

Hitachi and Google Cloud expand strategic alliance to accelerate real-world deployment of physical AI through FDE and advanced cybersecurity solutions

- Hitachi and Google Cloud will bolster FDE capabilities to accelerate physical AI globally by combining Hitachi's co-creation approach and digital engineering capabilities cultivated through Lumada with Google Cloud's advanced AI.
- Through the development of these FDE capabilities, Hitachi and Google Cloud will enhance HMAX using Gemini Enterprise, helping solve frontline worker challenges through autonomous operations in complex environments. By scaling FDE knowledge, Hitachi will deliver value to a wider range of customers.
- Expanding the collaboration, Hitachi and Google Cloud will enable customers to bolster their cyber defence capabilities against AI-driven cyber threats.

SANTA CLARA, Calif, June 8, Tokyo, June 9, 2026 - Hitachi, Ltd. (TSE:6501, "Hitachi") today announced the expansion of its strategic alliance*¹ with Google Cloud to support customers by accelerating the real-world deployment of physical AI and cybersecurity solutions to protect against AI generated threats. Garnering increasing attention, physical AI is a technology that connects AI-driven analysis and decision-making—derived from frontline data—to concrete actions such as autonomous control and operation of various devices and equipment. Continuously repeating this cycle enables optimal AI decision-making and execution tailored to each specific situation. Through the real-world deployment of physical AI, Hitachi is driving the transformation of social infrastructure.

To realize this critical mission, through the strategic alliance, Hitachi will establish and globally deploy Hitachi's Forward Deployed Engineers (FDEs) model that leverages its strengths in IT, OT, and products cultivated through Lumada, together with Google Cloud's advanced AI.

FDEs are specialists that embed directly with customers, providing end-to-end support. Their work can include everything from identifying management challenges, to early validation of value through building proof-of-concepts (PoCs), to agile implementation to helping deploy projects into operations. Hitachi's DNA includes a long history of practicing "on-site-oriented engineering," working closely with customers to identify and solve challenges together, from discovery through resolution—an approach with strong similarities to the FDE model. Hitachi's consultants and AI Transformation (AX) experts with deep expertise across a wide range of industries, together with Hitachi's U.S. subsidiary GlobalLogic's AI-native software engineers, will collaborate with Google Cloud's leading engineers to support customers.

The teams will work closely with Hitachi's Frontier AI Deployment Center to further enhance HMAX by Hitachi, a next-generation suite of AI-powered solutions that helps drive social infrastructure innovation, by leveraging Gemini Enterprise, an advanced agentic platform that brings the best of Google AI to employees. Leveraging the enhanced HMAX as a core platform, the two companies will help frontline workers through the autonomous execution of complex operations. Furthermore, a data platform that allows domain knowledge gained from FDE activities to be reused as assets will enable Hitachi to deliver value to a wide range of customers at scale.

In the field of physical AI, where AI directly connects with the real world, more robust security than ever before is essential. AI is also changing the cybersecurity landscape. Adversaries are actively leveraging AI models to accelerate vulnerability discovery and automate exploit generation at an unprecedented scale. In fact, research from Mandiant M-Trends 2026^{*2} by Google Cloud reveals that AI advancements have compressed cyberattack timelines significantly. To mitigate these risks, Hitachi's Cyber Center of Excellence will partner with Google Cloud to deliver Google Cloud Security, including its Google AI Threat Defense^{*3} platform alongside Hitachi's mission-critical domain knowledge to support customer security operations.

This collaboration aims to securely scale physical AI value creation on a global level.

Background

Since forming their alliance in May 2024, the two companies have advanced initiatives to create value through AI. As part of Hitachi's "Customer Zero" approach, the company conducted a technical validation using Gemini Enterprise for maintenance and inspection work at Hitachi Power Solutions Co., Ltd., which serves the power and industrial domains. The validation confirmed the potential to improve quality and efficiency^{*4}, while also demonstrating Gemini Enterprise's strong applicability to OT domains such as manufacturing and infrastructure. The trial also highlighted a shared understanding of the importance of specialists who, by taking a field-oriented, hands-on approach, can identify on-site constraints and, in an agile manner, create value and implement solutions to safely integrate advanced AI with operational equipment, business systems, and the tacit knowledge of experienced workers.

Hitachi is now accelerating efforts to enhance AI literacy by introducing Gemini Enterprise within its Digital Systems & Services Sector, which leads AX, and by advancing numerous PoC projects where frontline employees actively utilize AI.

Based on these proven results across the Hitachi Group, Google Cloud and Hitachi will expand their strategic alliance to safely scale the deployment of physical AI in customer production environments.

New Initiatives under the Strategic Alliance

1. Accelerating Physical AI Deployment through the Enhancement of FDEs Capabilities

Working closely with top engineers from Google Cloud, Hitachi's consultants and AX experts, together with GlobalLogic's AI-native software engineers, will further accelerate the development of Hitachi's FDE capabilities. To leverage continuously evolving AI technologies in business and operational environments, the companies will use an agile approach that enables rapid validation and adaptation to change. Unlike conventional system integration approaches that build systems based on predefined customer requirements, this FDE model practiced by these teams will present and validate their effectiveness in actual operations. This approach enables customers to visualize return on investment in advance, minimize risks, and create business value through AI at high speed.

2. Advancing Solutions to Frontline Challenges through HMAX Enhancement

Both companies will enhance HMAX by integrating Gemini Enterprise's agentic AI and multimodal Gemini models. Capable of simultaneously processing and understanding diverse data such as on-site camera footage and vast sensor data, Gemini Enterprise complements physical AI systems that autonomously operate by capturing real-world conditions. Leveraging these technological characteristics and incorporating use cases, such as maintenance and inspection using image comparison, Hitachi will promote autonomous operations in complex manufacturing and social infrastructure environments. To realize this, Hitachi will integrate its

proprietary domain knowledge with Google Cloud's agent-ready data technologies into Hitachi's data platform. By doing so, Hitachi aims to create scalable business outcomes that go beyond the provision of AI services and establish new business models in the infrastructure sector.

3. Next Generation Cybersecurity for AI Era Threats

In response to cybersecurity threats, the two companies will jointly deliver autonomous next generation security solutions. These solutions leverage Google Cloud Security technologies and services, including Wiz for automated risk reduction and comprehensive visibility into cloud and AI risks and Mandiant Consulting for cyber threat expertise, alongside Hitachi's experience in mission-critical system integration in industries such as railways, energy, and finance, as well as its global OT knowledge. Its effectiveness has already been demonstrated through a "Customer Zero" approach, including the adoption of Google Security Operations across Hitachi Group companies globally. Both Google Cloud and Hitachi will continue efforts to expand proposals to customers going forward.

Furthermore, the practical expertise and AI deployment technologies developed on the frontlines will be folded into the Frontier AI Deployment Center's resources. By sharing these advanced insights widely among system engineers in Japan, Hitachi will strengthen FDEs across the Hitachi Group. These efforts will enable Hitachi to accelerate the FDE model rollout and advance AI on a global scale.

Comment from Thomas Kurian, CEO of Google Cloud

"Combining Hitachi's deep domain knowledge, GlobalLogic's engineering strength, and Google Cloud's advanced AI and engineering resources represents an innovative approach to accelerating AI transformation in real-world environments. This partnership will better empower customers to implement AI agents and create value faster. In addition, by integrating Google Cloud Security's advanced solutions with Hitachi's expertise in mission-critical domains, we will help enable our customers to innovate within a secure, trusted environment for the AI era."

Comment from Jun Abe, Executive Vice President, Head of Digital Systems & Services Sector, Hitachi

"Hitachi has been proactively promoting the introduction and practical use of Gemini Enterprise at scale as Customer Zero, and has experienced significant improvements in operational efficiency and productivity as a result. The expansion of this strategic alliance is intended to enable both companies to take on more complex challenges, based on the enhanced development of FDE capabilities. By combining the world's most advanced AI implementation approaches developed by Google Cloud with Hitachi's co-creation approach and GlobalLogic's outstanding digital engineering capabilities, we aim to create value from physical AI in customers' business environments. Furthermore, to deliver this value safely, we will integrate Hitachi's expertise in building mission-critical systems with Google Cloud Security's advanced technology and services, protect social infrastructure from threats in the AI era, and contribute to the realization of a sustainable society."

*1 Hitachi's press release issued on May 28, 2024 [Hitachi and Google Cloud Announce Strategic Partnership to Accelerate Innovation and Productivity with Generative AI : Hitachi Global](#)

*2 Source: <https://cloud.google.com/blog/en/topics/threat-intelligence/m-trends-2026?hl=en>

*3 Google Cloud announcement on May 28,2026: [Introducing Google AI Threat Defense to help you outpace the adversary | Google Cloud Blog](#)

*4 Hitachi's press release issued on October 10, 2025 [Hitachi Advances Strategic Alliance with Google Cloud to Empower Frontline Workers with Field-Specific AI Agents](#)

About HMAX & Lumada

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About Hitachi, Ltd.

Through its Social Innovation Business (SIB) that brings together IT, OT (Operational Technology) and products, Hitachi aims to be a global leader in continuously transforming social infrastructure through digital, contributing to a harmonized society where the environment, wellbeing, and economic growth are in balance.

Hitachi operates worldwide across four sectors – Digital Systems & Services, Energy, Mobility, and Connective Industries – as well as a Strategic SIB Business Unit focused on new growth areas. With Lumada at its core, Hitachi creates value by combining data, technology and domain knowledge to solve customer and social challenges. Revenues for FY2025 (ended March 31, 2026) totaled 10,586.7 billion yen, with 606 consolidated subsidiaries and approximately 290,000 employees worldwide. Visit us at www.hitachi.com.