

Reusable Packaging Management

TRACKING AND OPTIMIZING THE LIFE CYCLE OF REUSABLE REF PET BOTTLES FOR COCA-COLA FEMSA

CASE STUDY

CUSTOMER PROFILE

Based in Mexico, Coca-Cola FEMSA, one of the largest bottlers in the world, bottles Coca-Cola products in 13 countries: Argentina, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Nicaragua, Panama and Uruguay.

PROJECT SCOPE

To reach its objectives, Coca-Cola FEMSA 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 Coca-Cola FEMSA's RefPET bottles. The company also needed to increase visibility over its fleet of reusable bottles to improve management and reduce costs.

Coca-Cola FEMSA 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.

Coca-Cola FEMSA 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 of bottles on the market



PRINT

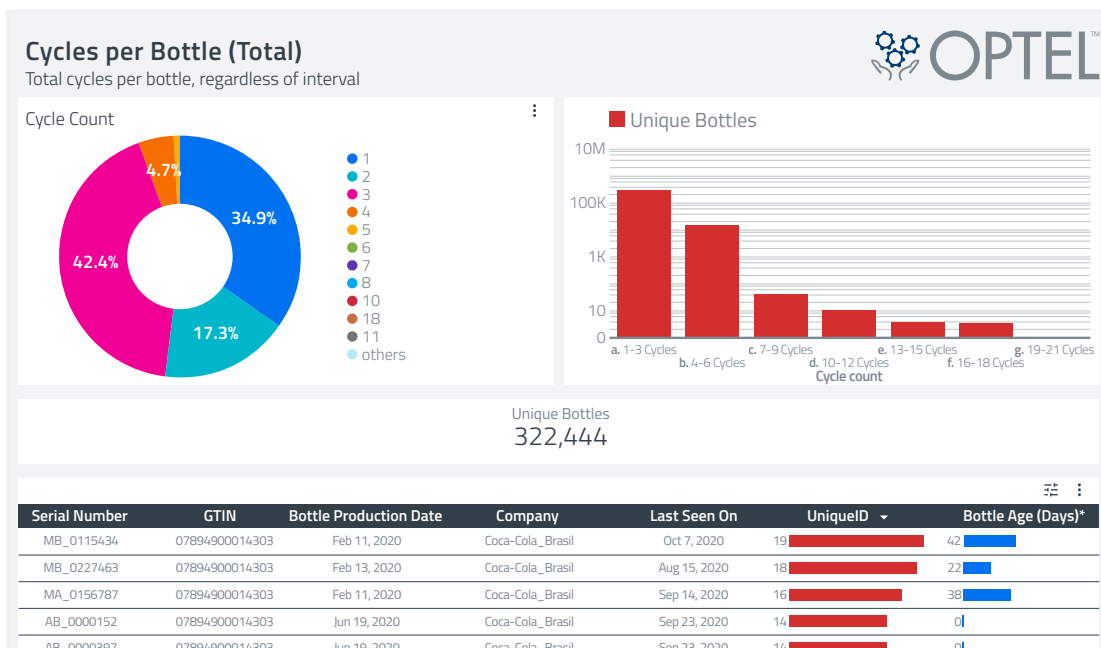


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EPCIS REPORT

3. Analyze, monitor and plan



NEXT STEPS

Once the track-and-trace solution is in place, Coca-Cola FEMSA 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)

Coca-Cola FEMSA 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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