

Fujitsu AI Strategy Briefing

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Fujitsu's AI vision and strategy



AI is becoming our trusted assistant

Sustainable World



Fujitsu Uvance

Planet



Business Issues



People



Prosperity

Converging technologies

Data & Security

5 Key technologies

Computing



AI



Network



Fujitsu Uvance
Making use of specialized AI assistants

Offerings Fujitsu Kozuchi

Fujitsu Data Intelligence PaaS

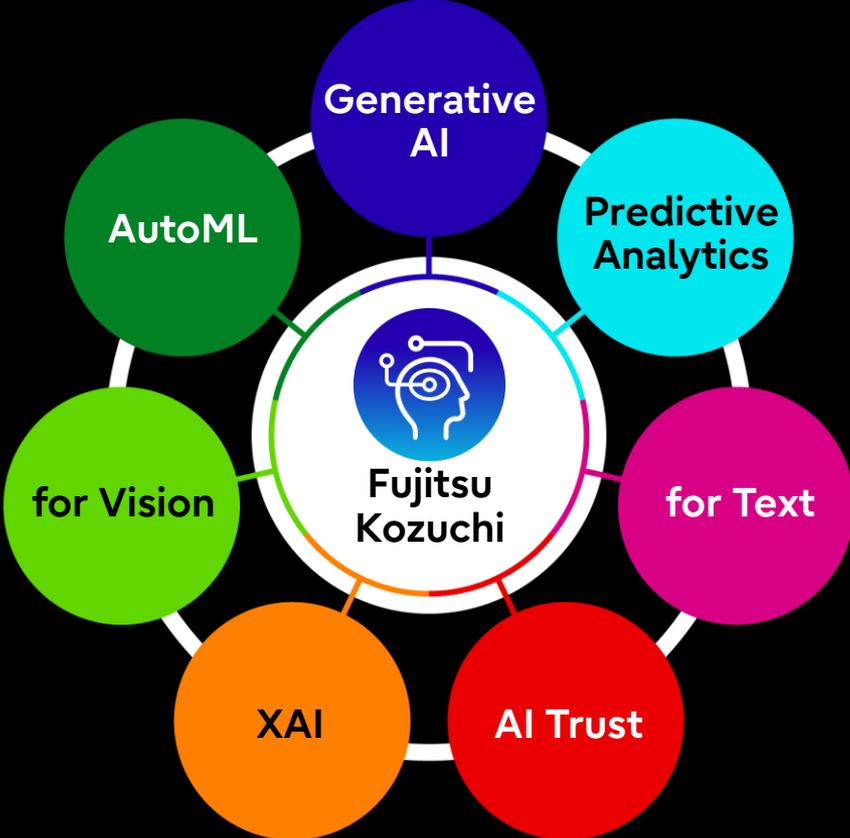
Fujitsu Kozuchi

Unique GenAI and Trust

World-class AI x Computing

7,000+ projects delivered

Fujitsu Kozuchi and 7 AI areas



Why Fujitsu's AI

Fujitsu's unique generative AI and combination of AI and computational technologies to accelerate customer AI adoption



Unique generative AI and trust technologies

Fujitsu's own specialized generative AI to support business, and generative AI trust using hallucination suppression and proprietary knowledge graph technology

- **Specialized Generative AI**, Fujitsu's unique technology that mixes a large number of generative AI models for specific industries and businesses such as document analysis and code generation
- **Generative AI Trust**, hallucination suppression and explainable generative AI with unique knowledge graph technology to solve generative AI's biggest challenges



Fusing world-class AI x computing technologies

Fusion of world-class AI, such as human sensing / causal discovery, with Fujitsu's world-leading supercomputing and quantum computing technologies

- Fujitsu's human sensing technology won world class human tracking accuracy in 2023 (CVPR 2023, WACV 2024), Fujitsu's XAI (explainable AI) earned ICLR workshop / Benchmark achievement of world's best in 2021.
- Fujitsu's causal discovery processes comprehensive search of all 20,000 genes in 1 day instead of 4,000 years.
- Combined with Fujitsu's technologies such as Fugaku, quantum computers, network, data and security, and converging technologies to deliver high performance in a variety of applications



7,000+ AI delivery cases

Grasping customers' core business challenges and deploying AI solutions in various industries worldwide for over 30 years

- Delivered across regions/countries, Japan, Americas, APAC, Europe, and across all types of industry, including manufacturing, retailer, logistics, university, government, hospital, utilities.
- Delivered across various use cases, including optimization of problems involving complex conditions such as GHG reduction/sales balance, cost and delivery time, object detection, predictive analysis, AI security, materials search, causal discovery.
- Used by 120k+ Fujitsu employees
- Support end-to-end AI adoption process from consulting, development to implementation and operation.

Support for creators using proprietary AI technology

Case Study with
REMOV



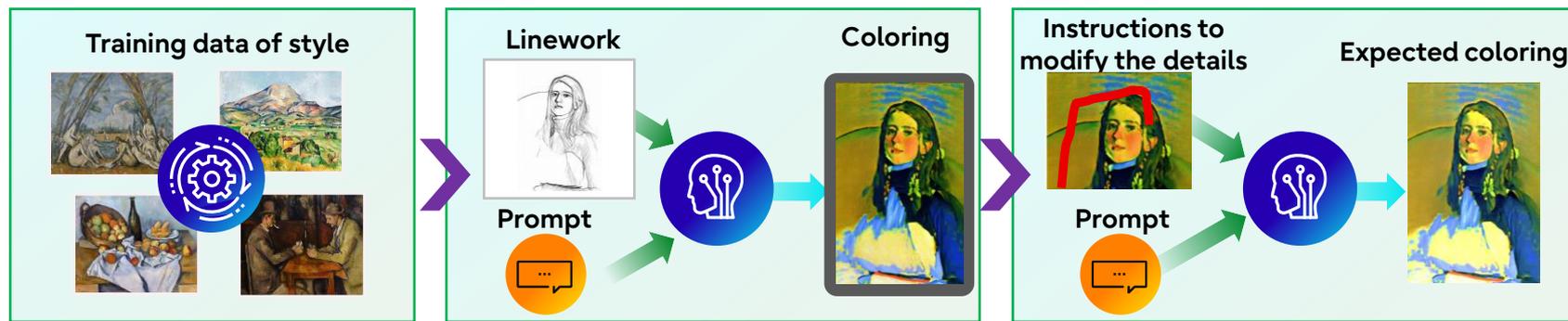
Challenge

Achieving desired output with conventional image-generative AI, including all the nuances

Solution

Unique generative AI technology ensures coloring matches creator intent.

- Training styles from the creator's work, AI suggests coloring that matches the style.
- For more detailed instructions, the generative AI can revise image through simple interactions.



1 Train creator's style

2 Propose coloring that matches the creator's style and worldview

3 Reflect the creator's detailed intent in the interaction

"Generative AI Mixture Technology"

to switch between multiple models

Use cases

Software development

Marketing campaign

Inquiry response

R&D brainstorming

Doc analysis / creation

Specialized GenAI



Marketing



Software engineering



Contract analysis

GenAI Mixture Tech to switch models



Japanese LLM



Picture gen



Trust



Doc analysis



Code gen



NW monitoring



Personalized



Sound gen



Planning



Function call

Combination of Fujitsu's own generative AI models, OSS and other companies' generative AI models

Knowledge Graph

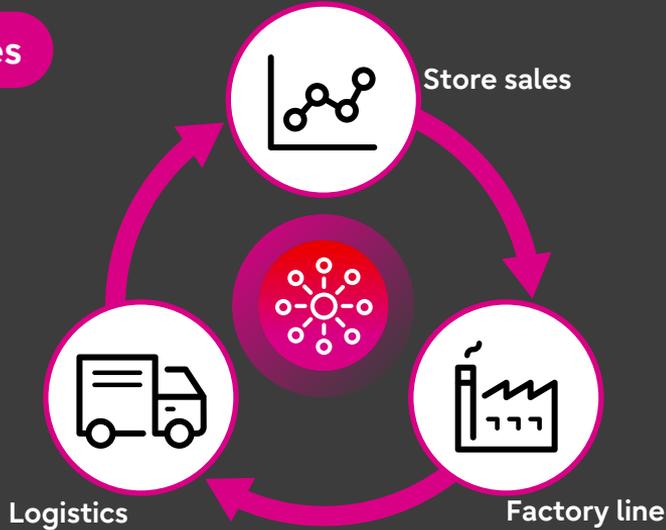


GenAI Trust Mitigate concerns related to generative AI

Available from April 2024 at Fujitsu Research Portal

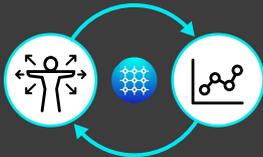
Large Heterogeneous Graph AI

1B nodes



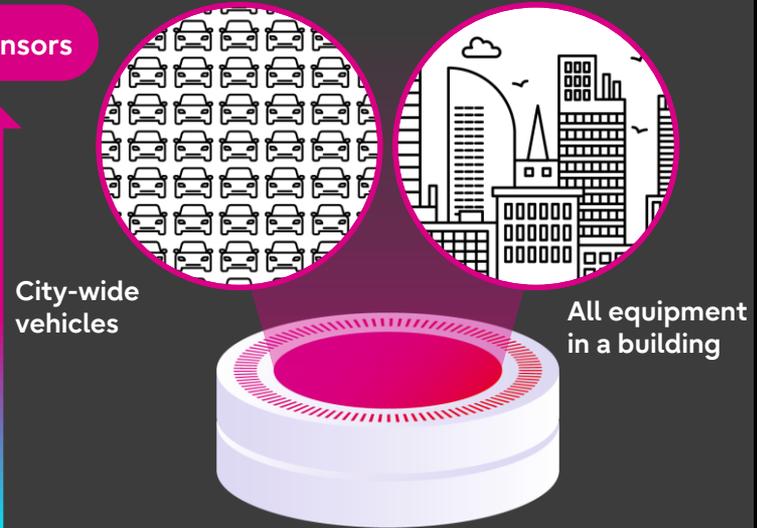
10k+ nodes

Customer behavior in store



Streaming Graph AI

10k+ sensors



Hundreds of sensors

Specific vehicle



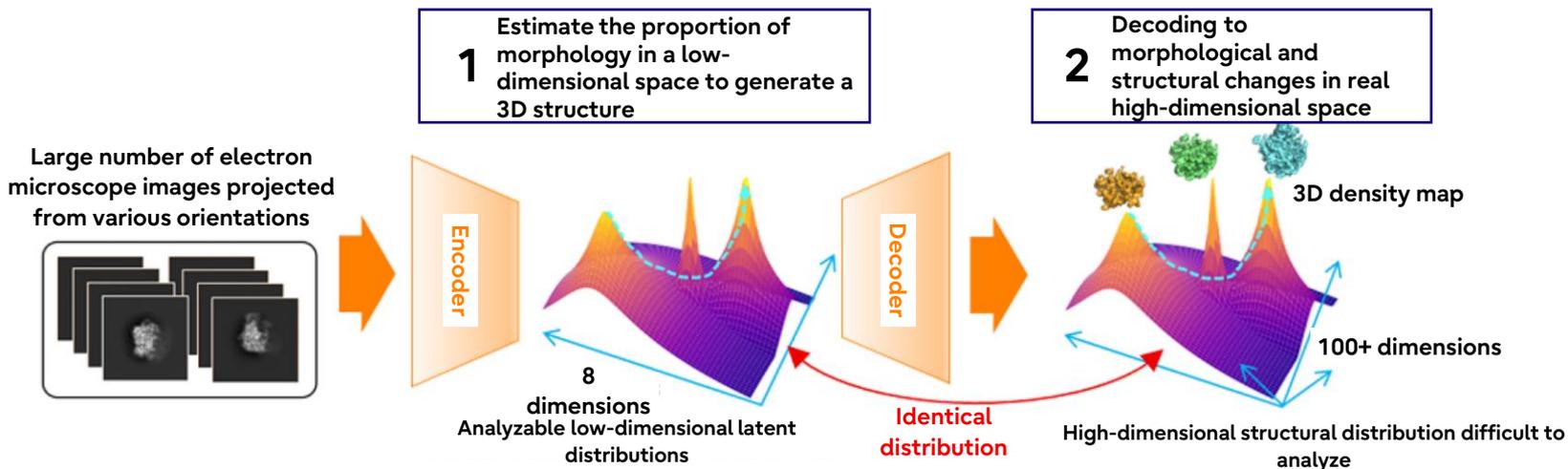
Drug discovery based on proprietary generative AI

Available since October 2023 at Fujitsu Kozuchi



Challenge Structural and dynamic changes of target proteins with 10k+ dimensions of information are difficult to grasp.

Solution Quantitatively predict 3D structure and sequence change by capturing protein shape in lower dimensions.



Innovating the design process of a drug that bind to target proteins

Knowledge and experience

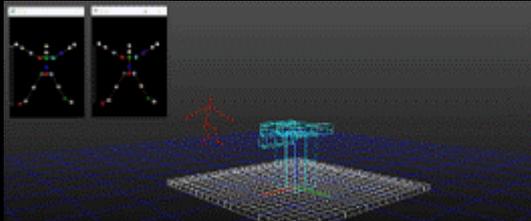


World's first and only AI judging support for competitions

Human Motion Analytics to digitize diverse human movements with high precision

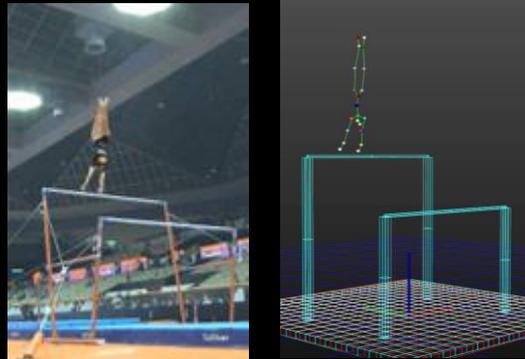
Motion-constraint corrector

Unique correction algorithm that significantly minimizes the jitter (estimation error) of posture recognition by deep learning, which has been a problem in image analysis.



Zero-Annotation 3D Data Generator

Photorealistic technology artificially generates a large amount of training data useful for improving accuracy without annotation.



4-Dimension Capture

Capture human movement in 4 dimensions (3 dimensions + time series) and recognize motion as a series of movements.



Over **200** patent applications



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Fujitsu Data Intelligence PaaS

 Fujitsu Kozuchi

Unique
GenAI
and Trust

World-class
AI x
Computing

7,000+
projects
delivered



Vertical Areas

Four cross-industry areas to solve societal issues



Sustainable Manufacturing



Consumer Experience



Healthy Living



Trusted Society

Horizontal Areas

Three technology foundations to support cross-industry growth



Digital Shifts



Business Applications



Hybrid IT

Key Technologies



Computing



Network



AI



Data & Security



Converging Technologies

Fujitsu Kozuchi for Uvance

- 1** | Makes Uvance offerings more convenient, stronger, and easier to use
- 2** | Provides a platform and consulting services that allow engineers to create services on their own
- 3** | Enables customers to use AI safely and securely



Accelerating delivery of AI for Uvance offerings

AI features will be released sequentially in four cross-industry areas, focusing on 22 offerings

Sustainable Manufacturing

- Industrial and manufacturing DX
- Smart factory
- Optimization of manufacturing SCM
- GHG reduction platform

Trusted Society

- Field staff operational efficiency DX
- Airport and maritime operational efficiency DX
- Optimization of transportation and transport
- Environment and disaster simulation

Consumer Experience

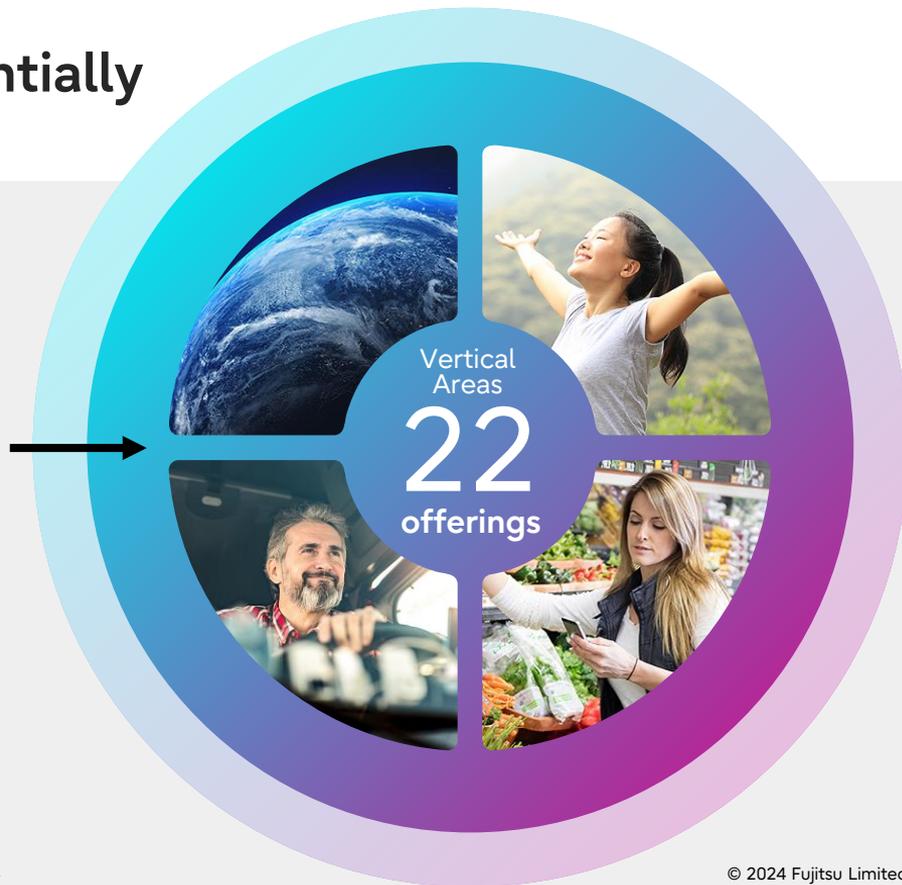
- Retail store DX
- Omnichannel services
- Personalized customer services
- Supply Chain Optimization

Healthy Living

- Platform for utilization of medical and health data
- Early creation of innovative drugs



**Fujitsu
Kozuchi**



2

Provides a platform and consulting services that allows engineers to create services on their own
Launching new platform to empower customers with advanced AI and data integration capabilities

Providing a platform and consulting services from the end of this March

Fujitsu Data Intelligence PaaS

Data

Premium Palantir

Basic Azure/AWS



AI
Fujitsu Kozuchi

Generative AI

for Vision

for Text

Predictive Analytics

AutoML

AI Trust

XAI

Blockchain

Track and Trust

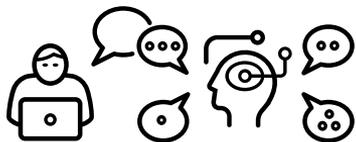
Technology consulting services

Realizing safe and secure AI

Dealing with disinformation



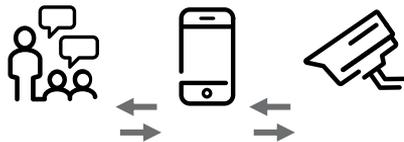
**Detect
Generative AI 'lies'**



Hallucination suppression



**Detect
Fake news**



Disinformation suppression

Dealing with cybercrime



**Detect
Fraudulent URL**



**Phishing URL
detection technology**

1

Makes Uvance offerings more convenient, stronger, and easier to use

Accelerating delivery of AI for Uvance offerings

AI features will be released sequentially

in four cross-industry areas, focusing on 22 offerings

Sustainable Manufacturing

ESG Solution
x Generative AI

Trusted Society

SCM solution
x Generative AI / AutoML

Consumer Experience

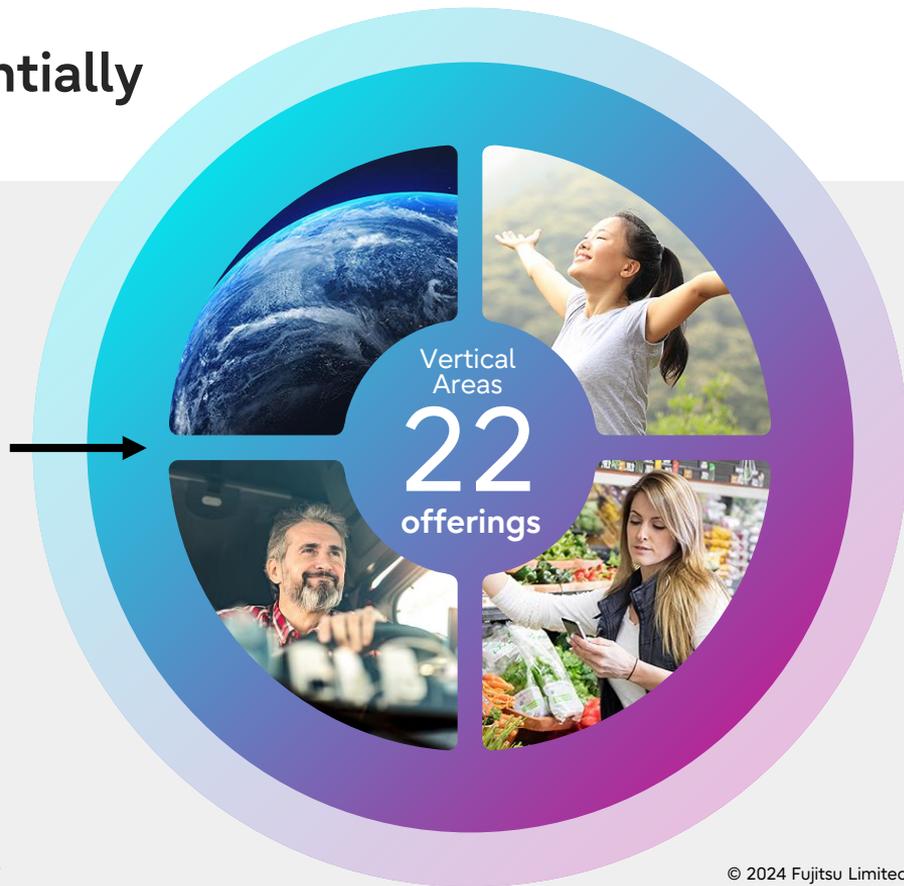
Retail Solution
x for Vision / Predictive Analytics

Healthy Living

Healthcare Solution
x Generative AI



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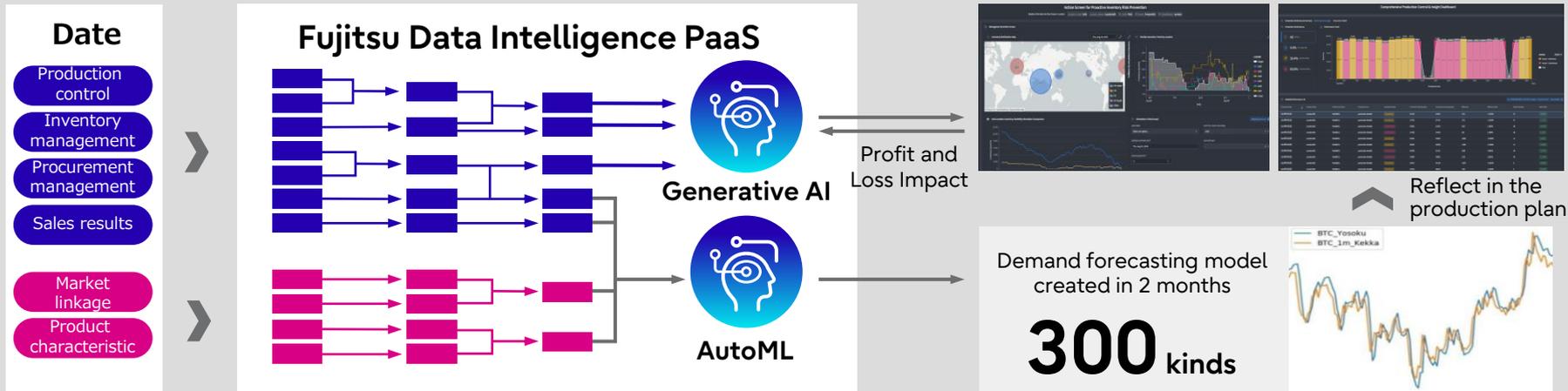




Demand Forecasting and SCM Resilience with AI - Major Manufacturers -

- Consolidation and integration of system data scattered at each site and process
- Realization of resilient production planning, inventory, and order management that is resistant to change in addition to optimization of company-wide SCM

**Profit and Loss Impact ascertained 2 days after Noto Earthquake.
Design and operate 300 predictive models for each parts in 2 months**





Transforming retail experience with smart stores using AI video analysis

- Major retailers -

- Improving the quality of customer service by promptly following up with highly motivated customers to purchase
- AI learns and analyzes customer behavior, objectively creating data-driven store plans to enhance user experience

Contributing to safe operations with detection and age verification support functions for tobacco, alcohol sales Privacy-friendly video analysis AI using existing cameras

Camera video data



Action detection



Attribute estimation



Data analysis

- Customer analysis
- Store simulation



Real-time detection

- Customer relations
- Safe and secure store operations



Sales and Number of customers



~ **30%**
increase

Demonstrated sales improvement effect



Deployment to stores



~ **100**
stores



Retention type service using AI

- Generated AI avatar suggests menu and product selection based on customer interactions
- Avoid opportunity loss/food loss with recommendations based on past purchase history and tastes

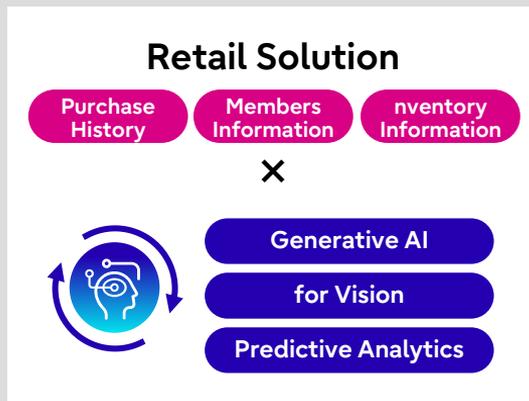


dynamic pricing



Personalization

Realizing personalized recommendations and optimal price control
"Providing consumers with an optimal purchasing experience"





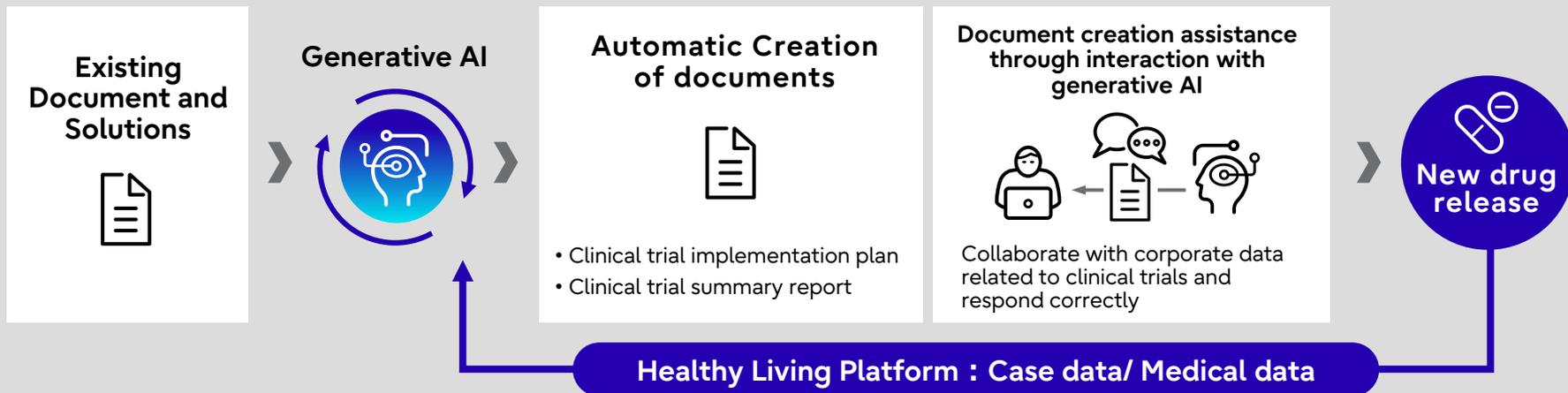
Transforming the process of creating clinical trial documentation with AI

- Utilizes AI to realize a solution that automatically creates new clinical trial documents from existing documents and other corporate data
- Streamlining process with documentation assistance functions through interaction with generative AI

New offering

Launch scheduled
April 2024

Accelerating clinical trials and delivering new drugs to patients who need them as soon as possible



Expanding Uvance for Cross-Industry growth

Uvance and partners' businesses are connected

Solving social issues and creating new value



SM×TS

Urban energy management optimization



HL×TS

Providing a combination of disaster risk recovery support and insurance products



SM×CE

Cross-industry supply chain optimization





**AI : a trusted assistant to
empower your Sustainability
Transformation journey**

