

Reusable Packaging Management

TRACKING AND OPTIMIZING THE LIFE CYCLE OF REUSABLE REF PET BOTTLES

CASE STUDY

CUSTOMER PROFILE

One of the largest bottlers in the world, bottles beverages products in 13 countries: Argentina, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Nicaragua, Panama and Uruguay.

PROJECT SCOPE

To reach its objectives, the company is working with OPTEL to understand the traceability of its bottles and its inventory management. In 2020, a first successful pilot project was implemented in Brazil.

One of the core objectives of the project was to gain visibility on the supply chain and conduct a life cycle assessment (LCA) of the company's RefPET bottles. The company also needed to increase visibility over its fleet of reusable bottles to improve management and reduce costs.

the company required cutting-edge technology that is easy to install without disrupting its line operations.

MAIN ISSUES TO SOLVE

- There was no track and trace of RefPETs once bottles were out on the market
- RefPETs are visually inspected for asset controls.
- A common industry practice is to refill RefPET bottles and measure the number of times they are filled.

The company has **ambitious sustainability objectives** to **reduce plastic waste** in its operating regions.



OPTEL SOLUTION OVERVIEW

The first step of the pilot project was to implement a track-and-trace solution inside the manufacturing plant to gather data about all past and current bottles.

1. Bottle identification: Each bottle has a unique identifier (UID):

- The UID is read when the bottle is loaded on the filling line
- Systems carry the product's profile and history

2. Data from the systems enables the life cycle assessment of the RefPET bottles:

- Measure the age, return rate, location and durability of the assets
- Measure number of bottles per day or per hour to monitor real performance of the line
- Measure the average time the bottles stay on the market before being refilled
- Determine the number of bottles on the market



PRINT

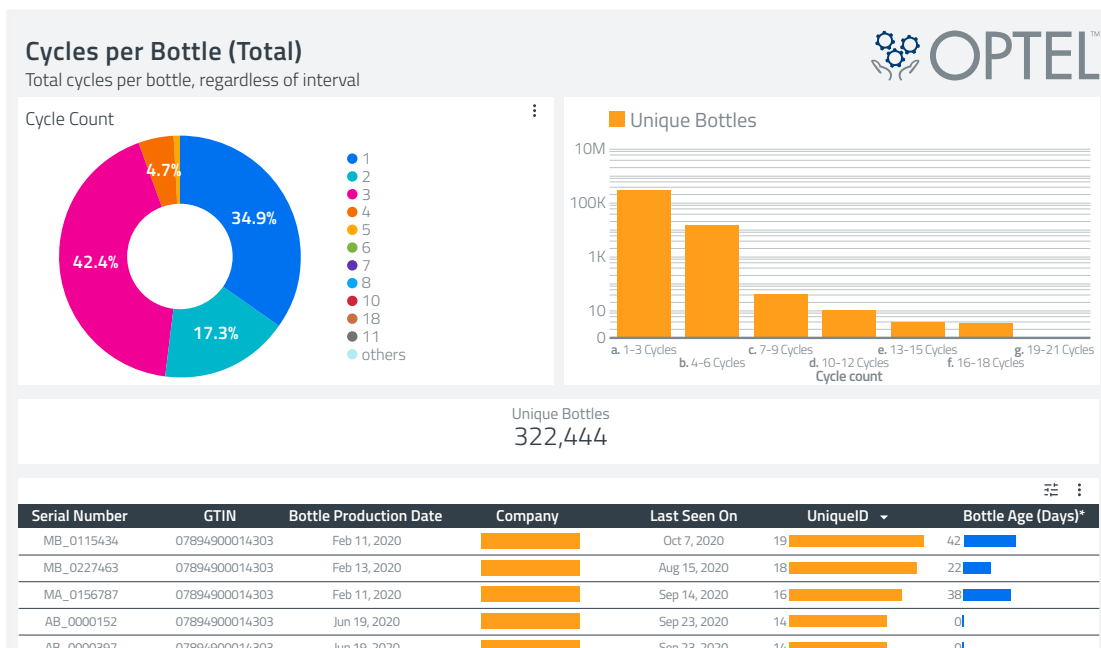


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EPCIS REPORT

3. Analyze, monitor and plan



NEXT STEPS

Once the track-and-trace solution is in place, the company can improve the return on investment with added-value options such as operational efficiency tools to provide visibility on:

- Fleet size and asset location
- Forecasting of new asset purchases
- Optimization of sleeping inventory
- Supply chain monitoring

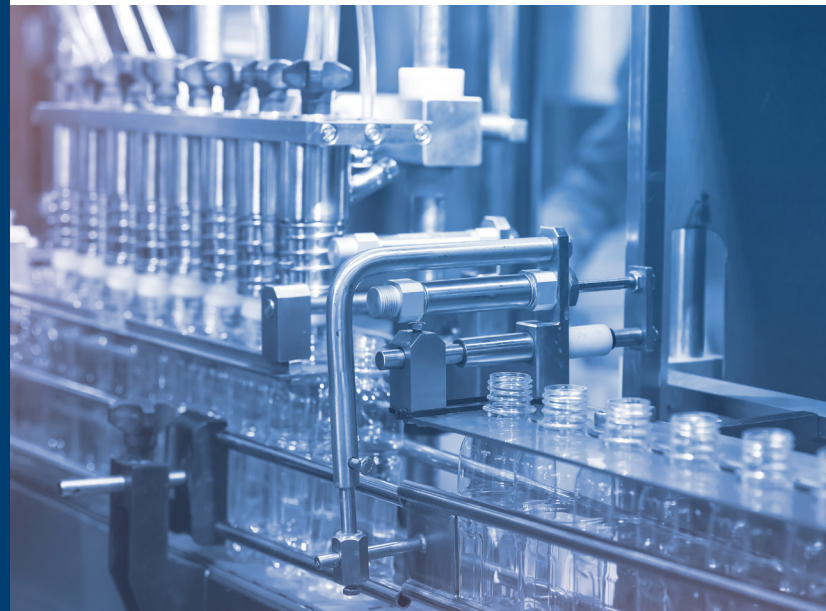
OVERALL BENEFITS AND RESULTS

- Better forecasting for bottle purchasing
- Reduction of asset losses
- Optimization of RefPET life cycle
- Benchmarking of RefPET suppliers
- Optimization of supply chain operations
- Improved inventory management
- Detection of manufacturing anomalies
- Improved performance
- Reduced operational costs
- Reduced waste
- Strong real-time analytics
- Potential to aggregate bottles/cases/pallets for stock management and traceability across supply chain (commercial insights, recalls, product diversion)

The company required cutting-edge technology that is easy to install without disrupting its line operations.

CONTACT US

To learn more about OPTEL's traceability solutions, contact us at optelgroup.com/contact/.



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