SoftBank Corp.
Enterprise Business Strategy

July 2, 2019
1. SoftBank’s Driving Force for Growth

President & CEO
Ken Miyauchi
Beyond Carrier Strategy

Pursue further growth

Communications Business
(Expansion of customer base)

New Business

Yahoo

Core Business

5G
SoftBank’s Driving Force for Growth

Enterprise Business
The number of IoT devices in the world

Population of 10 billion

2 devices/person (in 2010)

2010

2020

2035

1 trillion devices

100 devices/person (in 2035)

Source: Compiled by SoftBank based on Cisco's "Cisco IBSG, 2011"
Global IoT Data Volume (per month)

Source: Ericsson's data, and compiled by SoftBank based on "Cisco Visual Networking Index 2015-2020"

2015

2025

2035

1EB (exabyte)

2.3ZB (zettabyte)

2,450 times increase in 20 years
Global IoT market

¥1,534 trillion

Significant Growth in solutions on top of devices

Source: Accenture, Frontier Economics
Compiled by SoftBank based on "Accenture-Strategy-Accelerating-Future-Economic-Value-2018"

*Calculated at the exchange rate of 108 yen to the dollar
Expansion of data-based AI Business

Global AI market

¥10 trillion

¥318 trillion

Source: JEITA "Research and Statistics Guidebook 2017-2018"
Global data utilization market

¥5 trillion

Source: Complied by SoftBank based on Allied Market Research's "Global Data Monetization Market" 2016-2023

¥40 trillion

More data utilization coupled with data increase

¥5 trillion

2016  2023

Source: Complied by SoftBank based on Allied Market Research's "Global Data Monetization Market"

*Calculated at the exchange rate of 108 yen to the dollar
The Advance of Technology
Redefining Industry
Redefinition of industries will solve social issues

(Annual economic loss due to social issues in Japan)

- Traffic congestion: ¥10 trillion
- Natural disaster: ¥43 trillion (cumulative total for the past 20 years)
- Aging infrastructure: ¥5 trillion
- Cyber crime: ¥1 trillion
- Illness (medical cost, etc.): ¥10 trillion
- Retirement due to childbirth: ¥1.2 trillion
- Shrinking work force: ¥25 trillion
- Wasted food: ¥2 trillion
- Traffic accident: ¥4.2 trillion

*Surveyed by SoftBank*
SoftBank Enterprise Business Unit takes action to solve social issues in cooperation with partners
2. Enterprise Business Unit Strategy

Representative Director & COO
Yasuyuki Imai
Explore new businesses with telecommunications business at the core

Business area

- Fixed-line communications
  - Landline phone
  - Network

- Mobile

- Solutions, etc.
  - IoT
  - Robot
  - AI/RPA
  - Cloud
  - Security
  - Digital marketing
  - etc.
Ready to provide solutions, new frontiers for growth

Robot

AI • RPA

Security

Digital marketing

Cloud

IoT

pepper for Biz

IBM Watson

cybereason

arm TREASURE DATA

SB Cloud

SoftBank IoT Platform

SynchRoid

ZIMPERIUM

QZS-supported tracking service

Ginarra

Ginarra

Ginarra

Ginarra

Ginarra

Ginarra
Enterprise Business Unit: Sales

[Billions of yen]

<table>
<thead>
<tr>
<th>FY2017</th>
<th>FY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>604.2</td>
<td>620.5</td>
</tr>
</tbody>
</table>

- **Solutions, etc.**
- **Fixed-line**
- **Mobile**

￥620.5 bn
Enterprise Business Unit: Operating income

[billions of yen]

<table>
<thead>
<tr>
<th></th>
<th>FY2017</th>
<th>FY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>76.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¥76.3 bn
Providing strong infrastructures
Utilizing railway networks

Enterprise Business Unit: History


The former Japan National Railways founded Japan Telecom

Railway Telecommunication * merged with Japan Telecom

SoftBank acquired Japan Telecom

SoftBank acquired Vodafone

Four carriers merged into SoftBank

* A company privatized and separated from the former Japan National Railways
Japan Telecom period (2004- )

Making inroads into NTT’s stronghold, which lasted more than 100 years, significantly reduced corporate communication cost.

Landline phone was mainstream

High communication cost

Direct telephone service

Achieved 1.5m lines

Up to 60% cost reduction

*In comparison with NTT subscriber phone
Limited workplaces

Feature phones were mainstream

SoftBank Telecom period (2008-)

Transformed corporate workstyle

Smart devices deployed in about 340K companies
*As of May, 2019

G Suite deployment. about 1.6M IDs
*As of April, 2019
Shrinking working population

Low birthrate and aging population

SoftBank Enterprise Business (present)

Improving corporate labor productivity

*For contribution to improving awareness of Watson in the Japanese AI market with 1000 successful cases
Changes in operating income (Enterprise Business)

2004
Acquired Japan Telecom

2015
Merged with SoftBank

2018 (Present)

¥76.3 billion

Turned into a growth business
Mission of Enterprise Business

Bring solutions to businesses

1. “Customer solution 1st” rather than “Product 1st”

2. Address “potential problems” rather than “existing problems”

3. Design solution services from the “viewpoint of customers”
Bringing solutions to business issues will lead to solving social issues.
Requirement for solving social issues

“Co-creation” with partners

(Key players in each industry)
Robust customer base to foster “Co-creation”

We have business relationships with 94% of listed companies whose sales exceed ¥100 billion

* As of March 2018
“Co-creation” business model - B2B2C

Create new values through “Co-creation” with partners

**Co-creation project**

- **SoftBank**
  - Technology/business model

- **Partner**
  - Industry knowhow, etc.

**Service**

**End users**

*Including JVs*
Own platforms that range from data collection to billing

- Data integration/management
- Data analysis/prediction
- Data utilization/effect measurement

- Attribution
- Consumption
- Weather
- Temperature
- Traffic
- Map
- Trends
- Store visits

Device/Data
Network
Analysis
Location information
Open data
Message
Payment/billing

*All logs are collected in accordance with the guidelines of the Ministry of Internal Affairs and Communications, and personal information is handled with extra care by using only anonymized and processed information.
Towards “Co-creation”

Launch global technologies/business models in Japan

SoftBank Group Investment Company

- Establish JV
- Study business model
- Build operational framework
- Sales support

Customer (Individual/Business)

- Scoring
- Hotel operation system
- Self-driving
- Ride hailing app
- Robot
- QR payment

SoftBank

Towards "Co-creation"
An organization dedicated to solving social issues

Digital Transformation Division
(DX Division)

Business digitalization status (2017)

- **Digitalized**: 21%
- **Not digitalized**: 79%

Domestic companies
n=1,078

Started with 120 staff

at the time that 80% of domestic companies were not digitalized

(October 2017)

*About 140 persons as of July 2019

Source: Japan Users Association of Information Systems “Business IT Trend Survey 2018"
DX Division Mission

Address social issues in Japan

Create the next core business for SoftBank
Build up the skills required for new businesses rather than for telecom services.

Change mindset from “sales of telecom services” to “creation of new businesses”
Launch of “Co-creation” for solving social issues

- Disaster prevention infrastructure using IoT sensors
- Urban development utilizing data
- Health promotion
- Labor saving in infrastructure inspection
- Creation of smart buildings
- Improvement of local services, education, etc.

AI
Image analysis
Heat source sensor
Air conditioning data
Programing education
MaaS
3. New approach to solving social issues

Head of Digital Transformation Division

Shintaro Kasai
DX Division Strategy

Co-creation with partners

Platform-based business model
Social issues in Japan

Economic loss due to social issues (per year)

- Traffic congestion: ¥10 trillion
- Aging infrastructure: ¥5 trillion
- Cyber crime: ¥1 trillion
- Retirement due to childbirth: ¥1.2 trillion
- Natural disaster: ¥43 trillion (cumulative total for the past 20 years)
- Illness (medical cost, etc.): ¥10 trillion
- Wasted food: ¥2 trillion
- Traffic accident: ¥4.2 trillion
- Shrinking work force: ¥25 trillion

*Surveyed by SoftBank*
Many ideas were discussed and 35 became projects that are under way for launching commercial services

(450 ideas are raised for new businesses)
New business for solving social issues

17 projects will be monetized by 2020

(35 new business projects)
Social issues in Japan
Economic loss due to social issues (per year)

- Shrinking workforce: ¥25 trillion
- Traffic congestion: ¥10 trillion
- Wasted food: ¥2 trillion
- Cyber crime: ¥1 trillion
- Traffic accident: ¥4.2 trillion
- Aging infrastructure: ¥5 trillion
- Retirement due to childbirth: ¥1.2 trillion
- Illness (medical cost, etc.): ¥10 trillion
- Natural disaster (cumulative total for the past 20 years): ¥43 trillion

*Surveyed by SoftBank*
Many of social issues stem from the “shrinking workforce”

Decline after peaking in 1995

Many industries suffer from labor shortage

Source: Ministry of Internal Affairs and Communication
“Changes in aging population in Japan and future projection”
Retail/Distribution
Real estate/Construction
Service/Tourism
Healthcare

Social infrastructure (electricity, gas, water, weather information)
Logistics
Telecommunications
Payment
SoftBank Group invested companies

Focus area

Cross-industry project
Asset
Focus area

Cross-industry project

Social infrastructure (electricity, gas, water, weather information)

DX in logistics industry

Telecommunications
Payment
SoftBank Group invested companies
SoftBank DX strategy for logistics

Optimize supply chain through digitalization

Scope of digitalization target
SoftBank DX strategy for logistics

Optimize supply chain through digitalization

Scope of digitalization target

Current target (last one mile)
Current status of EC business in Japan

¥18 trillion

Annual growth rate of 9% (B2C)

¥8 trillion

Source: Ministry of Economy, Trade and Industry
“FY2018 report on basic infrastructure in the data-driven society in Japan”
Increase of parcels handled by home delivery service

- 2.9 billion in 2006
- 4.3 billion in 2017

Increase at the rate of 100 million annually

Source: Ministry of Land, Infrastructure, Transport and Tourism
“FY2017 survey on the number of parcels handled by home delivery service”
Changes in household composition

The number of households having difficulty in receiving parcels during daytime increased 10%.

Serious redelivery rate

Redelivery rate

20%

The number of redelivered parcels has reached 800 million/year

Source: Ministry of Land, Infrastructure, Transport and Tourism “FY2017 Current status surrounding logistics industry”
Widespread driver shortage

The number of parcels handled by one driver increased 2.4 times in the last 10 years.

Number of parcels: 4.32 billion (2017) to 8.73 billion (2027)
Number of drivers: 830,000 (2017) to 720,000 (2027)

Source: Ministry of Land, Infrastructure, Transport and Tourism
“FY2017 Current status surrounding logistics industry”
Issue of inflexible delivery capacity

(In the case of chartering three trucks)

- Trucks are chartered regardless of the number of parcels.
  - More parcels than truck capacity leads to Loss of opportunity.
  - More trucks than the number of parcels leads to Extra cost.

- Shortage:
  - More trucks than the number of parcels leads to Extra cost.
Promote Logistics Reform by the Power of Digitalization
Future service scheme

Connect supply chains through digitalization

- Shipper (EC)
- Hub WH
- Mass delivery
- Delivery depot
- Home delivery
- Delivery

EC company
Manufacturer, etc.

Digitalized warehouse

Mass delivery matching

Last one mile delivery matching

Various ways of receiving parcels

New delivery service

SoftBank’s logistic platform
Future service scheme

Connect supply chains through digitalization

Shipper (EC) → Hub WH → Mass delivery → Delivery depot → Home delivery → Delivery

- Mass delivery matching
- Last one mile delivery matching
- Various ways of receiving parcels
- New delivery service

SoftBank’s logistic platform
Approach to Logistics Reform
1st Wave

AEON Kyushu Co., Ltd.
Demand from double-income families is high, but the EC penetration rate for fresh food is only 2%\textsuperscript{1}

(A housewife on her way home from office)

Visit supermarket
Make dinner
Prepare a bath
Help kids do their homework
Respond to business emails before going to bed

Reason for not using online supermarket\textsuperscript{2}

- Not at home at the delivery time.
- Want products immediately.
- Delivery charge is high.
- Want to choose products by myself
- Not aware of online supermarket.

Source 1: Ministry of Economy, Trade and Industry “Report on basic infrastructure in the data-driven society in Japan”, Source 2: Online research conducted by Interwired Co., Ltd.
The issue of delivery prevents service expansion such as extended service hours.

**Increase of delivery cost**
(Changes in transport service charges)

- Home delivery: 128.3%
- Chartered freight transport: 109.5%
- Consolidated transport: 107.9%

Source: Bank of Japan “Corporate Goods Price Index”

**Lack of delivery capacity leads to loss of sales opportunity**
Launched a demonstration experiment to explore the possibility of online supermarket night delivery.

AEON Kyushu Co., Ltd.

Order by 15:00 for delivery 20:00-23:00 (until now 9:00-21:00 *)

*Not applicable to some areas

Reduce shopping burden by making night delivery available.

AEON Shoppers Fukuoka

Started on June 1, 2019

Order

Delivery

I can get foodstuff at home after I come home

AEON Kyushu Co., Ltd.

Online supermarket’s delivery after 22:00 is the 1st attempt in Japan

AEON Shoppers Fukuoka
Utilization of delivery matching service

Optimize delivery cost by order-based driver dispatch

Delivery matching

AEON

SoftBank

PicGo

Operated by CBcloud

Urgent delivery service

Delivery matching rate 99.2%

Nationwide 24-hour service

Visualized delivery (Driver’s location, etc.)

Registered drivers

About 10,000 drivers (increasing 10%/month)
Benefit of this approach

Optimal matching of “Demand” with “Supply”

Demands of shoppers

Reduced shopping burden
increases family time

Supply of delivery service

Reduced delivery cost of online supermarket
enables service expansion
/improvement
Collaboration with AEON Kyushu

Expand the delivery matching system in terms of both time and area

**STEP 1**
Uncover needs for night deliveries
Delivery driver training

**STEP 2**
Actual delivery matching

**STEP 3**
Expand delivery matching to daytime/other areas
Future service scheme

Connect supply chains through digitalization

EC company
Manufacturer, etc.

Shipper (EC)

Hub WH

Mass delivery

Delivery depot

Home delivery

Delivery

Digitalized warehouse

Mass delivery matching

Last one mile delivery matching

Various ways of receiving parcels

New delivery service

SoftBank’s logistic platform
Future service scheme (Last one mile)

Connect supply chains through digitalization

- Shipper (EC)
- Hub WH
- Mass delivery
- Delivery depot
- Home delivery
- Delivery

EC company
Manufactured

Digitalized
Conventional delivery

Mass delivery matching

Last one mile delivery matching

Various ways of receiving parcels

- Bicycle
- Motorcycle
- Delivery vehicle
- Delivery by drone
- Delivery by robot
- Delivery by self-driving vehicle

SoftBank’s logistics platform

Conventional delivery
- Future delivery

Future delivery