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Value Creation Initiatives —— Strategies by Sector

Digital Systems & Services

Promote digital transformation (DX) of customers' business systems and social infrastructure to help realize a sustainable society
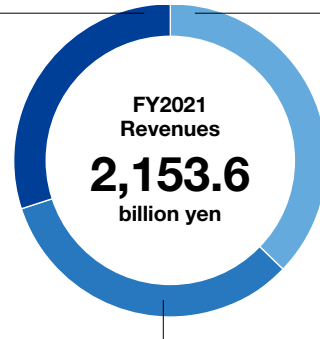
Digital Systems & Services Business Structure

Services & Platforms **30**%

Main products and services

Lumada's core DX methodology and digital technology

- Experience design
- Digital engineering
- Applications
- Data analytics, artificial intelligence
- Cloud services
- Security
- IT products (storage/servers)

FY2021 Revenues
2,153.6 billion yen

Front Business **37**%

Main products and services

IT/digital systems in mission-critical fields

- **Financial Institutions BU**
  Development and operation of mission-critical systems and financial solutions for banks, insurance companies, and securities companies
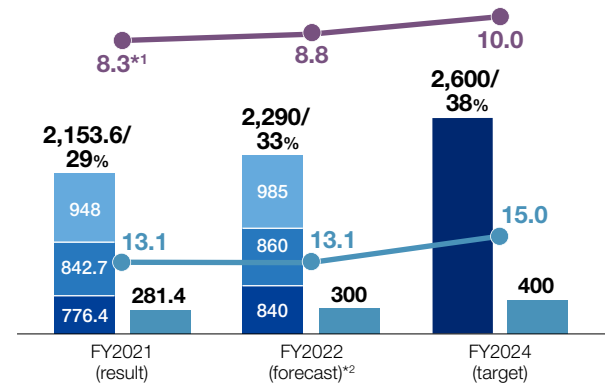
- **Social Infrastructure Systems BU**
  Construction and operation of social infrastructural systems, defense systems, and control systems for public offices, municipalities, electric power companies, and transportation companies, and provision of digital solutions to those entities

IT Services **33**%

Main products and services

DX solutions and services

- **Hitachi Systems**
  System operation, monitoring, and maintenance and one-stop services covering the entire IT lifecycle

- **Hitachi Solutions**
  Solutions for productivity improvement and new business creation through combination of packages and services

Results and Forecasts

Revenues (billion yen) / Overseas Ratio (%)

- Front Business
- IT Services
- Services & Platforms
- Adj. EBITA (billion yen)
- Adj. EBITA ratio (%)
- ROIC (%)

ROIC (%): 8.3*1 → 8.8 → 10.0

	FY2021 (result)	FY2022 (forecast)*2	FY2024 (target)
Total revenues / Overseas ratio	2,153.6 / 29%	2,290 / 33%	2,600 / 38%
Services & Platforms	948	985	
IT Services	842.7	860	
Front Business	776.4	840	
Adj. EBITA ratio (%)	13.1	13.1	15.0
Adj. EBITA	281.4	300	400

Lumada revenues (billion yen)

- Digital engineering
- System integration
- Managed services

FY2021 (result)	FY2022 (forecast)*2	FY2024 (target)
631	780	1,200

*1 Restated base of the impact of the GlobalLogic acquisition   *2 Announced on July 29, 2022
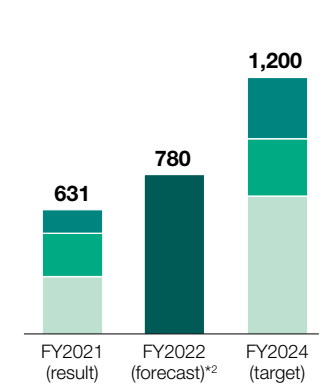
Strengths

The Digital Systems & Services Sector (DSS Sector) has approximately 100,000 employees and is responsible for operations in 50 countries and regions. It consists of three segments: Front Business (supporting social infrastructure with advanced IT solutions), IT Services (supporting customers' business DX with packaged solutions and services), and Services & Platforms (providing methodologies and the latest technologies necessary for DX).

The DSS Sector's strengths lie in its highly reliable system construction and operation capabilities cultivated over many years in mission-critical fields, such as finance, public services, electric power, and transportation; its know-how and solutions for realizing DX in collaboration with customers; and its numerous digital human resources that support these capabilities.

With GlobalLogic joining our ranks in July 2021, we have added two more powerful capabilities: design thinking and digital engineering.

We will leverage these strengths to create value in all quadrants, from understanding customer and social issues to creating agile solutions, system implementation and collaboration with products in the OT field, and secure service operation and maintenance in cloud environments. We will continue maintaining this cycle to foster the creation of new value and deliver DX for customers and society.

Mid-term Management Plan 2024: Vision

Over the period covered by our last two mid-term management plans (2018 and 2021), we implemented continuous reforms, including business restructuring, loss cost reductions through meticulous project management, and productivity improvements. As a result, we transformed ourselves into a business entity that can generate stable earnings and established a foundation for future growth. Under the Mid-term Management Plan 2024, we aim to achieve dramatic growth of Lumada in the DX market and become a top-class global business entity. We will achieve sustainable business growth for Lumada by both expanding revenues and improving profitability and continuously creating value as a partner in solving our customers' issues. To this end, we will work on the four KPIs listed on the right.

KPI	FY2021	FY2024
GlobalLogic revenues*3	1,280 million dollars	2,830 million dollars
Lumada Service Business ratio*4	46%	Over 50%
Lumada Overseas revenues ratio*5	35%	50%
Revenue of Whole Lumada Business	1.4 trillion yen	2.7 trillion yen

*3 Includes synergies/M&As   *4 Percentage of services business in DSS's Lumada business   *5 Percentage of overseas business in DSS's Lumada revenues

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Market Environment

To address increasingly complex business challenges, customers are stepping up their use of digital solutions and services for business continuity and competitive advantage. At the same time, environmental issues and SDG-related investments are increasing against the backdrop of serious social issues. In this context, the global DX market, a target for social innovation projects that address business and social issues, is expected to continue growing at double-digit rates in all regions, reaching an average annual growth rate of 17% by 2025.

In Japan, as well, we look forward to increased IT investments targeting customers' business growth, as well as stepped-up DX initiatives and accelerated deployment and spread of cloud computing and digital technologies.
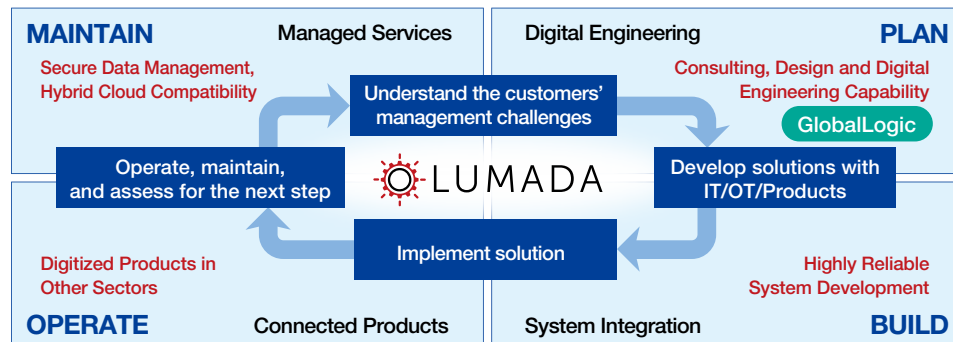
Digital Systems & Services Growth Strategy
Growth Driven by Lumada's Evolution

The DSS Sector is the core entity driving the three segments of Lumada's growth cycle—Digital Engineering, Systems Integration, and Managed Services—as shown below. With the addition of GlobalLogic to the DSS Sector in July 2021, we have gained design and digital engineering capabilities, enabling us to understand the issues facing customers and society in the global DX market while combining Hitachi's strengths in OT, IT, and products to come up with solutions more quickly. We are also confident that Hitachi Vantara will implement solutions developed by GlobalLogic on the cloud and provide them as services to global customers in the form of a recurring business. In the context of Lumada's growth cycle, the two companies—GlobalLogic and Hitachi Vantara—will work together to provide ongoing value, with GlobalLogic responsible for the first quadrant (Digital Engineering) and Hitachi Vantara the fourth quadrant (Managed Services).

Under the Mid-term Management Plan 2024, we will invest a total of 500 billion yen in business expansion and 200 billion yen in Lumada to complete the cycle of enhancing the strengths of each quadrant. Our aim is to accelerate growth by creating such cycles with more and more customers.

In addition, we launched Hitachi Digital in April 2022 to accelerate the global expansion of Lumada. Hitachi Digital will take the management lead in Silicon Valley. Together with Hitachi Vantara and GlobalLogic, it will collaborate with OT-related group companies, such as Hitachi Energy, Hitachi Rail, and JR Automation, to power the development and execution of our Lumada strategy.
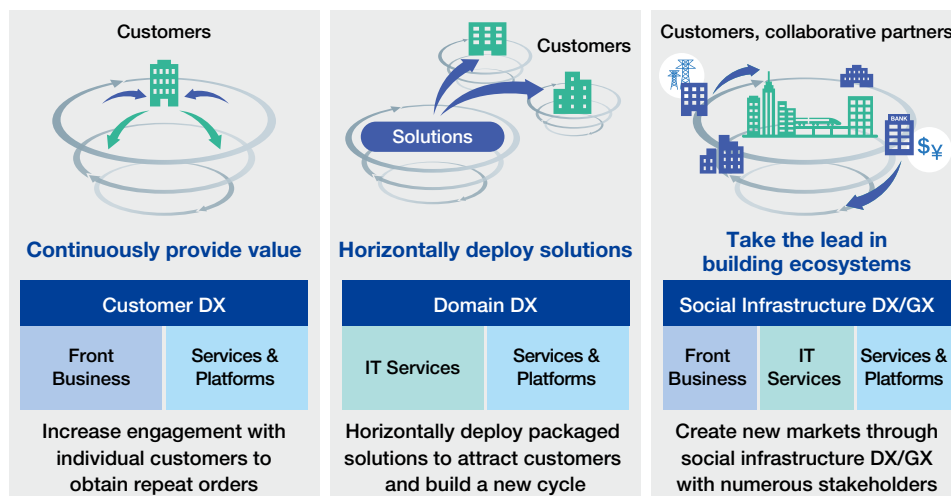
GlobalLogic

GlobalLogic's strength lies in design-driven digital engineering. It enjoys a high level of trust from customers, having posted year-on-year growth in revenues of 38% in fiscal 2021. GlobalLogic has 38 engineering centers, nine design studios, and more than 25,000 design and software engineering professionals worldwide. For more than 20 years since its founding, it has deployed its capabilities in design, engineering, and data science to support the DX initiatives of customers around the world. Specifically, it provides "experience design" to create intuitive digital experiences that increase user engagement, "advanced engineering" to realize powerful digital experiences through solution development, and "content/data engineering" to derive insights from data and convert them into customer value. By offering these services as a total package, it is able to deliver unique value. It also engages in cross-selling and solution synergies with Hitachi Vantara, which is beginning to produce results.

For the Japanese market, we established GlobalLogic Japan in April 2022 to accelerate DX promotion for customers by combining Hitachi's business foundation in OT, IT, and products with GlobalLogic's strength in design-led digital engineering.

Lumada's growth cycle (4-quadrant model)

MAINTAIN — Managed Services
Secure Data Management, Hybrid Cloud Compatibility

Digital Engineering — PLAN
Consulting, Design and Digital Engineering Capability
GlobalLogic

Understand the customers' management challenges

Operate, maintain, and assess for the next step

LUMADA

Develop solutions with IT/OT/Products

Implement solution

Digitized Products in Other Sectors

Highly Reliable System Development

OPERATE — Connected Products   System Integration — BUILD

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Scale the Lumada Business

The DSS Sector will address the needs of customers and the market through three approaches. In addition to solving issues through collaborative creation with individual customers, we will leverage the strengths of each business group—in such areas as horizontal deployment of high-value-added solutions and creation of new markets in the ecosystem—to scale the Lumada business.

Continuously provide value	Horizontally deploy solutions	Take the lead in building ecosystems
Customer DX	**Domain DX**	**Social Infrastructure DX/GX**
Front Business / Services & Platforms	IT Services / Services & Platforms	Front Business / IT Services / Services & Platforms
Increase engagement with individual customers to obtain repeat orders	Horizontally deploy packaged solutions to attract customers and build a new cycle	Create new markets through social infrastructure DX/GX with numerous stakeholders

Customer DX

This is a field in which we can deploy the strengths of the Financial Institutions BU, the Social Infrastructure Systems BU, and other business units.

Case study

• Sustainable management support for Sompo Japan Insurance

To support the insurance underwriting operations of Sompo Japan Insurance, we mobilized our "CMOS annealing" quasi-quantum computer to increase the number of policies analyzed and evaluated for risk 10 times, thus reducing overall business risk. We also expanded collaboration on multiple fronts to develop services that address social issues, such as AI-based infectious disease forecasting and corporate SX* support through HR tech.

*SX: Sustainability transformation

Domain DX

Here, our approach is to attract new customers by horizontally deploying original services developed through co-creation with customers and solutions already proven in the market. This is an area where we can utilize the strengths of Hitachi Systems and Hitachi Solutions, which have solid track records in the horizontal deployment of services and solutions.

Case study

• Value provision through horizontal deployment of proven solutions

More than 700 local governments have adopted Hitachi Systems' "ADWORLD" municipal solution, and the total number of users of Hitachi Solutions' "PointInfinity" digital marketing solution in Japan and overseas has surpassed 300 million.

Social Infrastructure DX/GX

This approach involves building a new ecosystem with numerous stakeholders to address complex issues that cannot be solved by customers and Hitachi alone. Such a business is only possible because Hitachi engages in a wide range of domains, including OT, IT, and products, and will actively promote it as one of the core businesses of the DSS Sector.

Case study

• Corporate ESG management and capital market transparency

We launched our "Sustainable Finance Platform," which facilitates the collection and use of ESG data using digital technologies, such as IoT, blockchain, and AI, to create an ecosystem that connects financial institutions and operating companies through transparent monitoring and data analysis, and thus identify new market opportunities.

Strengthening and Expanding Digital Talent

We will continue to advance GlobalLogic's exceptional HR recruiting and development mechanism and expand it to Japan while upgrading overall development programs. By also expanding the mutual exchange of human resources with GlobalLogic, we will accelerate the development of IT engineers in Japan. Our DSS Sector will increase its digital talent by around 30,000 people in Japan and abroad over the three years through fiscal 2024.

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Growth Strategies of Business Units and Group Companies

Front Business

Financial Institutions Business Unit

The Financial Institutions BU builds and operates mission-critical systems with high levels of robustness and safety for the financial, insurance, and securities industries. It also develops and provides innovative financial solutions that help resolve customers' business challenges. Under the Mid-term Management Plan 2024, we aim to increase revenues and operating income from "financial DX" services in Japan and overseas, where the market is continuously growing, while strengthening efforts in "GX," earmarked as a new growth engine.

The Financial Institutions BU has expanded its Lumada business by developing solutions and providing services through co-creation with customers in the financial services industry. Going forward, we will leverage the strong relationships we have cultivated with financial institutions and combine them with the Hitachi Group's capabilities in the OT field to build an ecosystem that involves stakeholders from different industries. Our aim is to utilize various data to create and expand new service businesses and thus achieve further growth of the Lumada business.

In "financial DX," we are working on digitalization services that utilize Hitachi's DX and cloud technologies for the systems of financial institutions, as well as microservices that contribute to the DX of financial institutions. We are also striving to create a tourism MaaS that combines data from different industries with Hitachi's digital ticketing and settlement capabilities. We will collaborate with GlobalLogic and Hitachi Vantara to globally expand the knowledge and results we have obtained in Japan and overseas from creating these new financial services. In "GX," meanwhile, we are currently developing a solution to support the collection of ESG information of listed companies, with a full-scale launch planned for the second half of fiscal 2022. In addition, we will work with regional financial institutions, local companies, and local governments to develop regional revitalization services and help realize a sustainable society.

Social Infrastructure Systems Business Unit

The Social Infrastructure Systems BU is responsible for developing a wide range of mission-critical social infrastructure systems and IT services for public offices, municipalities, electric power companies, transportation companies, telecommunication providers, and defense contractors. It aims to be a business entity that innovates social infrastructure with data and digital technology by co-creating with customers and stakeholders to resolve various social issues. Leveraging its strength in system integration–driven value provision, it engages in "Customer DX" aimed at providing individual customers with new value digitally to monitor their business challenges, as well as "Domain DX" to horizontally deploy the know-how obtained through individual customer DX efforts across businesses in the same sector and other industries. The next strategy of this business unit is to become a provider of "Social Infrastructure DX/GX" solutions that collaborates with various stakeholders to deliver advanced services and solutions to issues facing society as a whole. Under the Mid-term Management Plan 2024, we will create a new growth-oriented service model by positioning "social Infrastructure DX/GX" as a pillar of business growth in markets where the Hitachi Group can demonstrate its strengths from the perspective of social value, market growth, and value creation through co-creation. Using OT and domain knowledge in synergy with IT, we aim to generate stable revenues and high profitability through a recurring business model that implements solutions to customers' issues and also converts value into assets.

To realize "Social Infrastructure DX/GX," we will participate in national and local government initiatives for the social implementation of Society 5.0 while collaborating extensively on a global basis in order to expand our business. In light of new government policies, we will utilize our unique digital technologies to support Digital Government, the safety and security of local communities and public spaces, and reinforcement of social infrastructure. In addition, we contribute to a decarbonized society by combining energy management (including the supply-demand balance and control) and environment-related solutions that have proven expertise. We will also use materials informatics technology to support value creation in various industrial fields aimed at realizing a sustainable society.

Case study

As a cooperative member of Japan Exchange Group (JPX) that issued the first Green Digital Track Bond in Japan, Hitachi will utilize its sustainable finance platform to smoothly collect and record operational data on the power generation facilities in which JPX has invested. By providing high levels of convenience to issuers and investors, we will encourage corporate ESG initiatives and help society as a whole, achieve carbon neutrality.

Case study

To address the rapid aging of social infrastructure facilities and falling numbers of experienced maintenance personnel, we will provide more advanced maintenance solutions through remote inspections using drones and diagnostic imaging. In addition to infrastructure providers, we will incorporate superior technologies through open innovation from companies, universities, and other organizations to strengthen AI platforms for facility inspections and achieve more efficient and cost-optimized infrastructure management throughout local communities.

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IT Services

Hitachi Systems

We have business systems across a wide range of industries of varying sizes and a diverse service infrastructure that includes data centers, network and security operation and monitoring centers, contact centers, and around 300 service locations throughout Japan for system operation, monitoring, and maintenance. Deploying these strengths, we provide one-stop services covering the entire IT lifecycle.

In addition to services and security solutions to facilitate digitization of frontline processes, we will focus on managed services that support system operation, maintenance, and monitoring in order to expand Lumada's business. To broaden recurring businesses promoted by the DSS Sector, we will also focus on "areas of continuous value delivery." Specifically, we will leverage knowledge accumulated in each of our businesses to build a new growth model, and we will use this model to provide cloud-managed services and software assets and thus expand our business.

In cloud computing, Hitachi will use the standardization of municipal systems as an opportunity to step up deployment of its "ADWORLD" municipal solution, which incorporates know-how gained through the fast-tracked standardization of Japan's National Health Insurance system. Through collaboration with local vendors, we will promote the horizontal deployment of this solution. By also incorporating our business in managed services for the Government Cloud, we will work to expand our share of the municipal government market.

In managed services, we will deploy Lumada's solutions in a stable and efficient manner to enhance our high-value standardization services, which include security monitoring, IT operations, contact centers, and business process outsourcing (BPO). By also incorporating industry-specific solutions, we will deliver our services to a wide range of customers, including small and medium-sized companies. In security monitoring, which will become indispensable with the spread of cloud computing, we will step up collaboration with domestic and overseas group companies with specialized skills and actively engage in Groupwide initiatives.

Hitachi Solutions

As a member of society and the Hitachi Group, Hitachi Solutions provides digital solutions, particularly for the manufacturing, logistics, and communications industries, thus helping resolve problems faced by customers and society. It also promotes sustainability transformation (SX) by servicing and providing high added value to existing commercial products.

We have been promoting data-driven management by stepping up internal DX to visualize management data and improve productivity. Utilizing our expertise in this area, in Japan we have provided solutions to support productivity improvement and new business creation in the priority areas of smart manufacturing, digital marketing, workstyle innovation, smart mobility, business cooperation, security, spatial information, and data acceleration. As a result, we posted steady sales growth despite the COVID-19 pandemic.

Overseas, meanwhile, Microsoft's Dynamics business performed well in Europe, the United States, and Southeast Asia, which are earmarked for advances in DX and high growth. Hitachi Solutions America has received a global "Microsoft Partner of the Year Award" for four consecutive years. In 2002, it was a "Winner" in Microsoft's "Dynamics 365 Supply Chain Management and Intelligent Order Management (IOM)" category.

Under the Mid-term Management Plan 2024, we will leverage "Hitachi Solutions DX Lab," a digital co-creation space, to accelerate co-creation with customers and partners and deliver solutions and services that help realize sustainable management and society. Internally, we will refine data-driven management and promote human resource development that draws on people's individual strengths. Here, we will create opportunities for employees to take on global challenges by holding SX-themed idea sessions and encouraging senior employees to excel. We will also swiftly roll out commercial products that reflect market trends, such as IoT and smart payment solutions, while collaborating globally with partners who excel in AI, blockchain, and other advanced technologies.

Case study

"ADWORLD" has been adopted by more than 700 municipalities nationwide, contributing to municipal DX by improving services for residents and overall administrative efficiency. Using this solution, Shibuya Ward undertook a complete renewal of its ICT infrastructure for workstyle reform and reduced paper use by 40%. Going forward, we will expand activities for system standardization in compliance with the Ministry of Internal Affairs and Communications' Municipal DX Promotion Plan and provide support for the Government Cloud.

Case study

Our "PointInfinity" digital marketing solution has been adopted by a wide range of customers engaged in building loyalty point management systems, including such convenience stores as FamilyMart. The total number of "PointInfinity" members in Japan and overseas now exceeds 300 million. Here, we provide comprehensive marketing support, from building membership and loyalty point programs to providing recommendations and effectiveness measurements using information collected by AI.

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Services & Platforms
Services & Platforms Business Unit

The mission of the Services & Platforms BU is to utilize co-creation and data to provide shared infrastructure and services that strengthen Lumada and enable continuous value creation.

Through IT platforms and services that support society's digital infrastructure in the era of "ultra-big data," we have helped resolve issues for customers in Japan and overseas.

In overseas markets, Hitachi Vantara is driving Lumada's global expansion by providing data management solutions, while GlobalLogic is using its strengths in design-driven digital engineering to provide DX services. In the domestic market, we also provide IT platforms that leverage our expertise in cutting-edge digital technologies and mission-critical system construction.

With the progression of DX in recent years, customers have become increasingly active in utilizing cloud services to revamp their core systems for business expansion and improved operational efficiency. Based on their DX strategies, they are increasingly demanding hybrid clouds that combine the advantages of both public clouds (which enable rapid startup and flexible expansion) and private clouds (which allow safe and secure use of important data on corporate systems, management, and the like). With this in mind, we will focus on providing digital engineering and hybrid cloud managed services to avoid operational complexity and achieve both agility and reliability in environments where multiple clouds and services are used together. Specifically, we will strengthen our data management infrastructure by linking storage virtualization, operational automation, data governance, and other technologies. We will also provide a one-stop service that covers everything from understanding customers' business challenges to formulating optimal cloud migration strategies, migration itself, and system construction and operation.

Through these efforts, we will support the digital infrastructure that is the key to our customers' DX. At the same time, we will strongly encourage innovation by addressing the problem of data silos, eliminating operational complexity, and ensuring protection and traceability of critical customer data.

Case study 1. Hitachi Vantara and GlobalLogic

Data-driven solutions for BMW Group innovation

Hitachi Vantara has been selected as a strategic partner for cloud storage and data management. It provides a storage-as-a-service solution called "EverFlex" to manage the BMW Group's worldwide IT infrastructure and deliver the high reliability required for mission-critical manufacturing and operations.

GlobalLogic provides design and digital engineering services for the development, enhancement, and maintenance of middleware for connected cars. In these ways, we support the BMW Group's data-driven innovation efforts, from the first quadrant (design and digital engineering) to the fourth quadrant (hybrid cloud support).

Case study 2. Hitachi Energy and Hitachi Vantara

Development of "Lumada Inspection Insights" to optimize inspection and monitoring of facilities

"Lumada Inspection Insights," jointly developed by Hitachi Energy and Hitachi Vantara, uses artificial intelligence (AI) to analyze satellite images, as well as LiDAR (a remote sensing technology) and temperature distribution and other images and videos, to help customers automate facility inspections, improve safety, reduce weather-related risks and environmental impacts from wildfires, and achieve sustainability targets. This solution leverages AI and machine learning to analyze equipment conditions and risks and identify various causes of failures and equipment stoppages. Through predictive analysis, it also assesses operational and environmental risks, enabling repairs to be made efficiently before a failure occurs.