![Mindtree - A Larsen & Toubro Group Company]

Plastic Footprint & Recyclability Monitoring Dashboard

About the Customer

The client is an FMCG major with three different categories of products: Food & Refreshments, Beauty & Personal Care, and Home Care. The client is one of the oldest multinational companies with sales in over 190 countries and a brand portfolio of over 400 brands. The annual turnover in 2019 was 52 billion Euros.

The Challenge

Inspired by UN's Sustainable Development Goals, the client wanted to adopt and drive this transformational change in their business practice. The goal was to achieve sustainable business growth but not at the expense of the planet and its people.

Focusing on the immediate problems faced by the society such as climate change and plastic pollution, the client charted out three goals in the areas of Plastic Footprint and Recyclability as part of their sustainability initiatives. These include:

- To reduce the consumption of virgin plastic to 50% of their 2019 actuals by 2025
- To achieve 100% recyclability for all plastic consumed by 2025
- To use at least 25% PCR (Post Consumer Resin) as part of their plastic consumption by 2025

To proactively monitor these goals and take corrective action, a go-to dashboard was required to track all metrics in a snapshot view. In the as-is process, the KPIs were manually tracked, which was a tedious activity requiring multiple checks and validations. The objective was to automate this process and reduce the time taken in crunching the numbers by automating the KPI computation logic and standardize reporting for different business stakeholders.

The dashboard was expected to track high level metrics and generate insights in terms of identifying best performers by region (markets), category, and brand. The audience for this dashboard was the supply chain planning committee, for their quarterly review. Region and category teams were provided access to monitor performance for their respective segments.

The client was looking for an experienced partner for a swift upgradation of their Identity and Access Management (IAM) infrastructure where they could meet the business requirements for identity and access management, user provisioning/de-provisioning, managing privileged accounts, and providing updates using automated solutions or self-servicing capabilities with minimal intervention from the Identity and Access Management (IAM) support team.

Solution

As part of the engagement, Mindtree worked with the client to define the roadmap and delivered the dashboard built using Microsoft Power BI. The key challenge was to access authentic data to capture

the recyclability metrics. It was decided to rely on the sales volume data to back-track and compute the corresponding plastic footprint and its associated recyclability metrics.

The recyclability data was cleansed and transformed by the R&D team and hosted on Azure cube. The Power BI dashboard was then connected to the Azure cube to source the base data.

The second challenge was KPI definition. Computation logic for the metrics was built and finalized in consultation with the client's R&D team. Working with the business teams, the target definition for tracking performance was developed across categories and regions.

In terms of data security, role-based access was introduced. Users can only access data based on their role, as defined by the business.

In terms of the dashboard, it captured the following data points:

- Virgin Plastic Footprint
- Actual and Technical Recyclability Metrics
- PCR Consumed

Power BI's in-built AI capabilities were utilized to generate insights on understanding the recyclability metrics better. For instance, the 'Key Influencers' feature helped in drawing out insights on packaging materials vs the recyclability percentage metric.

Business Advantages:

1. **One-stop solution to track sustainability goals:**
   The dashboard presented a consolidated view on the three sustainability goals on a month/ quarter/ year view. The actual recyclability metrics could be monitored with respect to the annual targets. The data metrics could also be drilled down by category/brands or region/country levels.

2. **Facilitate prescriptive analytics:**
   The dashboard facilitated prescriptive analytics by identifying erring brands and regions so that corrective action could be initiated. To ensure that the customer would reduce their plastic consumption by 50% by 2025, plastic usage across products/brands, regions was monitored in a timely manner.
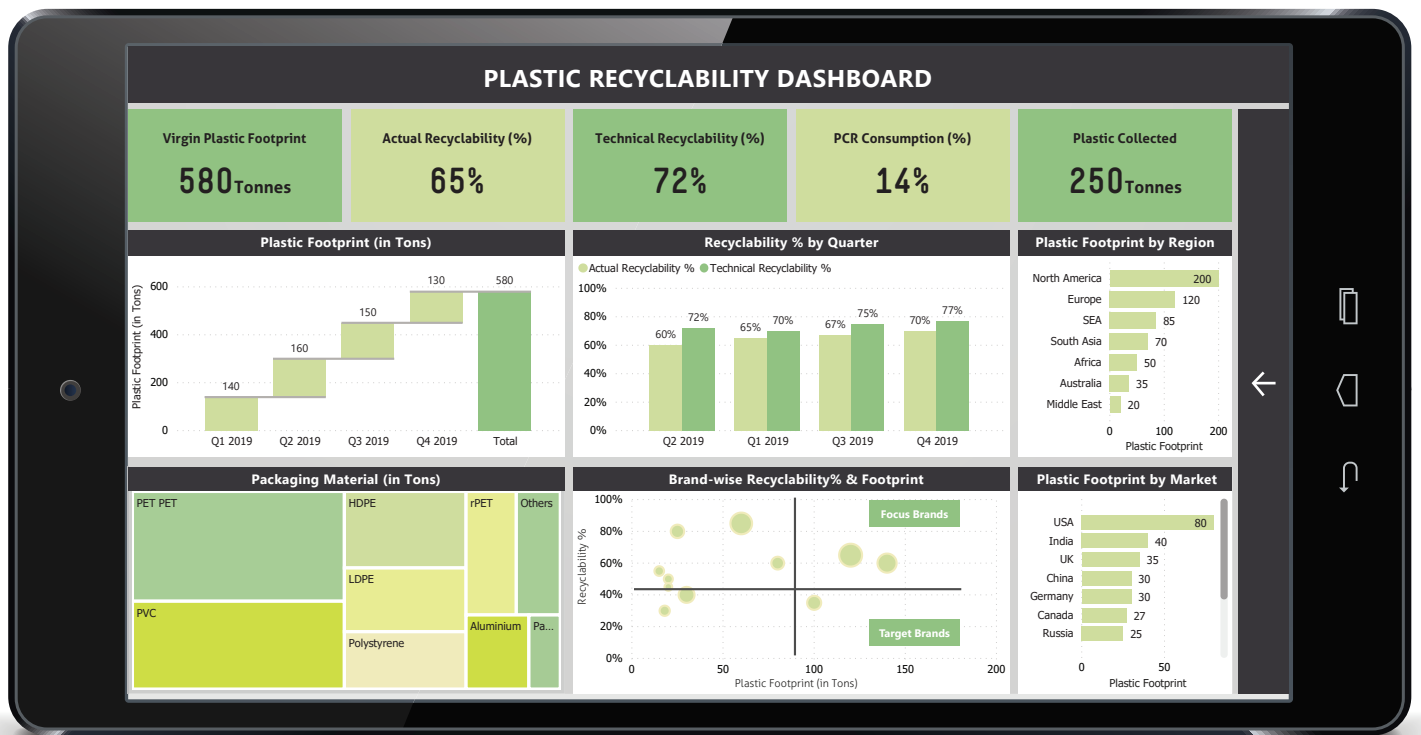
3. **Identifying outliers:**
   The solution helped identify products/ SKU's where scope of improving recyclability was a major driver in improving the overall recyclability scores. The in-built AI features in Power BI helped in pinpointing the outliers for remedial action by the R&D and regional teams.

4. **Automated reporting:**
    This is a seamless one-stop reporting solution which addresses the need for leadership to understand/track sustainability metrics. It facilitates quicker course correction for category and region teams to meet targets. Due to automation, the turnaround time was faster for report delivery.

5. **Self-service BI capability:**
    The solution facilitates self-service BI capabilities for business teams to draw out their analysis/-simulations/ insights on the lines of products, brands, regions and packaging material.

PLASTIC RECYCLABILITY DASHBOARD

Virgin Plastic Footprint	Actual Recyclability (%)	Technical Recyclability (%)	PCR Consumption (%)	Plastic Collected
580 Tonnes	**65%**	**72%**	**14%**	**250** Tonnes

About Mindtree

Mindtree [NSE: MINDTREE] is a global technology consulting and services company, helping enterprises marry scale with agility to achieve competitive advantage. "Born digital," in 1999 and now a Larsen & Toubro Group Company, Mindtree applies its deep domain knowledge to 290+ enterprise client engagements to break down silos, make sense of digital complexity, and bring new initiatives to market faster. We enable IT to move at the speed of business, leveraging emerging technologies and the efficiencies of continuous delivery to spur business innovation. Operating in more than 15 countries across the world, we're consistently regarded as one of the best places to work, embodied every day by our winning culture made up of over 21,000 entrepreneurial, collaborative and dedicated "Mindtree Minds".