

SOLUTION

Returnable Asset Management

INDUSTRY

Food & Beverage

BOTTLES OF EFFICIENCY: DIGITAL TRANSFORMATION FOR A GLOBAL FOOD AND BEVERAGE COMPANY'S RETURNABLE ASSETS

HOW A GLOBAL FOOD AND BEVERAGE COMPANY
USES RETURNABLE ASSET MANAGEMENT
TO DIGITALLY TRACK MILLIONS OF WATER BOTTLES

A global food and beverage company's delivery business manages millions of 5-gallon water bottles annually - a critical returnable asset essential to their operation. However, a lack of asset visibility, damage, food contamination risk, and manual tracking processes created inefficiencies and loss. The company needed an automated, digital system to trace each bottle from production to end-of-life to improve operational execution and enhance customer trust.

The company implemented the Returnable Asset Management solution by Antares Vision Group. Each bottle receives a unique QR code at production, enabling complete lifecycle traceability. The solution tracks bottle movement through internal plants, distribution centers, delivery fleets, and even customer locations. It integrates QR and RFID for high-speed line compatibility, feeding real-time data into the company's ERP and analytics systems. Additionally, the digital IDs enable consumer engagement and fraud prevention through tamper-proof origin verification.

With end-to-end visibility across the supply chain, the company achieved operational excellence and measurable savings. They identified root causes of bottle breakage by supplier and route, reduced asset loss, and improved fleet utilization. Digital interaction points through QR codes also opened new channels for customer loyalty and brand trust.



CHALLENGES

- Limited status insight making it difficult to track movement and usage of millions of 5-gallon water bottles.
- Improper handling and inadequate monitoring increased the risk of bottle damage and food contamination.
- Manual asset tracking were time-consuming, error-prone, and inefficient at scale.
- Lost assets, increased operational costs, and reduced trust in the reliability of the HOD service.

BENEFITS

- Full lifecycle traceability of returnable bottle-using hybrid QR/Rfid technology
- 30% reduction in asset loss and breakage through data-driven action plans
- Accurate inventory across plants, trucks, depots, and customer locations
- Real-time insights into asset cycle time and return patterns

SOLUTION

- Each jug is assigned a unique QR code at the point of production, enabling full lifecycle tracking.
- The solution monitors bottle movement across all stages.
- Real-time data into the company's ERP and analytics platforms.
- Digital IDs also support consumer interaction and prevent fraud through tamper-proof origin verification.

- Consumer engagement through scannable bottle and product authenticity verification
- Faster, smarter decision-making across operations and marketing