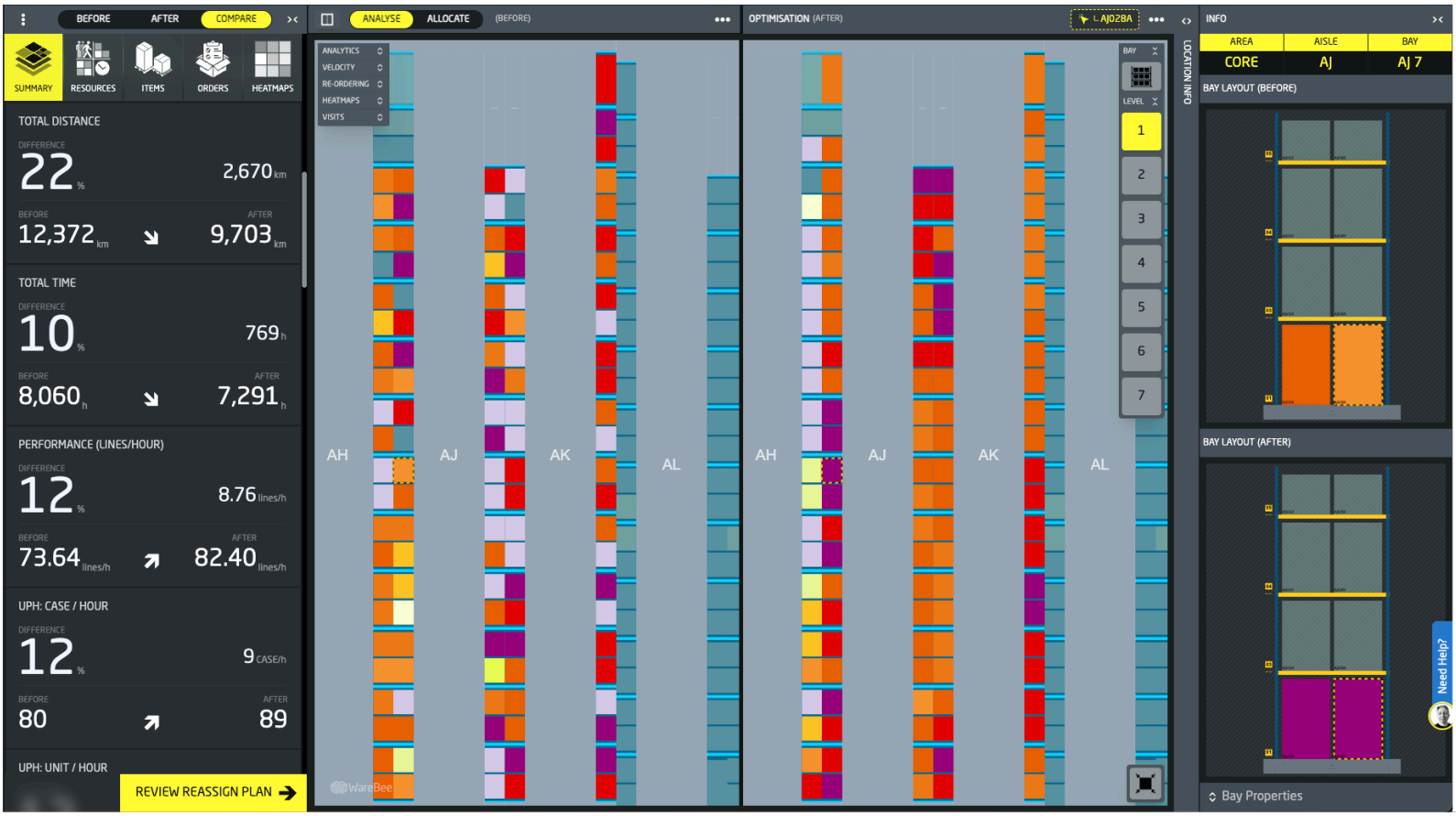
WareBee

go.warebee.com/case-study



Case Study

Efficiency in Food Distribution with WareBee

Who Is the Client?

A leading UK food and beverage brand, operating a national distribution centre responsible for supplying thousands of outlets daily. The facility manages **ambient, chilled, and frozen products**, each picked in dedicated zones. With daily store waves and just-in-time delivery windows, the DC faced mounting pressure from growing SKU ranges, tote-based picking, and labour-intensive replenishment.

How Did We Approach the Problem?

WareBee deployed its Digital Twin to replicate the facility across all zones. Using SKU velocity and frequency analysis, affinity groupings, and labour simulations, the team identified hidden inefficiencies and tested improvements in slotting, replenishment, and tote fill — validating the impact before making changes on the floor.

WareBee

warebee.com/case-study

Unit 1, Cambridge House
Camboro Business Park
Oakington Road
Cambridge, CB3 0QH, UK

What Did We Find?

Zone-Level Inefficiencies

- Ambient, chilled, and frozen areas operated in silos but shared similar challenges with slotting and replenishment.
- SKUs were not always positioned for efficient access, slowing pick rates..

Underused Storage and Picking Assets

- Containers and roll cages were underutilised, with picking density well below operational potential.
- Asset usage (totes) lacked optimisation logic, resulting in higher handling effort per shipment.

Labour & Ergonomics

- Navigation was slowed by congested aisles and poorly sequenced tote usage.
- Workforce planning did not always match zone-specific peaks, leading to overstaffing in one zone and bottlenecks in another.

Tote & Shipping Inefficiencies

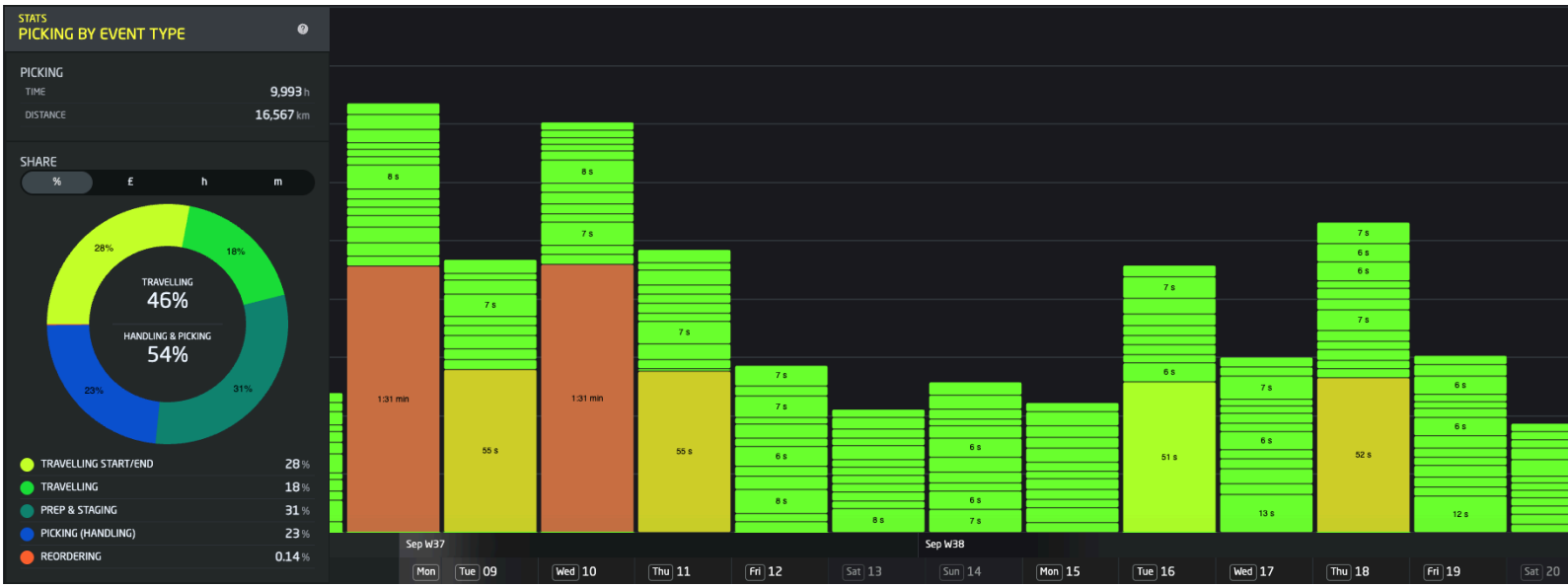
- Tote fill density was inconsistent, with excess handling per order.
- Heavy items were sometimes sequenced above light ones, increasing rework and raising damage risk during transport.

Replenishment Inefficiency

- High-velocity SKUs in small locations created frequent replenishment cycles.

Picking Inefficiency

- Excessive locations visited and suboptimal layout led to longer pick routes and slower fulfilment rates.
- Valuable real estate was occupied by low-velocity SKUs, reducing available capacity in high-turnover zones.



WareBee

warebee.com/case-study

Unit 1, Cambridge House
Camboro Business Park
Oakington Road
Cambridge, CB3 0QH, UK

What Steps Did We Take?

- **Velocity-Based Slotting per Zone:** Reslotted fast movers in ambient, chilled, and frozen areas to minimise walking and speed up picks.
- **Ergonomic Improvements:** Moved high-frequency SKUs to waist-level, cutting fatigue and improving safety.
- **Tote & Dolly Optimisation:** Improved tote fill sequencing and optimised routes for dolly board navigation, maximising picks per tote and ensuring heavy-to-light order stacking.
- **Continuous Monitoring**: Activated automated alerts for slot degradation, route friction, and high-variance locations.
- **Operational Benchmarking:** Quantified baseline performance and simulated improvements before committing any physical changes.
- **Simulation-Driven Labour Planning** Forecasted zone-specific demand and matched staffing to store dispatch waves.

What Were the Results?

WareBee's holistic approach delivered ROI improvements within three months.

- **Reduced Walking Distance:** Navigation improved, lowering travel distance per picker by **22%**.
- **Enhanced Pick Rates**: Picking productivity increased by **12% (lines/hour)** across all zones.
- **Improved Asset Utilisation:** Shipment density (picks per tote) increased by **18%**, reducing handling overhead.
- **Replenishment Efficiency:** **15% fewer** replenishment tasks.
- **Improved Visibility:** Enhanced data insights and monitoring tools provided real-time visibility into warehouse operations, enabling proactive decision-making and performance tracking.

Why WareBee?

In food distribution, every pick must be fast, and accurate. WareBee's **zone-aware simulations, tote optimisation, and ergonomic improvements** enabled the DC to **boost pick productivity, maximise tote fill, and streamline labour** — all while improving employee safety and delivery quality on time.