Fujitsu Technology Strategy Briefing

Vivek Mahajan

Corporate Executive Officer
Corporate Vice President
CTO, in charge of System Platform
Fujitsu Limited

December 2, 2025

Fujitsu Technology Strategy

Providing sovereign AI platforms and sovereign infrastructure for enterprise customers

Sovereign

Empower customers to be in control of their own AI and infrastructure

Security

Ensure the security of internal corporate data, AI models, and A2A* communication

Flexibility

Enable customization of AI agents by customers

Domain specific

Implementation of AI platforms specialized for specific industries and operations

*A2A: Agent-to-agent

Fujitsu Sovereign Platform

Technology portfolio capable of providing personalized environments for our customers

AI / Security technologies for Sovereign AI Platform

AI

- Takane AI model (Generative AI reconstruction)
- Kozuchi multi AI agent framework (Workflow evaluation and learning platform)

Security

- AI scanner & guardrail
- Fujitsu secure inter-agent gateway (A2A Security)
- Countermeasures for digital fakes

Computing technologies for Sovereign Infrastructure

- MONAKA/-X
- Quantum computing
- Quantum / HPC hybrid

Network technologies for Sovereign Infrastructure

- AI-RAN
- APN (All Photonics Network)

Fujitsu AI Strategy

FUJITSU

Delivering the latest AI technology - **specialized for enterprises** to meet corporate needs.

Target: Industries that require **Sovereign AI Platform (Defense, government, healthcare, finance, manufacturing)**

Fujitsu Kozuchi

Enterprise Generative AI Framework ·Generative AI reconstruction ·Knowledge Graph Enhanced RAG ·Generative AI trust

Generative AI Reconstruction

- High flexibility to provide the best customized models to meet corporate needs
- Can be lightweight for customer use cases

Specialized AI Distillation

Dedicated models with only the knowledge needed for specific use cases

	...	...	...
Cooking	Sport	Market	...
Language under standing	Language Generation	Coding	...

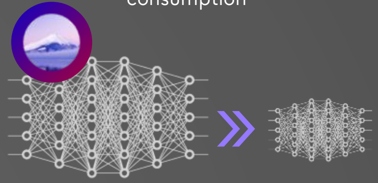
111B LLM

Business knowledge
+
Market
Language under standing

Specialized AI models

Quantization

Lightweight models capable of maintaining accuracy with lower power consumption



Before quantization (32bit or 16bit)

After quantization (1bit)

Knowledge Graph Enhanced RAG

Structure corporate data as a management resource to ensure it is always available for AI utilization *90% of enterprise data is unstructured, 42% never reused

Current Situation

Create

Difficult to reuse

Unstructured data

The world we want to realize

Reporting Summary
Proposal preparation
Program development

Create

Unstructured Data

Takane

AI Ready (Structured data)

- Self-Improving
- Advanced Analysis
- Structured

Takane LLM

Knowledge Graph •Root Cause Analysis •Software Engineering •Vision Analytics •Question & Answering

AI Core Engine •Generative AI •AI Security •Vision AI •Graph AI

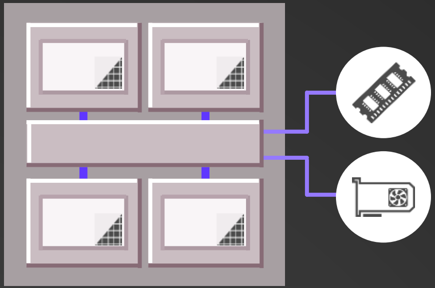
KDDI CORPORATION	株式会社九州地区農協オンラインセンター (Japanese name only)	Genequest Inc. Euglena Co., Ltd.	TOYOTA GAZOO Racing	TOYOTA AUTO BODY CO.,LTD.	Nikko Systems Solutions, Ltd.	Panasonic Corporation

Fujitsu AI Roadmap

FUJITSU

	2025	2026	2027	2028	2029	2030
	Kozuchi 2.0	**Kozuchi 3.0**	**Kozuchi 4.0**	**Kozuchi 5.0**	**Kozuchi 6.0**	
AI Platform	**Takane 2.0** **Business-specific lightweight model** Specialized AI distillation performs specific world-class tasks accurately, lightweight, power saving	**Takane 3.0** **Deeper business understanding by modal fusion** Deeper understanding of the relationships between a company's diverse data and the meaning of customer instructions	**Takane 4.0** **Adaptive evolution against environmental change** Evolve to adapt to changes in business and external environments	**Takane 5.0** **Future-insight strategy planning model** Strategy planning based on deep insights through multiaxial hypothesis generation and self-testing	**Takane 6.0** **Meta-learning and self-evolving model** Improve learning methods, adapt to unknown conditions, and evolve automatically	
	Multi-AI Agent Establishment of AI agent and evaluation framework	Orchestration for specialized task	Distributed collaborative learning	Knowledge sharing, Federated learning	Multi-AI agent self-organization	
Security	LLM Scanner / guardrail AI Ethics / compliance	Multi-agent security Countermeasures for digital fakes	Safety reinforcement learning AI alignment	AI threat hunting Brain security	Cyber-neuroimmunity (Self-healing)	Self-evolving security
Physical	**BRAIN 1.0** Robotics memory, inference, security	**BRAIN 2.0** Distributed memory, inference, security	**BRAIN 3.0** Experience sharing, task function binding heterogeneous small fleet		**BRAIN 4.0** Autonomous task division and organization of small robot fleet	**BRAIN 5.0** Multiple autonomous cooperative robots
	Spatial world model Model building from multiple sensors	Fusion of robot fundamental model	Few-shot imitation learning	World model sharing	Cross-modal sensing	Cross-domain and scale expansion

FUJITSU-MONAKA



- **Armv9-A Architecture**
- **3D chiplet**
  - Core die 2nm
  - SRAM die/IO die 5nm
- **Ultra low voltage for energy-efficiency**
- **DDR5 12 channels**
- **Air cooling**
- **Arm SVE2 for AI and HPC**
- **144 cores x 2 sockets (288 cores per node)**
- **Confidential Computing for security**
- **PCI Express 6.0 (CXL3.0)**

** FUJITSU-MONAKA : This is based on results obtained from a project subsidized by the New Energy and Industrial Technology Development Organization (NEDO).*

Next-generation high-performance, energy-efficient, made-in-Japan processor for a digital society

Goal

High-speed data processing platform

Achieve high-speed processing of computing workloads, particularly AI workloads (2x faster than competing CPUs)

Balance of energy efficiency and performance

Significantly reduce CO2 emissions and power costs with high energy efficiency (2x more efficient than competing CPUs)

High security & reliability

Stable operation technology cultivated in mainframes and high security for cloud utilization

Easy to use

Utilize the Arm software ecosystem, and collaborative design across services, software, and hardware

Achieved through proprietary technologies, including a self-designed microarchitecture and ultra-low-voltage technology

FUJITSU-MONAKA Targets and Roadmap

Supporting AI Foundations globally with state-of-the-art computing made in Japan

Sovereign infrastructure target : Defense, government, healthcare, finance [part], manufacturing [part]

Data Center

High-performance, low-power consumption FUJITSU-MONAKA platform to meet growing demand in data centers

High power efficiency and AI service co-creation

- AI services
- Lower TCO
- Security
- Strategic alliances with partners
  - Expanding global sales network by leveraging OEM channels
  - Enhance AI learning capabilities by strengthening collaboration with other companies' GPU platfoms

Security

Providing domestic technology to relevant ministries, agencies and companies for next-generation security

Safety and security by domestic technology

- Confidential Computing
- Domestic technology made in Japan

Roadmap

2011 — SPARC64 K (45nm)

World-class performance Massively Parallel SPARC Supercomputer

2020 — A64FX Fugaku (7nm)

The world's first Arm-based No. 1 Supercomputer

2027 — FUJITSU-MONAKA (2nm)

- High-speed data processing infrastructure
- Power efficiency and performance
- Reliability and security

2029 — FUJITSU-MONAKA-X (1.4nm)

- Consider potential **NPU** development
- Plan to develop with next generation node

2031 — FUJITSU-MONAKA-XX (Cutting edge process node)

- CPU-NPU fusion
- Leverage cutting-edge processes

Market Size (2027-2030):
Data Center 2,108.7 billion yen / Security 355.3 billion yen

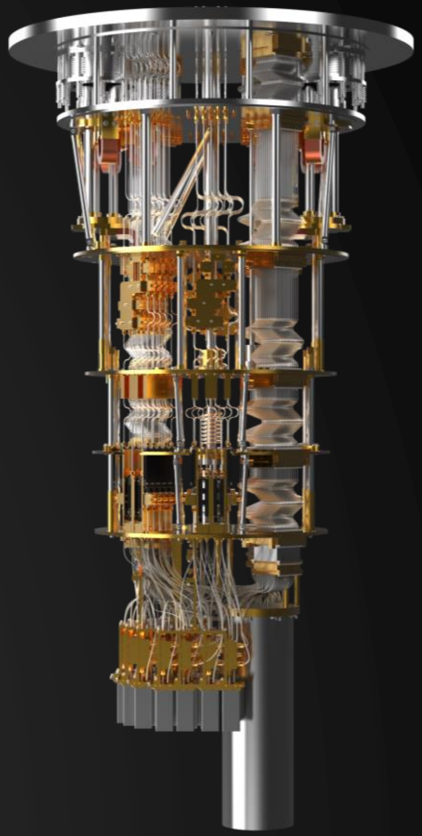
Quantum Computing R&D Strategy

Leading player building large-scale, made-in-Japan quantum computer

Joint research with world's leading institutions and companies	RIKEN / Delft University of Technology FUJIFILM Corporation (Quantum application) / Tokyo Electron Ltd. (Quantum application)

Extensive development focus, from quantum devices to software and applications

Development status of quantum simulator and quantum device	2023.07 40 -qubit quantum simulator announced 2023.10 Superconducting quantum computer (64 qubits) 2025.03 Superconducting quantum computer (256 qubits) FY 2026 Superconducting quantum computer (1,024 qubits) FY 2030 Superconducting Quantum Computer (10,000+ qubits, **250 logical** qubits) FY 2035 Superconducting quantum computer (**1,000 logical** qubits)
Technology development for breakthrough	• To achieve fault-tolerant quantum computer (FTQC) • STAR Architecture • Diamond-spin quantum computer
Achievements	• CESGA: Delivery of 34 –qubit quantum simulator (2023.09) Establishment of Fujitsu International Quantum Center (2023.09) • AIST: Delivery of 64 qubit superconducting quantum computer (2025.03)
2035 Market Size (Cumulative)	Approx. 4 trillion yen | Material discovery, Process simulation, Product development & engineering, Secure collaboration



Fujitsu Quantum Computer Roadmap

FUJITSU

FY 2022 — 2023 — 2024 — 2025 — 2026 — 2030 — 2035

March
36
-qubit
Simulator

March
Helped RIKEN release first Japanese domestic quantum computer

July
40
-qubit
Simulator

October
64
-qubit
quantum computer
Developed by RIKEN RQC – Fujitsu Collaboration Centre

August
Establishment of high-speed execution method of practical algorithm using original quantum computing technology STAR architecture

March
256
-qubit
quantum computer
Computer with quantum-classical hybrid applications

December
1,024
-qubit
quantum computer

10,000+
-qubit
(250 logical qubits)
quantum computer

1,000
-logical qubit
quantum computer

2024
64 qubit machines x HPC hybrid calculation

September 2025
Completion of quantum building

December 2026
1,024 -qubit machine ×HPC(**FUJITSU-MONAKA**) Hybrid calculation center

2031
10,000+ -qubit machine ×HPC (**MONAKA-X, GPU servers**) Hybrid calculation center

Fujitsu Network Technology

Realizing sovereign infrastructure through Network for AI & AI for Network

Photonic System

Optical transport systems featuring a comprehensive lineup that spans from the Core and Metro networks to Data Center Interconnect

800G pluggable transceiver

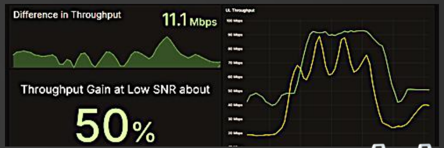
UOS T900 Series

FY26: 1.6T Pluggable, FY28: 3.2T Pluggable
To be released

Mobile System

Open-RAN compliant 5G base-stations, with field proven inter-operability in multi-vendor environment

- Low-power, highly reliable radio unit products
- AI-RAN Software



vRAN software

Radio Unit line-up

Network Orchestration

Intelligent Network management software leveraging our proprietary AI/ML technologies

- Automation, service enhancement
- Network modernization

Virtuora software suite

Data Centric Infrastructure (DCI)

Super power-efficient new ICT platform where connectivity and computing are integrated by advanced optical technology

- DCI controller

DCI controller

Fujitsu Network R&D Roadmap

FUJITSU

2025 | 2026 | 2027 | 2028 | 2029 | 2030

Key Trend	All Photonics Network (Core to Edge)	Distributed Data Centers	6G and Beyond

Photonic System

Optical transport systems

- 1.6 T Pluggable
- 3.2 T Pluggable
- 10 T Pluggable

APN (All Photonics Network)

- Open APN
- APN 3.0 (Access / Edge)
- APN 4.0 (Computing)

→ Network Digital Twin

Mobile System

- Massive MIMO
- vCU / vDU
- RAN advancement by AI-RAN
- Open-RAN Compliant
- 6G

→ Beyond 6G

Network Orchestration

AI for Network Orchestration

- Accelerated Root Cause Analysis
- AI Agent Troubleshooting
- AI Agent Provisioning (Demand forecasting, Resource provisioning)
- AI Agent Consulting
- Storm Detect
- Storm Preventer
- Orchestration integrated with OSS/BSS

→ Full Autonomous Network

Data Centric Infrastructure (DCI)

Integration of Connectivity and Computing

- Real-time Applications on DCI
- High-efficiency, High-performance LLM Inference
- Optical Heterogeneous GPU/xPU
- Rack Level Resource Pool
- Inner / Inter-DC Resource Pool
- Optical Interconnect

→ All Photonic & 6G on DCI

Fujitsu Technology Strategy - Summary

FUJITSU

Providing full-stack technologies to realize sovereign AI PF and sovereign infrastructure for enterprise companies

Quantum Computing

Processor

- FUJITSU-MONAKA(FY27)
- FUJITSU-MONAKA-X(FY29)
- FUJITSU-MONAKA-XX(FY31)

Quantum

Superconducting quantum bit quantum computer

- 256 –qubit (FY24)
- 1,024 –qubit (FY26)
- 10,000+、250 logical bits (FY30)
- 1,000 logical bits (FY35)
- Technology development for breakthrough (Diamond-spin, STAR Architecture)

Hybrid

- Quantum / HPC hybrid (FY26)

Data & Security

- Trustable Internet
- AI Security Framework
- Data Trust
- Ambient Authentication

AI Platform「Kozuchi」

Enterprise Generative AI Framework

- Generative AI reconstruction
- Knowledge graph enhanced RAG

Takane LLM

Network

- Mobile : AI-RAN, Open RAN (vCUDU, RU Products)
- Photonics : APN 800G/1.2T/1.6T ultra-high-speed technology
- Network Orchestration : Virtuora
- Data Centric Infrastructure : DCI controller

Converging Technology

- Social digital twin
- Ocean digital Twin
- Human behavior modification technology

Thank you

FUJITSU

Fujitsu's Research Strategy

Seishi Okamoto
Corporate Executive Officer, EVP
Head of Fujitsu Research
Fujitsu Limited

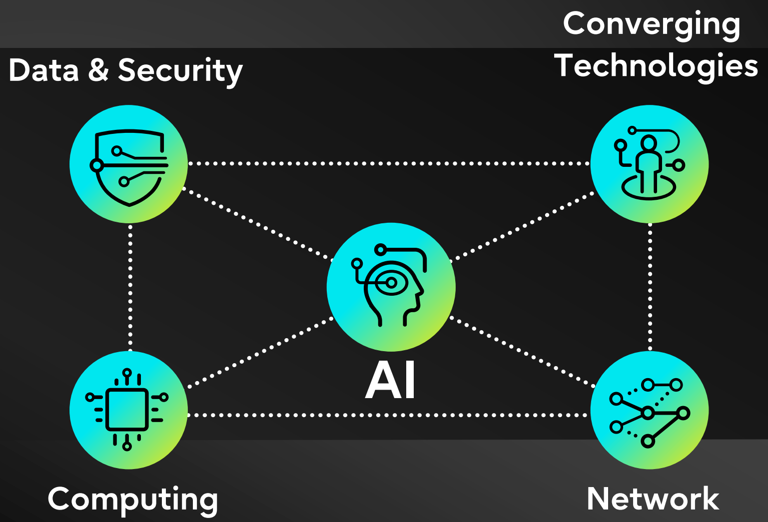
December 2, 2025

Research Strategy

Fusion

5 Key Technology Areas

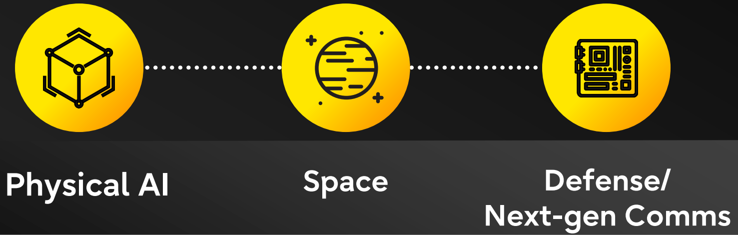
Creating new value by combining technology areas centered on AI



Innovation

Explore new fields

Forecasting medium-to-long term technology trends, develop technologies that pave the way for the next generation



AI Research Strategy

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Fields where sovereign AI is essential


Government


Healthcare


Finance


Manu-
facturing


Defense

Takane — Enterprise Generative AI

Enterprise LLM that can be optimally tuned

- Enterprise data understanding
- Behavioral reliability
- Adaptability to customer environment

Evolve — Enhance domain-specific functionality, enterprise data understanding and system behavior reliability

Kozuchi — AI Platform

Provide AI with the latest technologies on the cloud

- Speed
- Reliability
- Easy deployment
- Business flow transformation with AI agents

Enhance — Automate domain-specific AI agent workflows securely

From Scale-up to Scale-down

DEMO

FUJITSU

Takane realizes lightweighting and energy saving

Problems in scaling

- Increasing DevOps costs
- Increasing power consumption
- Need to address edge AI

Generative AI Reconstruction Technology

Quantization

Compress

LLM

High-precision quantization using Fujitsu's quantization error propagation technique

World's highest accuracy

Achieved **1-bit** quantization

89% accuracy retention rate
3x faster processing speed
98% reduction in power consumption / GPU cost

Specialize AI Distillation

LLM

Extract

Reconstruction using only required knowledge

World's first

Reduction of parameter size to $\frac{1}{100}$

While increasing inference speed by **11** times, improved accuracy by **43%** and reduced memory usage by **70%**

As a result of QA task verification using our CRM data

Today, we released 1-bit quantization technology as OSS

Knowledge Graph Enhanced RAG

FUJITSU

Structuring various enterprise business data as a knowledge graph

Issue in data utilization

- 90% of enterprise data is unstructured
- Companies cannot utilize their own data assets sufficiently

Knowledge Graph Enhanced RAG for structuring various types of enterprise data

Indexing technology generates insights	Optimizing queries using graphs and timelines	Updating knowledge graph and prompts based on context and execution results for
No. 1 in document search with charts/tables *1	Speeding up by **50 times** *2	**Self-improvement**
*1 Japanese PDF's RAG benchmark(JDocQA, Allganize)(Apr. 2025)	*2 Comparison with conventional graph analysis techniques in log analysis (as of Aug. 2025)	

Manufacturing

トヨタ車体 TOYOTA AUTO BODY

Maintenance/Incident document:
Increase implementation speed/accuracy of incident measures

GR TOYOTA GAZOO Racing

Summarize workplace know-how as organization knowledge

Things

Identify product defect causes based on defect case documents and Bill of Materials data

Finance

NKSOL 日興システムソリューションズ

Retrieve design information from source code and confirm specification

Healthcare

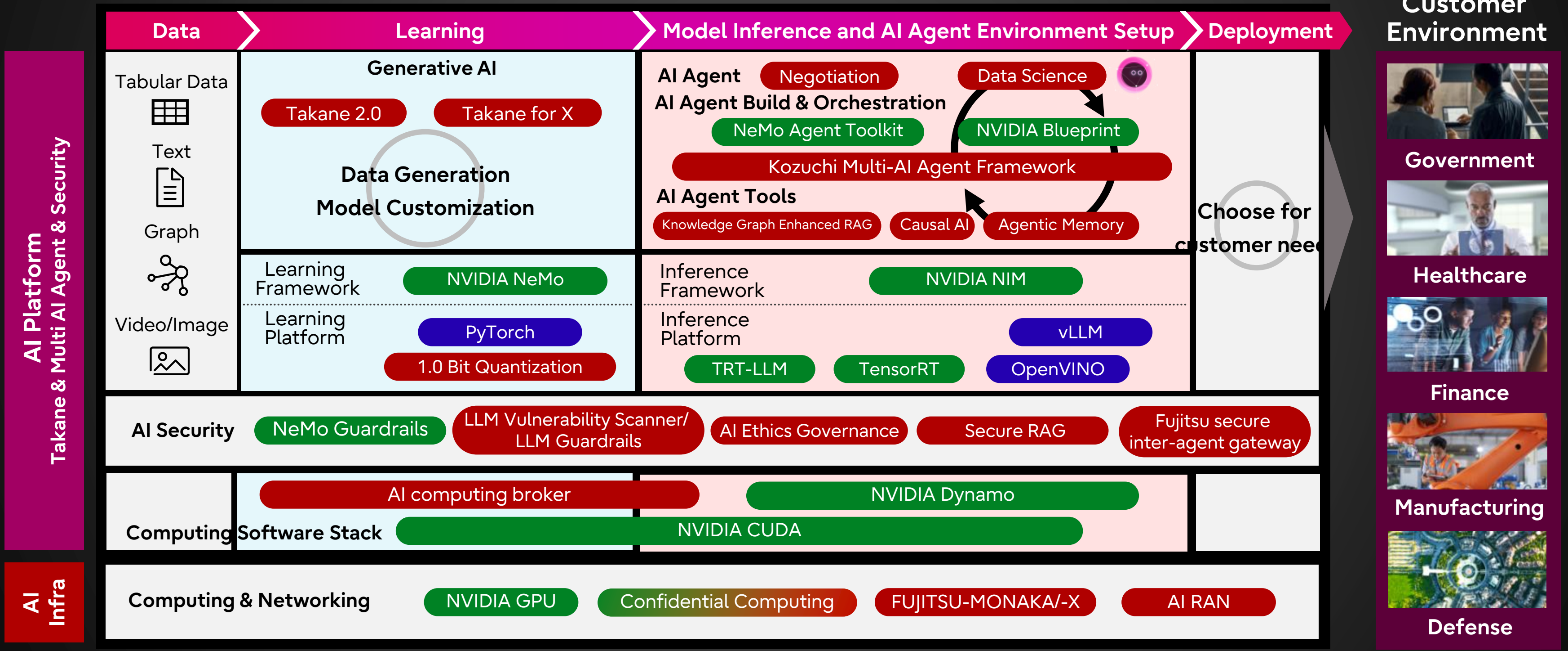
Paradigm Health

- Structured electronic health records
- Streamline clinical trial planning

Enhancement of the Kozuchi AI Platform

FUJITSU

- By integrating NVIDIA NeMo and NIM with Fujitsu's Takane, security, and multi-AI agent technologies, we will achieve highly reliable automation of sensitive business workflows
- Fujitsu MONAKA and NVIDIA GPU, NVLink Fusion collaboration provides global standard secure AI platform



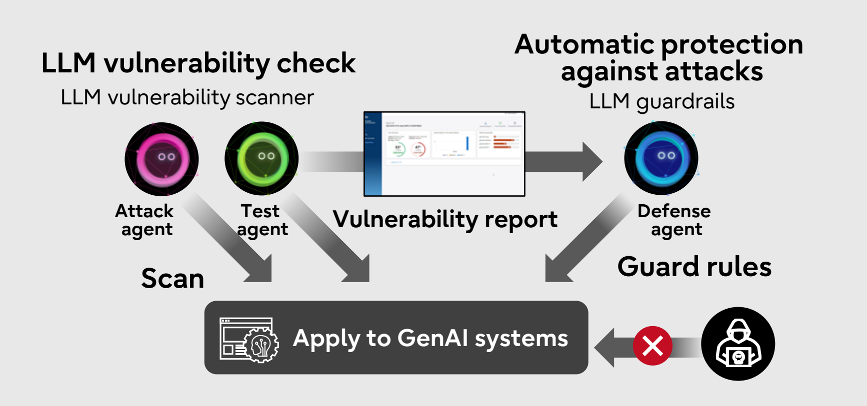
Fujitsu IP | NVIDIA IP | 3rd Party

AI Security

Technology to automatically check vulnerabilities/risks in GenAI for protection

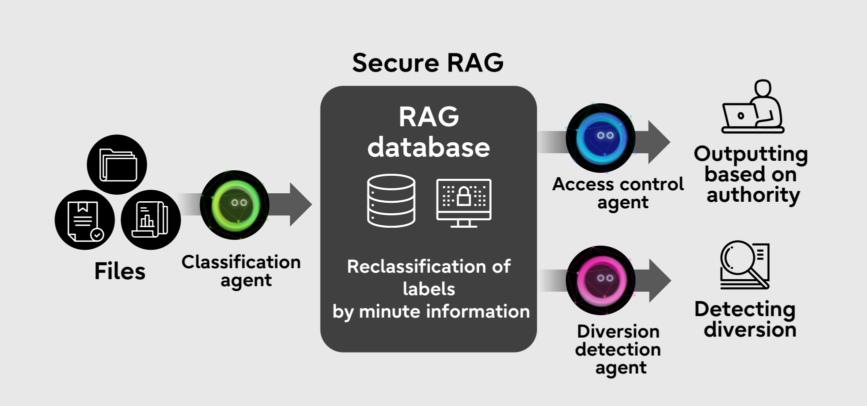
Addressing LLM vulnerabilities

Largest in the industry: 7.7K vulns



Addressing RAG information leakage risk

Highest accuracy in the industry: 98%



- Started commercial offering via Fujitsu cloud service Generative AI Platform

Oct. 2025

- Collaboration with Cohere Inc. to strengthen AI service security

Causal AI

DEMO

FUJITSU

Issues

As the number of data combinations becomes enormous, it becomes difficult to calculate

Difficult to present measures to achieve an objective

Explore/infer the relationship between "Cause" and "Effect"

Scalability

- 1000x faster processing than conventional methods
- Capable of handling thousands of variables

Estimating causal effects

- Data partitioning technology based on strong causality
- Causal exploration technology for combinations produced as a result

Healthcare

Genequest ユーグレナ

Discover new relationships between alcohol metabolism, obesity, and genetics

Marketing

HEIWADO

Present coupons according to customers' purchase intentions

Product development

swivel & knot

Design and propose a beer brewing procedure according to the intended taste

Management

住友商事

- Visualize the causal relationships in employee engagement
- Utilize the result for policy making

uvance

Planning to commercialize as one of core technologies that support Fujitsu's data-driven management solutions FY2026

Multi-AI Agent Framework

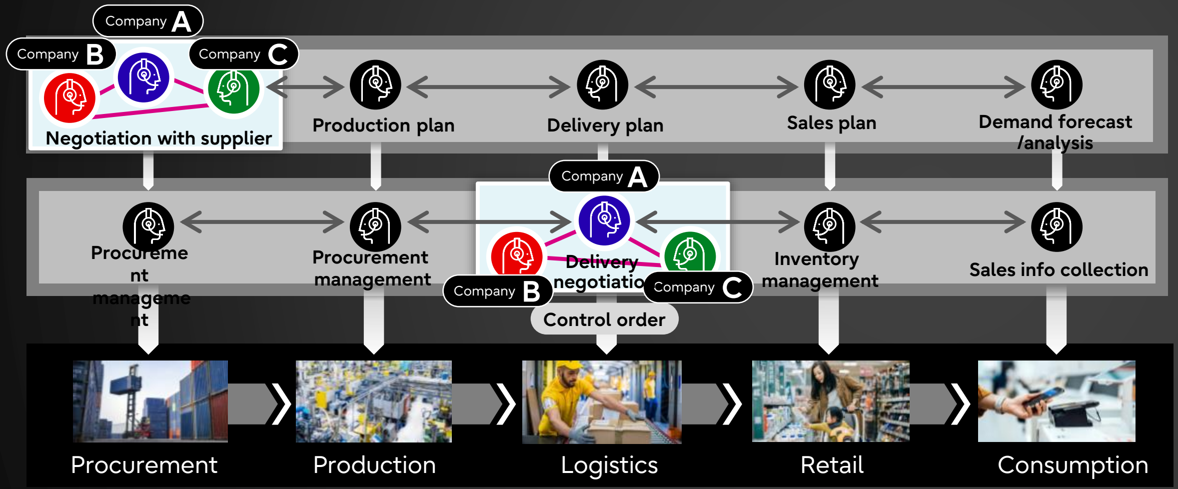
DEMO

FUJITSU

Cross-industry specific issues

- Need to operate across different systems
- Concerns about sensitive information leakage

Technology to enable AI agents' collaborative optimization, adjustment and judgment in the supply chain management across industries



Overall optimal control of AI agents with incomplete information

Instantly calculating the overall optimization solution to control AI agents working with other company systems

Fujitsu secure inter-agent gateway

Do not share sensitive information:
LLM guardrails/Decentralized training

ROHTO

ROHTO Pharmaceutical Co., Ltd. :
Verification in supply chain

産業競争力懇談会 COCN

Promote policy recommendations as a leader company of COCN

Planning to offer through Uvance Dynamic Supply Chain business

Within FY2026

Disinformation Countermeasures

DEMO

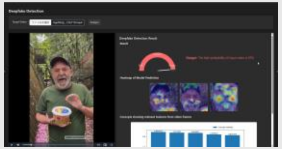
FUJITSU

Issue

Intentionally spreading disinformation or misinformation has a social/economic impact

Applications for experiencing the value of the latest technologies

Deepfake detection



Social media fact check

Document consistency/ Evidence check

Cross-modal inconsistency detection

Technologies for detecting disinformation with high accuracy

Multi-modal disinformation detection technology based on invisible features in data and its surrounding information

Disinformation analysis

Leading a large scale national project

Fake image analysis

World' highest detection accuracy: 97 %

LLM to detect disinformation

Takane: Surpassing GPT-4o performance

Applied some technologies to NEDO K Program (Key and Advanced Technology R&D through Cross Community Collaboration Program), which we are leading as a prime operator

Established an International Consortium Frontria

FUJITSU

The international consortium to address new threats such as disinformation or AI governance problems

Press Release

Creating new markets by globally combining various IPs

57 organizations participating

1 Co-creation space leveraging technologies

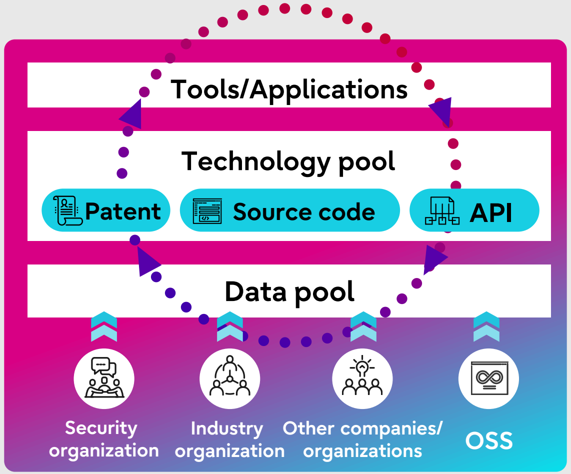
Expanding R&D on disinformation countermeasures to the one on solutions for AI safety/reliability problems

2 Pool of cutting-edge technologies (IP)

Accelerating the implementation of advanced technologies in the global society

3 International approach

Global expansion from Japan to Europe, Asia, and North America



FUJITSU

Frontria members

57※ organizations participated

Finance · Insurance · A I · Consulting · I T

Content · Entertain-ment · Media · Legal · University

ACTIVS	AKOS AI	All About Group	AMADEUS CODE	ASCII STARTUP	Atlas Associates	弁護士ドットコム	Prof. Oreste Pollicino (Bocconi University)	Cloudy Soft	Cross Business Producers
Daiichi Life Group	DAIKO	WEDO	大和総研 Daiwa Institute of Research		Digirow	DCAJ	fileforce	Glocalist	CERAG Université Grenoble Alpes
CRJ Université Grenoble Alpes	FUJITSU ジー・サーチ		ICR InfoCom Research, Inc.	Assoc. Prof. Shinichi Yamaguchi (International University of Japan)	INTESA SANPAOLO	LARUS	LY	MANCHESTER 1824 The University of Manchester	明治安田 MEIJI YASUDA
Meltwater	澪標アナリティクス TIS INTEC Group	三浦法律事務所 Miura & Partners	MIZUHO	MONASH University MONASH INFORMATION TECHNOLOGY	MORI HAMADA	MS&AD INSURANCE GROUP	Nebuly AI	OKI	Assoc. Prof. Shinichi Arakawa (Osaka University)
POCKET RD	Ridgelinez	Institute of SCIENCE TOKYO		Sparticle	Spectee	TDSE	株式会社 東映エージエンシー	TOHOKU UNIVERSITY	TOKIO MARINE 東京海上ホールディングス
TOKYO METROPOLITAN UNIVERSITY	Trusted Corporation	Uber AI Solutions	FUJITSU						

※Including non-public organizations

Development of 64/256-Qubit Superconducting Computers

FUJITSU

RIKEN QUANTUM COMPUTING

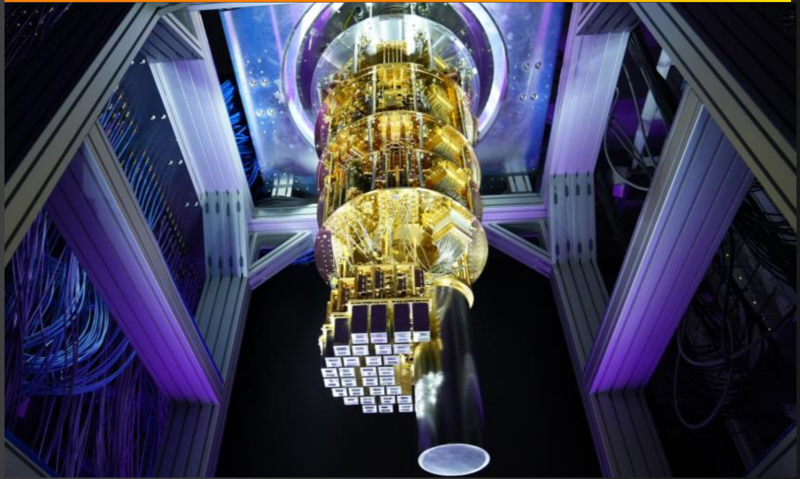
- Jointly developed with Prof. Nakamura team of RIKEN at RIKEN RQC-Fujitsu Collaboration Center

64-qubit real machine

Oct. 2023

256-qubit real machine

Apr. 2025



Introduced to G-QuAT (Global Research and Development Center for Business by Quantum-AI technology) of AIST (National Institute of Advanced Industrial Science and Technology)

Mar. 2025

Development of the World's Largest Class 1024-Qubit Superconducting Quantum Computer

Dec. 2026

FUJITSU

Widely used as a testbed for quantum technology verification

Providing a hybrid environment with FUJITSU-MONAKA

Quantum Computing

×

HPC Technology

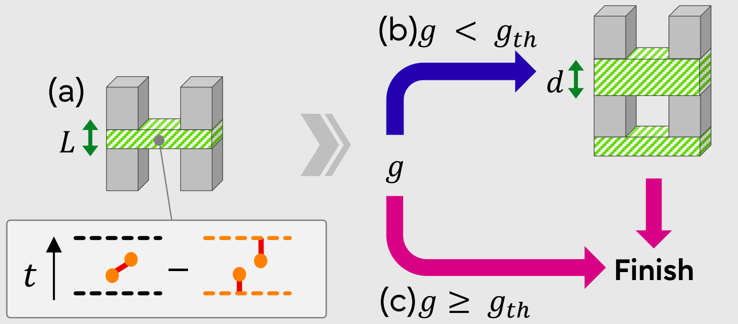
Development of a New Quantum Error Correction Technology

FUJITSU

Evolution of the STAR architecture

Succeeded in accelerating computation speed by more than double and reducing error occurrence probability to 1/6 or less

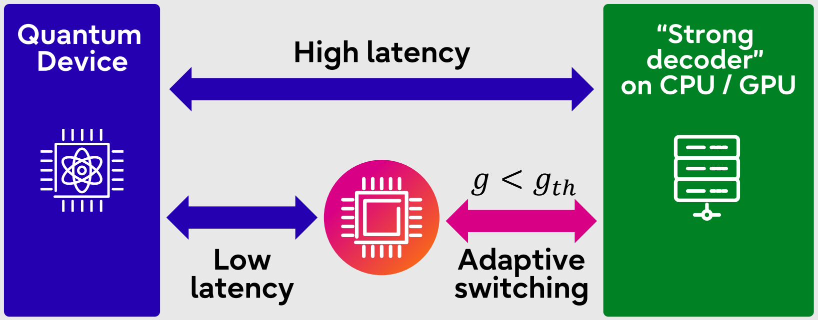
Acceleration based on temporal soft information



calculate time-like gap value g

Increased the calculation speed by more than double, by switching the error detection cycle based on temporal soft information

Error rate reduction through decoder switching



"Weak decoder" on FPGA / ASIC

Adaptive switching of decoders reduced the error rate to 1/6 or less

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Exploring Use Cases through Collaboration with Companies/Universities

DEMO FUJITSU

Seeking breakthrough in quantum technology

Materials

FUJIFILM

Discover innovative materials through simulation

Increase speed/accuracy in organic molecule energy calculation by using variational quantum algorithms

Drug discovery

MITSUBISHI CHEMICAL GROUP
三菱ケミカル株式会社

Realize highly effective drugs with minimal side effects

Method to calculate the energy of macromolecules like proteins

Finance

MIZUHO
みずほ第一フィナンシャルテクノロジー

Optimize and maximize efficiency in investment decisions

Quantum machine learning algorithm for high-precision credit assessment

Manufacturing

AGC

Utilize resources effectively to reduce environmental impact

Quantum approximate optimization algorithm for glass plate cutting problem

Machine

芝浦工業大學
SHIBAURA INSTITUTE OF TECHNOLOGY

Realize a humanoid that moves efficiently

Variational quantum algorithms for movement control of a multi-Joint robots

FUJITSU-MONAKA-X (1.4nm)

No.1 Processor made in Japan that leads the industry in the AI inference era

FUJITSU-MONAKA-X only CPU

2029 Second Half

Low-latency inference	World's first server CPU with Arm SME
Large-scale distributed processing	3D many-core x GPU tightly coupled
AI execution on the encrypted data	Confidential Computing (standard feature)
High-performance/ Energy-efficient	Advanced process (1.4nm) x Ultra-low voltage control

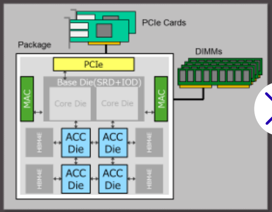
Inherit

FUJITSU-MONAKA-X CPU + NPU

2030 Second Half

High-speed processing with medium-sized LLM	Employing a reconfigurable engine and a quantization accelerator

Accelerating matrix multiplication and activation functions using our proprietary technology



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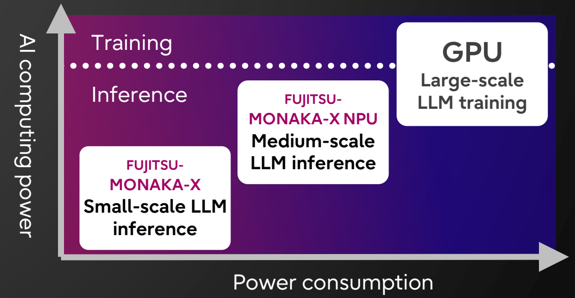
Hardware-aware dynamic application of quantization and execution size optimization

Coordinated control of hardware and middleware based on the execution graph

Real-time multi-modal AI	Autonomous driving	Robotics
Edge-Cloud integrated inference	Smart city	IoT
Confidential data AI analysis	Healthcare	Security

Providing customers with the best options for all AI workloads



Fujitsu Awarded Contract for Basic Design of Fugaku NEXT

FUJITSU

Jun. 2025

- Fujitsu received the order for basic design of Fugaku supercomputer successor from RIKEN
- Accelerating Japan’s scientific and technological innovation with domestic CPU technology
- Realizing a next-generation AI-HPC platform to support computational problem-solving, aiming to starts its operation around 2030

Evolves by incorporating advanced technologies applied with FUJITSU-MONAKA-X

Collaborating with GPUs, flexibly adapts to diverse demand changes

Contributing to the advancement of Japanese science and technology, and to solving business/social challenges

Social Digital Twin

uvance | Trusted Society

DEMO

FUJITSU

Urban transportation	Regional transportation gap	Environmental measures/ EV promotion	Rising medical costs




Predicting people's movements with high accuracy, our technology reproduces their status on the digital space and supports creation of various policies

Social Digital Twin

Verifies the effects of solutions through digital rehearsals

Demonstrated in various cities around the world

国土交通省 | KOBE | PITTSBURGH | 備前市 Bizen City Okayama

川西町 Kawanishi Town | 吉備中央町 | JA三井リース GROUP | ARCADIS

beryl | WBC

Behavior selection model

Social acceptability model

Real-time 3D twin creation

High-speed consensus-building support

New technology Policy Twin

Automatically creates policies without expert support through digitalization

Ocean Digital Twin

DEMO

FUJITSU

Dying seaweed beds	Labor shortage/ Safety assurance	Mud/Debris from construction work	Marine Debris and Plastic




Precisely digitalizing the ocean status (underwater conditions), creates issue solutions and verifies them for solving social challenges

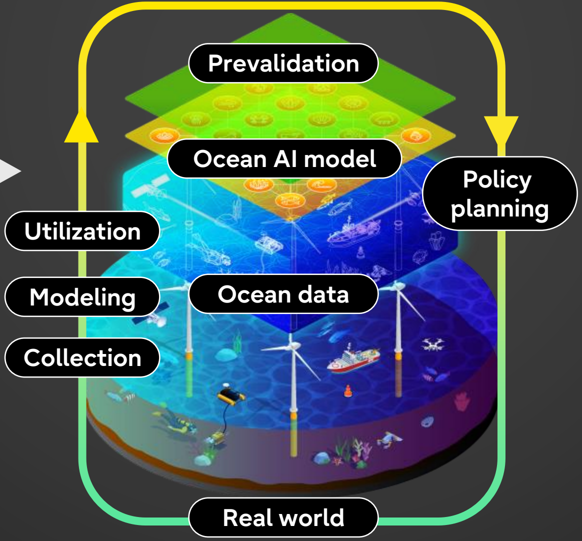
Ocean data automatic measurement/modeling

Autonomous navigation of an underwater drone

Positioning accuracy of **±50cm** (Competitors: 1-2m)

High-precision recognition of seaweed

Covers approximately **80%** of Japan's maritime area



Seagrass bed creation simulation

Marine ecological growth model

Enables observation of daily changes in multiple ecological species

Multi-faceted simulation

Targets various maritime areas and policies

JBE

Fujitsu won the top-class certificationof J-Blue Credit®
(Blue carbon credits in Japan)

Deploying to

Blue carbon measure	Biodiversity conservation
宇和島 uwajima, JBE	BCN PORT Innovation, HAKODATE

Spatial Robotics

Press Release | DEMO | FUJITSU

Robotics has evolved to encompass not only industrial applications, but also human-robot coexistence and even scientific experiments

Sorting delivery items


Source: Agility Robotics website

Agility Robotics

Navigating for the visually impaired


Source: TV Asahi POST website

Consortium for Advanced Assistive Mobility Platform (CAAMP)

Automating life science experiments

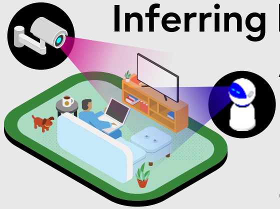

Source: RIKEN website

RIKEN

Developed a new spatial world model technology to realize multiple robots' high-level interactions

Spatial world model creation

Real-time integration of fixed camera information and spatial information of moving robots



Inferring human behavioral intentions

Accurately inferring human behavior based on causal relationships between diverse elements in the space

	Prediction accuracy (F1 score)*1
Conventional technology*2	19.2%
New technology	**58.8%**

*1: Public database JRDB-Social (CC BY-NC-SA 3.0)
*2: Behavior inference using General VLM (Qwen2.5-VL-7B)

Space Data on Demand

DEMO

FUJITSU

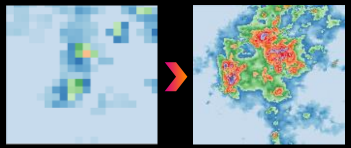
Contribute to strengthening national security and industrial competitiveness by delivering satellite images to the ground in real time

Satellite data platform technology

Satellite edge computing

Data Processing — **1/3** Low Power

Data Transmission — Within **10** Minutes
Near Real-Time Achieved



Capable of raising resolution of the image with a pixel size of 15km to the one with a pixel size of 1km

High-Precision Rainfall Estimation Technology

Sharpen the image **225**-fold

Satellite data and industrial data integration technology

Large-Scale Geographic Information Processing Infrastructure

Satellite data | Industrial data | Geospatial grid

Platform to integrate these 3 elements for AI analysis

Satellite image on-demand delivery

- **Monitor aircrafts and other vehicles, infrastructure and terrain in near real time**
- **Revolutionize supply chain through efficient maritime transport**

Defense/Next-Gen Communications

Aiming to realize a safe, secure, and sustainable society through material science and device technology

Continuous wide-area monitoring system for defense/disaster prevention

Enabling "anytime, anywhere visualization" of invisible objects

Developed a two-wavelength infrared sensor for early social implementation

Provide the world's top class high-sensitivity/ high-resolution infrared sensor to the ATLA
(Acquisition, Technology and Logistics Agency)

Power-saving wireless communication technology

Reducing environmental impact through power savings in base stations

Achieving world-leading power-saving performance with our proprietary Gallium Nitride (GaN) devices

Achieved the world's highest power efficiency of 70% in the 6G candidate frequency range (FR3)

DEMO Total 12

5 Key Technology Areas

- International Consortium Frontria
- Anti-Disinformation Technology
- Takane Innovative Technologies
- 100,000 Molecular Simulation
- Causal AI
- PolicyTwin
- Resilient Supply Chain
- Ocean Digital Twin
- Quantum-Classical Hybrid Algorithm
- Network Failure Countermeasures

Explore new fields

- Spatial World Model
- Satellite Data Utilization

Thank you