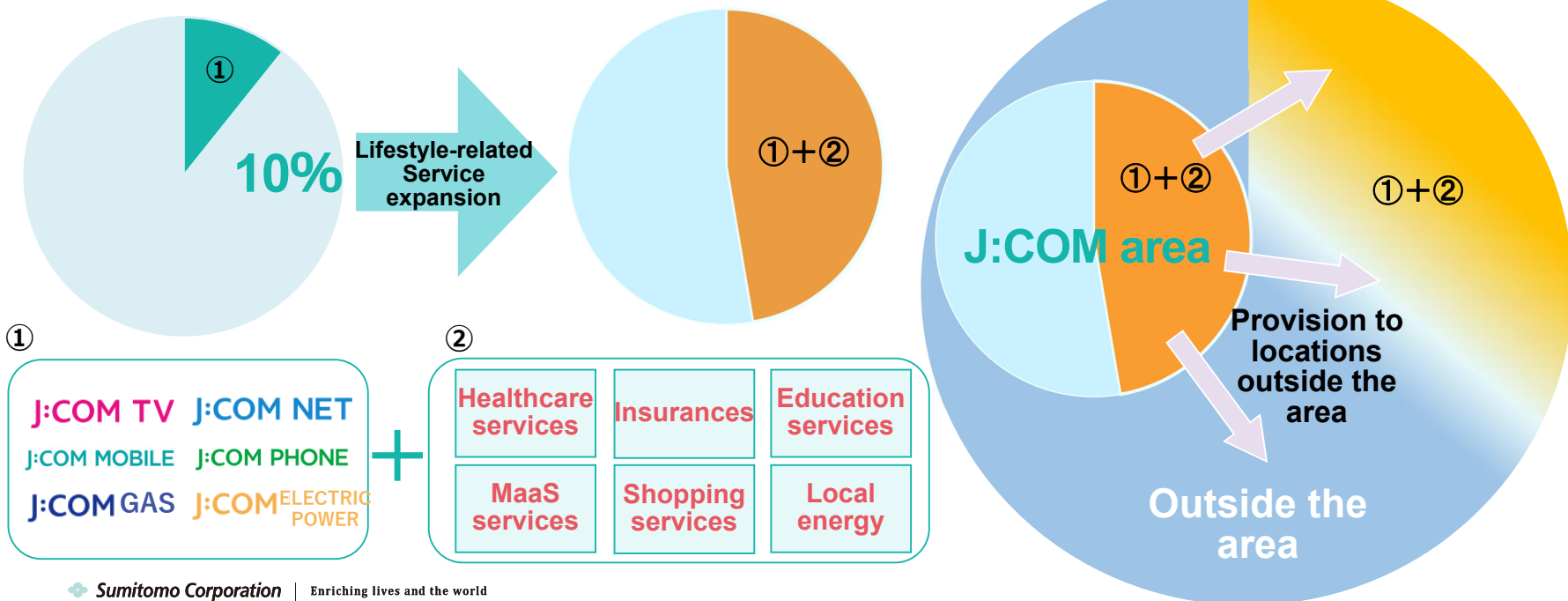
# Service Expansion and Out-of-Area Deployment

Increasing share in household consumption expenditure

22 million households in J:COM area

Expansion of eligible households (outside the area)

59 million households nationwide



# Electric Power Service

J:COM



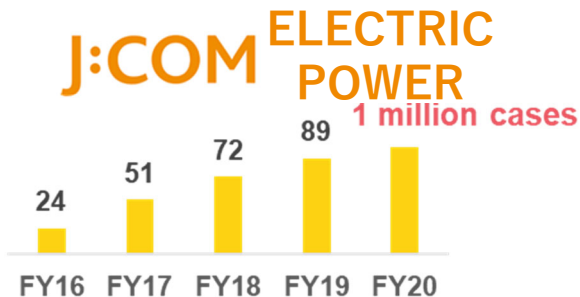
- Strong community-based sales development

## J:COM ELECTRIC POWER



- Owns power plants in five locations nationwide (gas / renewable energy, etc.)
- Providing electricity to 2,100 locations nationwide

### Current Status



#### ■ Comparison of retail subscriber numbers with regional power companies

Rank	Name of retail electricity supplier	Number of contracts [projection] (10,000 contracts)
1	TEPCO EP	1,998
2	KEPCO	920
3	Miraiz	761

8	Shikoku Electric Power Company	195
9	Hokuriku Electric Power Company	153
10	Okinawa Electric Power Company	75

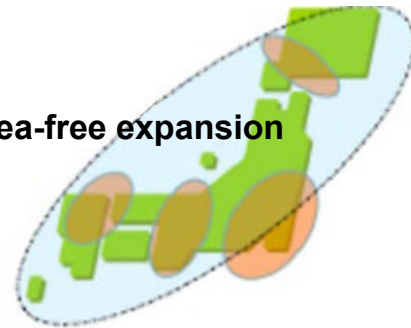
J:COM Electric Power

Summit Energy

(SC:100%)

### Future Development

Area-free expansion



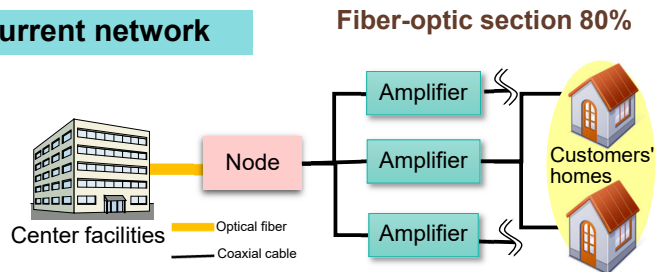
# Expansion of Living Support Services



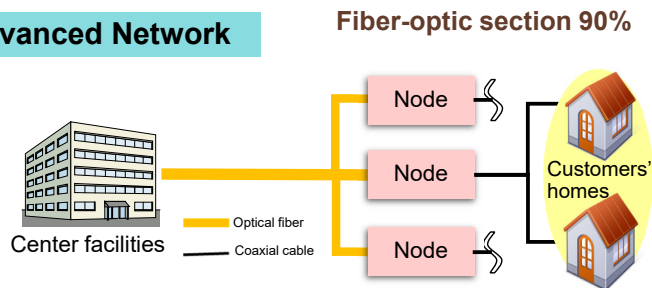
# Advanced Networks and Faster Internet Services

## Advanced Network Services

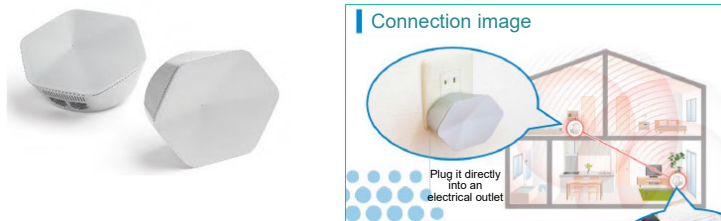
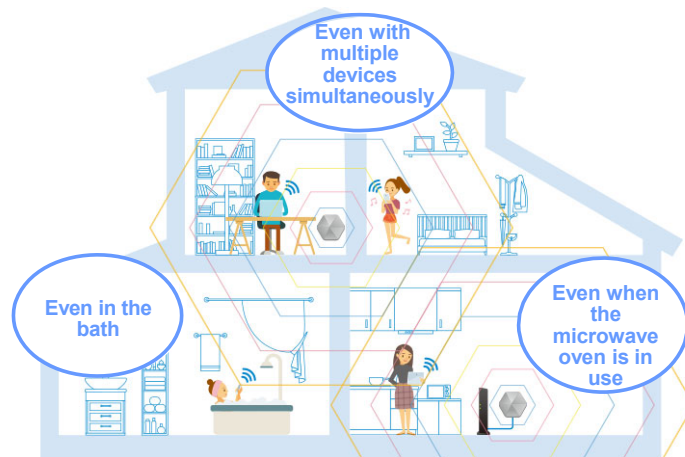
### Current network



### Advanced Network



## Major Improvement in Home Wi-Fi Environment



Manufactured by Plume in US (invested by Presidio Ventures, the Company's CVC)

# J:COM New TV Service

Video streaming service on a large TV screen



TV<sub>er</sub>

NETFLIX



Viewing live  
broadcasts  
and recorded  
programs  
away from  
home



Providing a new  
viewing experience



Powered by **android**

High image and sound  
quality  
4K / Dolby Atmos

Voice control  
of TV

(TV remotes and  
smart speakers)



# Health Care Service Concept

Target  
Customers

**Elderly patients (65 years or older) with chronic diseases who visit hospitals regularly**

On **TV** at  
home

Service  
Concept

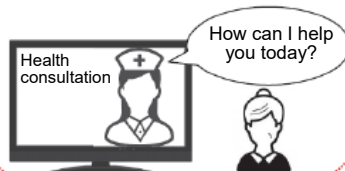
## (1) Online consultation

Doctor's consultation and pharmacist's medication guidance are available at home



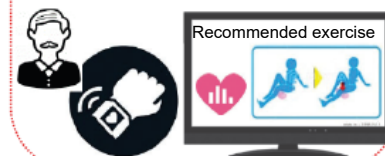
## (2) Health consultation

Consultation with nurses on holidays and at night when it is difficult to go to a hospital



## (3) Wearable devices

A sensor on their arm automatically records their steps and sleep time

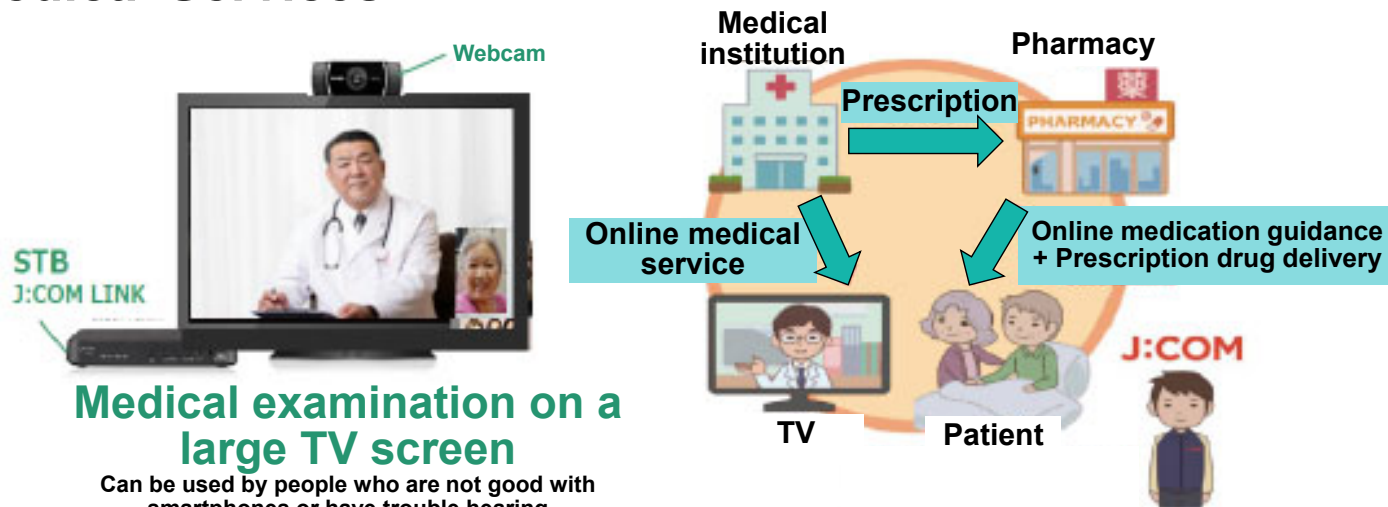


**J:COM Service Platform on TV**



**Reliable support** by J:COM staff

# Online Medical Services



## Medical examination on a large TV screen

Can be used by people who are not good with smartphones or have trouble hearing

### Medical Institution

Initial fee and monthly fee

**Free**

### Customer (patient)

Fee

**300 yen/  
session**

Device fee

Subscriber  
**Free**

Non-subscriber  
**480 yen/month**

Webcam

**6,980 yen**



Medical support  
in attendance

**4,500 yen/  
session**

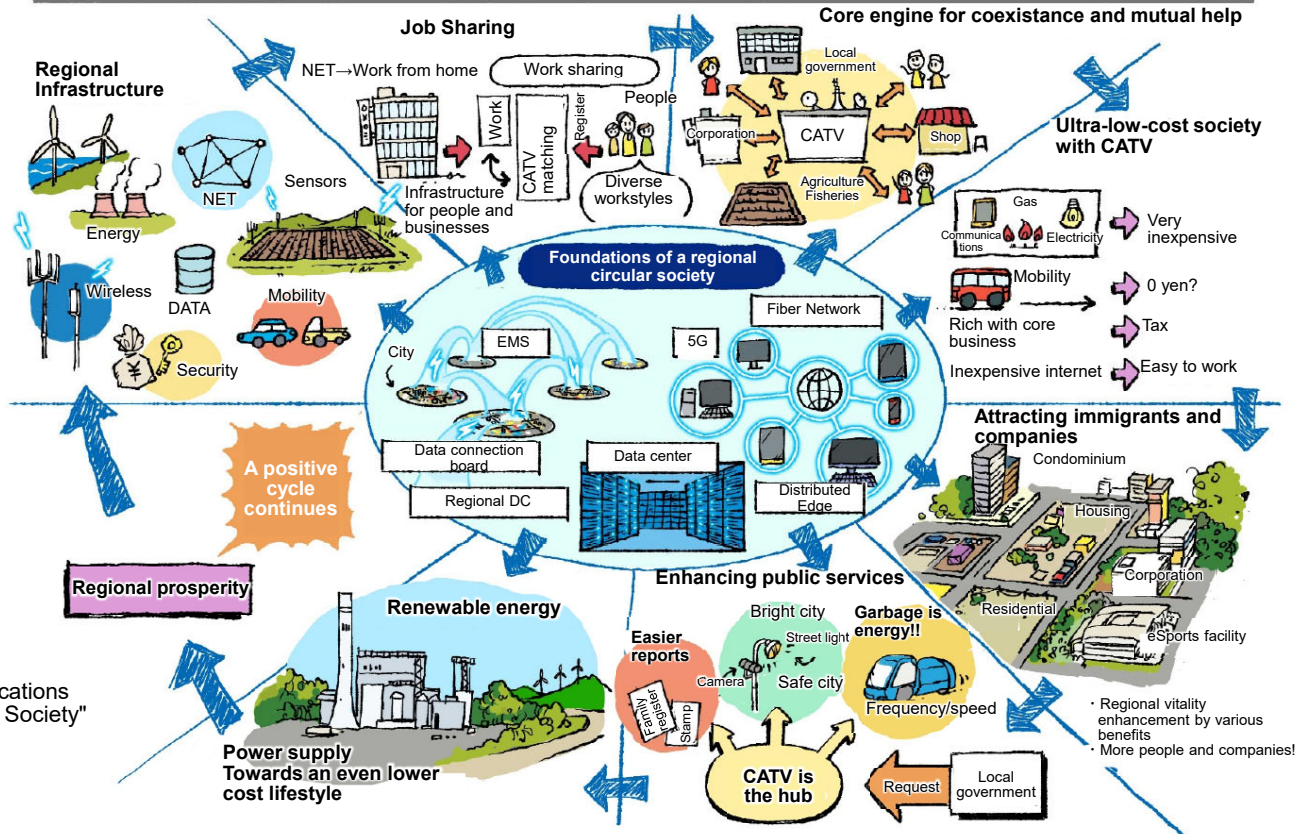
# Cable TV Industry's Vision for Society (Leap Forward to 2030)

## A Circular Society Supported by CATV

Circular Society

Regional Development

Toward a Sustainable Society



\* Japan Cable and Telecommunications Association, "CATV's Vision for Society"

03

# 5G-Related Business

**Kazumasa Watanabe, General Manager of Media Div.**

# The Ideal 5G World

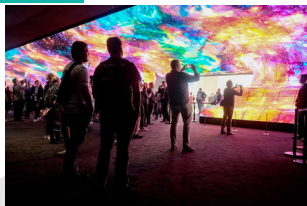
Communication is  
from “person to person” to  
“person to thing” and “thing to thing”

**High Speed,  
Large Capacity**

Download a two-hour long video in three  
seconds  
(100x faster than 4G)



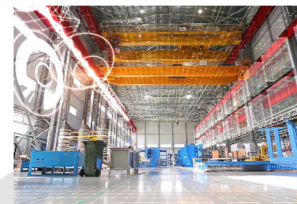
AR/VR



4K/8K Streaming



Stadium Solutions



Smart Factories



Automatic Driving

**Ultra-low Latency**

Latency of around 1/1000th of a second  
(1/10th of 4G)

 **Sumitomo Corporation** | Enriching lives and the world



Remote Healthcare



Agriculture ICT



Smart City/Smart Home

**Multiple  
Simultaneous  
Connections**

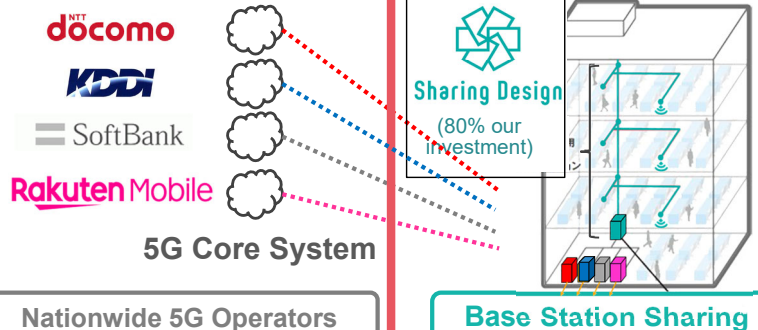
1 million connected devices/km<sup>2</sup>  
(30-40x more than 4G)

# Challenge Domains, Seeding Areas for 5G-Related Business

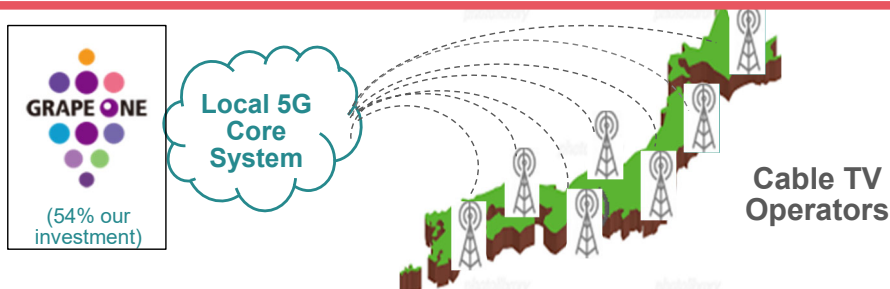
## ✓ Future Society Brought about by 5G



## Nationwide 5G (Infrastructure)



## Local 5G (Communications Infrastructure)



## Platform Building

## Local 5G (Solutions)

### Factory (Osaka) Regional Disaster Prevention (Tochigi) Railroads (Okinawa) (Tokyo) etc.



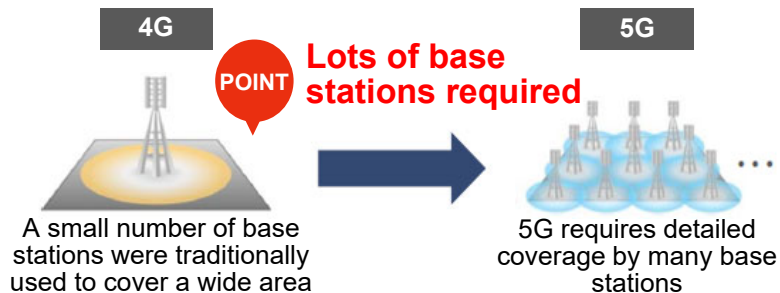
FY2020

FY2021

## Use Case Development

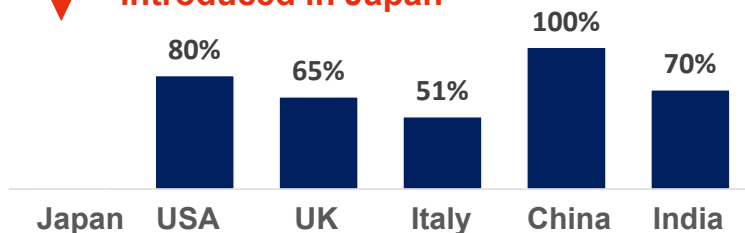
# 5G Base Station Sharing Business

## Expanded Need for Base Stations for 5G



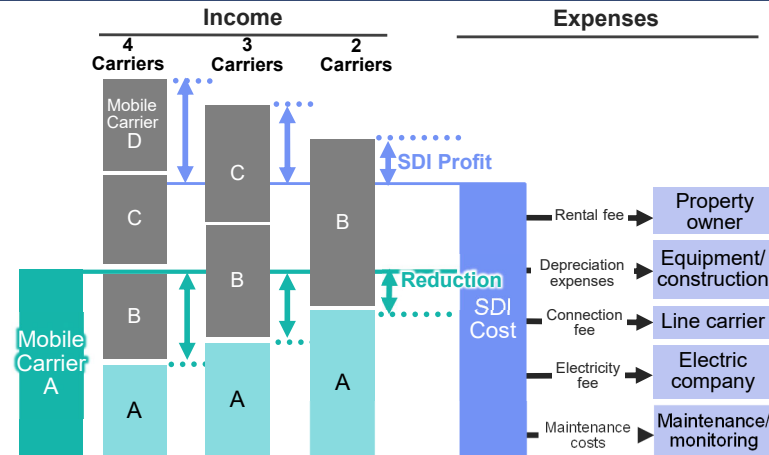
## Sharing Ratio in Other Countries

**POINT** Sharing has essentially not been introduced in Japan

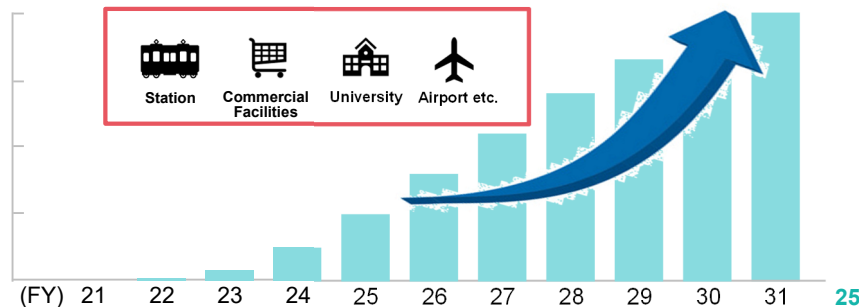


Reference: Mizuho Bank, Industry Research Division, Mizuho Industry Focus Vol. 216, "Toward the Expansion of Mobile Infrastructure Sharing in the 5G Era" (2019)

## Base Station Sharing Business Model



## Number of Locations (Image)



# Base Station Sharing – Image

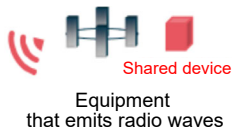
## Base Station Configurations

3 Elements of Base

(1) Antenna installation



(2) Antenna



(3) Transceiver



Optical and electrical signal exchangers

## Types of Base Station Sharing

No sharing



- Each carrier installs individual pole/antenna/transceiver

Optical fiber  
To each carrier's facility

Site sharing



- Only pole is shared

To each carrier's facility

Antenna sharing



Shared device

- Pole/antenna are shared

To each carrier's facility

Transceiver sharing

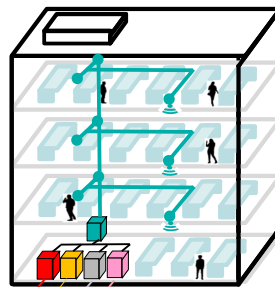


- Pole/antenna/transceiver are all shared

To each carrier's facility

## [Indoor] Installation Image

&lt;Sharing&gt;



To each mobile carrier's facility

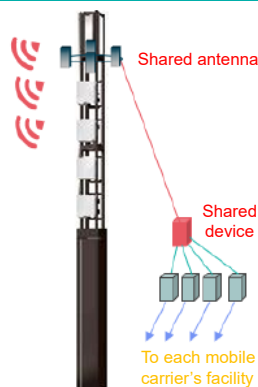
&lt;Shared Antenna&gt;



&lt;Shared device&gt;



## [Outdoor] Installation Image



Smart Pole (Nishi Shinjuku, Tokyo)

# Base Station Sharing – Introduction Merits

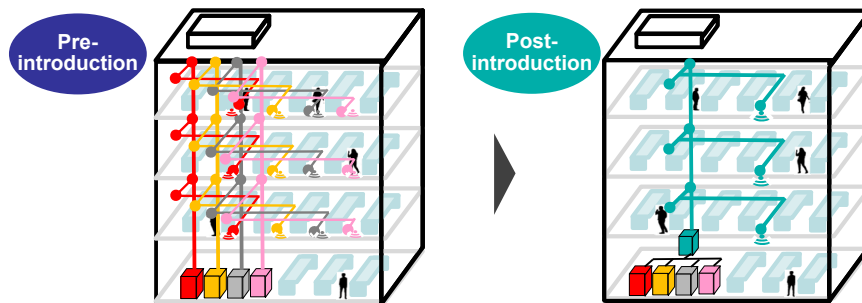
1

Early construction  
of 5G environment

- Improvement of facility value and user convenience
- Proactive construction of 5G environment
- Additional 5G rent in addition to current 4G

2

Space  
saving/effective use  
of facility space

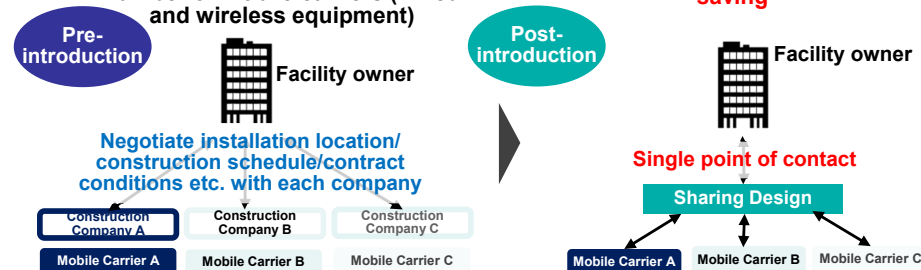


Space proportional to the  
number of mobile carriers (Wired  
and wireless equipment)

Effective use of space by space  
saving

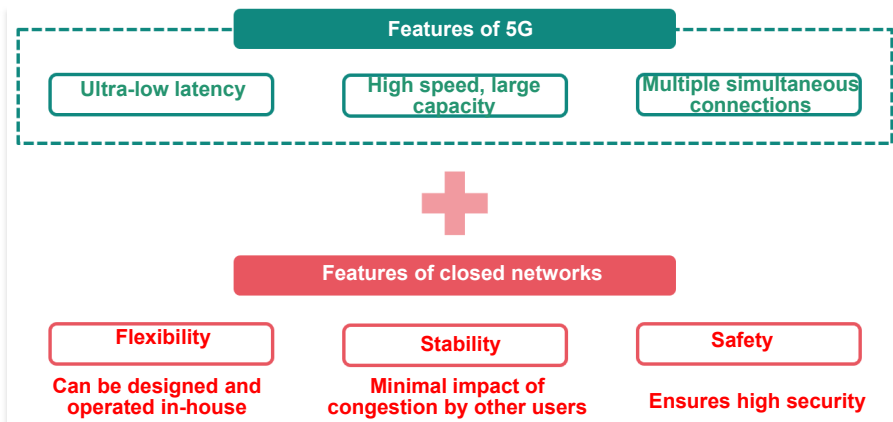
3

Load reduction  
during introduction/  
operation

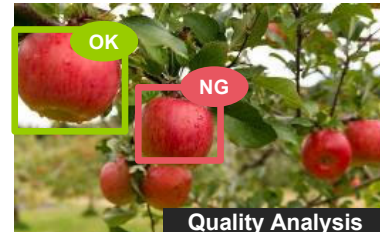
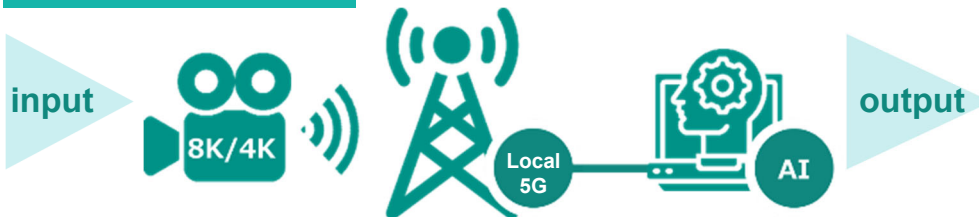


# Examples of Local 5G Usage

## High Capacity x Local 5G x AI Analysis



### Use Image



# Trial—Examples

## DX in Factories

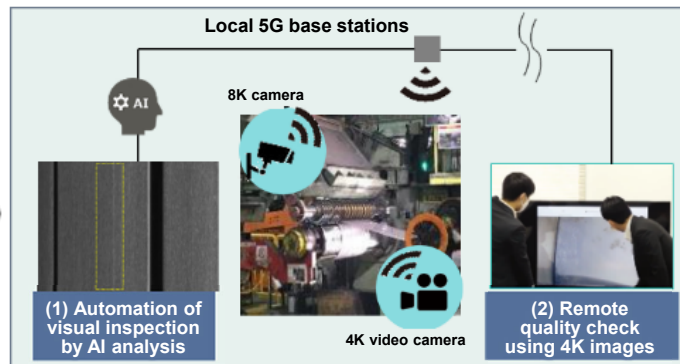
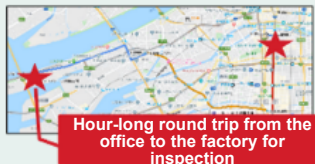
### (1) Product quality check

Visual inspection by humans



### (2) Determination of shipment availability by sales

On-site decision via car transfer



## Local 5G Demonstration at Railroad Station

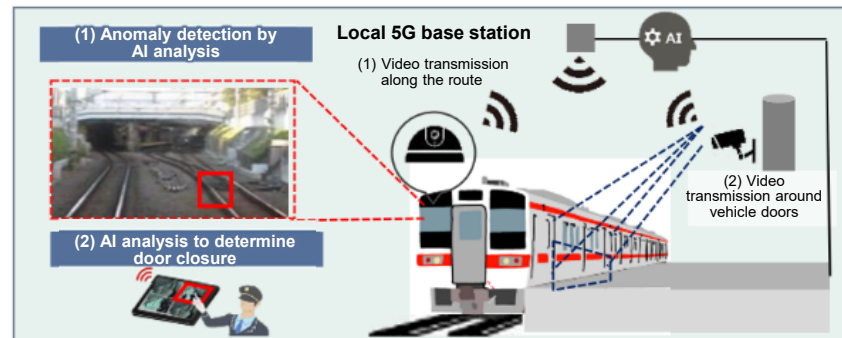
### (1) Railroad track patrol work

Visual inspection by railroad workers



### (2) Vehicle door closing signaling duties

Judgment/signaling by station staff



# Trial – Examples

## Ship maneuvering support and Safety Management in the Port

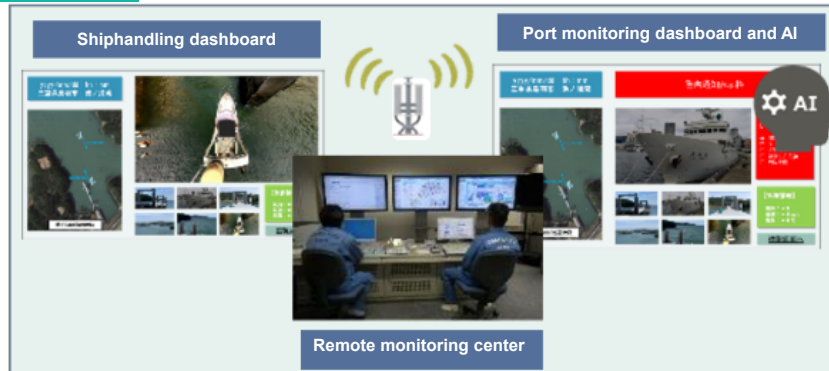
### Ship maneuvering (berthing, etc.)

Captain's discretion



### Port/harbor monitoring

Conventional monitoring methods

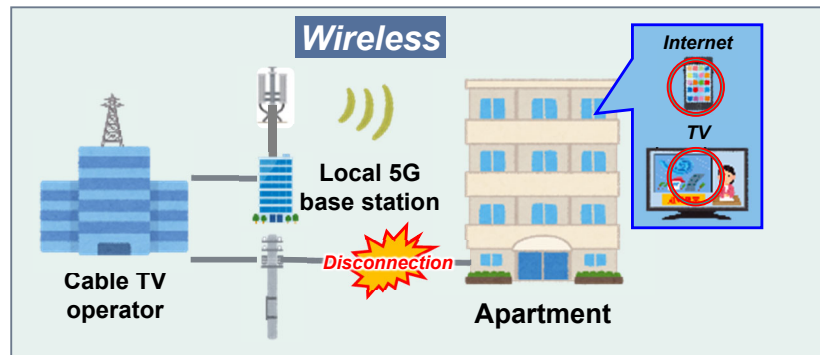


## Emergency Restoration of Cable TV infrastructure

### Wired



### Wireless



04

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# Ethiopia Telecommunications Business — Multifaceted Business Alliance with Vodafone

**Katsuya Kashiki, General Manager of Smart Communications Platform Business Div.**

# Ethiopia Telecommunications Business – Overview

Entered the Ethiopia Telecommunications Business with Vodafone Group (UK).

## Potential



Quick Development/Expansion of Communication Area (Base Stations)

10,000 ~ 12,000 sites

~1,000 sites

Y1

Y10

## Promotion Structure



**Vodafone Group**

Vodafone (UK)

Vodacom (South Africa)

Safaricom (Kenya)

**CDC**  
Investment works

**Safaricom (Ethiopia)**

Established in July 2021

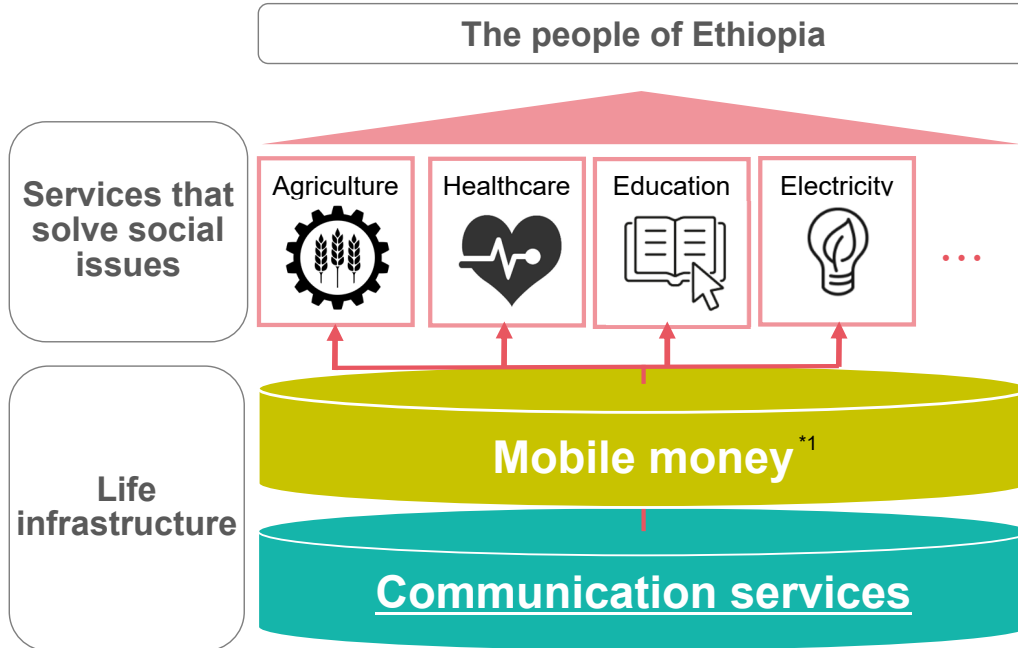


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\*1 Source: UN database \*2 Source: World Bank database \*3 Independently estimated based on figures published by Ethio telecom, Ethiopia's only telecom operator (state-owned company), and UN database (as of October 2021)

# Toward a Sustainable Business Foundation

Developing services that solve social issues based on the telecommunications business. Becoming an essential presence for the people.



## Vodafone Group

- ✓ Telecom business developments in 43 countries<sup>\*2</sup> worldwide, including 8 in Africa
- ✓ Mobile money business success

### Safaricom (Kenya)'s "M-PESA"

- Annual transaction volume: Over 4 trillion yen (approx. 40% of GDP)<sup>\*3</sup>
- Number of users: 28 million (over 50% of the population)<sup>\*3</sup>



## Sumitomo Corporation

- ✓ Telecom business developments in emerging countries (Mongolia, India, Russia, Myanmar, etc.)
- ✓ Various industry portfolio as a Sogo-Shosha

<sup>\*1</sup> Mobile wallet that doesn't require opening a bank account. Payment, domestic and international remittance, etc. are possible. <sup>\*2</sup> Including countries where service is available through partnerships. Vodafone Group alone operates in 24 countries. <sup>\*3</sup> Source: FY2021 Safaricom Annual Report.

# Multifaceted Business Alliance with Vodafone Group

- Experience in Africa/ Europe
- DX/5G track records etc.



**Vodafone Group**



**Sumitomo Corporation**

- Diverse business domains
- DX/CX experience etc.

## Africa

### Energy

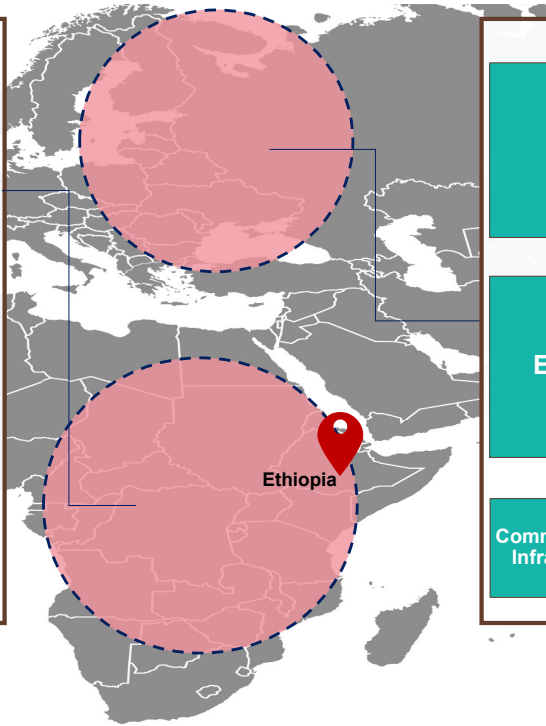
- Sale of solar power generation equipment
- Distributed power sources

### Agriculture

- Services for agricultural workers
- Autopilot agricultural equipment/IoT devices

### Other

- Healthcare/telemedicine
- Trade of coffee/steel sheet etc.



## Europe & CIS

### DX

- Industry IoT, agriculture IoT, healthcare
- Smart city/mobility
- Used devices/digital telecom business

### Energy

- Providing renewable energy for mobile base stations
- Lifestyle-related bundle business (utilities (electricity/gas etc.), insurance, finance)

### Communications Infrastructure

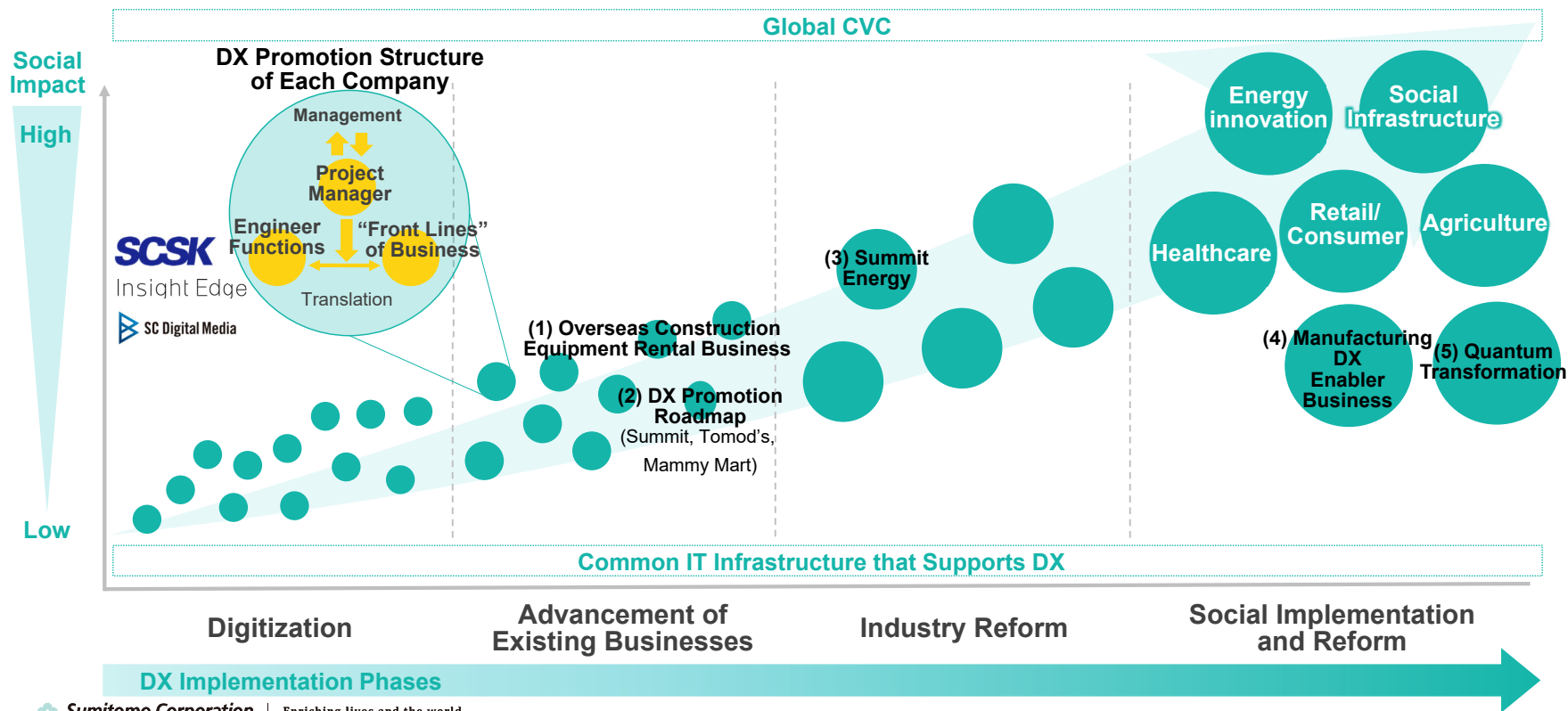
- Tower sharing

05

**DX**

**Bin Haga, General Manager of Digital Business Div.**

# DX Implementation Phases & Examples of Initiatives



# (1) Overseas Construction Equipment Rental Business Enhancement of Operations through Insourcing

- Advancement of existing businesses at overseas operating companies where in-house DX is in progress
- Continued promotion of (1)business system development and (2)data analysis insourcing. Some of the projects are being worked on collaboratively with the DX Center/Insight Edge.
- Accumulate the knowledge and expertise to resolve issues at the SC head office, and aim for horizontal expansion to the construction equipment rental business in other regions as well as the application to other divisional businesses.

Insight Edge: DX Technology Subsidiary

## Issues

Decision making and judgement based on experience

Desire to further improve efficiency and sophistication of operations



Desire to increase asset efficiency

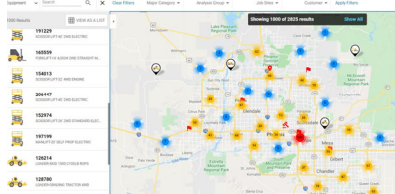


Desire to improve customer satisfaction and responsiveness

## Initiatives/Measures

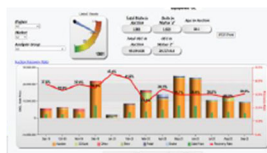
### (1) Upgrade of business systems

Strengthen the IT department and data analysis unit, as well as in-house development capabilities



### (2) Operation improvement through data analysis

Reduction of underused machine ratio  
Fleet allocation optimization  
Improvement of delivery efficiency, etc.



Supported by company-wide DX function

Sumitomo Corporation's DX Center/Insight Edge



## Going Forward

### Construction equipment rental business

Strengthen competitiveness, improve value provided to customers and consider horizontal expansion to other regions

### DX Center

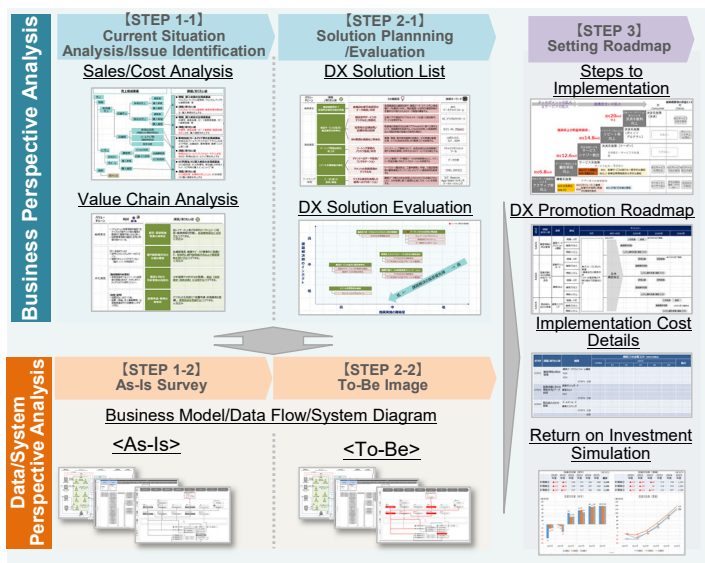
Improve corporate value of the Group by expanding DX knowhow into other businesses through accumulating knowledge and expertise



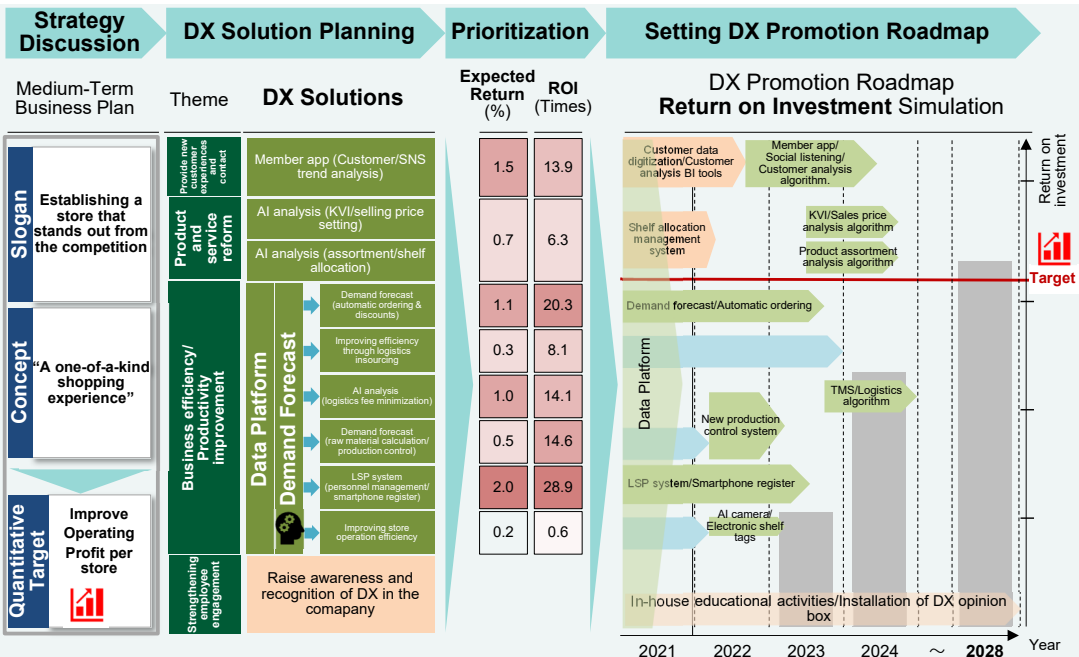
# DX Promotion Roadmap for Mammy Mart

- Business analysis from the perspectives of both business and data → DX promotion roadmap to increase sales and reduce costs
- Turning of front-line issues into managerial issues by project managers of DX Center under the leadership of operating company's management

## <Process>



## <Results Summary>



### <sup>DX</sup>(3) Summit Energy Business Advancement and ESG Management Initiatives through the Use of Data

- Improving the accuracy of electricity price forecasts as basic infrastructure in the electricity retail business
- Initiatives for ESG management using data analysis capabilities

Summit Energy's  
Data Analysis Team



Insight Edge's  
AI Expertise

#### Traditional Issues

- Improving the accuracy of **future JEPX price forecasting** by Summit Energy

JEPX: Japan Electric Power Exchange

#### Current Initiatives

##### Refining JEPX's Future Price Forecasting with AI

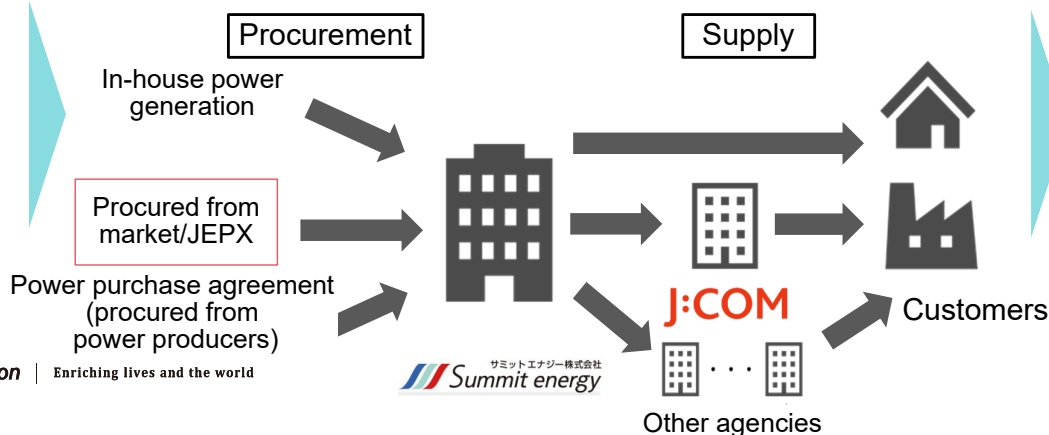
- Insight Edge supports Summit Energy's forecasting team. Improving accuracy by upgrading the forecasting model.

#### Initiatives Going Forward

Shift to clean energy (ESG management)

⇒ Achieve a stable energy supply through the use of various DX technologies, even if the ratio of renewable energy sources with unstable output, such as solar and wind, is increased

- Proposals to improve usage efficiency, such as demand response
- Electricity service based on renewable energy generation forecasts
- Green certification menu using blockchain, etc.



Sumitomo Corporation

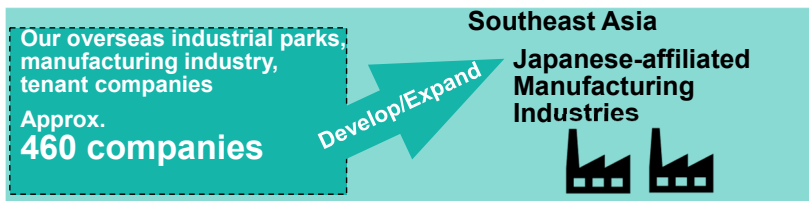
Enriching lives and the world



# (4) New Business: Digital Solution Provider for the Manufacturing Industry

■ Leveraging the strength of the Group's business platform (overseas industrial parks x SCSK) and providing integrated digital services throughout Asia.

## Target Customer

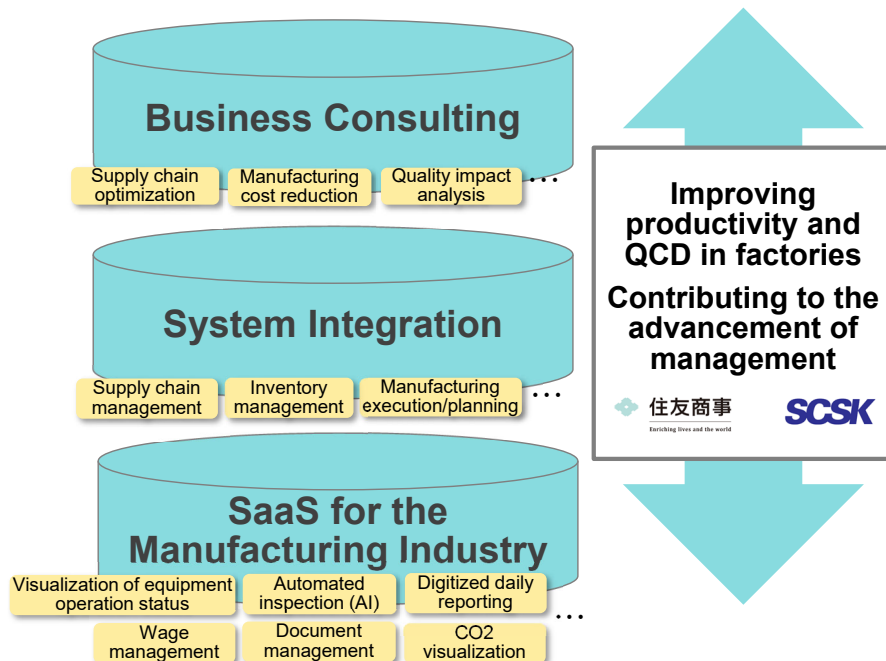


## Industry Issues

- Lower work quality and yield rate than in Japan...
- Don't have the resources for DX promotion and don't know where to start...
- Want to reduce costs, but afraid it will require a large initial investment...

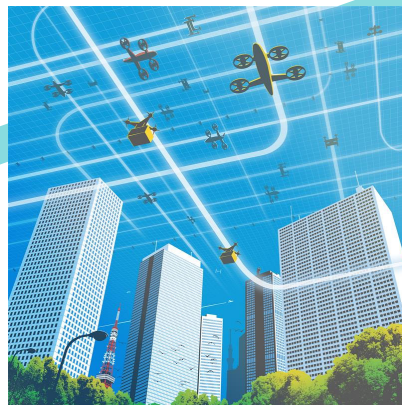


## Provided Value



# (5) Quantum Transformation (QX) Project

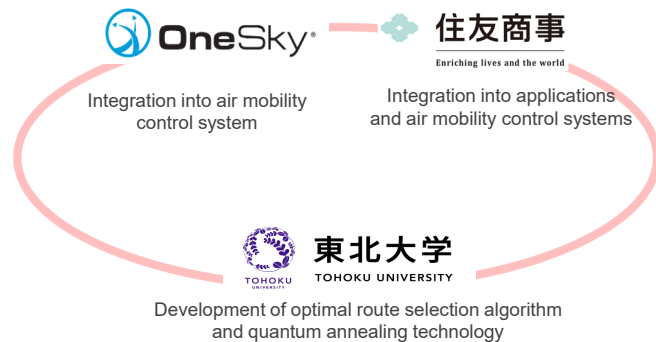
Across the globe, from underground to outer space.  
Changing the society with the power of quantum.



**QX x Sustainable City Initiative  
(North Hanoi)**



## Example of new business creation “Quantum Sky Project”

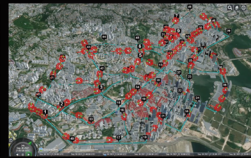


\* OneSky Systems, Inc. (Headquarters: Pennsylvania, U.S.A.): Developer of unmanned aircraft control systems; **SC** invested in April 2020.

Legacy method on PC



Future ready method  
on Quantum annealer



Official YouTube channel for  
Quantum Transformation

# DX Implementation Phases

