



Mitsui & Co.

Introduction of DX Activities

April 2023

DX for Industry

For Industry (Digital Twins / MODEC・Shape)



Digital Twins / MODEC and Shape

FPSO for Mining Development Project off the Coast of Brazil

- ◆ Used IoT to accumulate operational data
Built digital twins for topside (crude oil and gas production facilities)
- ➔ **Reduced downtime by a maximum of 65%**
- ◆ **Recognized** at the World Economic Forum (WEF) in January 2020 as a **Lighthouse** (meaning guiding light, benchmark) **factory with the world's most advanced technology** capable of leading the fourth industrial revolution
- ◆ **Shape** established in **Singapore and Rio de Janeiro, Brazil** as companies that provides **AI-based failure prediction services / CBM(Condition Based Maintenance) / DBMS(Digital Barrier Management System) / GHG Emission reduction(R&D).**
- ➔ Also collaborated with Microsoft and McKinsey & Company.
- ➔ Plans to provide its services to the electric power, mineral and **metal resources**, iron and steel, **chemicals**, and **paper manufacturing industries** in addition to **the oil and gas industries, such as FPSO.**



Image provided by MODEC, Inc.

For Industry (Bearing.ai)

Optimizing Ship Navigation

- ◆ We established BEARING.ai with **AI Fund**, which was established by Andrew Ng, a global authority on AI.
- ◆ AI Fund developed a **deep learning algorithm** using vessel navigation data and data collected from IoT devices, and built a **fuel consumption prediction model**. Higher accuracy has been confirmed.
- ◆ This reduced the cost of global maritime transport by roughly 50%, improved global fuel efficiency by 10 trillion yen/year, and reduced GHG emissions from vessels.
- ◆ Bearing.ai was selected for **AI50 2021** by Forbes as an AI company that should be watched. It was also selected by CB Insights for the **Top 100 AI 2022**.
- ◆ Kawasaki Kisen Kaisha, Ltd. has already introduced the company's technology for commercial use in the roughly 300 ships in its core navigation fleet, and Iino Kaiun Kaisha, Ltd. has also decided to introduce it. Mitsui O.S.K. Lines is participating in the PoC trial as a partner.

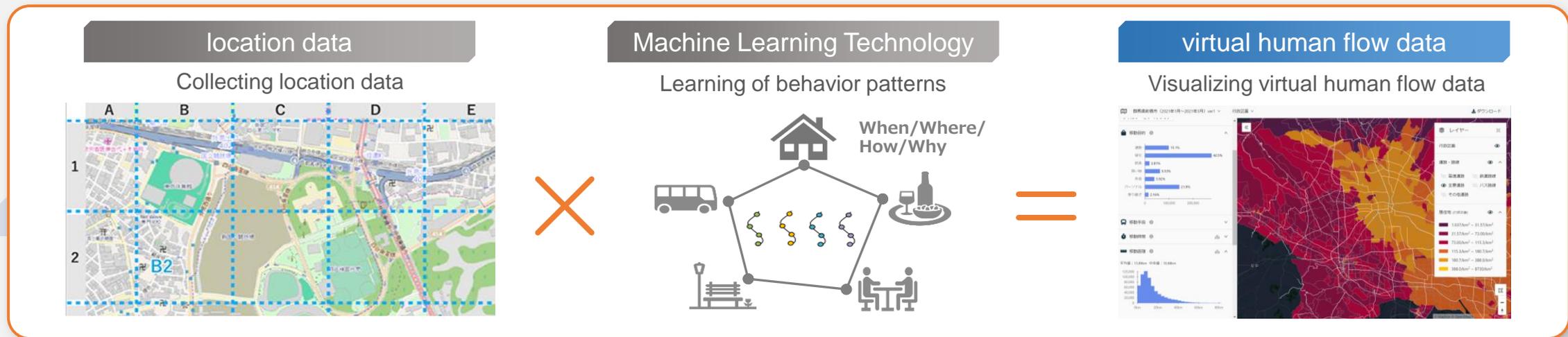


For Industry (GEOTRA)



Urban simulator technology

- ◆ In April 2022, Mitsui & Co. and KDDI released established GEOTRA Co., LTD. to provide a data platform that can perform AI-based analysis and visualize geospatial information.
- ◆ Provides data on the movement and behavior of consumers in urban areas and related services.
- ◆ Reproduces demographic movement and household distribution by visualizing people's lifestyles, and from data on individual movements, attributes, and population flow data gained from communication carriers.



For Industry

(Strategic Alliance with Quantinuum)



Quantum Computing

- ◆ Next Gen Core Digital Technology accelerating DX, its value creation potential in 2040 is said to be \$450B-\$850B.
- ◆ Mitsui and Quantinuum, the global quantum computing company integrating its trapped-ion quantum computer and its quantum software, started the strategic alliance partnership in Japan and the Asia-Pacific.
- ◆ Mitsui will create the new innovative business model with its business assets and domain knowledge utilizing quantum technology and developing the new business model in broad industries like drug discovery, new material design, operation optimization, quantum cybersecurity etc.



Yoshio Kometani, Representative Director, Executive Vice President and Chief Digital Information Officer of Mitsui & Co., Ltd. and Tony Uttley, Chief Operation Officer of Quantinuum

Quantinuum System Model H-1 powered by Honeywell

[Topics | Strategic Partnership Agreement to Develop the Quantum Computing Market in Japan and Asia-Pacific - MITSUI & CO., LTD.](#)

Details of the Strategic Partnership

1. Joint development of business use cases and business models utilizing quantum computing (pharmaceutical, materials development, energy, mobility, logistics, etc.)
2. Market development through dissemination and sharing of quantum computing knowledge
3. Introduction of Quantinuum's quantum computing solutions to the Japanese and Asia-Pacific markets

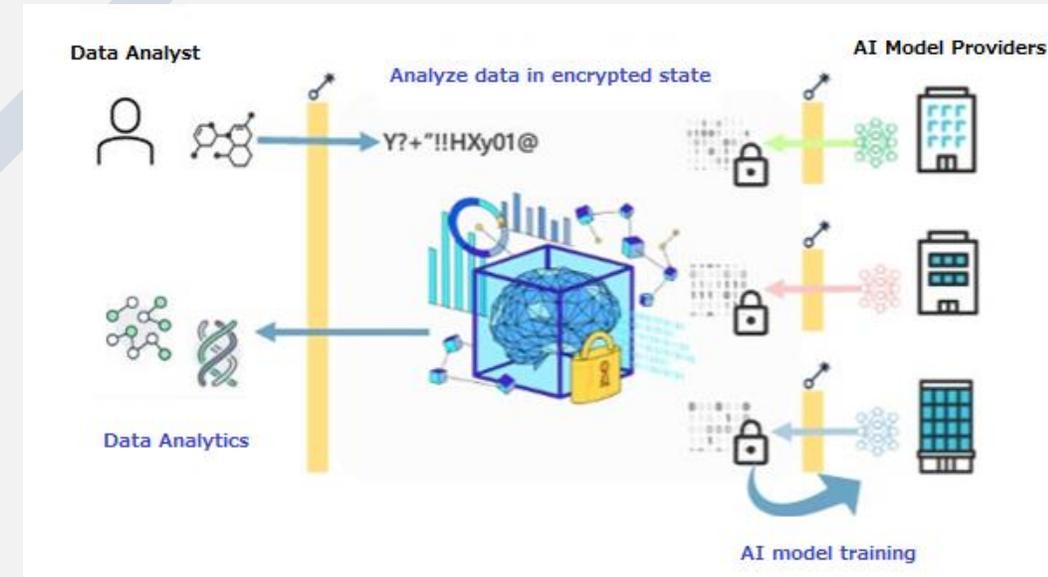
Collaboration areas and applications

1. Quantum computational chemistry (pharmaceutical, chemical, energy industry, etc.)
2. Quantum cybersecurity
3. Various optimization applications using quantum computers
4. Quantum natural language processing and artificial intelligence

For Industry (Secret/Confidential Computing)

data analytics while keeping data

- ◆ **Secret/Confidential Computing**
enables data analytics while keeping data secret.
- ◆ Mitsui & Co. and EAGLYS conducted a PoC on secret computing for Drug discovery and Materials informatics in 2021.
- ◆ Mitsui & Co. are developing applications for a wide range of industries including pharmaceutical, chemicals, finance, telecommunications, retail, etc.



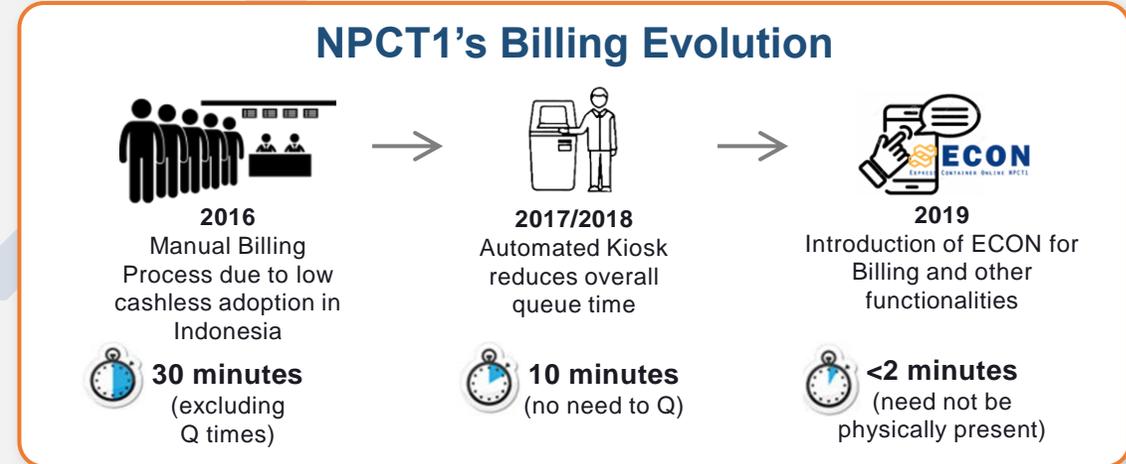
Conceptual diagram of the secure computing platform developed by Mitsui & Co. and EAGLYS

NPCT1 ~ Data Driven Initiative at Container Terminal ~



Digitalizing container terminal operation

- ◆ Encouraged shift to online operations at a payment center that collects terminal usage fees for roughly 700 people/day. The system for NPCT 1 was developed in-house (called ECON -Express Container Online NPCT 1).
- ◆ Completed installation of the Tableau data analysis platform for visualizing the container density of each plot in the building and the number of waiting vehicles
- ◆ We are currently conducting a trial with a truck platformer to promote “Dual Cycle” in which both import and export containers are loaded/unloaded for one trip by the same truck.
- ◆ We continue the digitalization efforts to further improve operational efficiency and customer convenience.



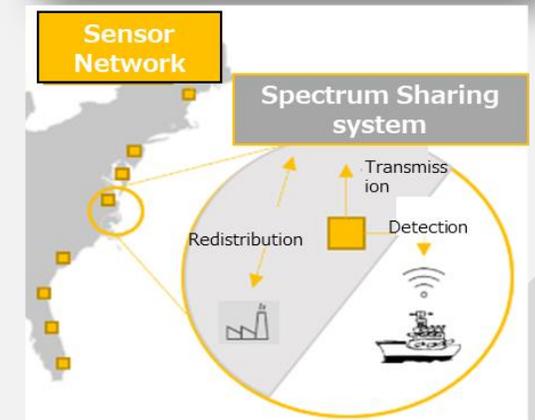
NPCT1 was awarded as “The Operator in Supporting the Service Through Digitalization Program” at the ceremony of OP Award 2022 (Jan 22, 2023).



For Industry (Sony Group Corporation / Spectrum Sharing Service)

Dynamic Spectrum Access

- ◆ Mobile data traffic will grow exponentially by a factor of 300 over the next 10 years globally, but spectrum is a finite resource, and its scarcity and depletion of spectrum is a major social issue.
- ◆ Sony Group Corporation possesses "**Dynamic Spectrum Access**" technology, which dynamically allocates and redistributes available spectrum to users. Mitsui is focusing on this technology as an important core tech for generating spectrum resources.
- ◆ Starting in 2023, Mitsui, Sony Group Corporation and the Tokyo Metropolitan Expressway will launch a joint research PJ to apply this technology for wide-area private 5G deployment on urban expressways.
- ◆ Our goal is to respond to the needs of nations and cities seeking to generate new spectrum and improve the efficiency of their spectrum use targeting in Japan and Southeast Asia.



For Industry

(Goyo Food Industry Co., Ltd.)

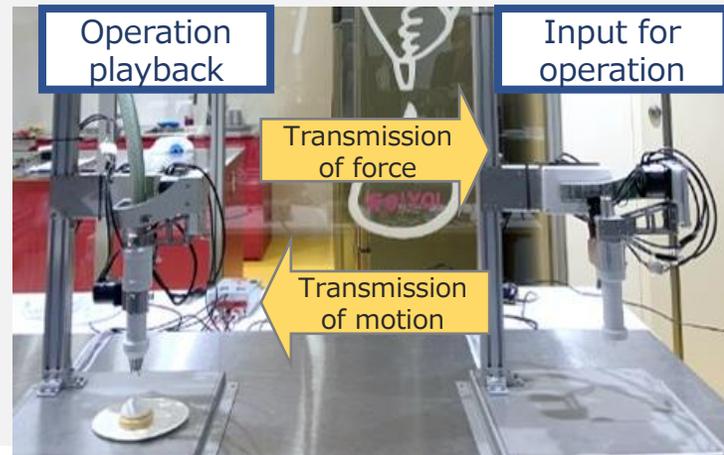
GO!YO!

Remote control and automation of food production processes

- ◆ Goyo Food Industry Co., Ltd. manufactures frozen cakes that are differentiated from other companies' products by adding manual processes performed by skilled employees to automated, mechanized production lines, and its main sales channels include restaurants and cafe chains, B-to-C routes centered on co-ops and EC, and exports to Asian countries.
- ◆ The detailed manual work that is a differentiating factor requires time to acquire skills, such as adjusting the squeezing method according to the cream viscosity, and it is difficult to reproduce with existing automated technology.
- ◆ **By using Real Haptics**, a new technology that enables the data collection and control of the "force" of the baker, we are currently **verifying the reproduction and automation of craftsmanship in the cream-squeezing process**. (Joint research and development with Nozaki Laboratory, Haptics Research Center, Keio University)



Craftsmen hand-squeeze cream



Equipment developed through PoC



Results in PoC



DX for Decarbonization and Ethical Issues

For Decarbonization & Ethical Issues (Earth hacks)



Promoting decarbonization for consumers / Platform that contributes to reduction of CO2 from Household Consumption Sector

Businesses

Understanding the importance of the agenda but have no idea where to start with.

Consumers

Willing to take action to support decarbonization but lacking information and opportunities to take action.

Earth hacks promotes “Realization of Personal Contribution (Calculation of footprint and Carbon Labeling)” and Personalization of the Issue (Relatable Communication through Social Media)

Calculation of CO2 footprint Collaborating with Swedish Impact-Tech Company

2030 Calculator (Calculation of Products' LCA)

Communication to Consumers through Instagram and Webpage

Operate SNS/website

自分にも、まわりにも、地球にも意外とアリな“新しい選択肢”

Media/EC business linked to visualization

Management of Co-creation community centered on Generation Z

Community events where you can support companies and products working on decarbonization and propose ideas.

For Decarbonization & Ethical Issues (「Green & Circular」web site)

Decarbonization x Digital Marketing

- ◆「Green & Circular」 is a solution website that introduces Mitsui & Co. decarbonization solutions, launched since June 2022. In addition to general information on decarbonization, we provide information on the development of our solutions and customer case studies, which have received a large number of access.
- ◆We are working on digital marketing to understand customers' interest and link them to our businesses by understanding customers and raising awareness, stimulating interest, and promoting understanding through search engine optimization and email marketing.

■ Green & Circular Top Page



<https://www.mitsui.com/solution/>

■ Solutions introduced on Green & Circular

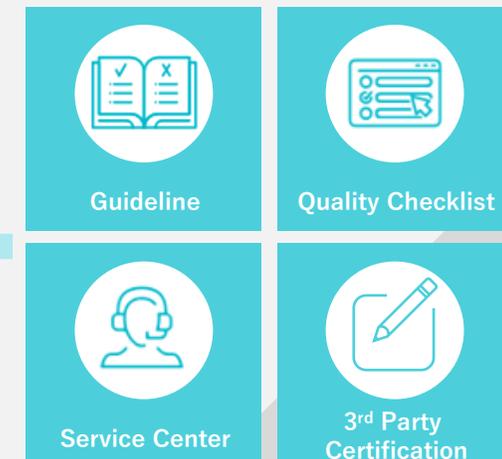
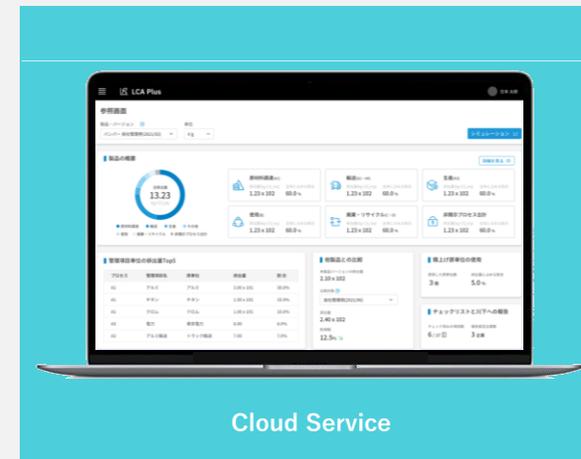
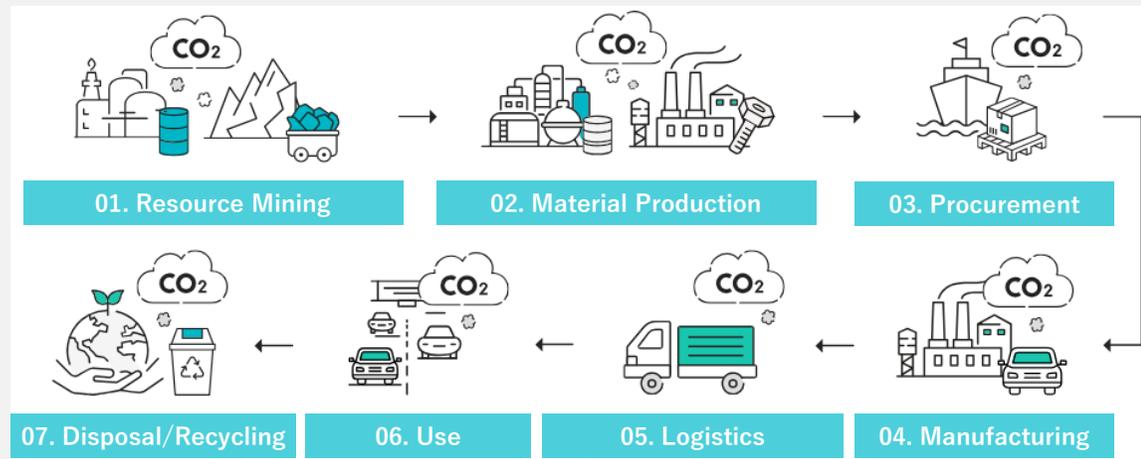


For Decarbonization & Ethical Issues (LCA Plus)



Visualizing GHG Emissions Volume for Individual Products

- ◆ A **subscription-based product LCA^(*)** calculation platform developed in **collaboration with SuMPO^(*)**, launched in August 2022.
- ◆ LCA Plus provides a **high-quality calculation method** that ensures objectivity and accuracy, based on the environmental certification backed by the **ISO 14040** and **14044** international standards for LCA.
- ◆ By analyzing the GHG emissions volume throughout the lifecycle of specific products/services, it allows for the **identification of hotspots** at the product or component level. This promotes GHG reduction actions within companies, such as environmentally conscious product development and showcasing reduction efforts.



(*1) LCA: Life Cycle Assessment

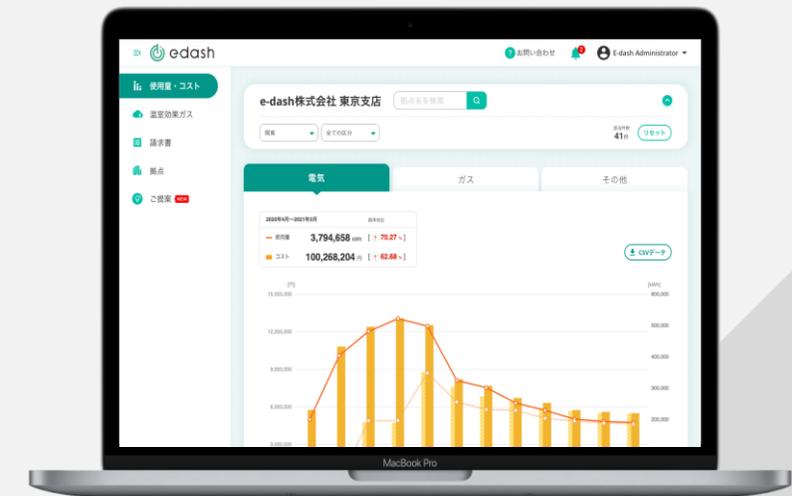
(*2) **SuMPO**: **S**ustainable **M**anagement **P**romotion **O**rganization. Japan's only carbon footprint certification organization.

For Decarbonization & Ethical Issues (e-dash)



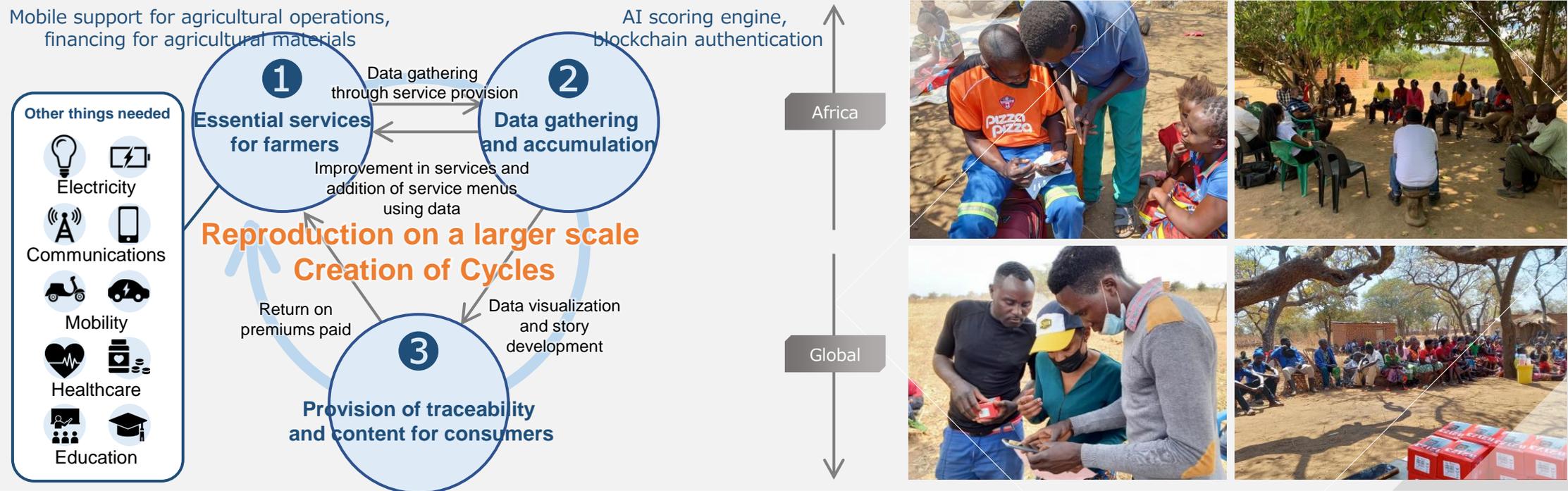
Visualizing, Reporting, and Reducing CO2 Emissions

- ◆ A cloud-based service platform that provides **total support** from **visualizing CO₂ emissions volume** to optimizing energy procurement and reducing CO₂ emissions.
- ◆ Launched a Carbon Offset website in July 2022 where carbon credits can be purchased.



For Decarbonization & Ethical Issues (farmers 360° link)

- ◆ This is a collaborative project with ETG, a global agricultural supply chain company established in 1967, in which Mitsui & Co. has an investment stake.
- ◆ We trace everything from the furthest upstream to the very downstream points of the supply chain, and visualize the environmental and social impact of products.
- ◆ We aim for fair allocation of compensation by directly linking producers and consumers and joint pursuit of SDG initiatives.



For Decarbonization & Ethical Issues (Forest DX)

Generating Forest J-Credits (Contributing to the Reduction in GHG Emissions)

- ◆ Mitsui & Co. has begun to use aerial measurement data to visualize the amount of CO₂ absorbed by company-owned forests and generate substantial credits (120,000 tons maximum).
- ◆ We aim to provide knowledge to forest owners in Japan and improve efficiency and maximize generation of credits to achieve sustainable forest management.

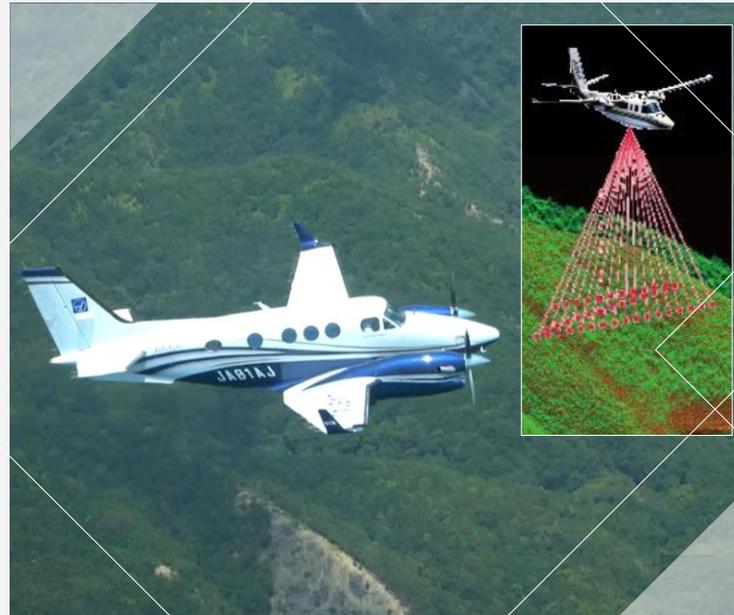


Image provided by Asia Air Survey Co., Ltd.

DX for Wellness

For Healthcare (IHH Healthcare)



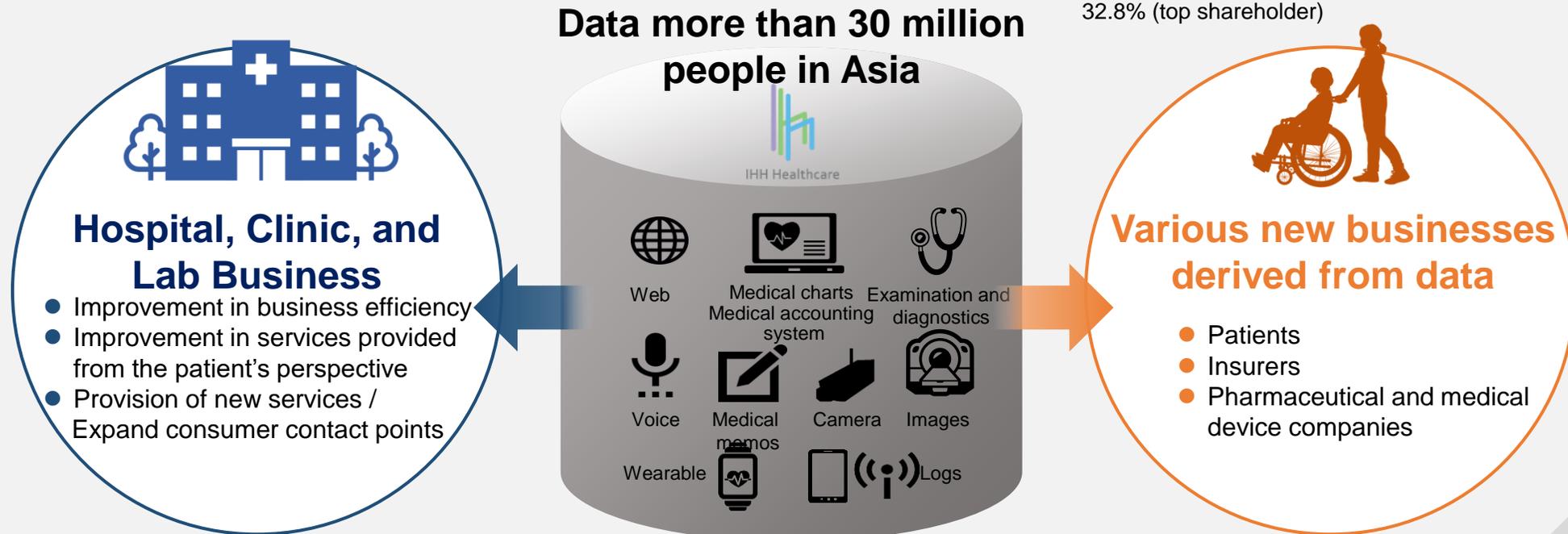
IHH Healthcare Berhad

Private hospital operator listed on the stock exchanges of Singapore and Malaysia. Over **15,000 beds** in around **80 hospitals** in **10 countries** in Asia and Europe.

Provide Integrated healthcare services, including advanced healthcare and peripheral businesses. Mitsui & Co. investment interest: 32.8% (top shareholder)

Medical Data Utilization

- ◆ Provides value-based healthcare across Asia
- ◆ Aims to create new business value through new businesses derived from data

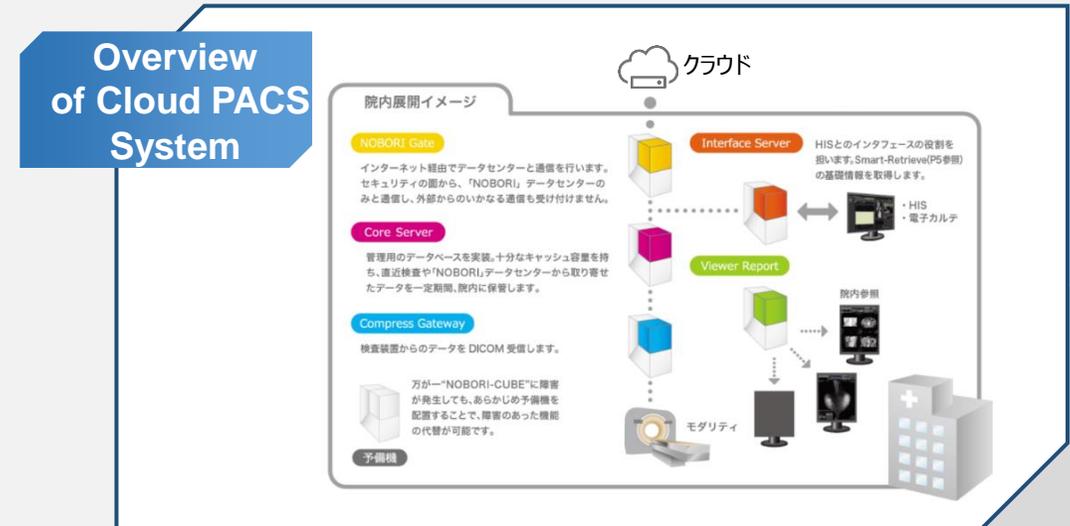
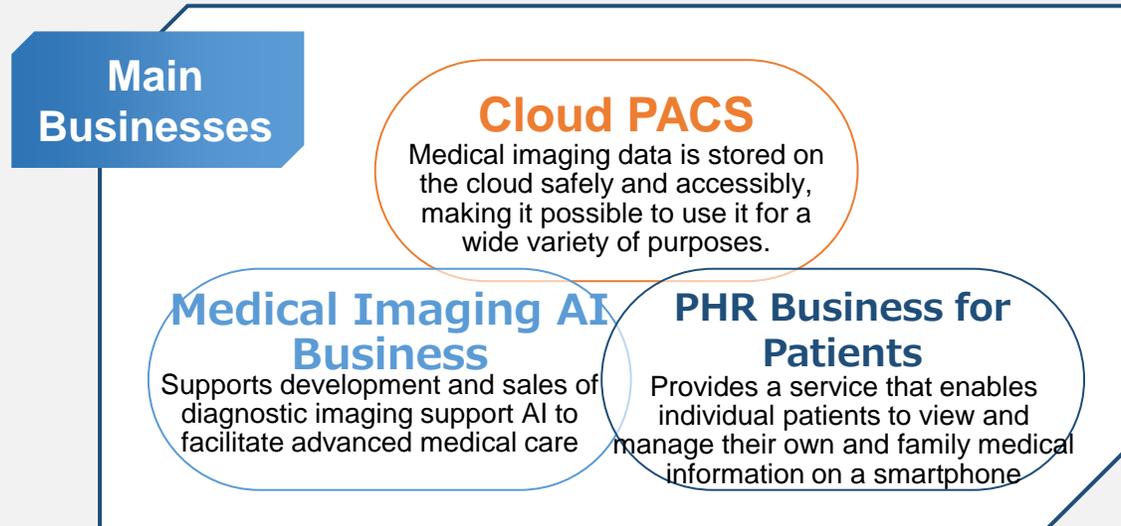


For Healthcare (PSP)



Cloud x Medical Imaging

- ◆ As of 2020, PSP has introduced cloud PACs systems (picture archiving and communication systems) to around 1,100 medical facilities, which comprise **roughly 70% of the domestic cloud PACS market**.
- ◆ Manages **38 million patients** and handled **227 million lab orders/results**.
- ◆ The PHR service enables individual patients to view and manage the patient medical information on their smartphone stored in a medical institution.
- ◆ The **medical diagnostic imaging support AI platform business** uses AI to support diagnostic frontlines.



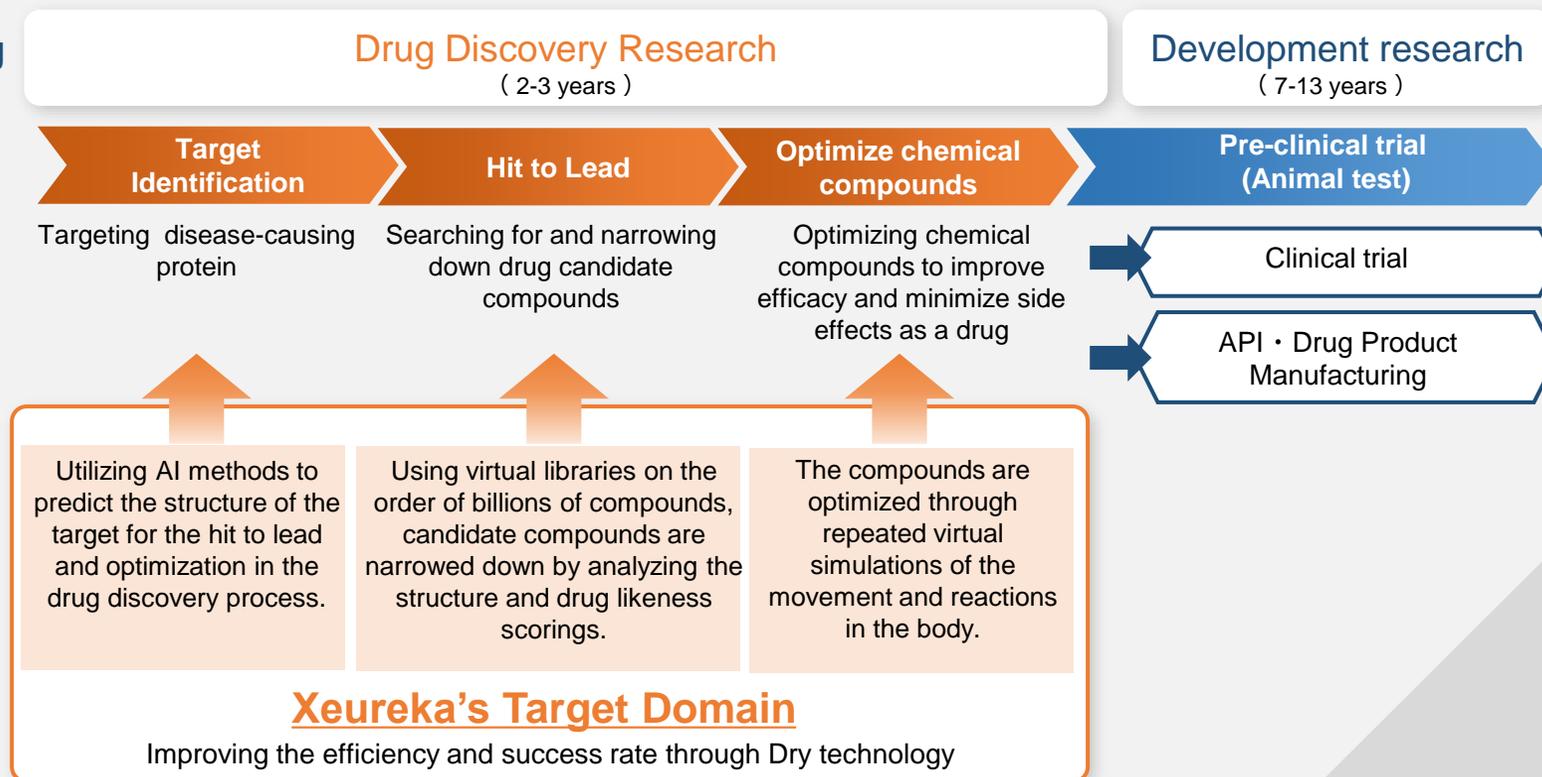
For Healthcare (Xeureka)



Official name : Xeureka, Inc.
Date established : Nov. 1, 2021
Investment Stake : Mitsui & Co., Ltd., 100%

AI Drug Discovery

- ◆ Business of AI Drug Discovery is to utilize **state-of-the-art AI methods** to support **drug discovery research** for pharmaceutical companies.
- ◆ Utilizing computer technologies for all aspects of drug discovery research leads to **substantially improve the efficiency and success rate.**
- ◆ Xeureka is expanding its business with MKI, which has been engaged in the bioinformatics business for about 50 years.



* Dry: Drug discovery using AI and other computer technologies (Wet: Drug discovery through actual experimentation in a research lab)

For Healthcare (HOKENDOHJINSHA INC.)

Well-being Digital Platform

- ◆ Established in 1946 and became a subsidiary of Mitsui & Co. in 2020.
- ◆ Provides a holistic well-being services that cover both mental and physical health by supporting health management and disease prevention through the knowledge accumulated in publishing/consulting, specialist networks, and digital technology.
- ◆ Provides scientifically grounded medical and healthcare information and personal coaching by medical specialists (specific health guidance, etc.) to health insurance association enrollees, company employees, and those registered to receive insurance, electric power, and various other services
- ◆ Provides the **Kateinoigaku** (“Home Healthcare”) app, which is the core of the WaaS platform.



■ Minna no Kateinoigaku (“Home Healthcare for Everyone”)

家族みんなで健康増進

保健室をいつも手元に

1969年の創刊以来、
家族の健康を支えてきた『家庭の医学』が
アプリとして生まれ変わりました。

サービス紹介動画

健康相談

健康相談からのお知らせ
4/29 (月) 10:00 健康相談予約受付開始のお知らせ

メールで相談
スマホからスタッフとテキストベースで
相談できます

電話相談予約
2週~2週間前 (後決)
家ですぐできます

いままですぐ電話相談
健康相談により簡単に
家ですぐできます

お申し込みの受付、お申し込みの受付

シェアする

トップページ サービスの特徴 私たちについて 利用規約

Download on the App Store GET IT ON Google Play

<https://service.kateinoigaku.jp/>

For Wellness (USA THINKIE)

Cognitive Function Training

- ◆ A cognitive function training service which utilizes a device to capture a cerebral blood flow and a brain training application. The service is to be introduced at elderly care facilities in the U.S. from 2023.
- ◆ The service will motivate users and encourage them to continue training by visualizing the amount of brain activities when using the application.

Device
*1

Training Games

Results and Target

Brain Blood Flow

Brain Age Check

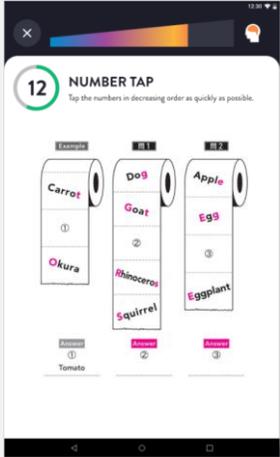
Image of Use



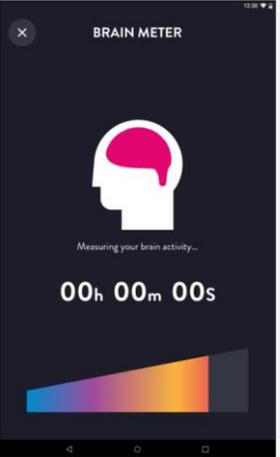
NeU
*2

ExBrain

×









➤



*1 Near-infrared light is irradiated from the forehead and to the frontal lobe, and blood flow is measured based on the degree of reflection.
 *2 A start-up company originated from Tohoku University. Mitsui invested in the company in January 2022.

For Hospitality (Sendai Aquarium Development Co., Ltd.)

仙台水族館開発株式会社
Sendai Aquarium Development Co., Ltd.

App Development

- ◆ Opened in July 2015 with the concept of "Creating new connections between the sea, people, and water," the aquarium is operated by Hakkeijima and the Sendai Umino-mori Aquarium Development, which is our leading shareholder. In order to increase the number of visitors with annual passes, we have released an app.
- ◆ The app provides functions such as a check-in feature and a step counter. When multiple check-ins are made or the target number of steps are reached, special images are provided.
- ◆ The data obtained from the app is analyzed and used for implementing various measures.



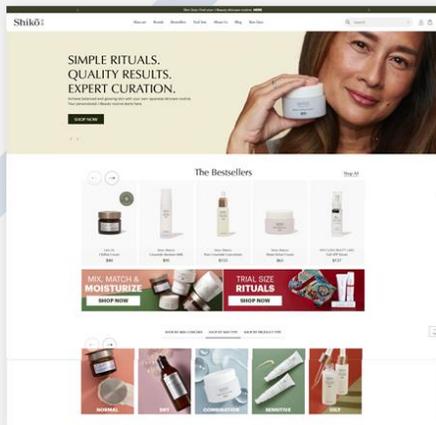
DX for Consumer Touchpoint Business

For Consumer Business (Shiko Beauty)

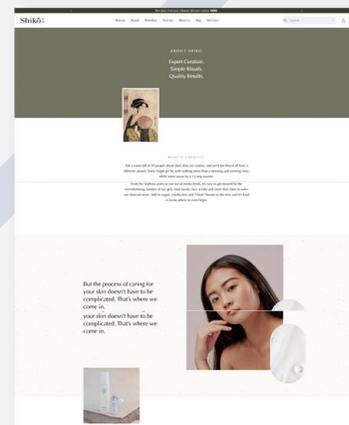
E-commerce Platform for Selling Cosmetic Products

- ◆ Shiko Beauty Inc. (wholly-owned subsidiary of (Mitsui & Co. (U.S.A.), Inc.)
- ◆ In 2021, the company launched an e-commerce platform (<https://shikobeauty.com/>) for direct sales of Japanese brand skincare and other cosmetic products to consumers.
- ◆ The company is focusing on refining its digital marketing function and establishing and accelerating a PDCA cycle for a series of actions to reach target consumers and get them purchase products.
- ◆ It is also pursuing joint development of new products with cosmetics brands based on accumulated sales data, consumer insights, and the Shiko-related network.

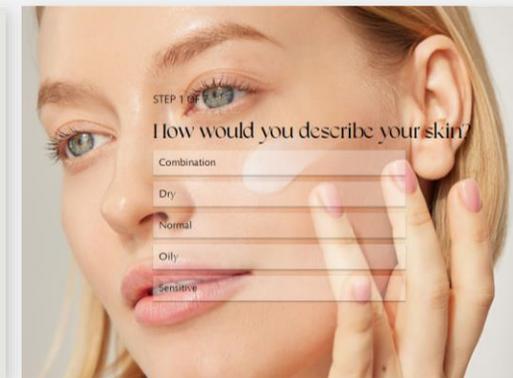
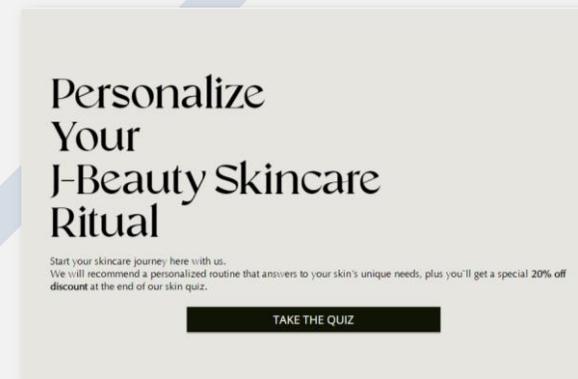
■ Home Page



■ Our Story Page



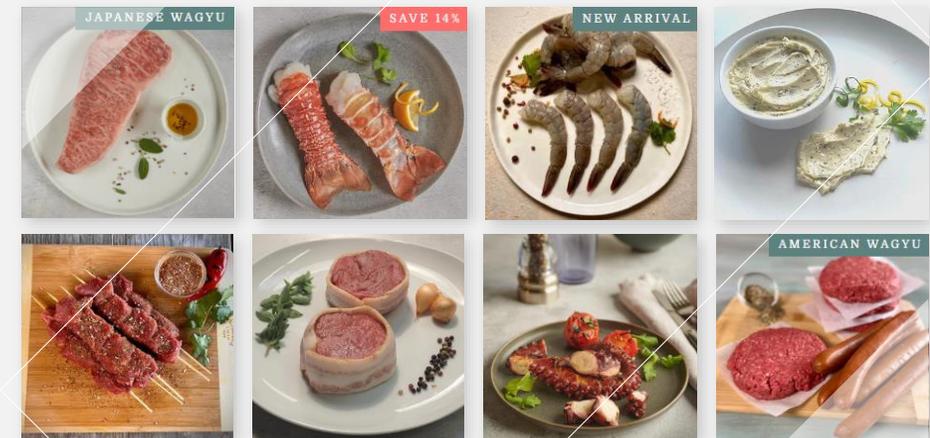
■ Skin Quiz Page



For Consumer Business (The Seasoned Carte)

E-commerce Platform for Marketing Food Items

- ◆ The Seasoned Carte, Inc. (wholly-owned subsidiary of Mitsui & Co. (U.S.A.), Inc.)
- ◆ In 2021, the company launched an e-commerce platform (www.TheSeasonedCarte.com) to sell premium A5 Wagyu (Japanese beef) produced in Japan, lobster tail from South Africa, Chilean sea bass, other premium foods, and the essential seasonings for such foods directly to consumers.
- ◆ It uses production development functions centered on insights obtained directly from consumers and chefs to develop differentiated products. The focus is to provide a memorable culinary experience through products. The company is focusing on refining its digital marketing function and establishing and accelerating a PDCA cycle for a series of actions to reach target consumers and get them purchase products.



For Consumer Business (TASTEMADE)

Improving UX/CX

- ◆ Used PLAID, Inc.'s KARTE to improve the online shopping user experience (UX) on a weekly basis. Used KARTE to display rankings, pop-ups, etc.
- ◆ Improved the purchasing conversion rate (CVR) by several times. Sales also improved along with the CVR.

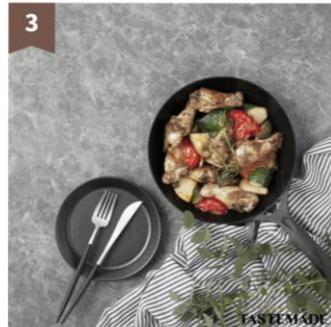
今月の人気ランキング



1
水だけで作れるパンケーキミックス
¥1,080 (税込)



2
スタッシャー サンドイッチ M ライム
¥1,650 (税込)



3
波佐見焼 ラウンドプレート ブラック M
¥1,870 (税込)

作り方&レシピ



■材料
水だけで作れるパンケーキミックス 150g
水 180ml
いちご 適量
ブルーベリー 適量
はちみつ 適量

【事前準備】
いちごはスライスしてお花の型でくり抜く。

スタッフレビュー

海外のパンケーキミックスみたいで、ふわふわ感が抜群です！とっても美味しくて、これが水だけでできるなんて信じられません！すでに我が家の定番になっています。

あっという間にふんわりモチモチのパンケーキが出来上がります！甘さもちょうどよく、自分好みにアレンジできるのも良いなと思いました。

水を入れて、混ぜて焼くだけでふんわりとしたパンケーキが簡単にできあがるので、休日のランチにぴったりです。我が家のダクタイルパンでは片面1分ずつでちょうどよく焼けます。いちじくジャムとフルーツで、コーヒーと一緒にいただきます！

こだわりポイント

水だけで作れる
時短の朝食・おやつにぴったり



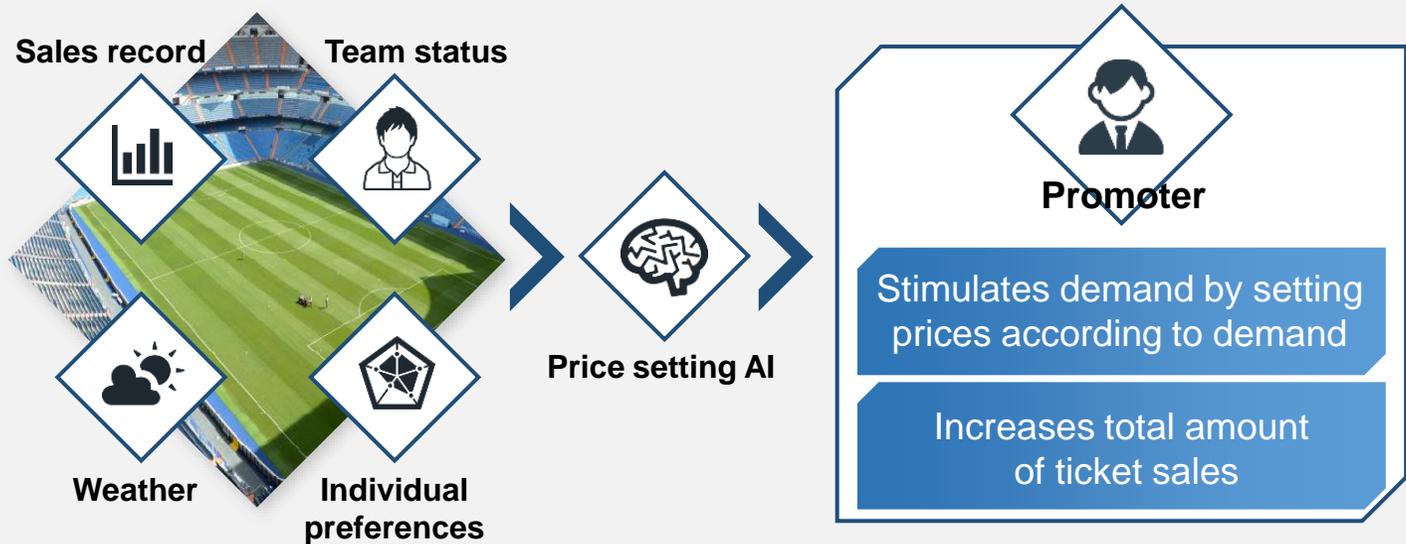
水を加えるだけで、ふんわりもっちりの本格的なパンケーキが作れます。乳化剤、安定剤、増粘剤、加工デンプンを使用せず、味だけでなく素材にもこだわりました。調理器具の準備や洗い物も最小限に

For Consumer Business (Dynamic Plus)



Dynamic Pricing

- ◆ Uses big data and AI to automatically adjust prices and increase sales based on demand forecasts.
- ◆ Established in June 2018 (with Pia Corporation, Avex Inc., and NEC participating as shareholders).
- ◆ Roll out dynamic pricing via AI algorithms and revenue management services to the sports, concert, theme park, hotel, e-commerce, retail, and other industries.



Starting with the entertainment business such as J.League, Nippon Professional Baseball, and B.League, expanding this service to various businesses

DX for Financial and Logistics Systems

For Logistics (T2)



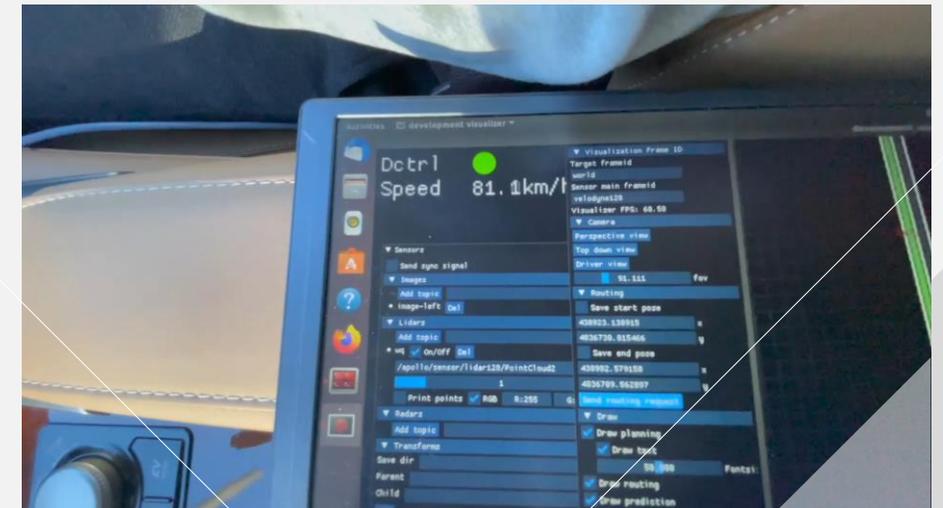
Truck as a Service

◆ Purpose: Development of new technologies and business development

- ✓ Providing trunk transport services utilizing Level 4 Autonomous Trucks
- ✓ Conducted technological development of Level 4 Autonomous Trucks, and at the same time verified the business viability of trunk transport services.
- ✓ Project certified as a Strategic DX Support Program

◆ Overview:

- ✓ Phase1 [Jul-20~Apr-21]: Development of autonomous vehicles based on passenger cars, market surveys, study of related businesses
- ✓ Phase2-1: [Jun-21~] : Development of autonomous trucks, consider of safe driving systems, system of cooperative systems with transport companies, examination of future business systems
- ✓ JV "T2" was established in August of 2022. Autonomous truck road test on highway started from November of 2022.

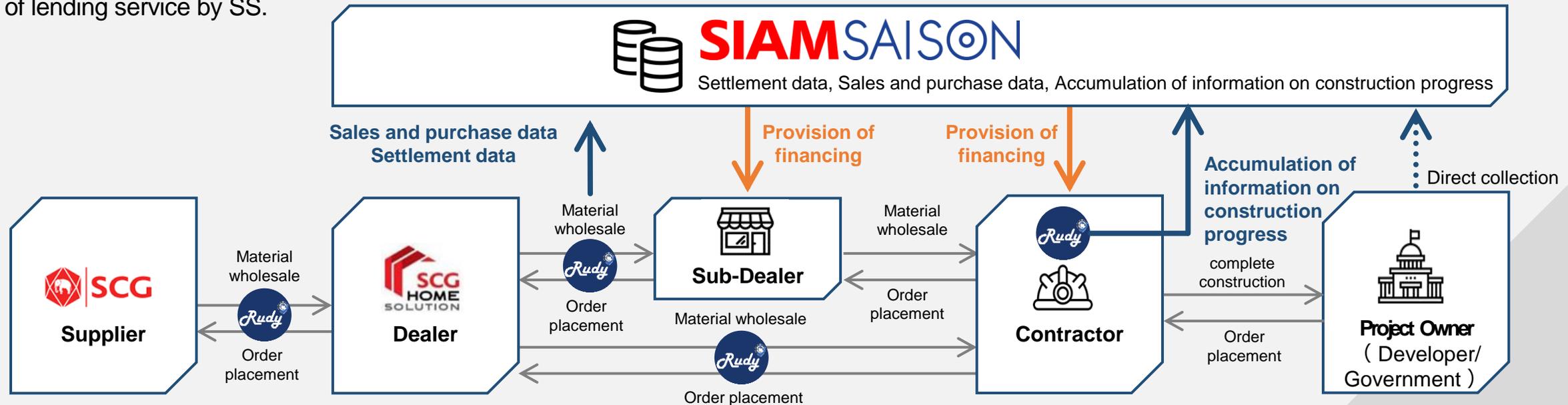


For Finance (Siam Saison)



Data Finance Business

- ◆ A DX project for construction materials logistics in Thailand. Siam Saison is a joint venture with Siam Cement Group (SCG), which claims 60% share of the Thai construction materials industry. The joint venture uses SCG business frontlines to roll out this initiative.
- ◆ It operates a data finance business that provides credit and financing in transactions between dealers and contractors/sub-dealers, based on data possessed by SCG and its sales networks.
- ◆ Rudy, the ordering platform of an SCG subsidiary, digitalize transactions. Various kinds of data are obtained via Rudy, which supports application of lending service by SS.



For Finance (GAILABO)



AI Solutions

- ◆ In October 2019, we established Global AI Innovations Laboratory (GAILABO) as a subsidiary of Mitsui & Co.,Ltd. GAILABO, a SaaS AI solution services company, is a joint venture with Sony Network Solutions (SNC).

Financial Domain

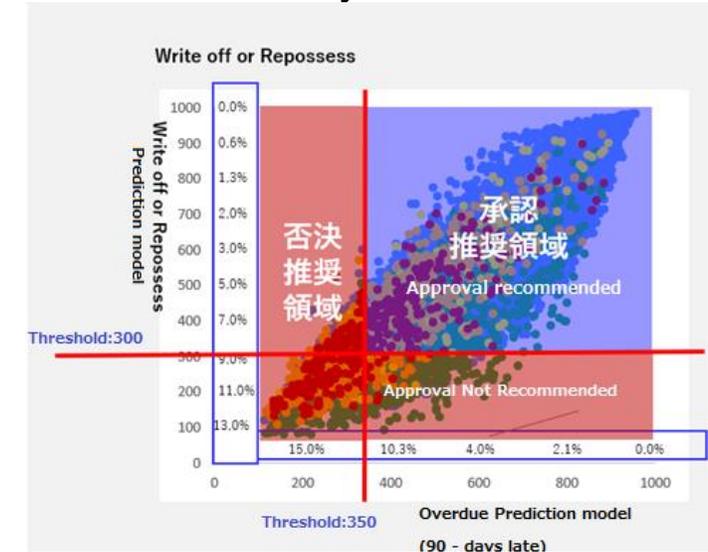
AI credit/collection scoring model

- ✓ The model contributes to substantial improvement in the profitability of the companies in the financial sector in Indonesia, Chile, and other emerging countries by increasing the approval rate, reducing the default ratio, etc.
- ✓ GAILABO focuses on this service as a core business.

Non-financial Domains

- ✓ **New vehicle demand prediction model for construction machinery:** This model contributes to a reduction of sales opportunity loss and the risk of long-term inventory in arrears by optimizing of ordering and receiving operations.
- ✓ **Optimization/Prediction model:** We intend to explore the opportunities for new models by cooperating with Mitsui & Co., Ltd.

Image of a credit score analysis



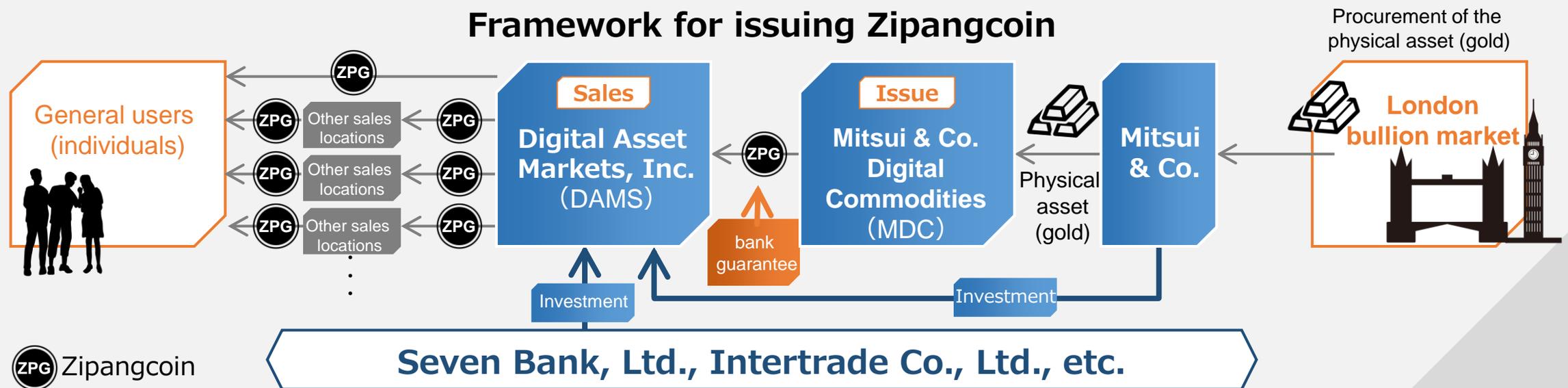
For Finance (Mitsui & Co. Digital Commodities)



Virtual Currency

- ◆ Mitsui & Co. Digital Commodities, Ltd. issues **Zipangcoin (ZPG)** a virtual currency with gold as the underlying asset. It is listed on a cryptocurrency exchange (DAMS: Digital Asset Markets, Inc.).
- ◆ Use of blockchain makes **small accounts** and **low costs** possible.
- ◆ **Safe transactions are achieved** through a private blockchain with a manager.

Framework for issuing Zipangcoin

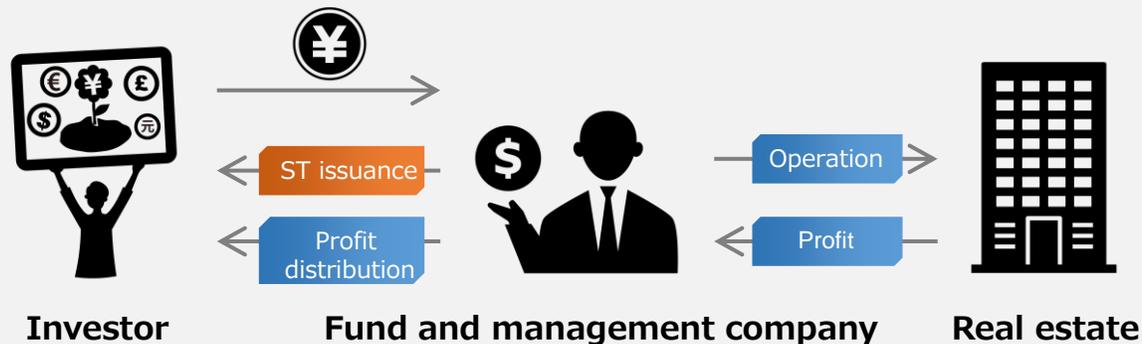


For Finance (Mitsui & Co. Digital Asset Management)



STO : Security Token Offering

- ◆ Jointly established Mitsui & Co. Digital Asset Management with LayerX, which possesses integrated digital technologies, including **blockchain**.
- ◆ Built a highly reliable investment platform secured by blockchain technology to ensure the stability of systems and safety of information.
- ◆ Mitsui & Co. Digital Asset Management **issues digital securities** using blockchain technology, procures financing within the bounds of existing financial instrument transaction regulations, and **manages real estate and infrastructure funds both in Japan and overseas**.



For Logistics (Plus Shipping)



Shopify Shipping

- ◆ This service allows e-commerce businesses, mainly small and medium-sized businesses, to easily and seamlessly integrate their shipping procedures with the Shopify platform and ship at a lower price than the shipping company's fixed rate. Instead of EC businesses that cannot negotiate with shipping companies individually due to low shipping volume, we offer shipping fees to EC businesses at a lower price than the fixed price of shipping companies by making a lump-sum contract with major shipping companies.
- ◆ Plus Shipping automatically integrates Shopify order information and prints invoices, making shipping operations smarter.

わずらわしい支払いの手間いらず!

アプリ内で 事前決済

配送伝票作成と同時に、
クレジット決済まで一気に完了。

スマートな配送料決済ができ、
請求書のやりとりも無縁に。

ご利用のクレジットカード登録も、
一度で完結。

手入力・手作業での伝票作成はもう不要!

注文から 伝票作成までを 一元管理

シンプル操作で配送伝票を作成でき、
時間を大幅に短縮。

面倒な情報の移し替えがなく、
注文情報と自動で連携し配送まで管理可能に。

配送時の荷物のサイズを選択するだけで、
適正な伝票を作成。

全国一律、配送料
最大 **51% OFF**
荷物の個数が少なくてもOK

全国一律の料金で配送することが可能です。

配送料も一般的な料金と比べ、
最大で51%OFFに。

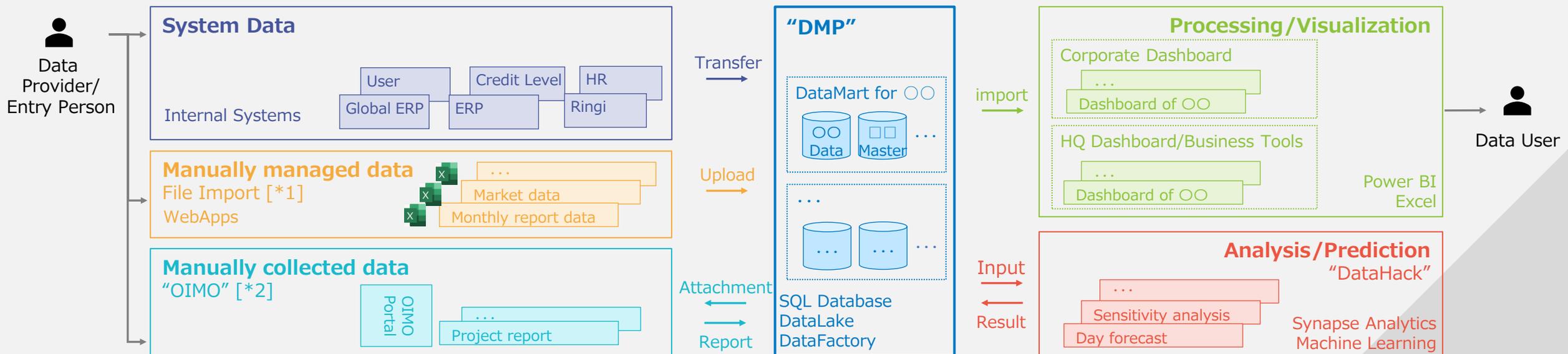
荷物の個数制限がなく、
1個からでも利用できます。

COE

For Data-Driven Management Strategy

DMP (Data Management Platform)

- ◆ Operate a single SQL Database ("DMP") as a company-wide platform to aggregate and centralize data scattered throughout the company
- ◆ Consolidation and provision of data scattered across multiple internal systems, as well as collection and visualization of data that is managed manually or collected manually by each division/corporation
- ◆ System functions required for data collection/processing/provision are developed as a common infrastructure, and expanded as needed (e.g., input forms, data analysis).



*1: File Import | A system that allows each department to upload and store data that is updated/stored in Excel/SharePoint, etc., to the DMP in Excel format.

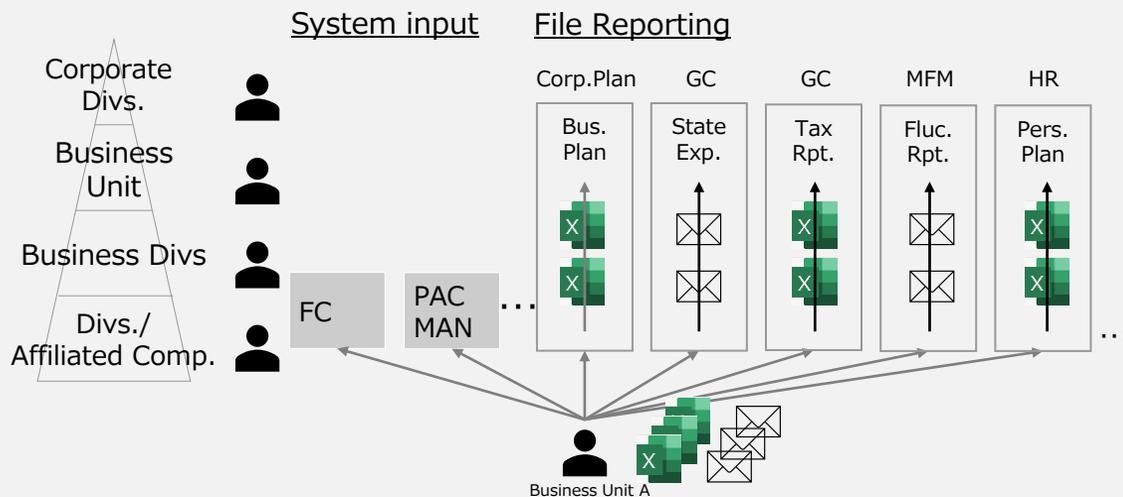
*2: OIMO | Initiatives to promote portalization/data conversion of reports that are mainly collected by corporate departments from each business unit via Excel/Word/email, etc.

For Data-Driven Management Strategy

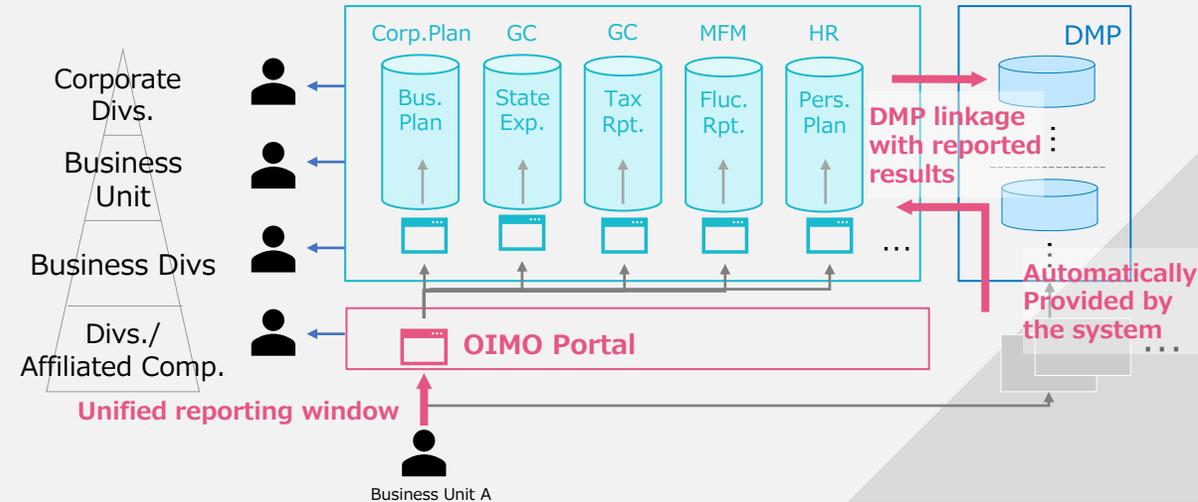
OIMO (One Input Multiple Output)

- ◆ Initiatives to improve internal reporting efficiency and promote data utilization by making reporting to corporate divisions into portals and web forms.
- ◆ Reduces the burden of searching/researching for users by unifying the reporting contact point to OIMO Portal and centralizing related information such as procedures, deadlines, etc.
- ◆ Minimize the number of input items, convert input contents into data, and promote data utilization outside of the target business by converting to Web forms and linking data with business systems.

"As Is" Internal Reporting Workflow



"To Be" Internal Reporting Workflow

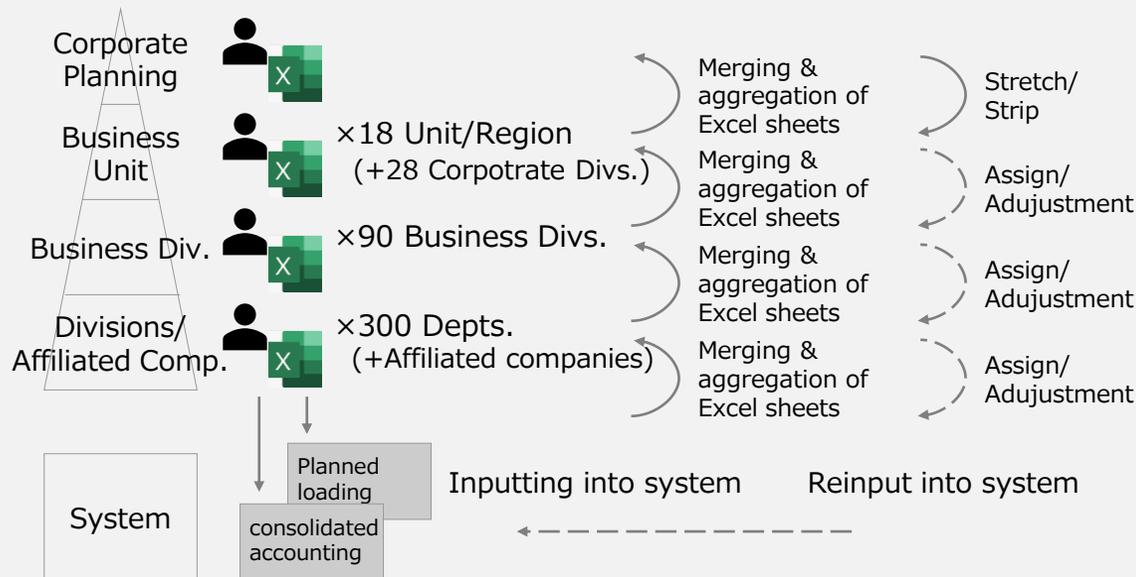


For Data-Driven Management Strategy

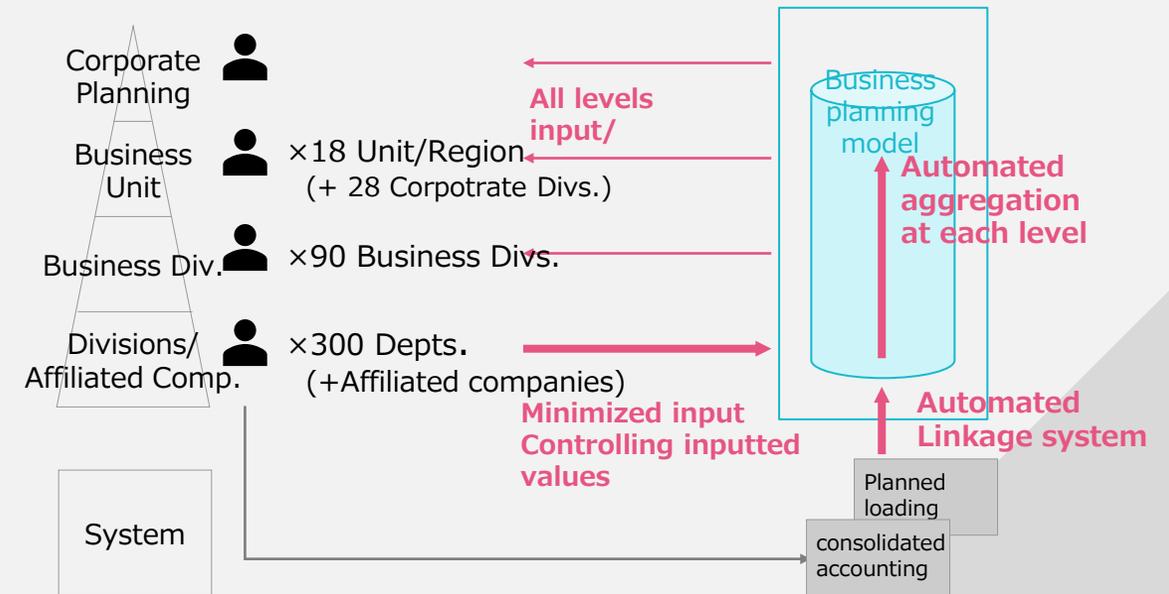
Business plan DX

- ◆ For reporting tasks such as business plans, which involve many departments/employees and require burdensome data collection/compilation work across hierarchical levels, eliminating system transfers and Excel bucket relays, and aiming for minimal input, automatic compilation across levels, and coordination work on a single DB.

As Is for Business plan formulation



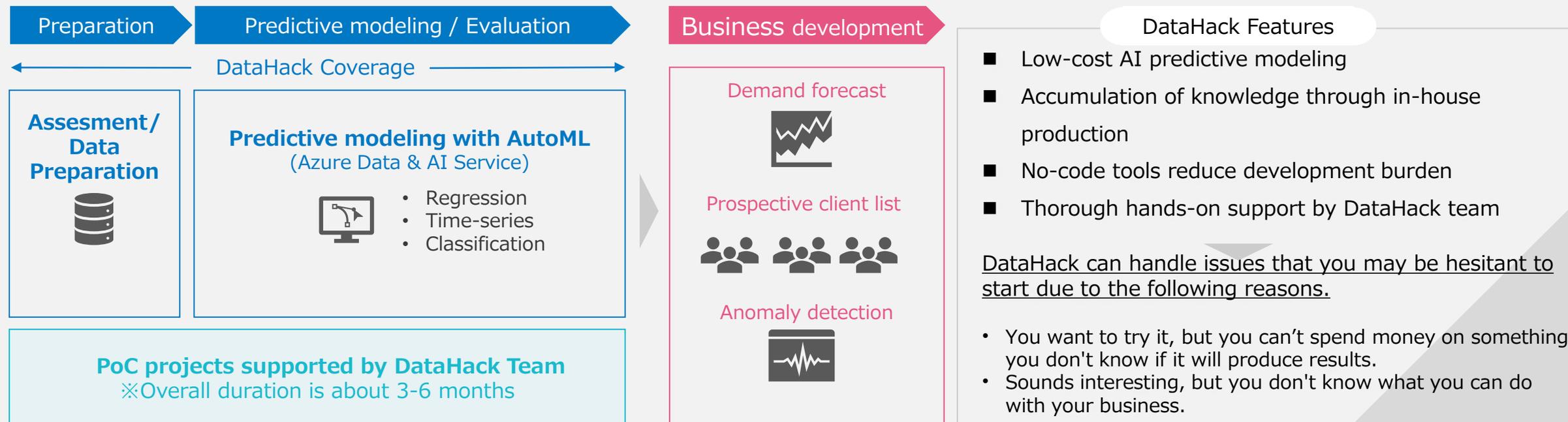
To Be for Business plan formulation



For Data-Driven Management Strategy

DataHack

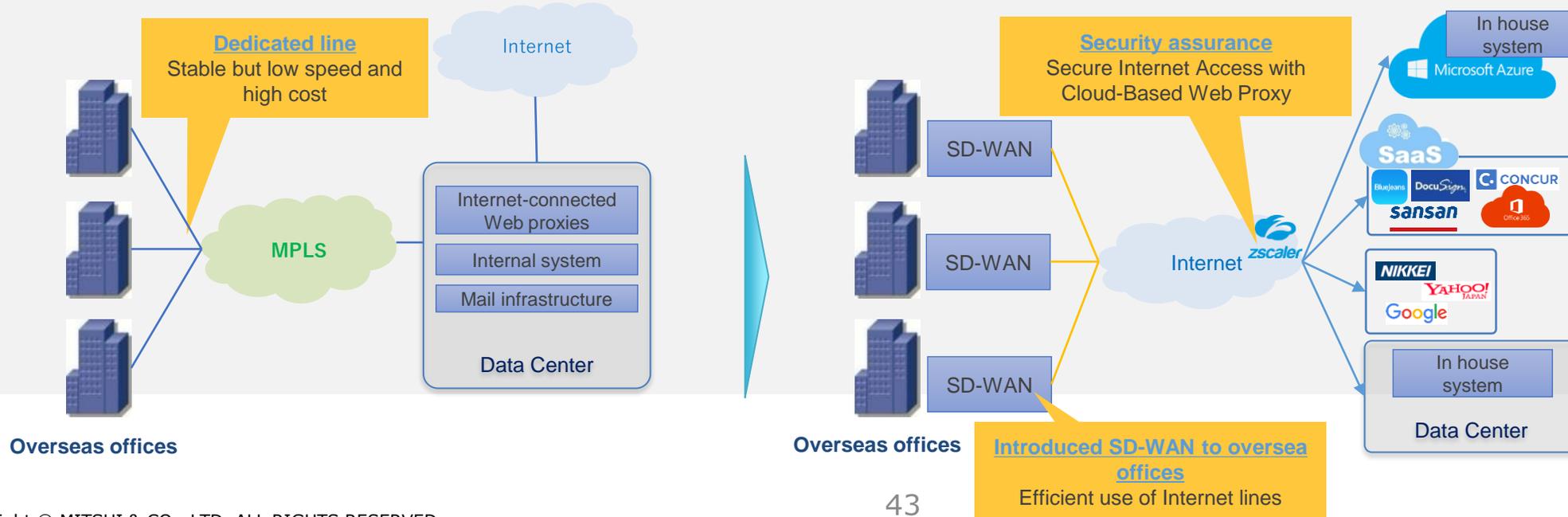
- ◆ Employees themselves create predictive models using AI service to improve operational efficiency and profitability.
- ◆ The target themes are based on field issues, and projects are implemented in a wide range of business.
- ◆ Develop human resources who can lead data analytics and predictive modeling on their own through the projects.



Network

WAN service

- ◆ Stable and High-Speed Network Connecting Bases around the World
- ◆ In the past, stable dedicated lines were laid out at each offices in global, but the lines of the data centers were bottlenecked because they were expensive, and it need to connect via datacenter for internet connection. In addition, the increasing use of online meetings and the cloud has made it an issue that the bandwidth used continues to increase.
- ◆ In response, we have implemented SD-WAN lines that can be directly connected to the Internet from various locations (for domestic locations, they are used in conjunction with dedicated lines).
- ◆ In addition, security functions (Web proxies) for accessing the Internet are installed to ensure security.

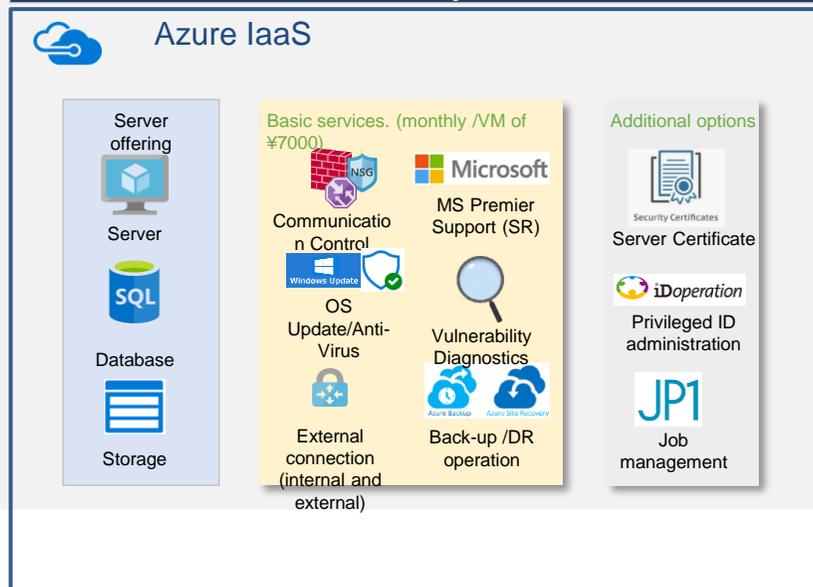


Cloud

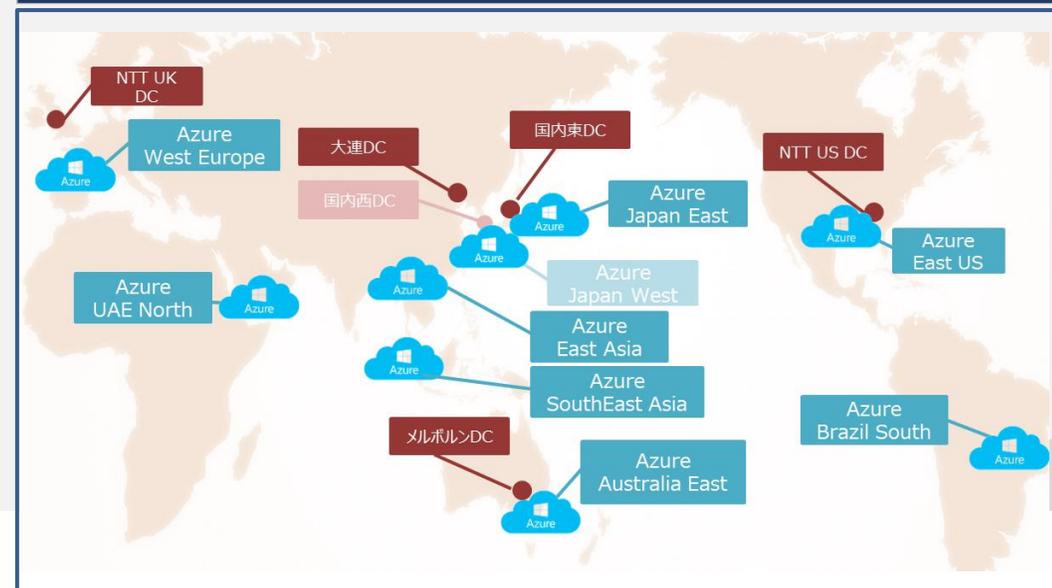
Cloud services

- ◆ Developing a Microsoft Azure environment that enables Mitsui & co.'s globally deployed bases to comfortably use cloud services.
- ◆ Provides a platform for developing business systems and services for DX projects globally.
- ◆ Unified and intensive implementation of infrastructure operation and security measures at Mitsui's head office. Contributed to improving the operational efficiency of users.

Provision of operations and functions incidental to the use of systems



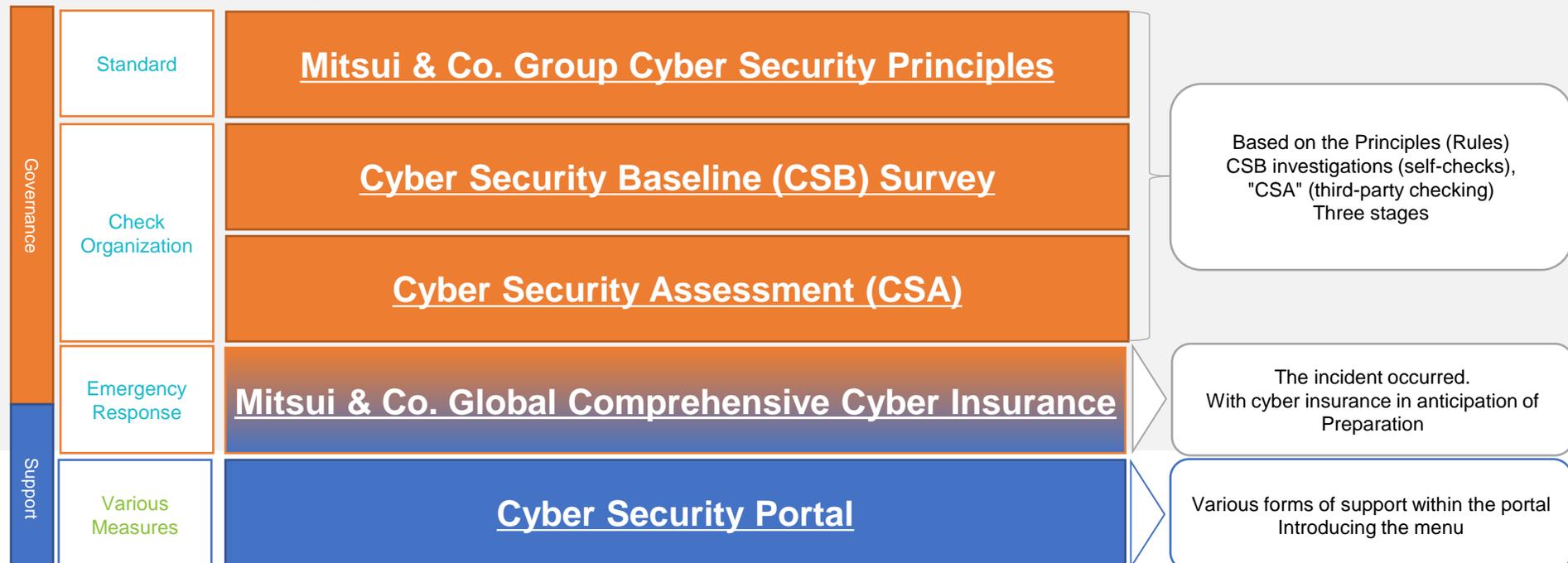
Developing Azure Environments in Nine Regions Globally



Security

Cybersecurity governance and support for affiliated companies

- ◆ Efforts to improve cyber security by making governance effective not only for Mitsui but also for the entire group, including affiliated companies
- ◆ Established Mitsui & Co. Group Cyber Security Principles to be followed by affiliated companies.
- ◆ Each company to conduct a self-check based on the Cyber Security Baseline (CSB) survey to ensure that efforts are being made in accordance with the principles.
- ◆ Information is shared through the cyber security portal of the entire group.

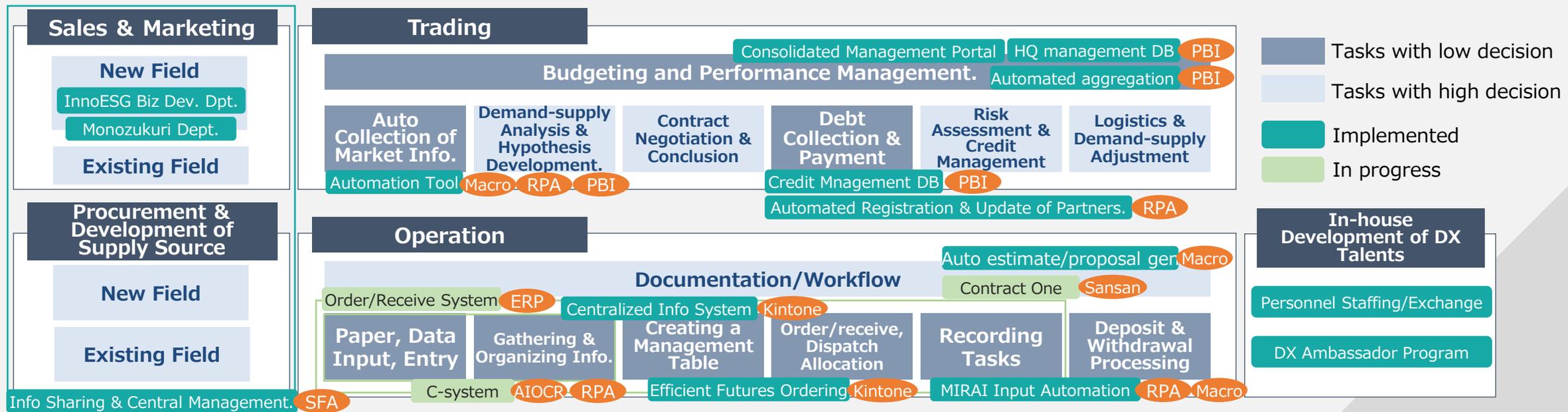


For Food Business

Improve Efficiency, Visualization, Cloud

Logistics & Execution Operation Transformation

- ◆ We aim to achieve a **labor environment that enables us to process twice the amount of transactions with the existing workforce** by streamlining administrative and simple tasks in the logistics operations of the Food Division. Our focus is on achieving **'zero information gap'** and **'business efficiency based on onsite needs'**.



- Centralized Info System: By utilizing Kintone in our import/export operations, we can consolidate scattered Excel management sheets and achieve SIMO (Single Input, Multiple Output) processing. This enables real-time information sharing with internal and external stakeholders.
- MIRAI Input Automation: Automate the process of recording goods issued into MIRAI systems around 600 times a month by utilizing RPA in domestic logistics operations.
- SFA (KITCHEN) : Dynamics365 has been introduced across the entire business unit. By consolidating and centralizing sales information, smarter sales activities are possible.

Working Style

Support for working from home

- ◆ Various infrastructures and applications enable flexible work styles
- ◆ Creating a safe and secure environment without compromising productivity when working from home
- ◆ Progress in paperless operations

Infrastructure

Remote Access

Security

Mobile

Accessibility

Safety

Mobility



approval

Meeting

Collaboration
Sharing

Application

Electronic signature

Online meeting
Online business card

Chat
Cloud storage

Created with
Designer

User Experience

Effective Customer Value Creation Mechanism (Employee Monitoring System)

- ◆ In order to achieve the "realization of experiences that capture customers' essential needs" and "improvement of usability", challenges are discovered, and improvements are made through user research, prototyping, and usability testing from the planning stage.
- ◆ To conduct such user research/testing quickly and efficiently, an "employee monitoring system" was established, in which employees cooperate in surveys, interviews, and usability testing.
- ◆ Currently, approximately 120 Mitsui employees, regardless of department, are registered, and it has been used in 7 business development/UI improvement projects in the past 2 years.
- ◆ With the accompanying internal UX designer group, more effective utilization is supported.



AI

Improving operational efficiency with MBK's ChatGPT

- ◆ Developed "MBK Private AI" that prevents retraining on input information and deployed to all domestic employees
- ◆ Created a portal site to collect tips for better utilization, with the goal of improving operational efficiency
- ◆ Develop a custom model to search internal data
- ◆ Establish usage rules and development guidelines to ensure safety

AI Portal Top Page

MBK Private AI powered by GPT-3.5

使用時の注意事項

- AIの回答は正確・倫理的とは限りませんので、結果は必ず人の目で確認して下さい。社内外でAIの回答を利用する場合は、ご自身の責任でお願致します。
- AIからの回答は最新情報ではありません。2021年9月までのインターネット上の公開情報に基づいています。
- 入力した情報は記録し、出力情報にも制限をかけています。
- 重点管理情報（CSI）は絶対に入力しないでください。自社及び他社の営業秘密の入力は、法的リスクを伴うため慎重に判断して下さい。

当サービスは、皆さんと共に「育てる」サービスです。
是非様々な用途で利用いただき、便利な使い方があればこちらから教えてください！

TOPIC

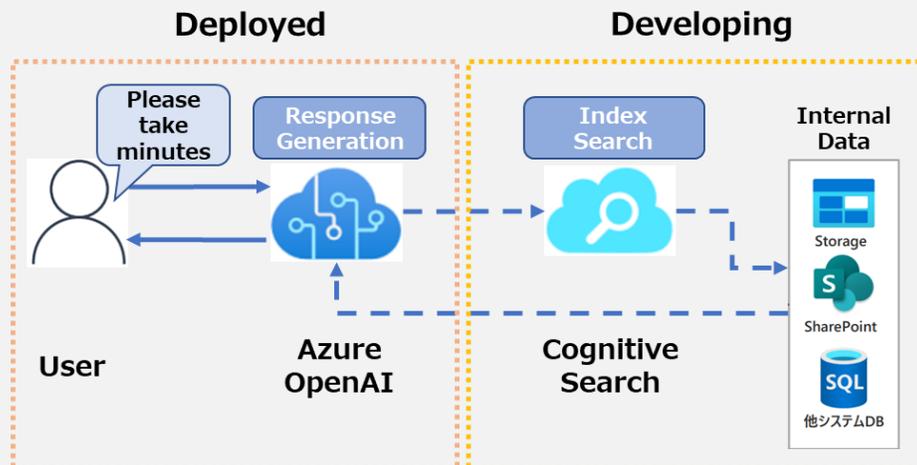
- MBK Private AIとは
- MBK Private AIを利用できる方
- 基本的な使い方
- 便利な使い方
- 気を付けたいポイント
- よくあるお問合せ
- お問合せ



MBK AI
POWERED BY GPT-3.5

利用はこちらから！

MBK Private AI System Architecture



MBK Private AI Screen

The screenshot shows the MBK Private AI user interface. On the left, there is a chat input field with a "送信" (Send) button. The chat history shows a user asking for use cases. On the right, a list of use cases is displayed:

- カスタマーサポート**
ChatGPTを利用して、カスタマーサポートを自動化することができます。顧客が問い合わせをすると、ChatGPTが自動的に応答することで、効率的に対応することができます。
- 商品説明**
商品説明をChatGPTで行うことで、人件費を削減することができます。また、自然言語処理技術を利用することで、顧客の意図を正確に理解し、適切な回答を提供することができます。
- マーケティング**
ChatGPTを利用して、マーケティング施策を展開することができます。顧客の購買履歴や嗜好を分析することで、商品の推奨やセールスプロモーションを行うことができます。
- オペレーション**
ChatGPTを利用して、オペレーションを自動化することができます。例えば、在庫管理や配送料の計算などをChatGPTに行わせることで、ヒューマンエラーを減らすことができます。
- 翻訳**
ChatGPTを利用して、複数の言語に翻訳することができます。例えば、海外顧客とのやりとりや、海外展開を行う企業にとっては、非常に有用な機能です。

360° business innovation.



MITSUI & CO.