

Working Toward Creating Innovation in Life Insurance Business

February 28, 2022

The Dai-ichi Life Insurance Company, Limited

一生涯のパートナー

第一生命

 Dai-ichi Life Group

安心の先にある幸せへ。

I. About Dai-ichi Life Group

—Trajectory of Transformation—

Company profile



Dai-ichi Life Holdings

Established	September 1902
Listed	April 2010 (First Section of the Tokyo Stock Exchange)
Head office	1-13-1, Yurakucho, Chiyoda-ku, Tokyo
Consolidated operating income	7.8278 trillion yen (March 2021 term)
Consolidated assets	63.5937 trillion yen (end of March 2021)
No. of employees	64,823, of which 44,818 are salespersons for Dai-ichi Life (consolidated, end of March 2021)
Solvency margin ratio	958.5% (consolidated, end of March 2021)

The principle of putting customers first and the spirit of transformation that have been passed down for more than 116 years



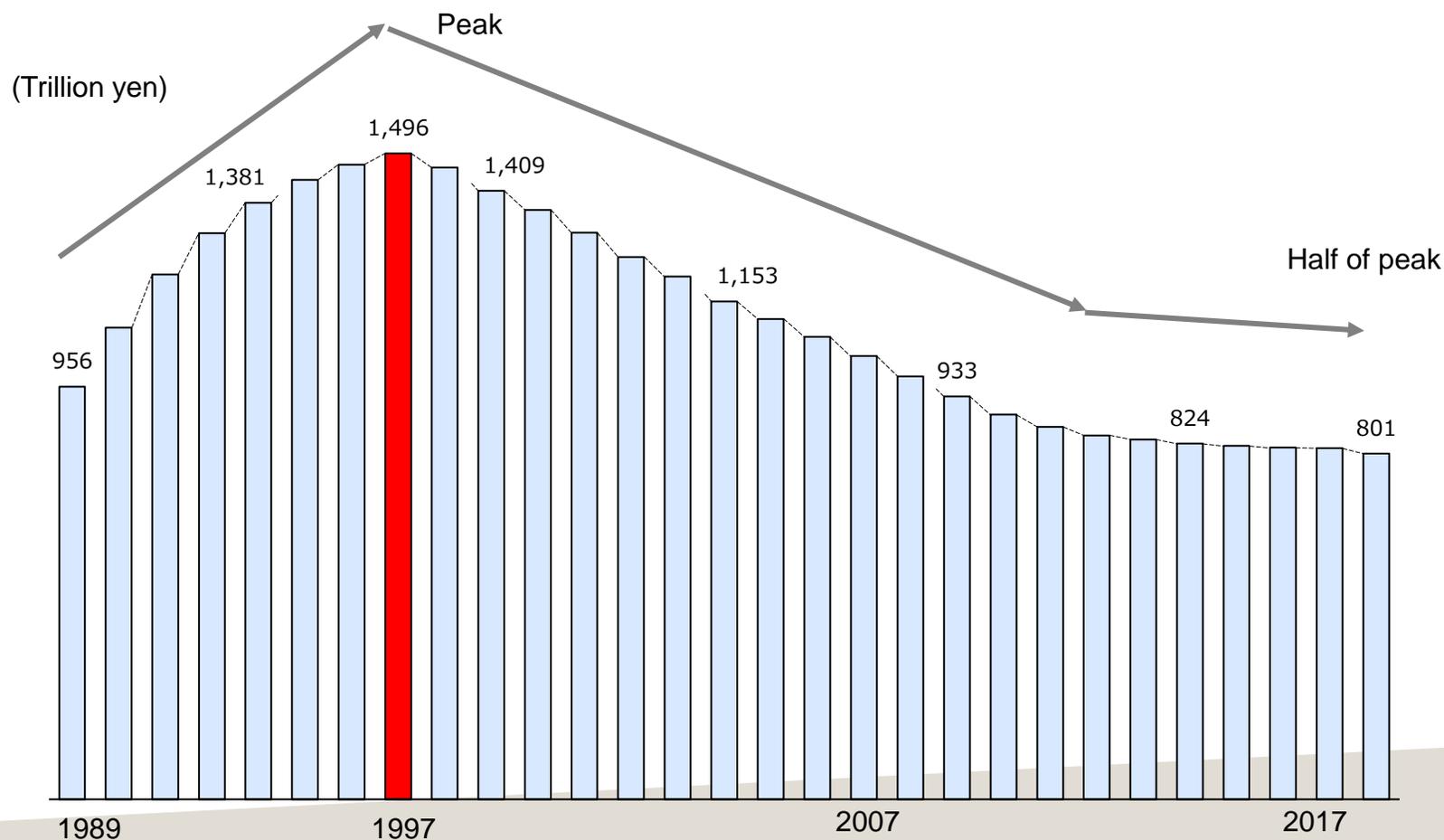
Founder Tsuneta Yano

- Joined Nippon Life Insurance as a medical examiner.
Devoted himself to life insurance research.
- [Traveled to Europe to learn about mutual companies. Studied at the Gothaer Mutual Insurance Company in Germany.](#)
- Joined the Ministry of Agriculture and Commerce in 1897.
[Contributed to the drafting of the Insurance Business Act and the Enforcement Regulations.](#)
Became chief of the insurance section of the Ministry of Agriculture and Commerce and contributed to the soundness of the insurance industry.
- [Founded Dai-ichi Life Insurance Company, Japan's first mutual company, in 1902.](#)

Turning Point (1)

The amount of policies in force for private life insurance peaked out in 1997.

With Japan's falling birthrates, aging society, and transition to nuclear family units, the amount of policies in force for private life insurance peaked out due to the reduced need for death protection.

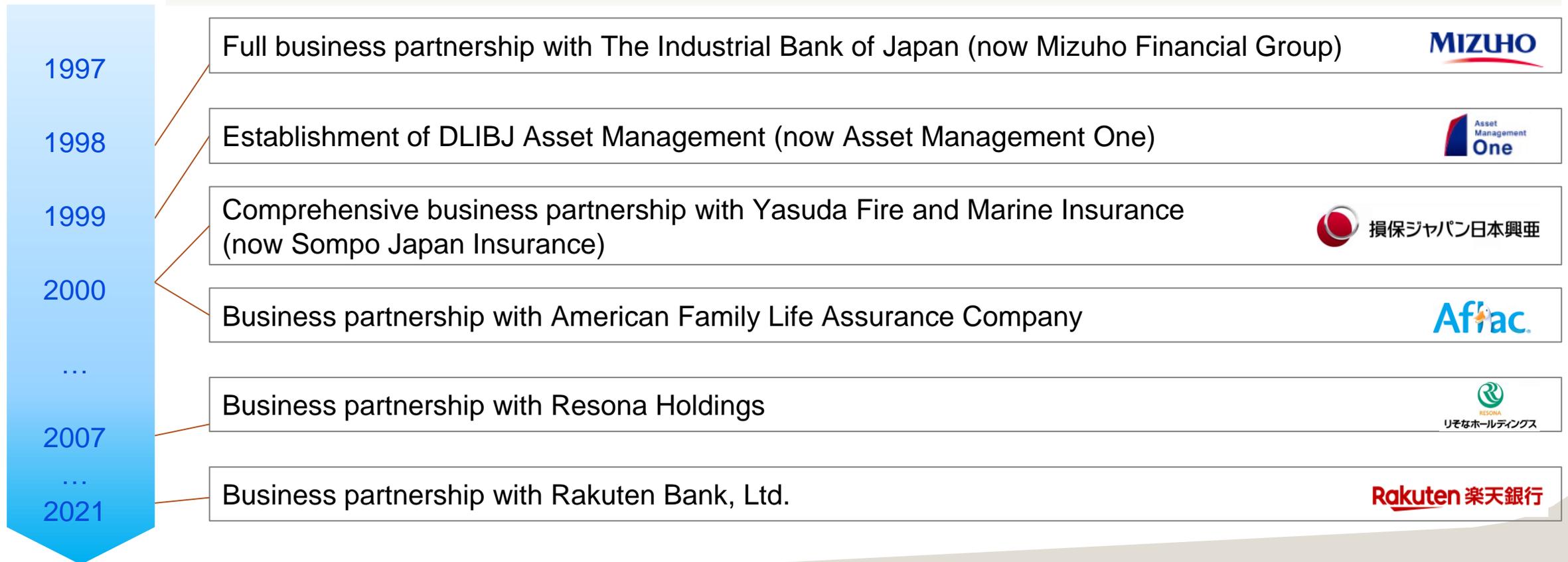


Trajectory of Transformation (1)

Adoption of a partnership strategy, rather than going it alone

In order to meet diversifying needs with high-quality products and services, we have promoted strategic partnerships, rather than adhering to a strict policy self-sufficiency.

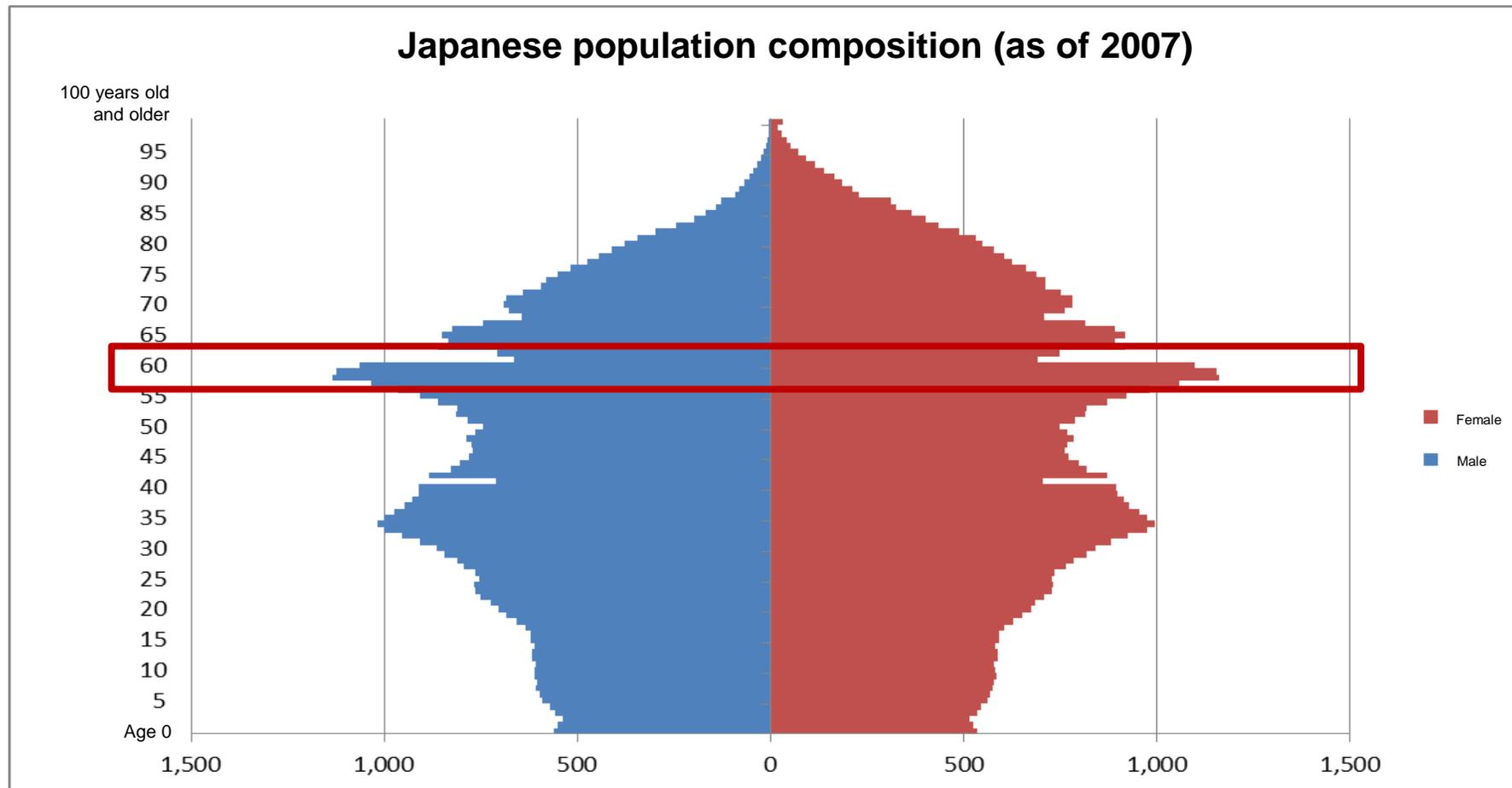
Main partnerships, etc.



Turning Point (2)

After 2007, Baby Boomers are in their 60s.

Traditional death protection needs are declining and there is a shift toward savings and medical protection.
Japan is becoming a mature market.



Trajectory of Transformation (2)

The Shift to Savings and Medical Insurance in Japan and Development Overseas

Main initiatives in Japan



Sale of savings products through financial institution agencies

Demutualization and listing



「あったらいいな」をいちばんに。



第一生命グループ

Sale of medical-related products through banks and insurance shops that customers visit, etc.

Main developments overseas

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

⋮

2019

2020

Dai-ichi Life Vietnam (Vietnam)

Ocean Life (Thailand)

Star Union Dai-ichi Life (India)

TAL (Australia)

Janus Henderson (US & UK)
*Asset management company

Panin Dai-ichi Life (Indonesia)

Protective Life(US)

Dai-ichi Life Cambodia (Cambodia)

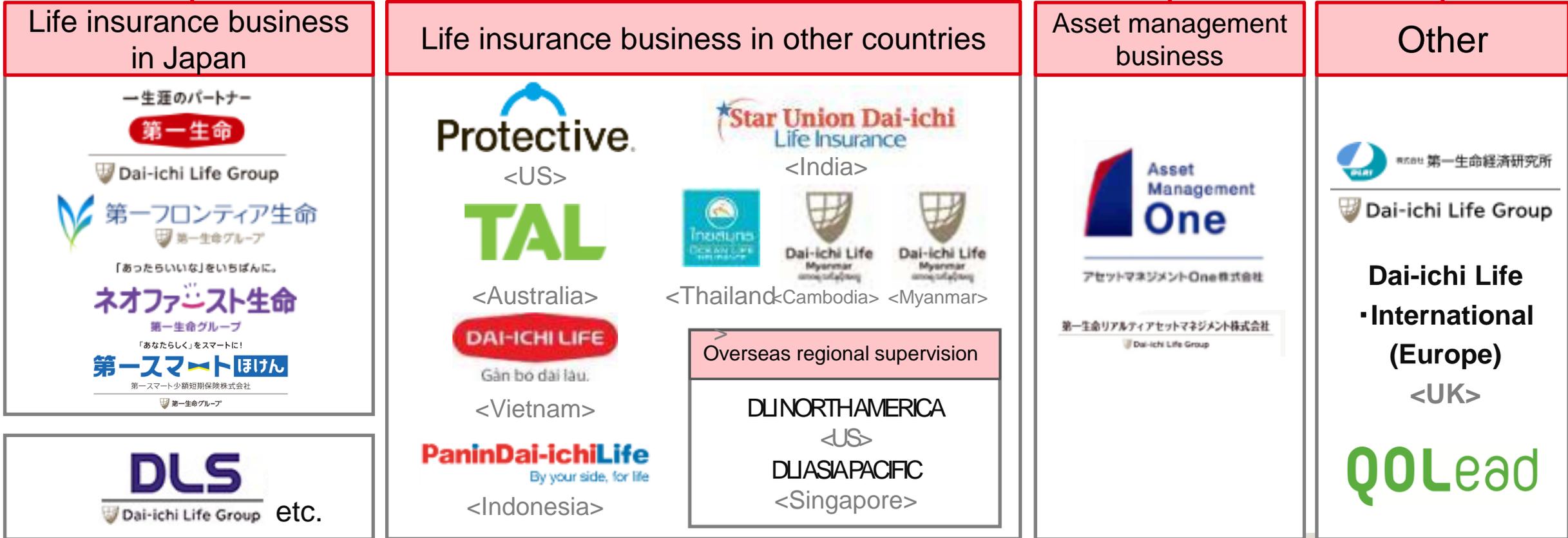
Dai-ichi Life Myanmar (Myanmar)



Composition of Dai-ichi Life Group



Dai-ichi Life Holdings



II. Changes in Business Environment

Progression of Societal Aging

Festival scenes — then and now



1966 >>>



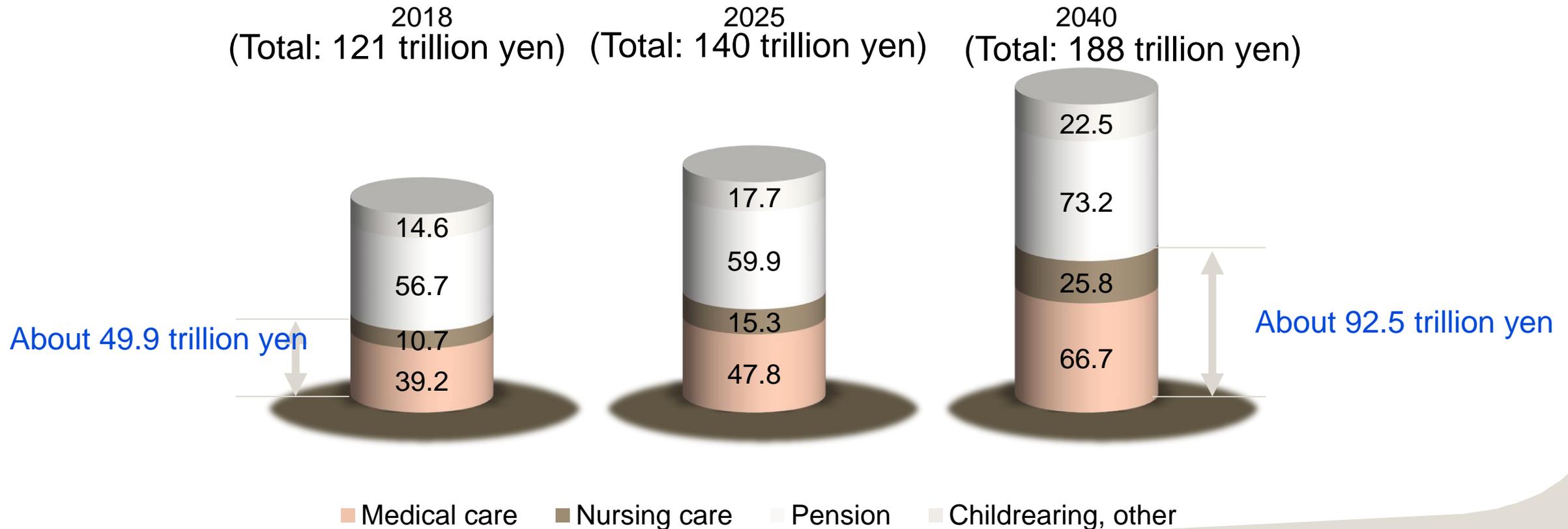
>>> 2019

Increase in Social Security costs

In addition to an aging population, advances in medical technology and other influences have caused an increase in social security costs.

Outlook for social security costs

Unit: trillion yen



Changes in Consumer Behavior



Change of Business Model

—From “B to C” to “C to B”—

Until now

“B to C” business model

Providing standard mass products based on supply-side logic

Product development and marketing with limited customer information

Efficiency-focused value chain

Consumption limited to products displayed in stores



- Internet spread
- Digitalization
- Big data accumulation
- AI analysis technology
- On-demand, seamless

.....

From now

“C to B” business model

Supplying personalized products to meet diverse needs

Product development and marketing based on deepening of customer understanding

An ecosystem that meets customer needs

Self-pleasing consumption after prior research and product comparison

III. Dai-ichi Life's Innovation Initiatives

1. Steps toward creating innovations

Creating Innovation Through InsTech

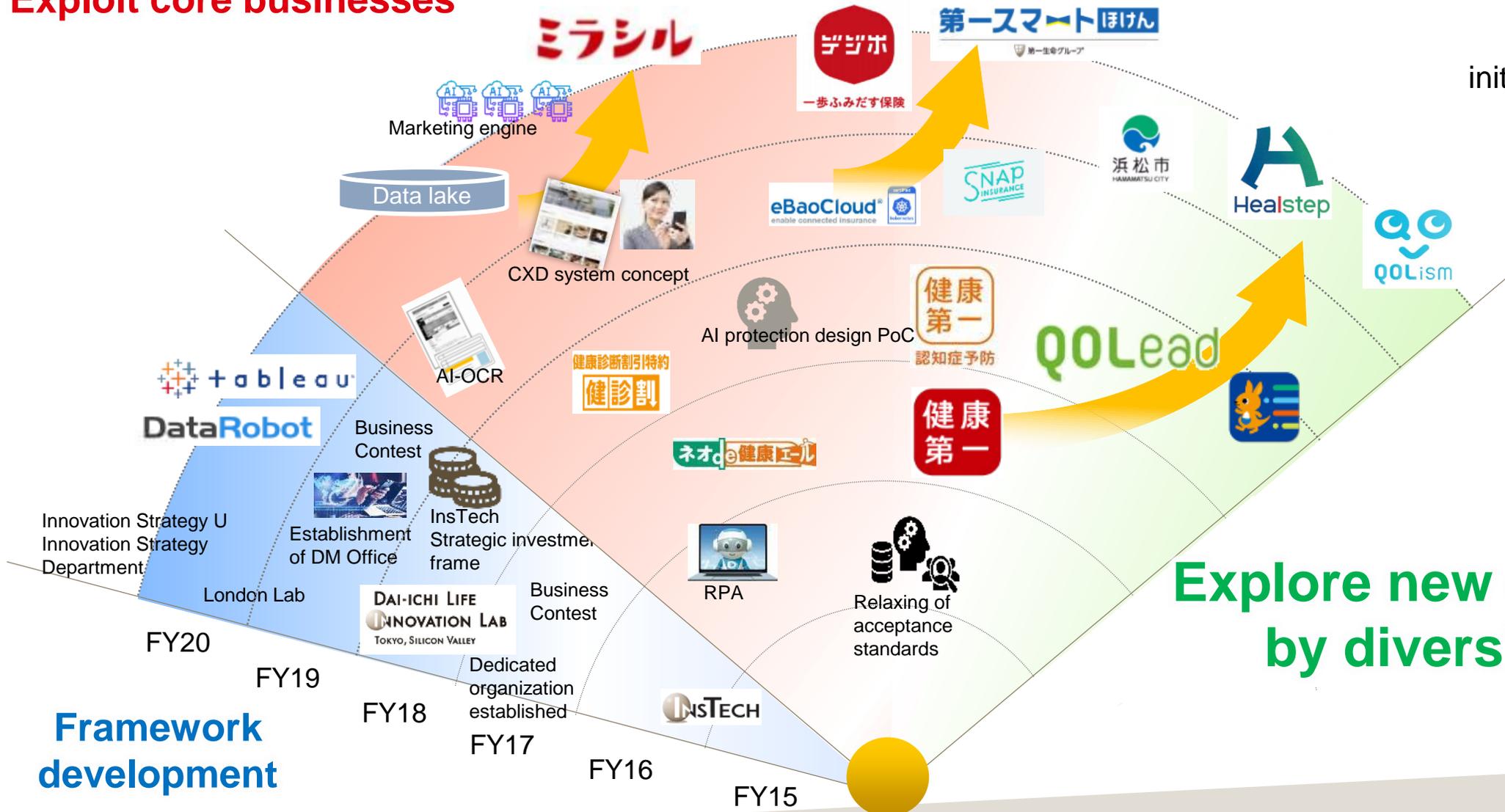


Insurance × Technology
(Insurance) (Technology)

December 2015	Cross-functional team formed (InsTech Innovation Team)
April 2017	Dedicated organization established (InsTech Promotion Office)
April 2018	Lab function established (Dai-ichi-life Innovation lab, Tokyo & SV)
April 2019	Data science specialized organization established (Data Management Office)
April 2020	Innovation Strategy Unit/Department, Communication Design Department established

Steps toward creating innovations

Exploit core businesses



* Only the main initiatives are shown.

Explore new capabilities by diversification

*DM Office: Data Management Office

Main Initiatives that Have Led to New Experience Value and Business Creation (FY2017-20)

**Framework development
External
collaborations/investments, etc.**

Exploit core businesses

**Explore new capabilities
by diversification**

FY2017

- ✓ InsTech Promotion Office
- ✓ Business contest
- ✓ Collaboration with Shiga University (DS)

- ✓ Kenko Dai-ichi (Health First) app released

- ✓ Commencement of examination for a scheme to provide an app for Japan Post Insurance
- ✓ QOLeal established

FY2018

- ✓ Shibuya&SVLab
- ✓ InsTech strategic investment frame
- ✓ Collaboration with Keio Advanced Research Institute

- ✓ Dementia prevention app released (for early detection of dementia signs)
- ✓ AI protection design PoC, etc.

- ✓ Release of a health promotion app for Japan Post Insurance

FY2019

- ✓ Data Management Office
- ✓ London Lab
- ✓ Collaboration with Tohoku University
- ✓ Business contest

- ✓ Low-cost, short-term business concept, marketing, and system infrastructure verification (Snap Insurance, eBao)
- ✓ Establishment of low-cost, short-term preparation company

- ✓ Commencement of joint research with Mizuho FG
- ✓ Development of AI for predicting future medical costs

FY2020

- ✓ Innovation Strategy U
- ✓ Innovation Strategy Department

- ✓ CX design system concept, concept verification, communication interface (Mirashiru) development preparations

- ✓ Health insurance support project concept, concept verification
- ✓ Demonstration experiment on health promotion with Hamamatsu City

**New experience value
Business creation**



*DS: Data scientists

Steps toward creating innovations —Insurance Pool—

Exploit core businesses

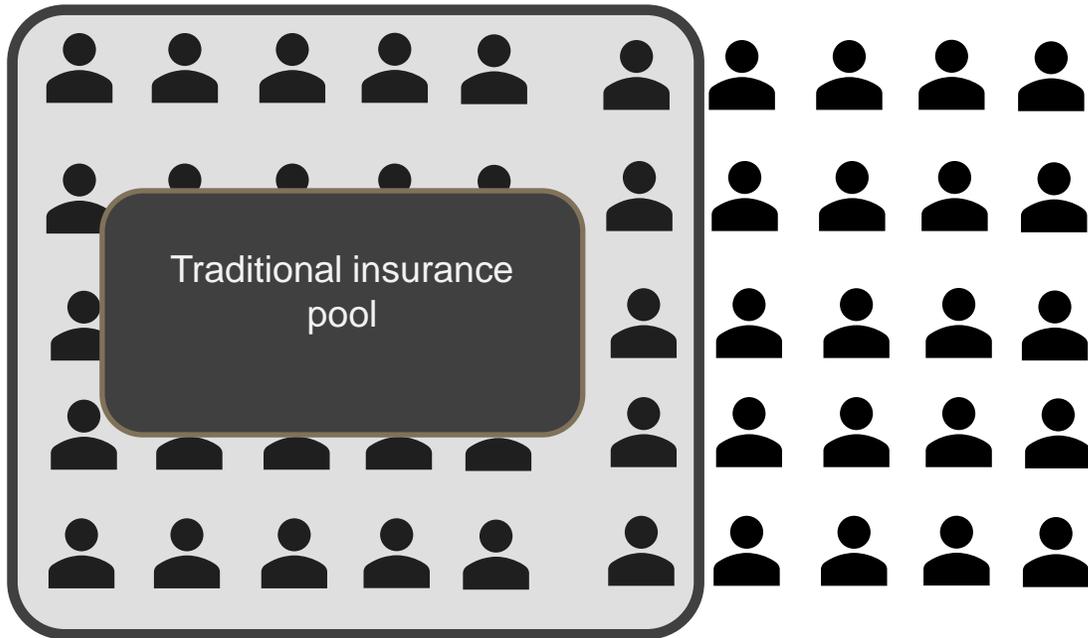


*DM Office: Data Management Office

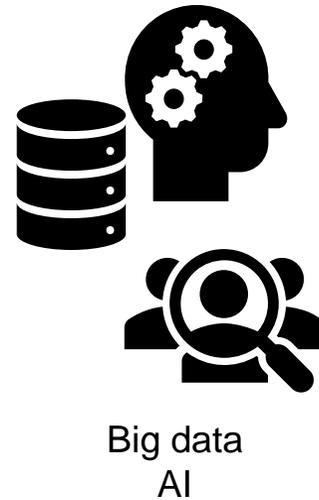
Providing Value to Health Promotion and Medical Checkups

—Transformation of the Insurance Pool—

Low Risk High



Utilization of advanced technologies



Big data
AI

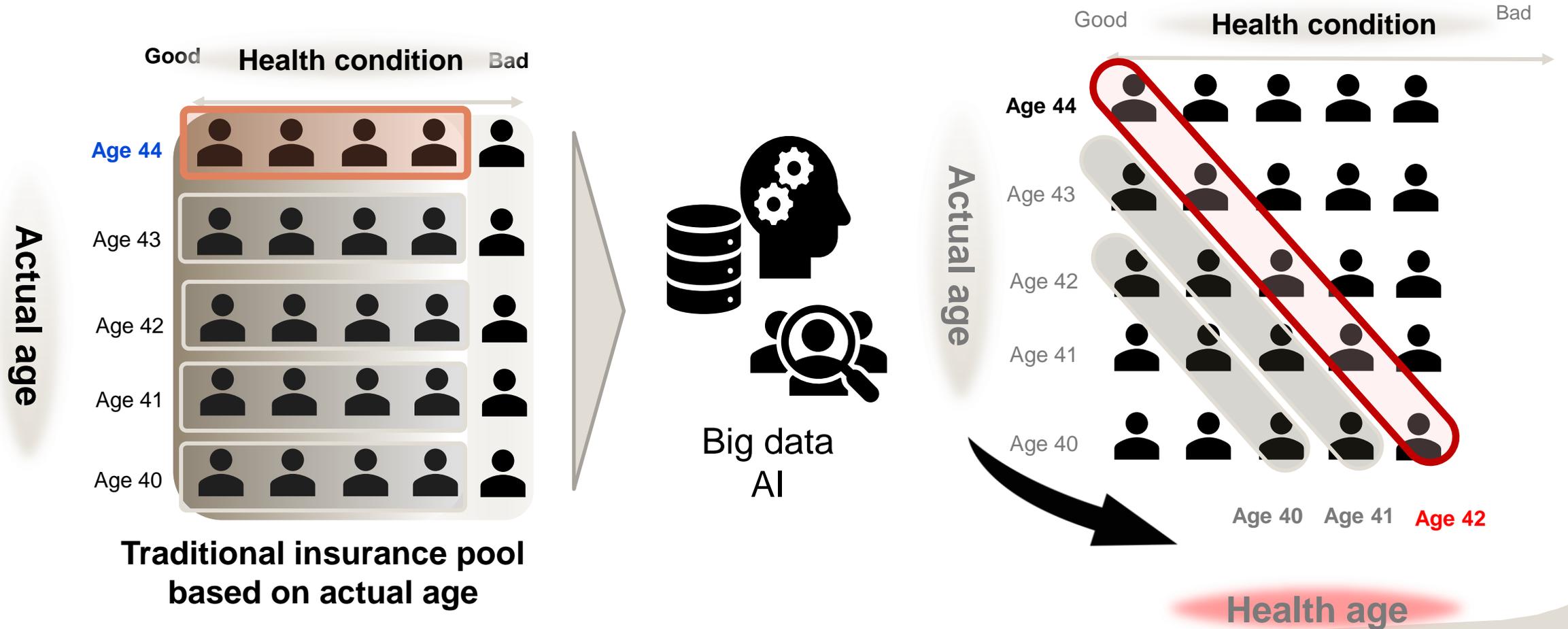
- (1) Insurance premium setting according to health age*
- (2) Insurance premium setting depending on whether or not customers take a medical checkup
- (3) Expansion of the insurance pool

*Kenko nenrei (health age) is a registered trademark of Japan Medical Data Center Co., Ltd.

“Health age” used by Neo First Life Insurance is calculated through Neo First’s own method based on data from Japan Medical Data Center Co., Ltd., and is used for evaluating risks pertaining to specified lifestyle-related diseases. The calculation standard differs from that of the “health age” of Japan Medical Data Center Co., Ltd.

(1) Insurance premium setting according to health age

From the traditional concept of determining insurance premiums based on actual age, to the practice of setting insurance premium based on health age



[Initiative example] Sale of insurance based on health age

First in the industry*



December 2016



October 2017

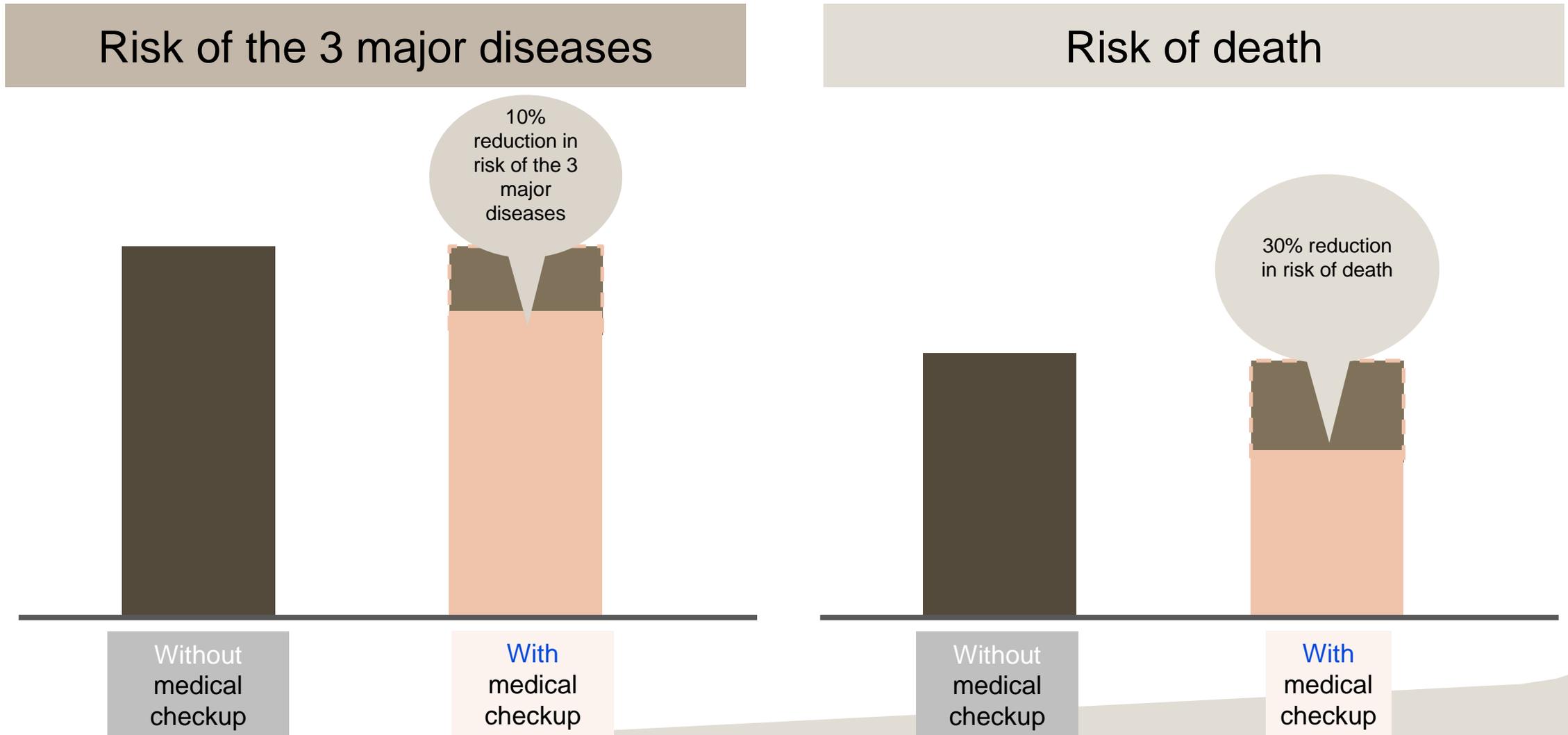


 The younger your health age, the cheaper your premiums are.*

*According to Dai-ichi Life's investigation of insurance products handled by life insurance companies belonging to the Life Insurance Association of Japan. (As of September 20, 2016)

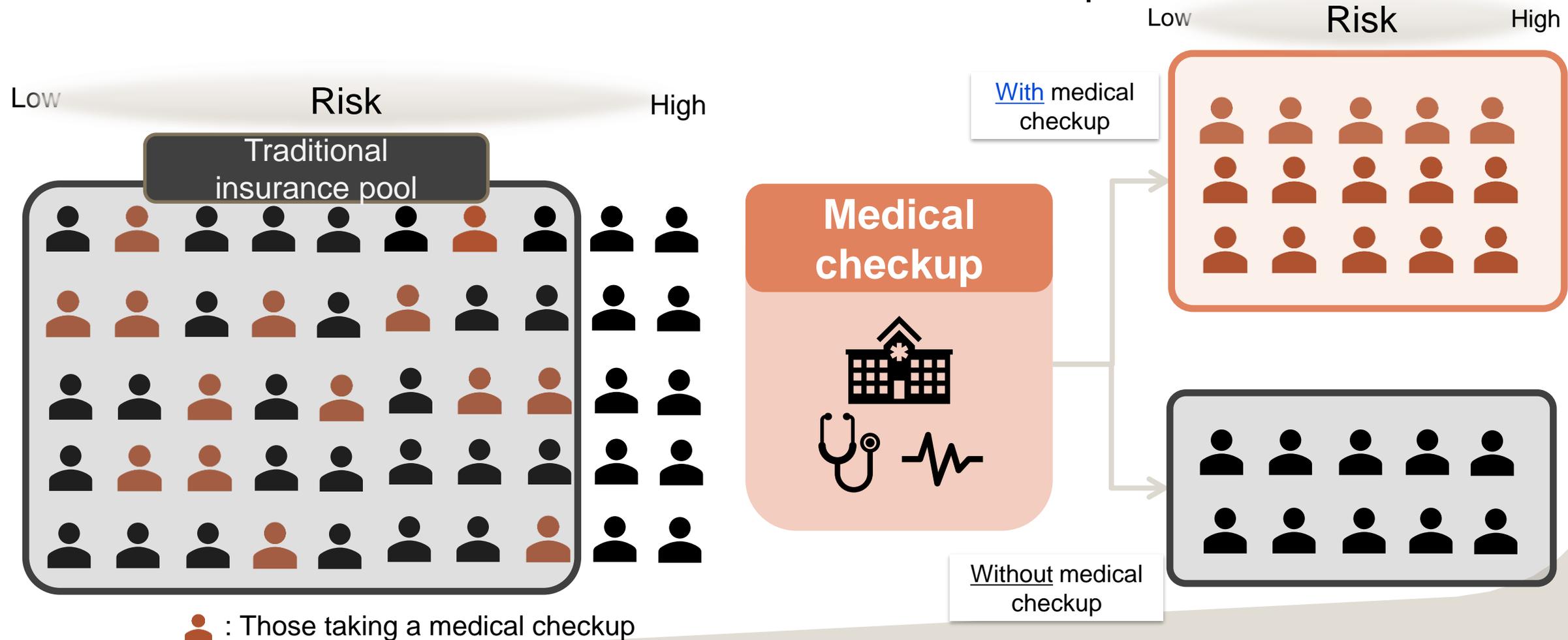
Risk Comparison With and Without Medical Checkup

The results of big data analysis have shown that there is a difference in risk depending on whether or not a customer has taken a medical checkup.



(2) Insurance Premium Setting Depending on Whether or Not Customers Take a Medical Checkup

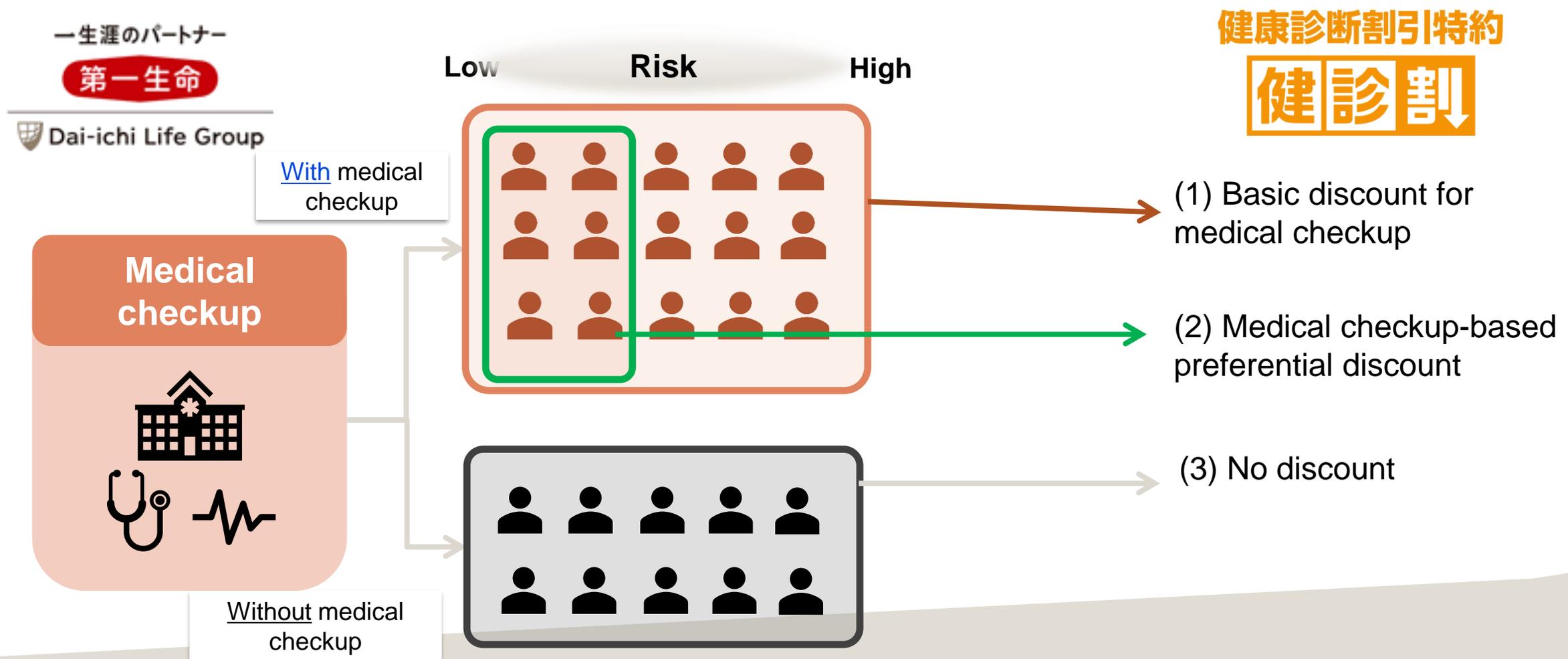
It is possible to classify insurance pools and set insurance premiums based only on whether or not customers have taken a medical checkup.



[Initiative example]

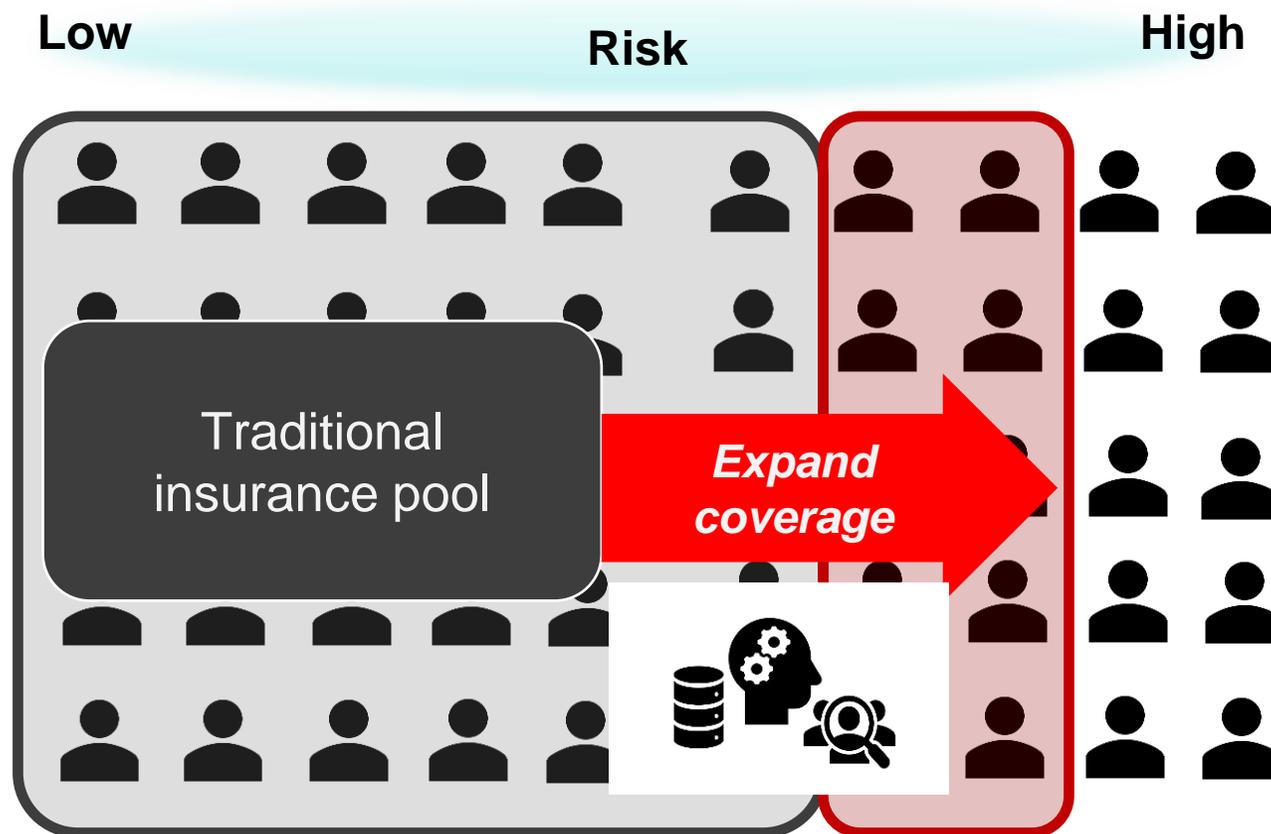
Sale of insurance with medical checkup discount

Dividing the traditional insurance pool into 3 categories and setting insurance premiums according to whether or not customers have taken a health checkup



3. Expand the insurance pool

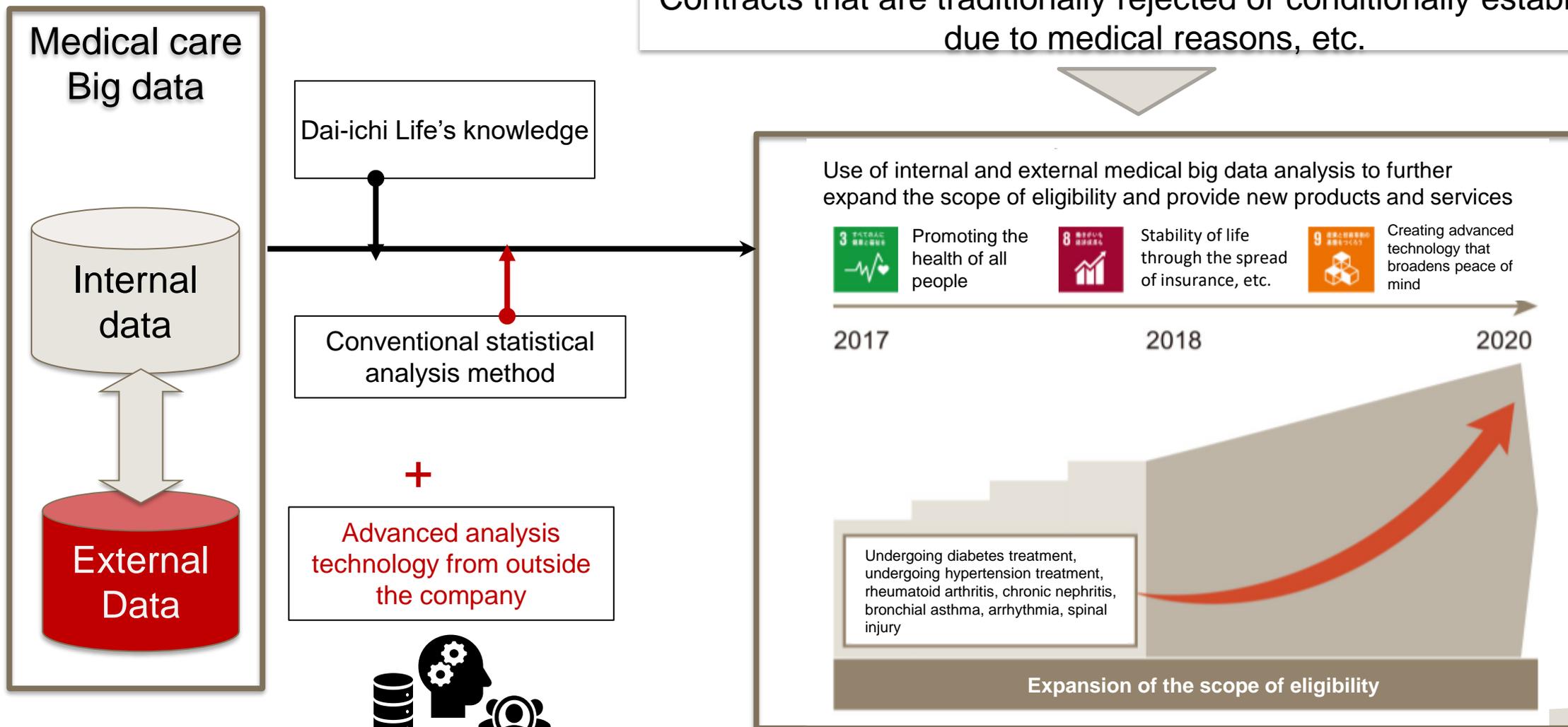
Internal data and external anonymous medical big data were analyzed with AI to sophisticate and expand coverage capabilities.



[Initiative example]

Expansion of acceptance through big data analysis

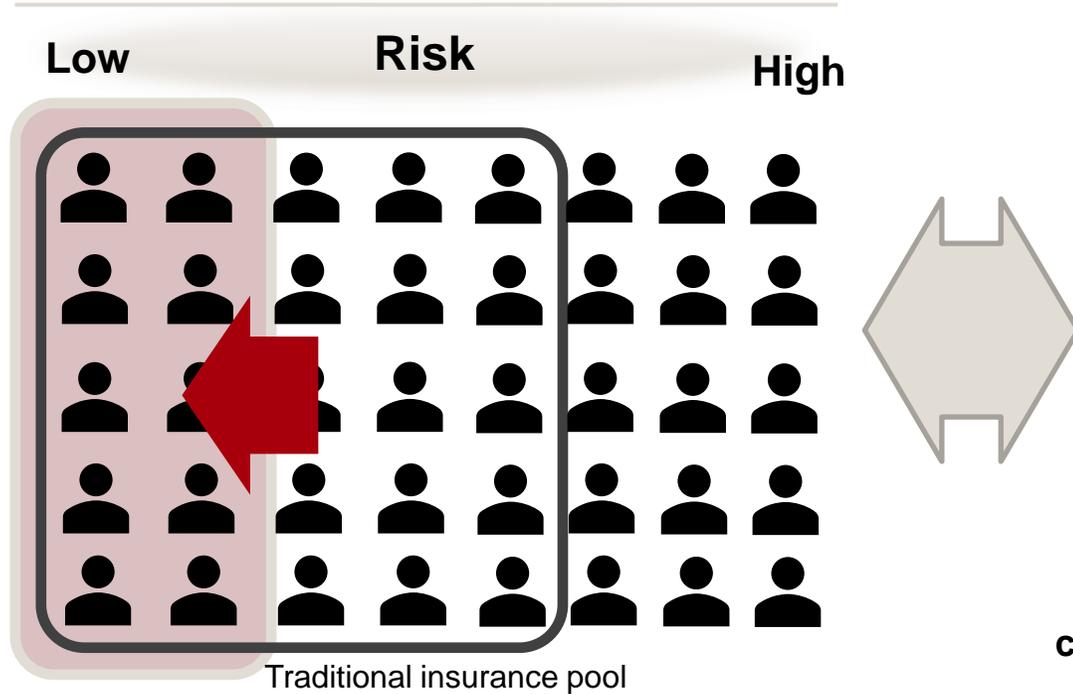
Contracts that are traditionally rejected or conditionally established due to medical reasons, etc.



Approximately 12,000 new contracts per year (equivalent to approximately 1% of Dai-ichi Life's new contracts) can now be accepted.

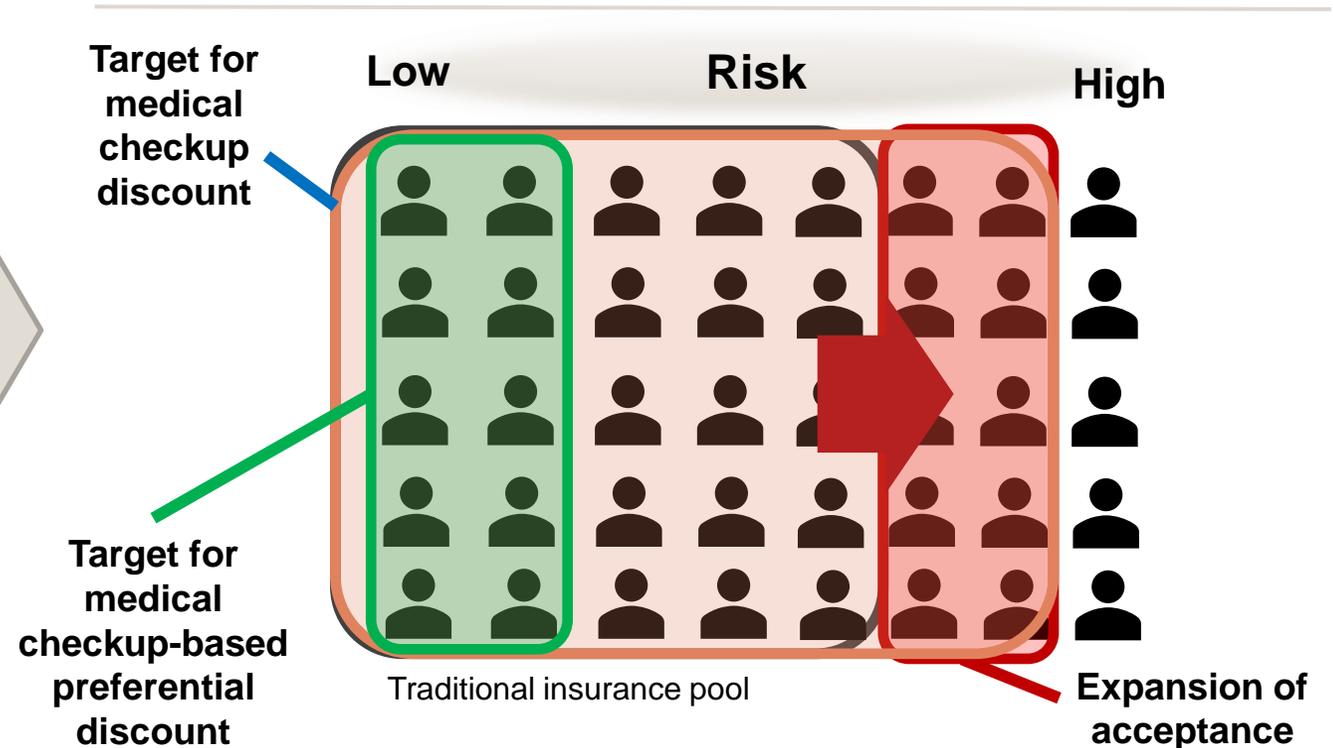
Health Discount Limitations and Dai-ichi Life's Initiatives

Health discount limitations



If only health discount is pursued, insurance will target only the low-risk group, thereby diminishing the original role of insurance.

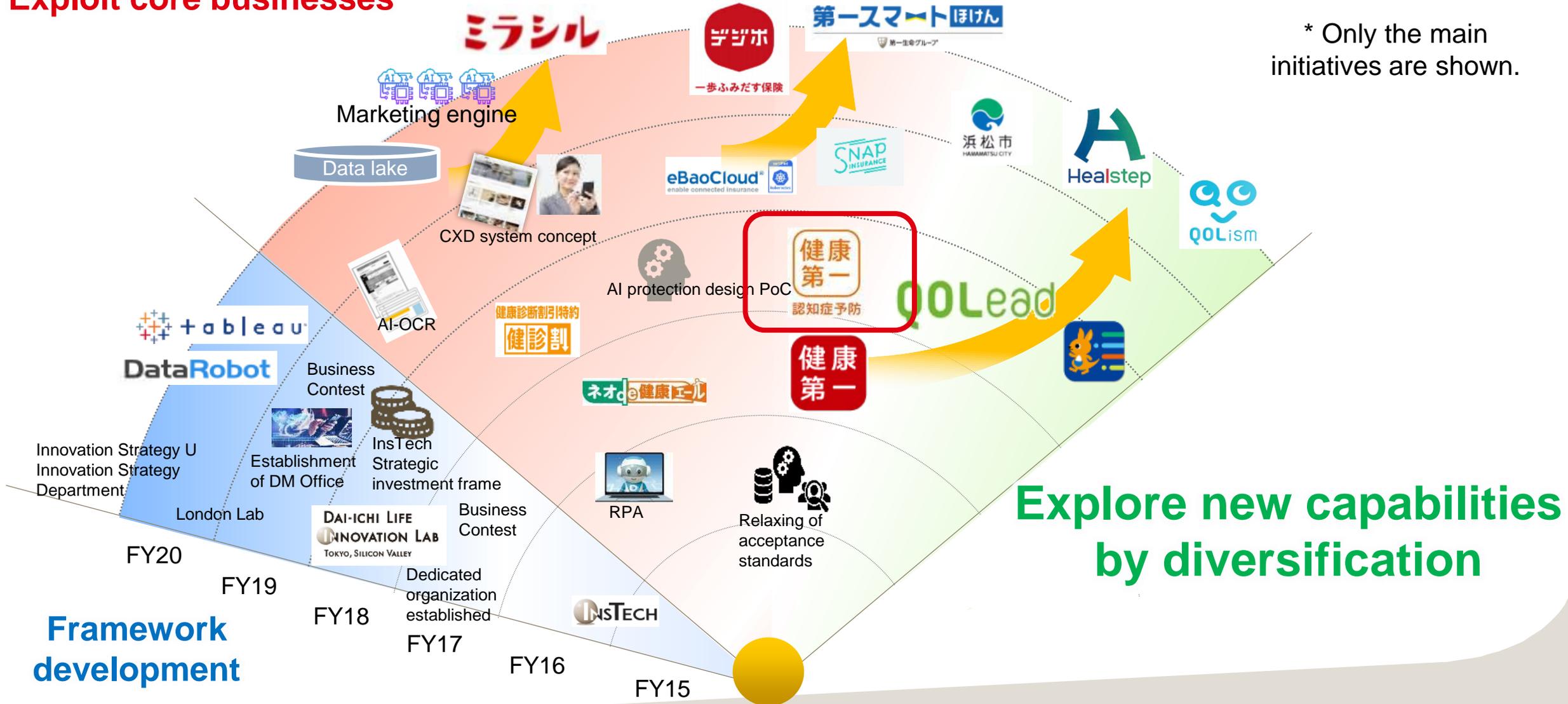
Dai-ichi Life's Initiatives



By promoting not only health discount but also health checkup discount and expansion of acceptance in a comprehensive way, we provide optimal security to our customers while fully demonstrating the proper functions of insurance.

Steps toward creating innovations - Prevention -

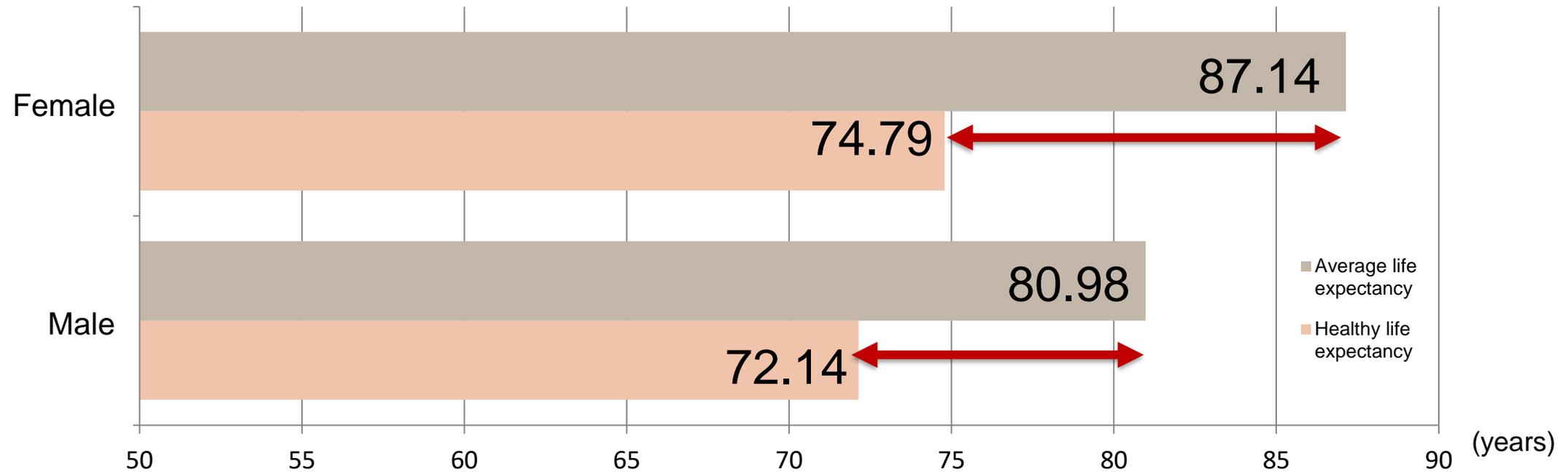
Exploit core businesses



*DM Office: Data Management Office

◆ Gap between average life expectancy and healthy life expectancy (2016)

(Published by MHLW in July 2017 and March 2018)



The New Added Value of “Prevention”

Extension of healthy life expectancy and curtailment of medical expenses

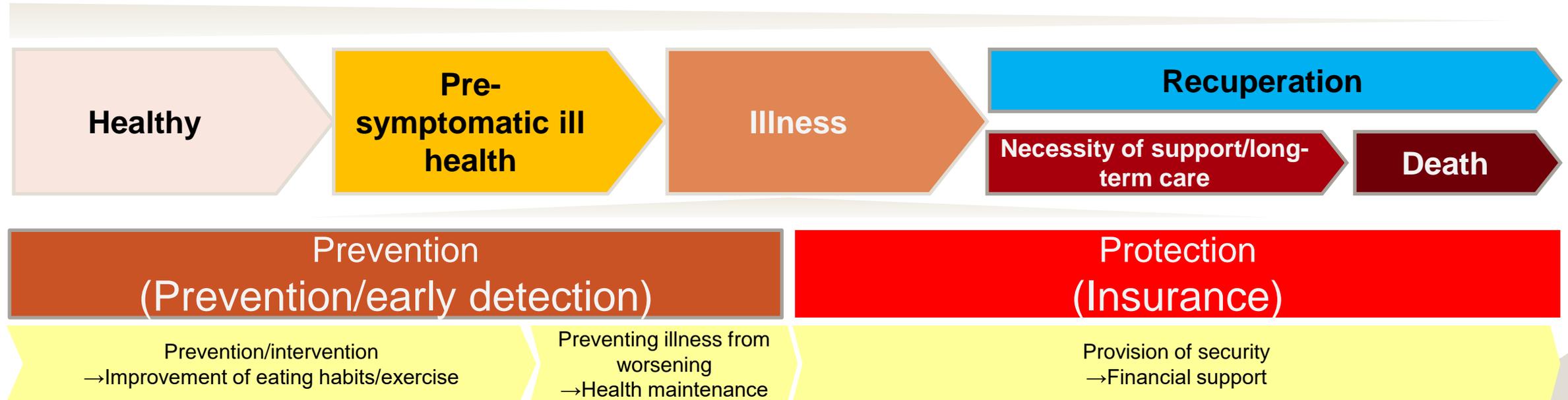
Role of life insurance business = To complement the social security system

Provided value in need of strengthening
Added value that leads to health promotion and QOL improvement

Provided value emphasized thus far
Reliable payment of insurance claims and benefits

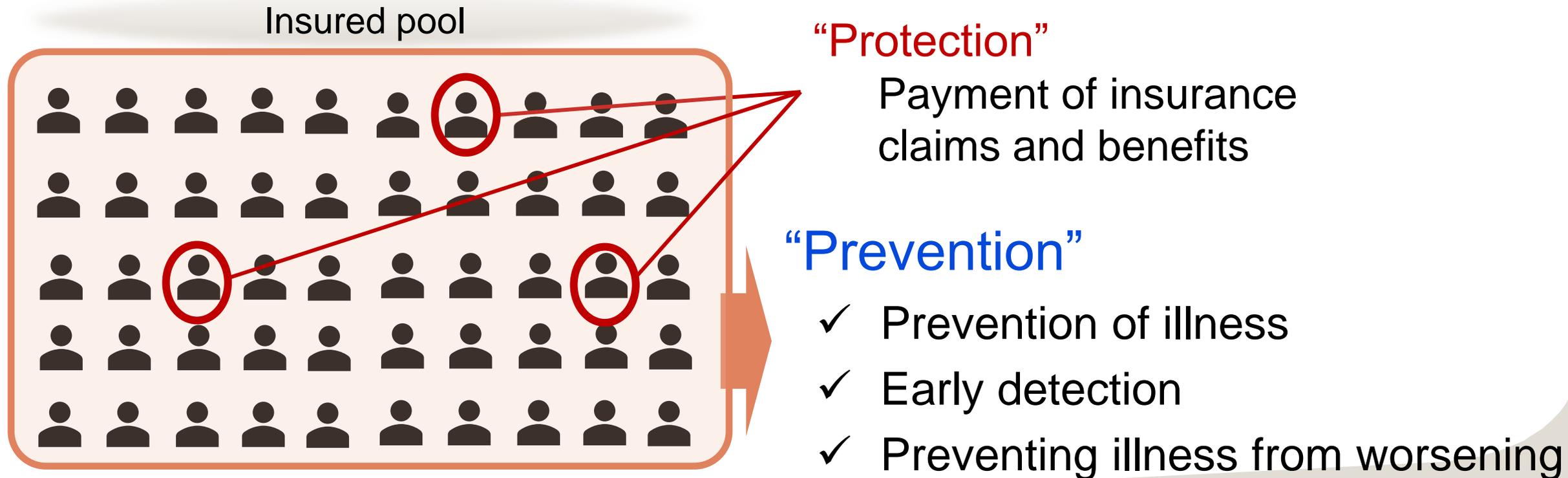
Ordinary circumstances

Extraordinary circumstances



The New Added Value of “Prevention”

In addition to the conventional value of “payment of insurance claims and benefits in case of emergency” (“Protection”),
Provision of the new value of “preventing emergencies” (“Prevention”)

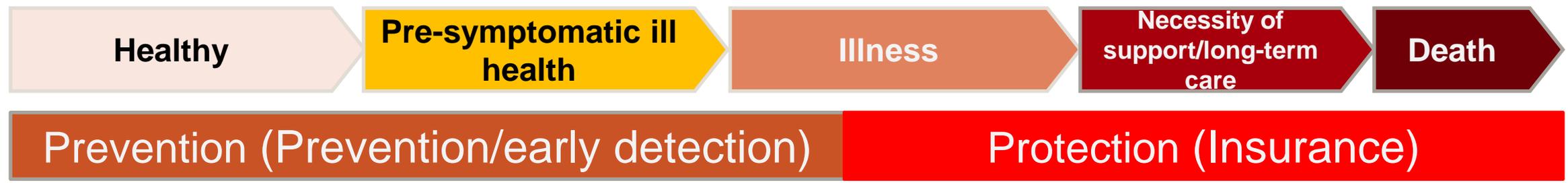


[Initiative example]

Dementia insurance, offered since Dec 2018

About dementia

- ✓ With current medical technology, there is no definitive treatment or medicine available for the purpose of achieving a complete cure.
- ✓ Thus, avoiding onset and suppressing disease progression are considered to be the most effective measures.



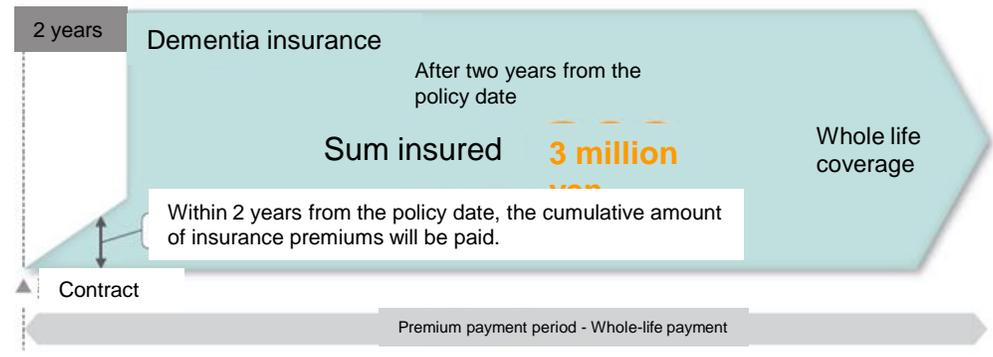
[Preventive function]



[Risk-checking function]



Implementation of cutting-edge technology from Silicon Valley



*Cognitive function check by eye movements

Cultivating the Network of Silicon Valley

- 1 representative officer dispatched to Silicon Valley in April 2017
- Dai-ichi Life Innovation Lab, Silicon Valley established in April 2018
- Cultivation of the network by utilizing Dai-ichi Life's asset management side and the network of the US subsidiary Protective Life Corporation



Significance of Collaboration with Silicon Valley Startups



Press announcement
in JPN (Nov 2018)



Launch event in SV (Dec 2018)



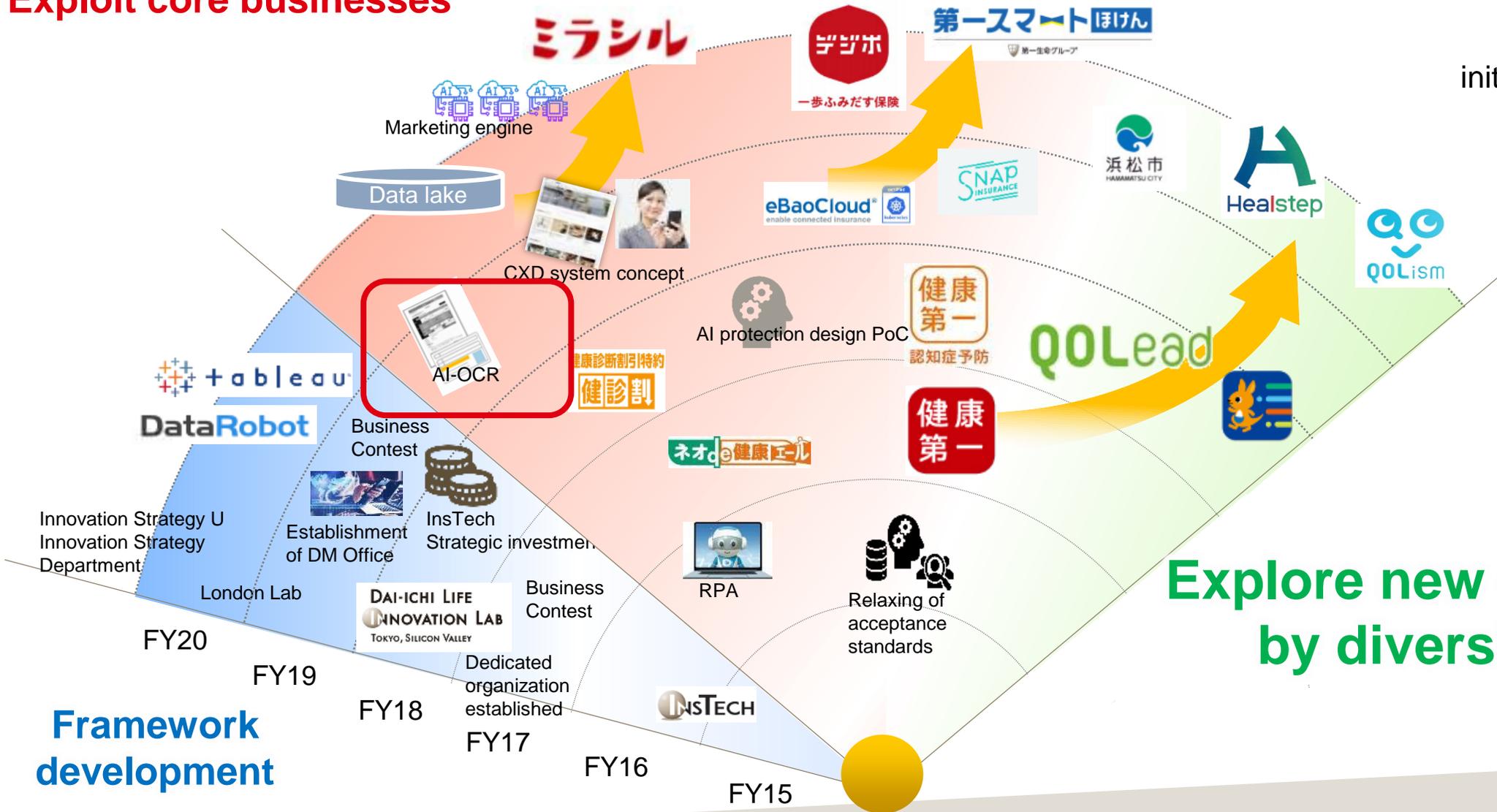
Quotes: VC leaders from Silicon Valley

- ✓ “Dai-ichi defined an ideal way of collaborating with startups with prevention/early detection capabilities.” (Founder of Khosla Ventures: Vinod Khosla)
- ✓ “Unlike a typical seminar for Japanese expats in SV, majority of the audience were local VCs, startup executives and corporates. Dai-ichi proved Japan can also do an impactful business here.” (MD of Sozo Ventures: Phil Wickham)

(Source) Nikkei

Steps toward creating innovations —Utilization of AI—

Exploit core businesses



* Only the main initiatives are shown.

Explore new capabilities by diversification

Framework development

*DM Office: Data Management Office

Automation of Operations Utilizing AI-OCR and Other Technologies

News Release

第一生命保険株式会社

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一生のパートナー

第一生命

Dai-ichi Life Group

June 25, 2020

Automation of Administrative Operations Through Implementation of AI-OCR Platform

—Reading of required items and automatic processing of non-standard forms—

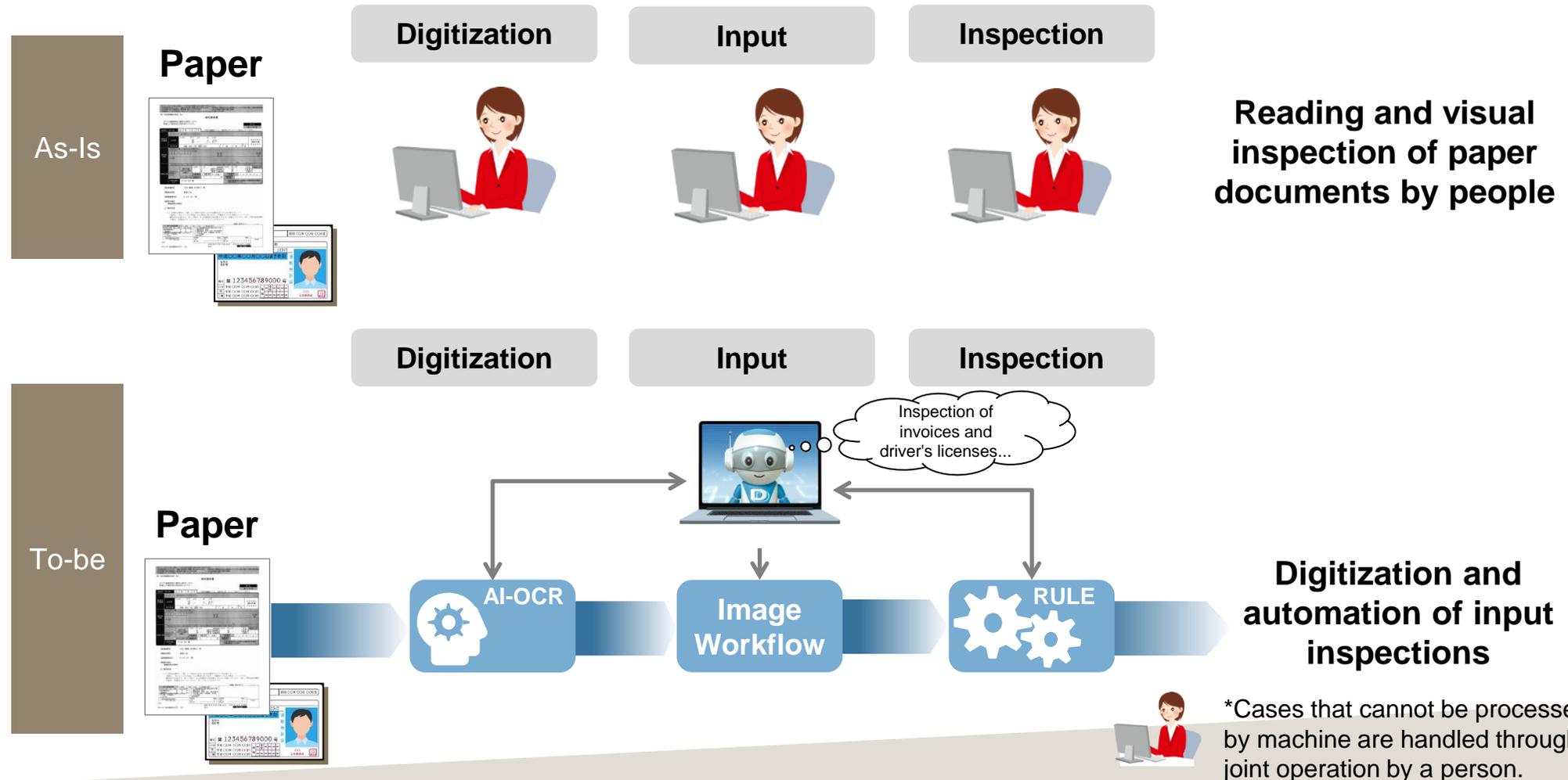
From July 2020, The Dai-ichi Life Insurance Co., Ltd. (President: Seiji Inagaki; hereinafter "Dai-ichi Life") will introduce the AI-OCR platform in the area of procedural processing (conservation) of policies in force.

Dai-ichi Life currently performs visual inspection of 70,000 images, etc. per day, on average, in order to carry out clerical processing of changes in policy contracts and payments of insurance claims and benefits.

Although we have been making advances in automation thus far, such as adopting digitization and implementing RPA, chatbot, etc., this time, by implementing the AI-OCR platform, we will have automatic reading of approximately 700 types of forms, including not only Dai-ichi Life's own prescribed forms such as invoices, but also non-standard forms such as medical certificates issued by hospitals and health insurance cards, which are used as identification documents, and this will enable us to achieve greater efficiency of clerical processing.

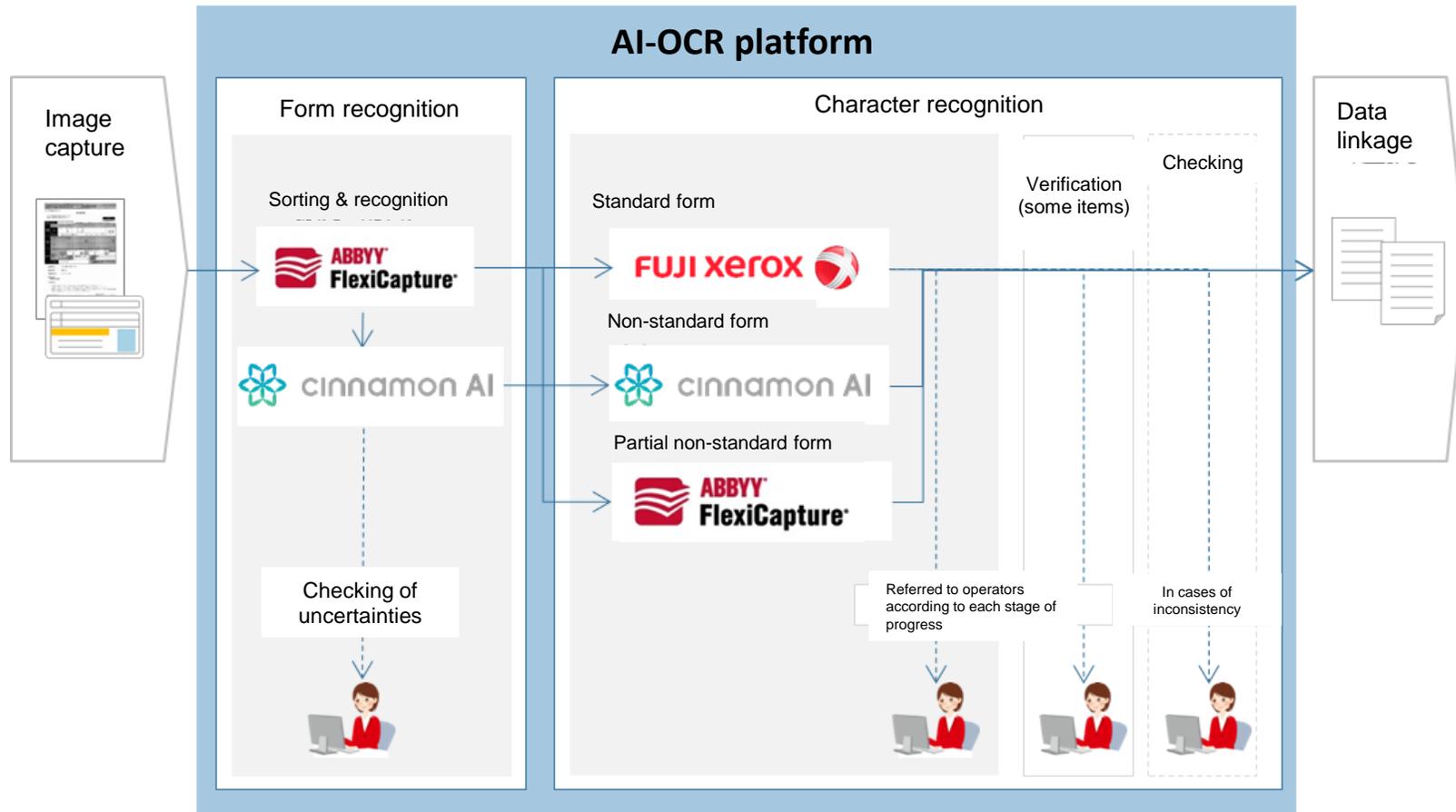
Automation of Operations Utilizing AI-OCR and Other Technologies

- Using AI technology, we will digitize printed and handwritten text and use robotics and other technologies to automate remaining forms that cannot be digitized. This will allow us to achieve reduction of BPO work and improved productivity of head office operations.



Overview of AI-OCR base

- It comprises **form recognition**, which sorts by form type, and **character recognition**, which reads the characters written on the form.

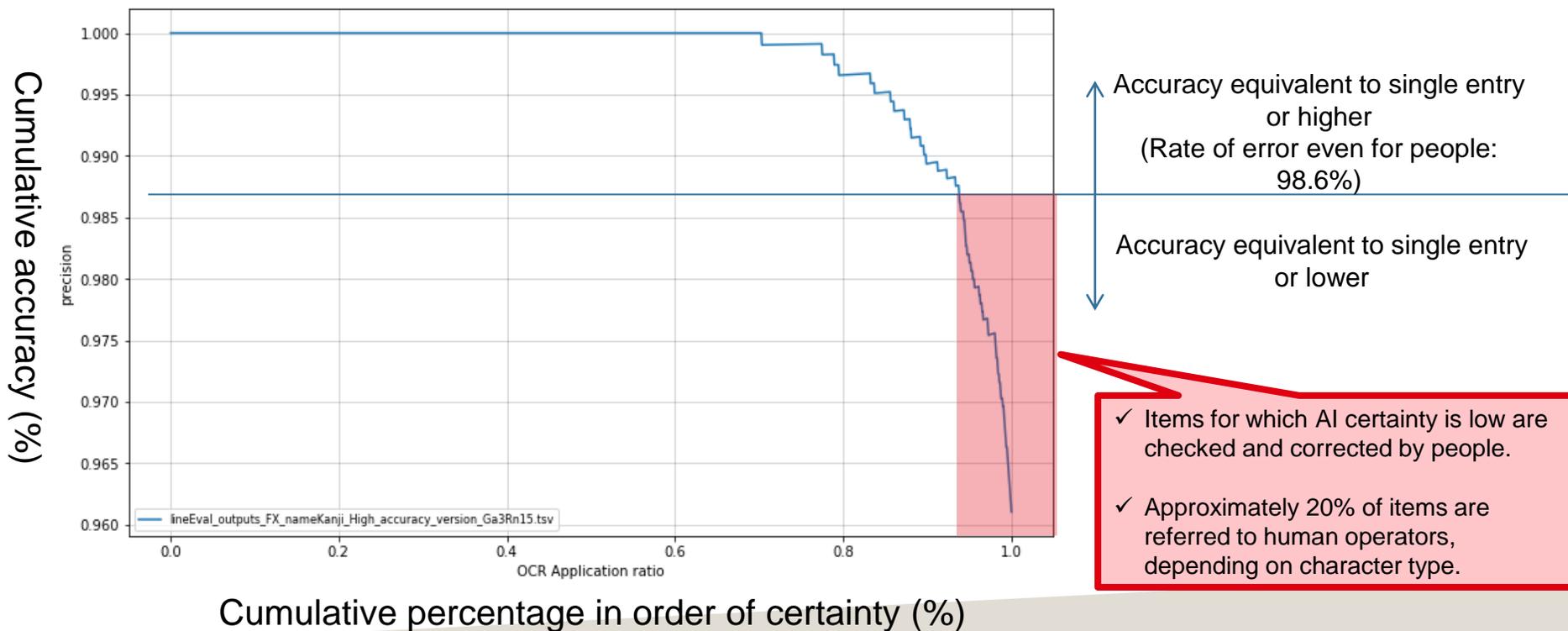


Improvement of Character Recognition Accuracy by Machine Learning

- Because AI is not 100% accurate, human confirmation is needed.
- High accuracy is efficiently achieved by having people check and correct what AI judges to be of low certainty.

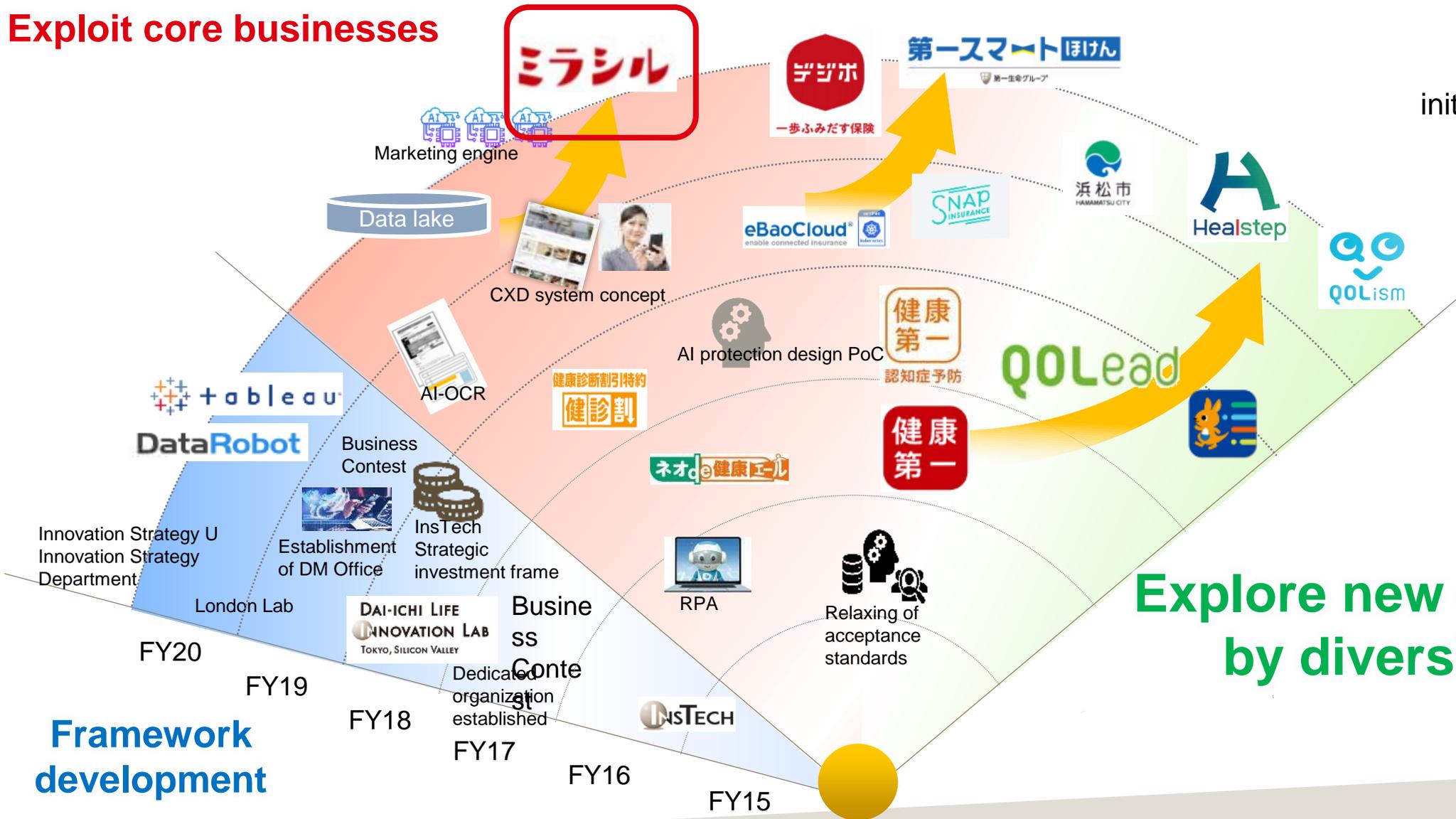
■ Item-reading test case and image of referral to human operators

As certainty decreases, reading errors occur and accuracy declines.



Steps toward creating innovations —CX Design Strategies—

Exploit core businesses



* Only the main initiatives are shown.

Explore new capabilities by diversification

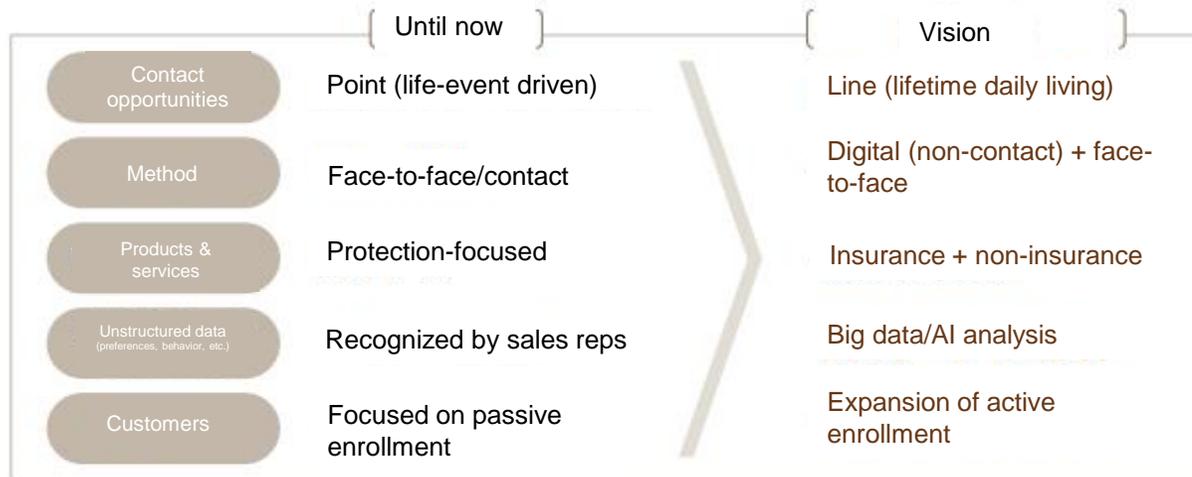
Framework development

*DM Office: Data Management Office

Transformation of domestic business model through CX design strategies

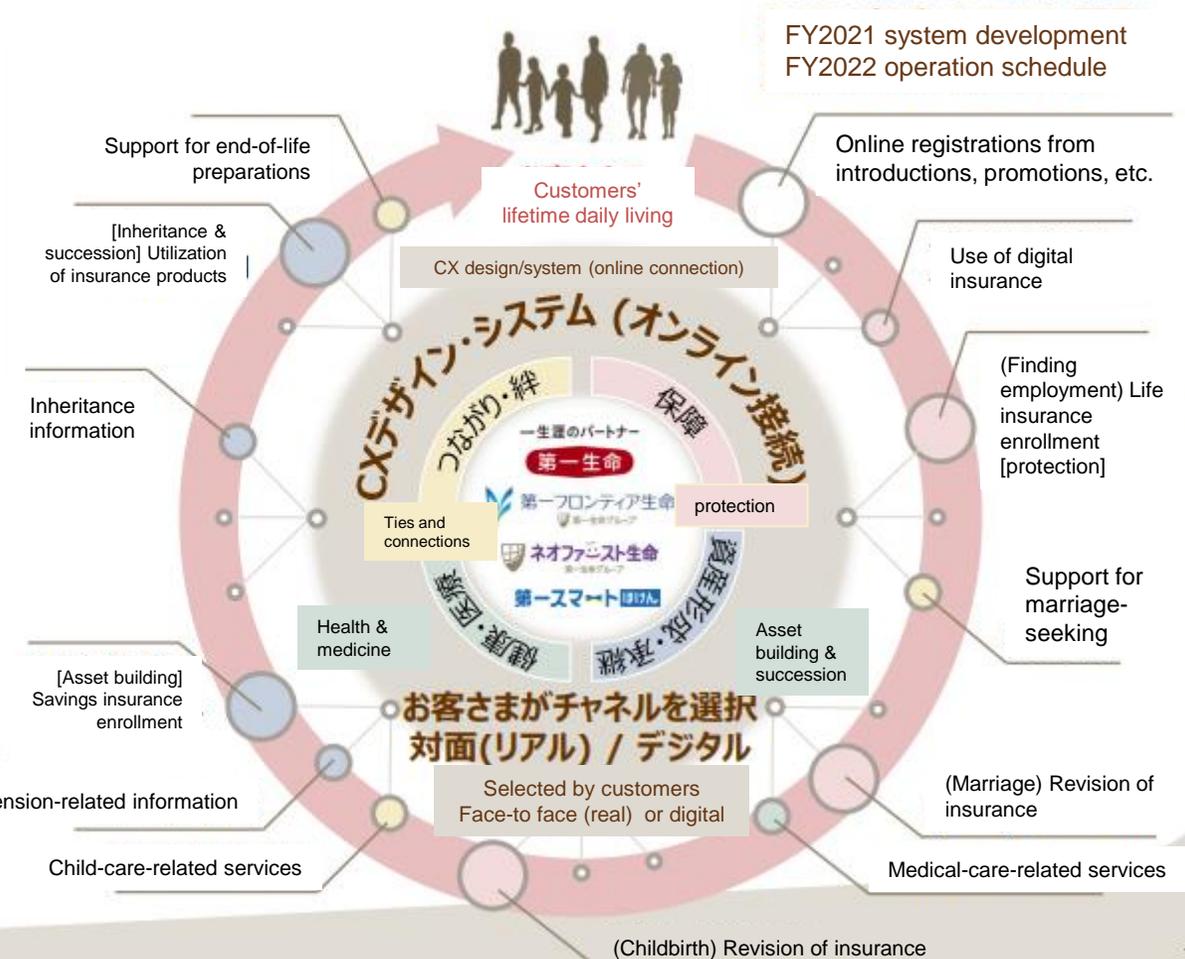
- Making a complete departure from traditional customer contact points with the aim of transforming our domestic business model through CX design strategies
- Providing optimal products, services, and information with optimal timing and through optimal channels to become the insurance group that customers choose

Change in points of contact with customers



The vision of CX design strategies

(OMO: Online Merges with Offline)

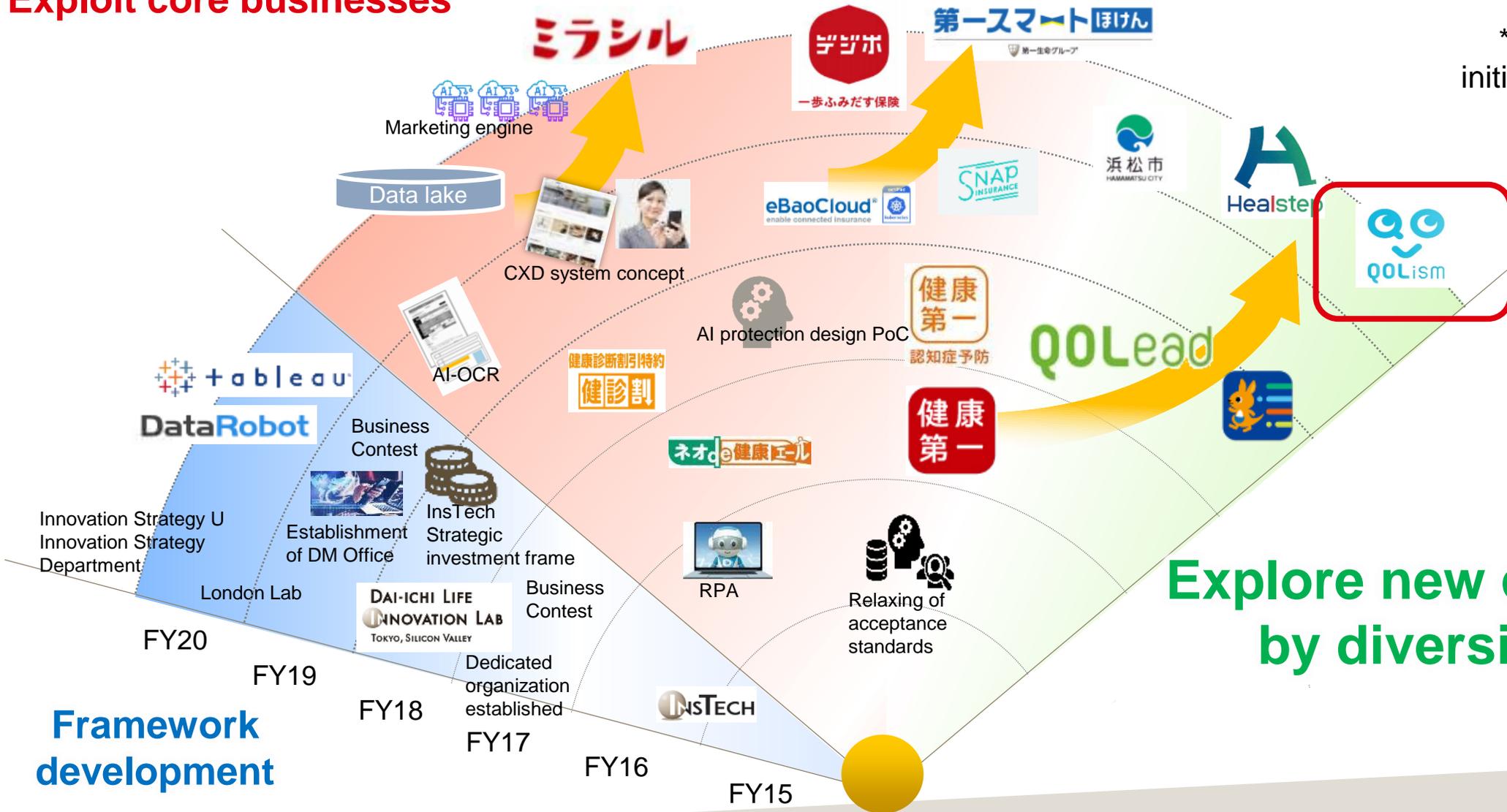


Traditional approach



Steps toward creating innovations —Health App—

Exploit core businesses



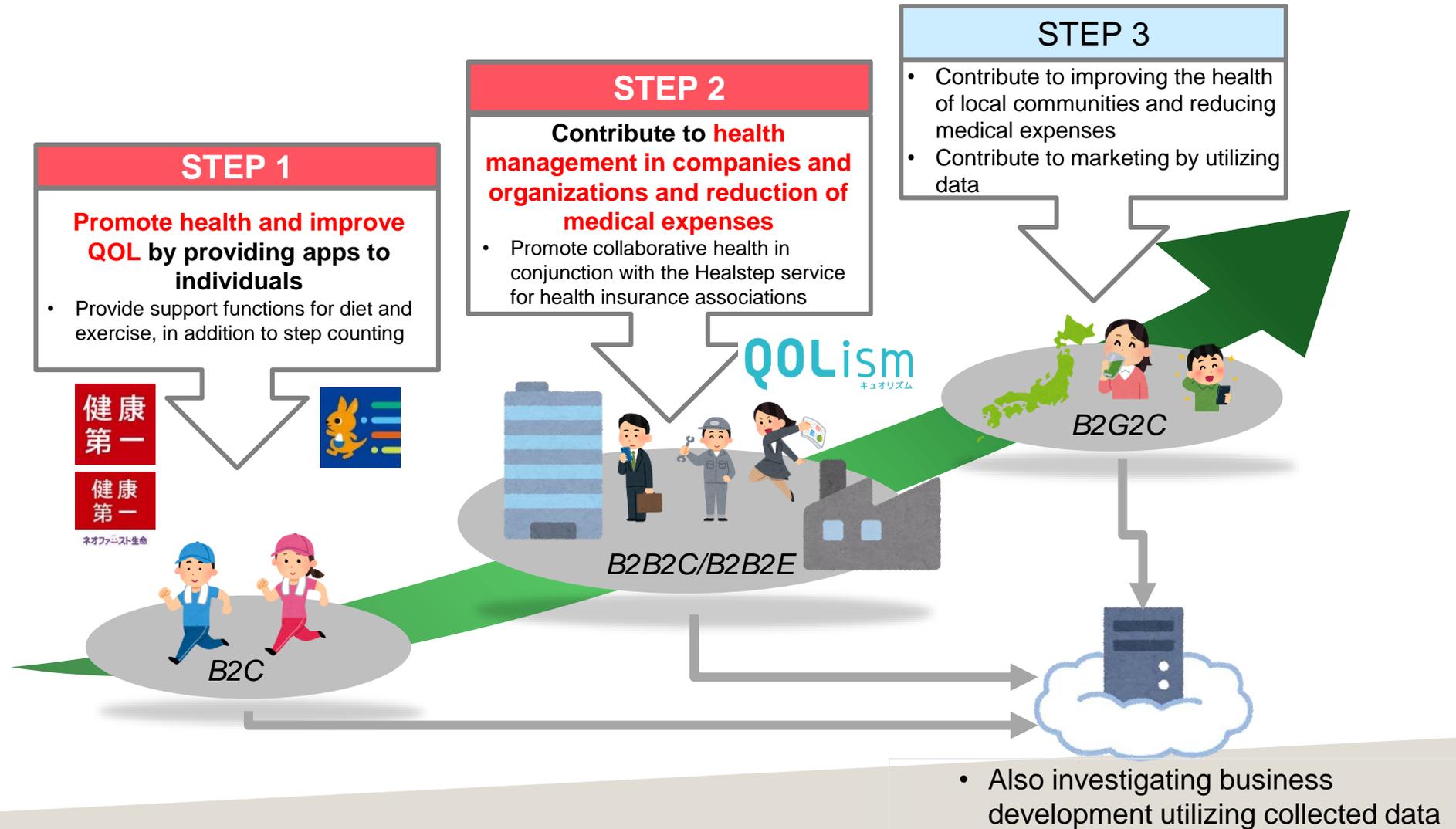
* Only the main initiatives are shown.

Explore new capabilities by diversification

*DM Office: Data Management Office

Initiatives Toward Solving Social Issues

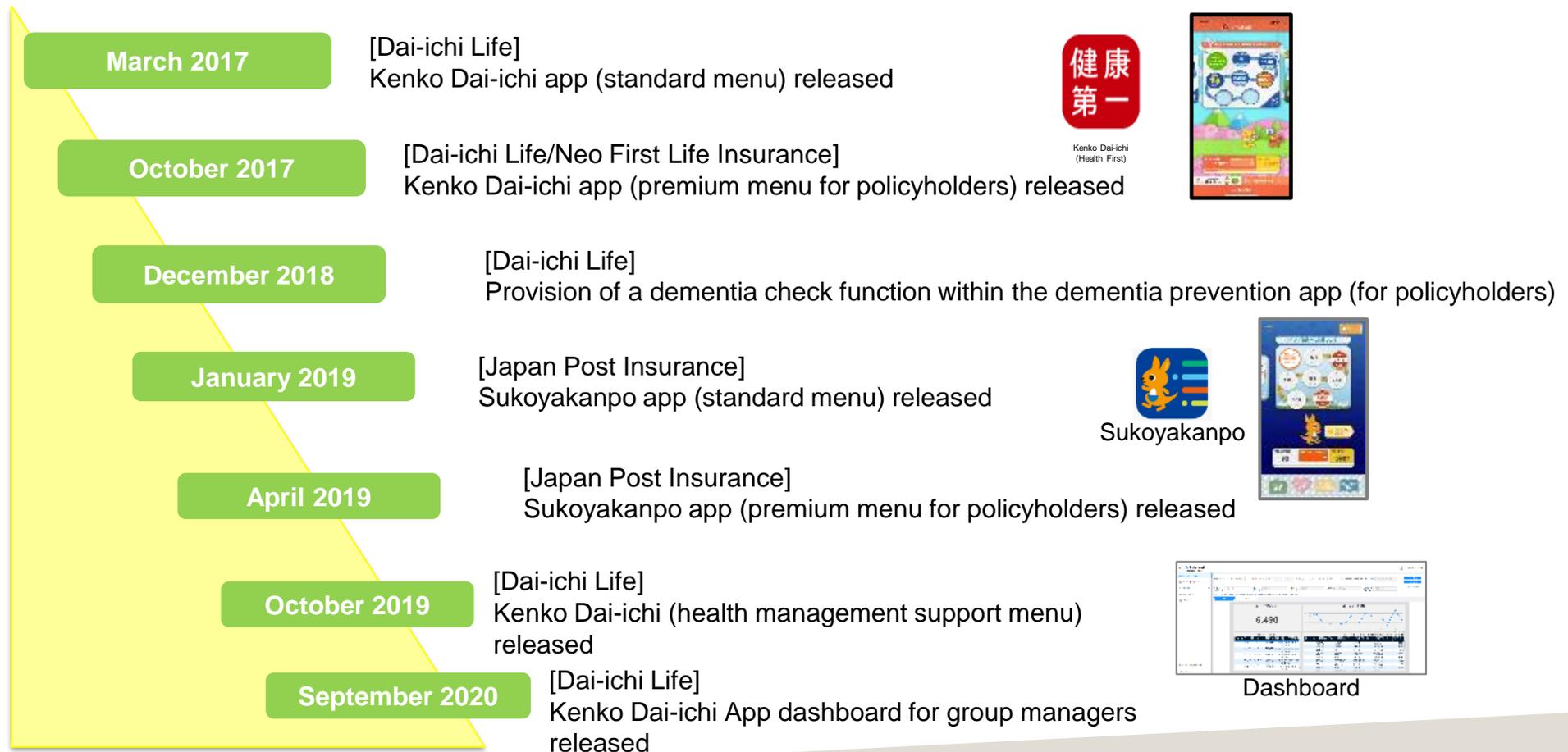
- By providing health promotion services, we are engaged in a number of endeavors, such as helping to extend people's healthy life expectancy and improve their quality of life, providing support for health management in companies and organizations, and contributing to the reduction of medical expenses.



Promoting Health and Improving QOL Through the Enhancement of Healthcare Apps

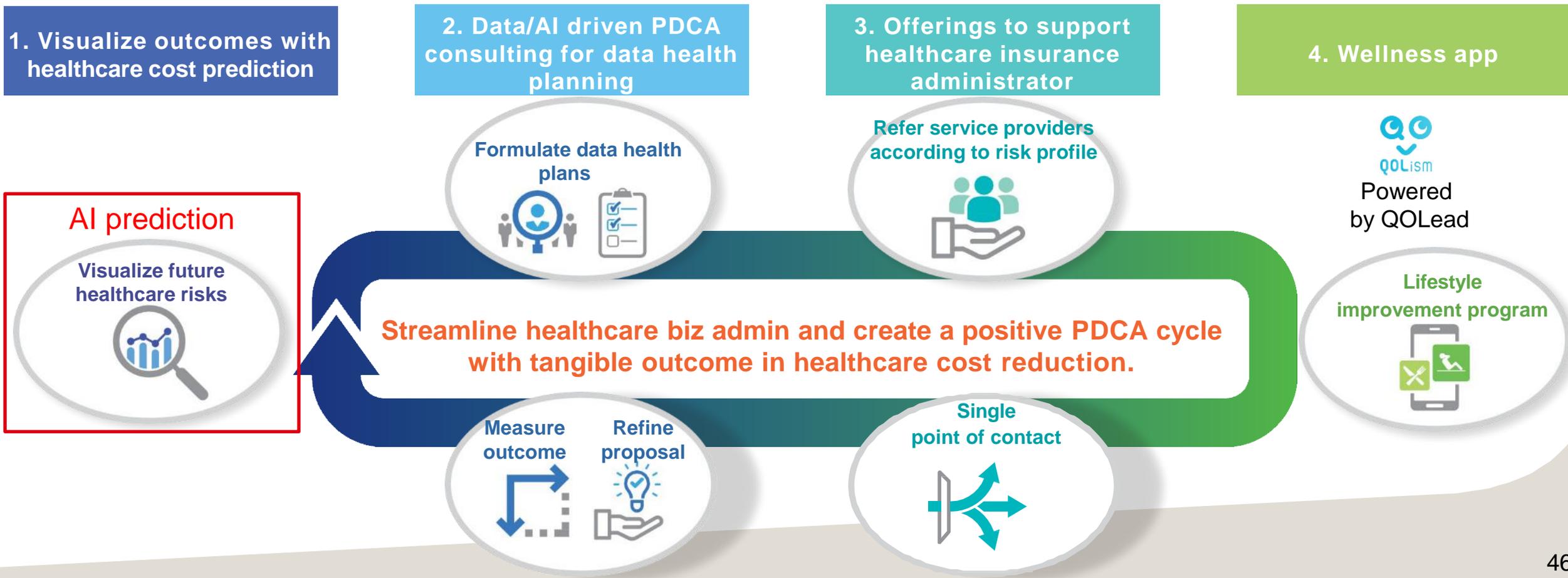
We contribute to improving the health of policyholders and potential customers through app services such as the Kenko Dai-ichi (Healthcare) app, the Dementia app, and the Sukoyakanpo (Healthcare for JPI) app.

Main achievements (healthcare app part)



(Ref) Overview of business towards healthcare administrators

- Aiming effective & efficient healthcare services in corporate welfare, the business supports healthcare insurance administrators to reduce medical costs, improve health conditions of their employees and streamline the operation.
- Collaborate with Mizuho Financial Group in providing a holistic & integrated service.



[Launched April 2020] from "Kenko Dai-ichi" App
 "Let's overcome COVID-19! Every Day Kenko Dai-ichi"

Eligible for all (standard, premium, corporate) users of the app



<p>(a) Wellness tips to support life at home</p>	<p>2) What we should know about COVID-19</p>	<p>3) Announcements from Dai-ichi Life</p>
<p>Daily updates</p>	<p>Frequent updates</p>	
<p>Daily wellness tips (recipes/activities) that can be done at home</p>	<p>Reliable sources/links of COVID-19 related information</p>	<p>Important announcements from Dai-ichi Life Group</p>

- Can be viewed from the top screen
- Roughly 10K views per day

App top screen

Press button!

Standard Premium

Check out daily!

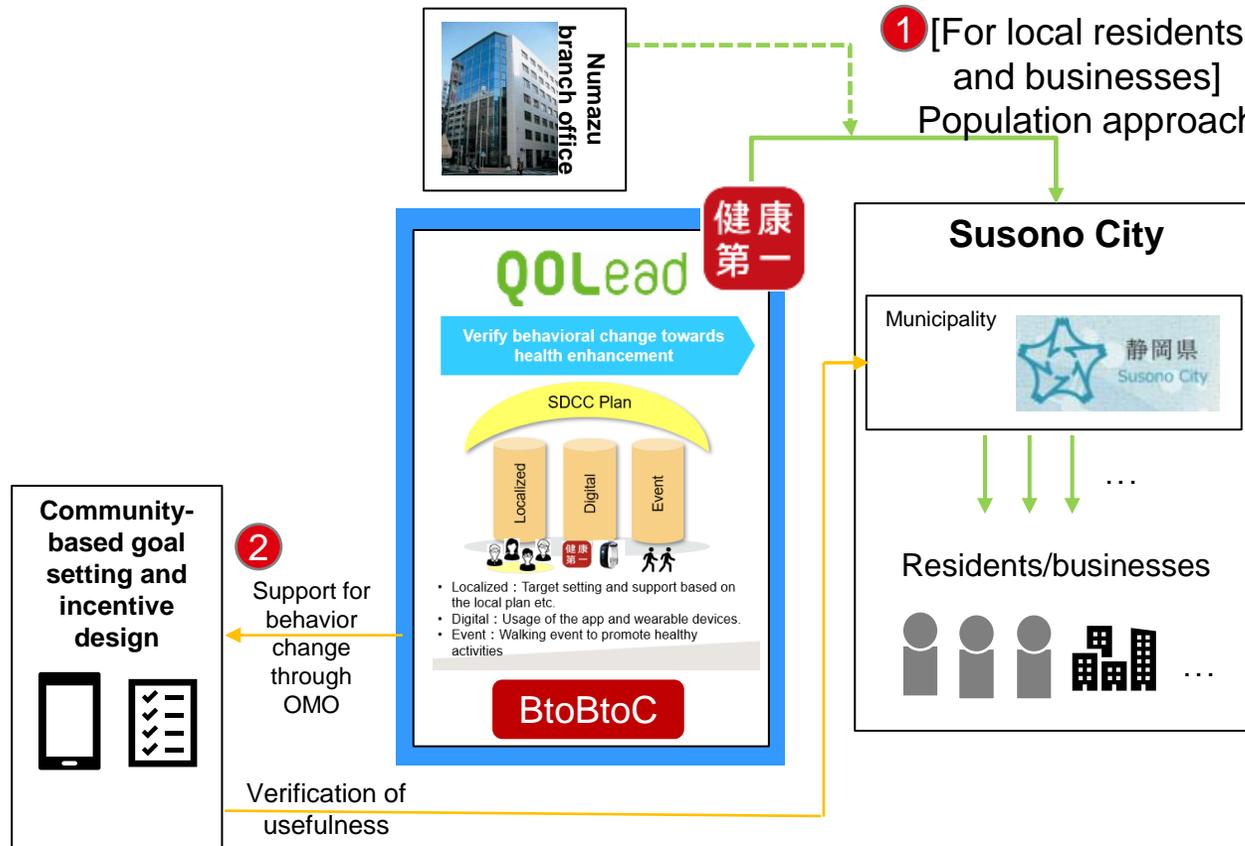
(Ref) Social demonstration of Kenko Dai-ichi App regional version

- We are participating in a social demonstration for Susono City and providing the Kenko Dai-ichi app (health management menu) to local residents and businesses.

Through utilization of the app contents, we verify the effectiveness for Susono City residents and workers and changes in health behavior.
 Role of QOLeader

Project scheme image

(operations contracted by Dai-ichi Life)



1 Provision of Kenko Dai-ichi App

- Providing a population approach utilizing the Kenko Dai-ichi app for Susono City citizens and businesses

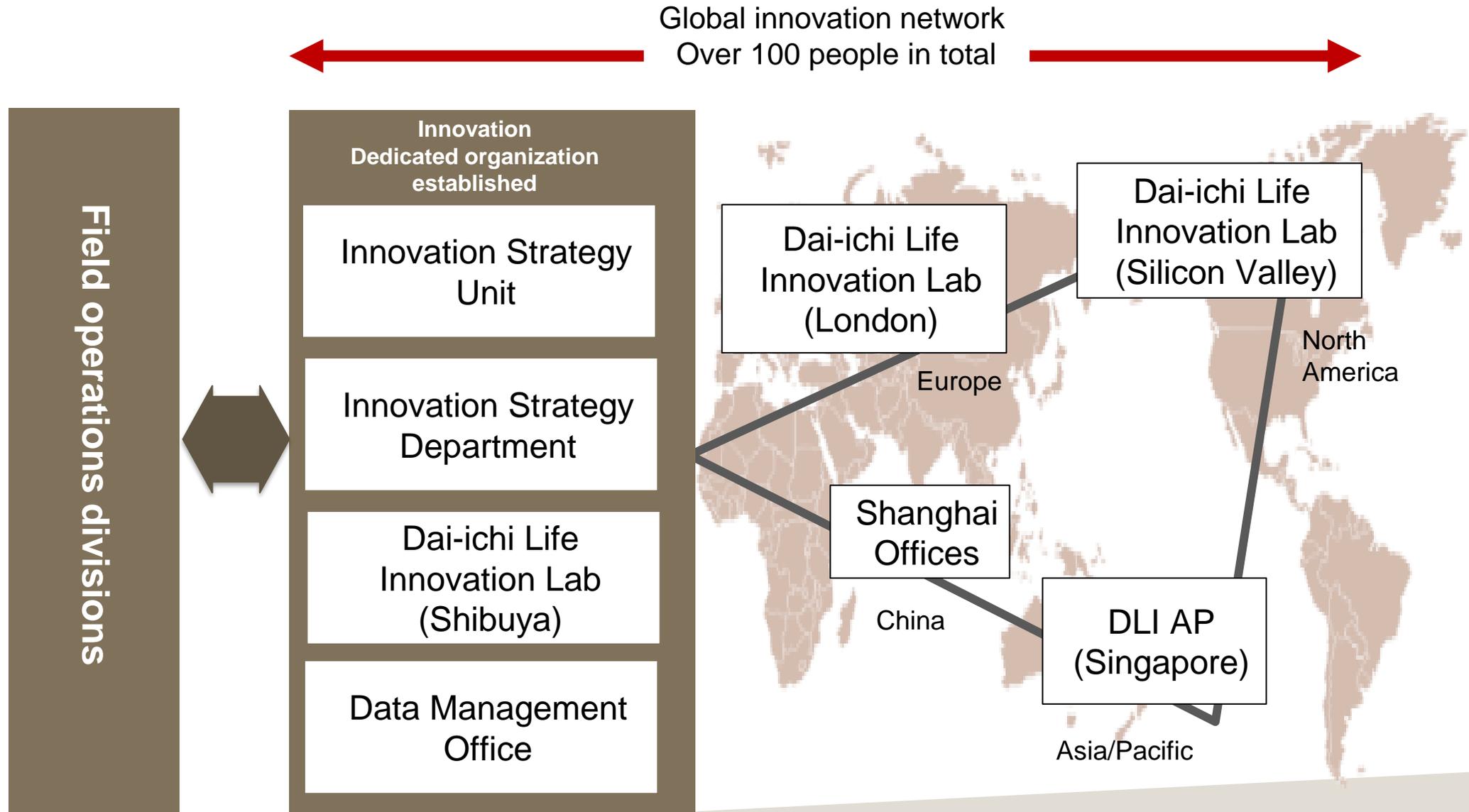
2 Support for behavior change through OMO

- Utilizing wearable devices, SNS and events to support behavior change
- Verification of usefulness in Susono City

III. Dai-ichi Life's Innovation Initiatives

2. Innovation-supporting Framework

Establishment of a System to Support Innovation



Dai-ichi Life Innovation Lab

Labs were established in Shibuya, Silicon Valley and London to accelerate innovation by speeding up the PDCA cycle, including flexible PoC.



Creating Synergy at a Global Level

Creating synergy with a taskforce that includes Group personnel in charge of innovation from both Japan and abroad



Group Innovation Fund

一生のパートナー

第一生命

 Dai-ichi Life Group

Dai-ichi Life Group's Global Innovation: Dai-ichi Life Holdings (dai-ichi-life-hd.com)

Towards Further Growth of the Group

- We will increase the strengths of the Group from the perspective of "Re-CONNECT", contribute to the well-being of all people in the future, and achieve growth through the realization of a sustainable society looking ahead 100 years from now.

Concept of new mid-term management plan

The well-being of all Realization of a sustainable society looking ahead 100 years from now

Revisit our approach to stakeholders and re-engage
Harmonize values to transform with a stronger bond among all
employees



**Dai-ichi Life
Holdings**

Take on challenges to transform in three years to secure a
foundation for sustainable growth



Promoting the health
of all people



Stability of life through the
spread of insurance, etc.



Old-age security for
a 100-year lifespan



Response to human
rights of all people



Creating safe, secure,
and comfortable
communities



Response to
climate change



Creating advanced
technology that broadens
peace of mind



Improving corporate
governance & risk
management



Contributing to society
through responsible
investment and lending



Popularizing clean
energy
Improving energy
utilization efficiency



Promoting participation of
women in the workplace



Creating job satisfaction
Regional development

Strengths of Dai-ichi Life Group

Growth of Dai-ichi Life Group



Among the United Nations Sustainable Development Goals (SDGs), the goals that are listed here are those of high importance to Dai-ichi Life Group that we have focused on as priority areas for us to undertake value creation by leveraging our strengths.



Dai-ichi Life
Holdings

Thank you for your attention.

