💄 Cosmetic Insights: Navigating Cosmetics Trends and Consumer Behavior with Tableau

📘 Project Overview

Cosmetic Insights is a data visualization initiative that leverages Tableau to uncover insights into cosmetics product trends, consumer preferences, and skin-type suitability. This project enables beauty brands, analysts, and marketers to explore product efficacy, ingredient patterns, and market shifts using interactive dashboards.

🎯 Objectives

- Transform raw cosmetics data into meaningful, interactive insights

- Identify shifts in customer preferences and ingredient popularity

- Detect and respond to product-related concerns using data

- Enable predictive analysis to guide product innovation and strategic growth

📊 Dataset Summary

Source: [Kaggle Cosmetics Dataset](#)

Key Columns:

Column	Description
Label	Type of product (e.g., Moisturizer, Serum)
Brand	Brand name
Price	Product price (USD)
Rank	Product rating or popularity score
Ingredients	Text list of product ingredients

Dry, Oily, Normal, Sensitive, Combination Binary flags for skin-type suitability

Optional preprocessing step: Created a derived column Skin Type Category for aggregated analysis.

📊 Key Dashboards & Visuals

- **Product Type Distribution**: Pie chart showing ratio of each product type

- **Top Brands by Average Rank**: Bar chart highlighting high-performing brands

- **Price vs Rank Analysis**: Scatter plot to examine value vs. popularity

- **Skin-Type Suitability Heatmap**: Show which brands cater to different skin types

- **Ingredient Word Cloud** (optional): Requires external text parsing

🎡 Real-World Scenarios

Scenario 1: Monitoring Consumer Preferences

Rapid decline in interest for certain products/ingredients is detected through live filters and KPI drop-offs.

Scenario 2: Responding to Product Concerns

Dashboards isolate low-rated products linked to specific skin types or ingredients—supports timely interventions.

Scenario 3: Predictive Trend Analysis

Track historical ingredient mentions or rank scores to forecast demand and guide R&D strategies.

🛠️ Tools & Stack

- **Visualization**: Tableau Public / Desktop

- **Preprocessing**: Python or Excel for data cleanup and categorization

- **Deployment**: Tableau Public + GitHub

🔗 Useful Links

- 💼 [Live Dashboard (Tableau Public)](https://public.tableau.com/views/Book1_17504907470590/Dashboard2?:language=en-US&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link)
  https://public.tableau.com/views/Book1_17504907470590/Dashboard2?:language=en-US&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

- 📁 [GitHub Repository](https://github.com/Navyajede/Cosmetic-Insights-Navigating-Cosmetics-Trends-and-Consumer-Insights-with-Tableau/tree/main) https://github.com/Navyajede/Cosmetic-Insights-Navigating-Cosmetics-Trends-and-Consumer-Insights-with-Tableau/tree/main