

Panasonic Connect Develops AI-Based Warehouse Task Optimization Technology to Solve Logistics Challenges

R&D combining Panasonic Connect's industrial engineering and Blue Yonder's software solutions to enhance warehouse operations

TOKYO, JAPAN, March 8, 2024 — [Panasonic Connect Co., Ltd.](https://connect.panasonic.com) today announced that it has developed a new AI-based technology*¹ that optimizes tasks in the warehouse to enhance efficiency and solve issues in logistics with the aim of future implementation with Blue Yonder Warehouse Management solutions.

This task optimization engine is designed to work in tandem with Blue Yonder Warehouse Management solutions*² by linking information on incoming and outgoing shipments with an AI algorithm that optimally allocates tasks to robot picking arms, automated warehouse systems, and warehouse personnel to synchronize and optimize the preparation and shipment of goods. This makes it possible to dramatically reduce the idle waiting time for trucks and drivers, which is a major issue particularly in Japan with legislation curbing truck driver overtime set to go into place this April, thus negatively impacting overall transportation capacity. Panasonic Connect aims to provide this service as part of an open platform.

Panasonic Connect initially made a 20% investment into Blue Yonder in 2020, then purchased the remaining 80% in 2021 (approx. 860 billion yen at the time) with the larger aim of revolutionizing supply chain management through the synergy between Blue Yonder's software and Panasonic's industrial engineering (IE) expertise*³ cultivated over the company's more than 100-year history. The R&D project for the task optimization engine is another step along the way to realizing this revolution.

In general, supply chains are very complex systems involving various stakeholders which tend to lead to waste of time and resources. By improving efficiency and reducing such waste, Panasonic Connect and Blue Yonder aim to make significant contributions to customers' businesses, society, and the global environment. Panasonic Connect and Blue Yonder co-developed this task optimization engine solution in order to efficiently manage, control, and optimize the synchronization of labor, robots, and equipment in the warehouse.

In addition, by developing the task optimization engine as part of an open platform, Panasonic Connect aims to collaborate with diverse robotics companies that provide effective solutions for warehouse automation. As the first partner, a business alliance has also been announced today with [Rapyuta Robotics Co. Ltd.](#), which provides the Rapyuta ASRS automated warehouse solution.

Furthermore, the company has developed a robot control platform which controls robot hands that pick products in the warehouse in conjunction with the task optimization engine, and also plans to provide this technology as an open platform^{*4}. Together with the task optimization engine, Panasonic Connect aims to increase the number of partner companies in the platform to help co-create and solve wider supply chain issues.

Panasonic Connect will continue to collaborate with Blue Yonder to tackle overall optimization of the supply chain by combining hardware, software, edge technologies, and AI, thereby contributing to solving societal issues and customers' management challenges as a world-class supply chain platform provider.

*1: This technology is currently under development, with 13 patents pending. Panasonic Connect will make further announcements when commercially available.

*2: A set of software solutions that visualize inventory across the business and manage supply chain fulfillment operations from distribution centers to store shelves.

*3: Industrial engineering visualizes each task, sets a standard value for each operation as a yardstick, identifies the cause of the gap with the actual work, then iterates and improves operations, contributing to management by continuous on-site improvement.

*4: The robot control platform is currently under development, with 17 patents pending. Panasonic Connect will make further announcements when commercially available.

About Panasonic Connect

[Panasonic Connect Co., Ltd.](#) was established on April 1, 2022, as part of the [Panasonic Group's](#) switch to an operating company system. With about 29,500 employees worldwide and annual sales of JPY1,125.7 billion, the company plays a central role in the growth of the Panasonic Group's B2B solutions business and provides new value to its customers by combining advanced hardware, intelligent software solutions, and a wealth of knowledge in industrial engineering accumulated over its over 100-year history. The company's purpose is to "Change Work, Advance Society, Connect to Tomorrow." By driving innovation in the supply chain, public services, infrastructure, and entertainment sectors, Panasonic Connect aims to realize a sustainable society and to ensure well-being for all.