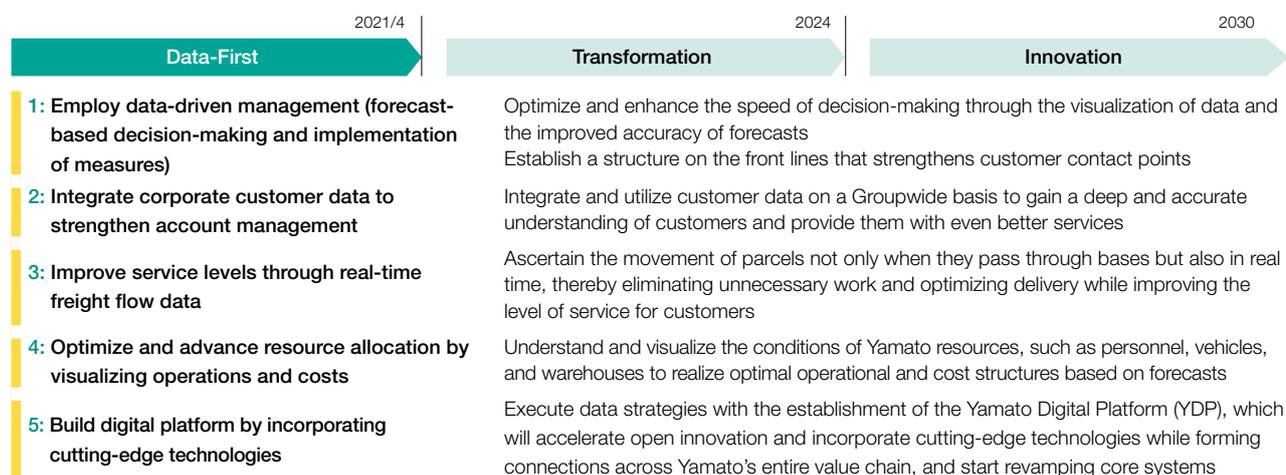# Digital Transformation of *TA-Q-BIN*

To implement "inclusive management," which helps our employees provide a thorough response to customers, we are working to enhance the efficiency of logistics operations and standardize them by promoting a digital transformation (DX). At the same time, we are striving to forecast demand and workloads based on data analysis and pursuing the optimal allocation of management resources. In these ways, we are working to transition to data-driven management that realizes objective and rational decision-making.

Infrastructure Reforms to Realize DX

Transition to Data-Driven Management

- Invest roughly ¥100.0 billion in digital fields over the four-year period starting from the fiscal year ending March 31, 2021
- Launch a new digital organization with 300 personnel in 2021
- Execute five actions to launch a new organization with the aim of achieving results in the near term
- Launch CVC fund with a size of ¥5.0 billion to accelerate open innovations

2021/4	2024	2030
Data-First	Transformation	Innovation

1: Employ data-driven management (forecast-based decision-making and implementation of measures)

Optimize and enhance the speed of decision-making through the visualization of data and the improved accuracy of forecasts
Establish a structure on the front lines that strengthens customer contact points

2: Integrate corporate customer data to strengthen account management

Integrate and utilize customer data on a Groupwide basis to gain a deep and accurate understanding of customers and provide them with even better services

3: Improve service levels through real-time freight flow data

Ascertain the movement of parcels not only when they pass through bases but also in real time, thereby eliminating unnecessary work and optimizing delivery while improving the level of service for customers

4: Optimize and advance resource allocation by visualizing operations and costs

Understand and visualize the conditions of Yamato resources, such as personnel, vehicles, and warehouses to realize optimal operational and cost structures based on forecasts

5: Build digital platform by incorporating cutting-edge technologies

Execute data strategies with the establishment of the Yamato Digital Platform (YDP), which will accelerate open innovation and incorporate cutting-edge technologies while forming connections across Yamato's entire value chain, and start revamping core systems

Initiative

Establishment of CVC Fund KURONEKO Innovation Fund

In April 2020, we launched the corporate venture capital (CVC) fund, KURONEKO Innovation Fund, together with the major independent venture capital fund corporation, Global Brain Corporation.

The basic stance of the KURONEKO Innovation Fund is to "Always think from a long-term perspective, provide start-up companies with all the assets that the Yamato Group has to offer, and grow together with them." Rooted in this basic stance, this CVC fund strives to achieve the following three goals: (1) Create new growth models, (2) Realize outstanding operational efficiency, and (3) Promote open innovation through consistent management of funds. To that end, the fund will invest in start-up companies both in Japan and overseas that possess innovative technologies and business models that can transform logistics operations and supply chains. At the same time, the fund aims to create growth models in the logistics market and other related markets by opening up the Yamato Group's management resources.

Fund Overview

Name (registered name)	KURONEKO Innovation Fund L.P. (YMT-GB Investment Limited Partnership)
Fund size	¥5.0 billion
Operation period	10 years
Investment target	■ Start-up companies with innovative technologies and business models that can transform logistics operations and supply chains ■ Start-up companies that have potential as Yamato Group partner companies
Target stage	Seed, early, and middle, in principle
Target area	Mainly focus on Japan, but also invest in North America, Europe, and Asia
Unlimited Liability Partner	Global Brain Corporation
Limited Liability Partner	Yamato Holdings Co., Ltd.

Initiatives for *TA-Q-BIN* DX

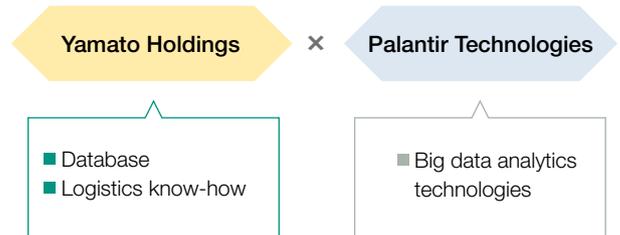## Optimizing Operations through Data Analytics

Through detailed data analysis and the utilization of AI, we will enhance the accuracy of our demand and workload forecasts. Based on these forecasts, we will better allocate personnel and vehicles and improve delivery routes. Through such efforts, we will aim to boost pickup and delivery productivity by optimizing and standardizing transportation and delivery processes as well as our overall operations.

Initiative

Collaboration with Palantir Technologies to Accelerate DX

In July 2020, we initiated efforts aimed at accelerating the operational reform of the Yamato Group and the DX of the logistics industry in collaboration with the U.S.-based Palantir Technologies, Inc., a leading company in the global market for big data analytics.

Leveraging the technologies of Palantir, we will build a digital platform that creates new added value for our customers. At the same time, we will aim to optimize resource allocation, streamline the supply chain, and enhance the level of service we offer customers. Furthermore, through operational innovation, not only will we transform the Yamato Group itself, we will also lead the way with innovations in the overall logistics industry in Japan.

Yamato Holdings × **Palantir Technologies**

- Database
- Logistics know-how

- Big data analytics technologies

Provide optimal supply chain solutions for customers through innovations to logistics operations using sophisticated data analysis

Enhanced Productivity in Logistics Operations through the Introduction of Sorting Systems

We will improve the productivity of sorting operations across our entire network by 40% through the introduction of unique sorting systems that innovate conventional sorting processes. Through such efforts, we will significantly enhance the productivity of our logistics operations.

▶ Overview of Enhancing Productivity through the Introduction of Sorting Systems

From 2021 on

70 bases

3,700 *TA-Q-BIN* Centers

Parcels from across Japan

Conventional
Primary sorting of parcels for regional *TA-Q-BIN* centers performed at bases in accordance with invoice information

From 2021 on
Through the introduction of digitalization, robotics, and factory automation, parcels sorted at bases based on specific courses for each *TA-Q-BIN* center and sent to each center accordingly

Conventional
Implementation of secondary sorting and loading processes at each *TA-Q-BIN* center based on specific courses

From 2021 on
Immediate loading and delivery enabled as sorting work for each *TA-Q-BIN* center will be significantly reduced