



OPPORTUNITY

PALTAC needed a highly efficient logistics network to support sustainable growth and overcome operational challenges

INNOVATION

By combining AI-driven demand forecasting with warehouse robotics, PALTAC's SPAID initiative optimizes procurement for retail partners.

SOLUTION

Partnering with InterSystems IRIS, PALTAC developed an AI-powered robotic warehouse system. Robots address workforce shortages and boost productivity through human-robot collaboration.

IMPACT

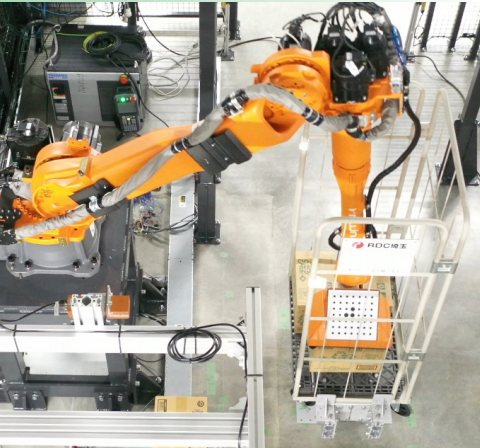
SPAID doubled distribution productivity, achieved 99.999% order accuracy, and cut warehouse labor needs by 50%. PALTAC now leads in integrating AI, robotics, and digital technologies.

Creating the Future of Society Through the Power of Connections and Innovation in Distribution

PALTAC Corporation, a major wholesaler and distributor based in Osaka, Japan, is revolutionizing the distribution landscape with its cutting-edge Automatic Ordering Service, an integral part of its Retail Sales Management System. Called **Super Productivity Advanced Innovative Distribution (SPAID)** and based on **InterSystems IRIS**®, this innovation leverages AI-driven demand forecasting to streamline the procurement process for retailers, ensuring they always have the right products in stock without overordering. By minimizing food loss and optimizing inventory management, PALTAC is not only streamlining operations but also contributing to a more sustainable future. This technology is a testament to how PALTAC's connects people and society through advanced, forward-thinking solutions.

PALTAC recognized the need to build a highly efficient logistics network to address current and future environmental changes and a shrinking workforce. The company identified a critical challenge in the bulk selection process within its distribution centers, essential for intermediate distribution. Since the RDC Kinki logistics system began operation in 1998, PALTAC has continuously improved its SPIEC logistics model, achieving faster and more accurate selection operations. However, a declining working-age population presented a significant obstacle, necessitating a more advanced solution, SPAID.





“The SPAID initiative has not only doubled our productivity but also maintained a 99.999% accuracy rate, which is a game-changer in our industry.

“By integrating AI and robotics, we have effectively addressed the labor shortage and set a new standard in logistics efficiency.”

The PALTAC team

A New Level of Supply Chain Accuracy and Efficiency

SPAID has significantly enhanced PALTAC’s warehouse productivity and accuracy through robotics guided by AI. In the bulk selection process in its distribution centers, PALTAC has achieved faster and more accurate selection operations by improving the SPIEC logistics model. The new SPAID logistics model, introduced in distribution centers built since 2018, has doubled the productivity of the older model by integrating AI, robotics, and other digital technologies. This innovation not only reduces the number of workers needed by half but also ensures a 99.999% accuracy in bulk item selection, effectively addressing the labor shortage and setting a new standard in logistics efficiency.

Key Elements of an Historic Leap in Logistics

The SPAID initiative has demonstrated a remarkable impact, achieving an unprecedented accuracy in warehouse product selection. This level of precision not only reduces errors but also enhances customer satisfaction and operational reliability. The aggressive adoption of AI-supported robots in PALTAC’s warehouses is a key feature of the SPAID initiative. These robots work in tandem with human workers, optimizing the workflow and significantly reducing the number of workers needed to operate the warehouse. This innovative approach not only meets the current labor challenges but also positions PALTAC as a leader in the integration of advanced technologies in logistics. Additionally, the SPAID model proved to be a crucial support during the COVID-19 pandemic, maintaining the efficiency of PALTAC’s supply chain when many other systems were strained.

About the Winner: PALTAC Corporation

PALTAC Corporation, a leading wholesale company founded in 1898, has been at the forefront of delivering essential daily necessities. With a strong focus on connecting manufacturers to retailers, PALTAC ensures that products like cosmetics and OTC pharmaceuticals are available quickly and accurately. Embracing a new vision, PALTAC is committed to shaping the future of people and society through innovative distribution solutions.

About the InterSystems Impact Awards, Selected by an MIT Panel

Each year, select client organizations are recognized at the InterSystems READY conference for projects driving positive change. Nominations are evaluated by independent judges from MIT on three criteria:

- **Makes a significant difference**
- **Breaks new ground**
- **Sets an example**

To learn more about the InterSystems Impact Awards visit

<https://www.intersystems.com/intersystems-impact-awards/>.