

Problem Statement's Solutions and Impact

Title:

Operational Performance Optimization and Delivery Efficiency Analysis for Bharat Retail Store Chain

Context and Background:

Bharat Retail Store operates across multiple cities and offers a wide range of categories such as Cakes, Sweets, Plants, Soft Toys, Mugs, Colors, and festival-specific products. While the store has achieved a **total revenue of 4 billion** and sold over **3,000 units**, concerns around **logistics inefficiencies and regional delivery delays** persist.

This dashboard provides a consolidated overview of business performance metrics including product category trends, gender-based purchase behavior, monthly sales volume, and geographic delivery efficiency. It highlights key KPIs such as **average delivery delay (5.53 days)**, **city-specific delay ratios**, and **monthly sales distribution**, which are critical to operational decision-making and service quality improvements.

Problem Statement:

Despite a strong revenue footprint and near-equal gender distribution in purchases (**Male: 51.33%, Female: 48.67%**), Bharat Retail Store is facing **inefficiencies in product delivery and uneven distribution of order volume across time and regions**.

The **average delivery delay of 5.53 days**, with categories like **Cakes (6.02 days)** and **Sweets (5.73 days)** experiencing higher delays, indicates a systemic issue in supply chain responsiveness and logistics management. Furthermore, certain cities such as **Vellore (21.39%)**, **Tiruchirappalli (20.32%)**, and **Warangal (17.38%)** show disproportionately high delay contributions, suggesting location-based operational bottlenecks.

On a temporal scale, monthly sales volumes are highly skewed, with peaks in **March (673 units)** and **September (517 units)**, and troughs in **January (92 units)** and **November (119 units)**, indicating suboptimal inventory planning and promotional calendar alignment.

Objective:

To identify, quantify, and address delivery inefficiencies, regional disparities, and seasonal imbalances by:

- Diagnosing high-delay product categories and cities contributing to customer dissatisfaction.
 - Optimizing logistic operations and warehouse distribution strategies for improved delivery times.
 - Enhancing demand forecasting to align inventory planning with monthly sales trends.
 - Strategically planning marketing and resource allocation for high-demand periods (e.g., March, September).
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Business Impact:

Addressing these inefficiencies will:

- Improve customer satisfaction and retention.
- Enhance brand reputation by reducing late deliveries.
- Optimize supply chain costs by minimizing last-mile delays.
- Maximize profitability through better demand-supply alignment.