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Course: Data Analytics with Tableau

Assignment: Assignment 1

Team Id:- LTVIP2025TMID52150

Team size:- 4

Objectives:

Identify product suitability for different skin types (Oily, Dry, Normal, Sensitive).

Compare brand performance based on product variety, skin suitability, and pricing.

Visualize market trends across product categories (e.g., Cleanser, Moisturizer).

Highlight top-performing brands in terms of customer suitability and value.

Support data-driven recommendations for both customers and product developers.

Process Flow :

Step 1: Data Collection and Preparation

- Import cosmetic product data including brand, label, skin suitability attributes, and price.
- Clean and organize the dataset (remove duplicates, handle missing values).

Step 2: Data Categorization

- Classify products by:
  - **Brand**
  - **Label/Type** (e.g., Cleanser, Eye Cream)
  - **Skin Suitability** (Oily, Dry, Normal, Sensitive)
  - **Price and Rank**

Step 3: Visualization Creation

- Build visual dashboards using Tableau:
  - Bar charts for product distribution per brand.
  - Pie charts for brand share.
  - Bubble charts for skin suitability.

       o   Box plots for price range analysis.

## Step 4: Insight Generation

- Analyze trends and patterns:

       o   Which brands are most suitable for dry/oily/sensitive skin?

       o   What product types dominate each brand?

       o   Are high-priced products more suitable?

       o   Which brands offer balanced suitability?

Step 5: Decision Making and Reporting

- Summarize insights in a report/dashboard.

- Provide recommendations for:

       o   Customers (brand and product choice by skin type)

       o   Brands (areas for improvement or focus)

       o   Marketing and product strategy

Dashboards:

## 1.Product ranking and detailed analysis
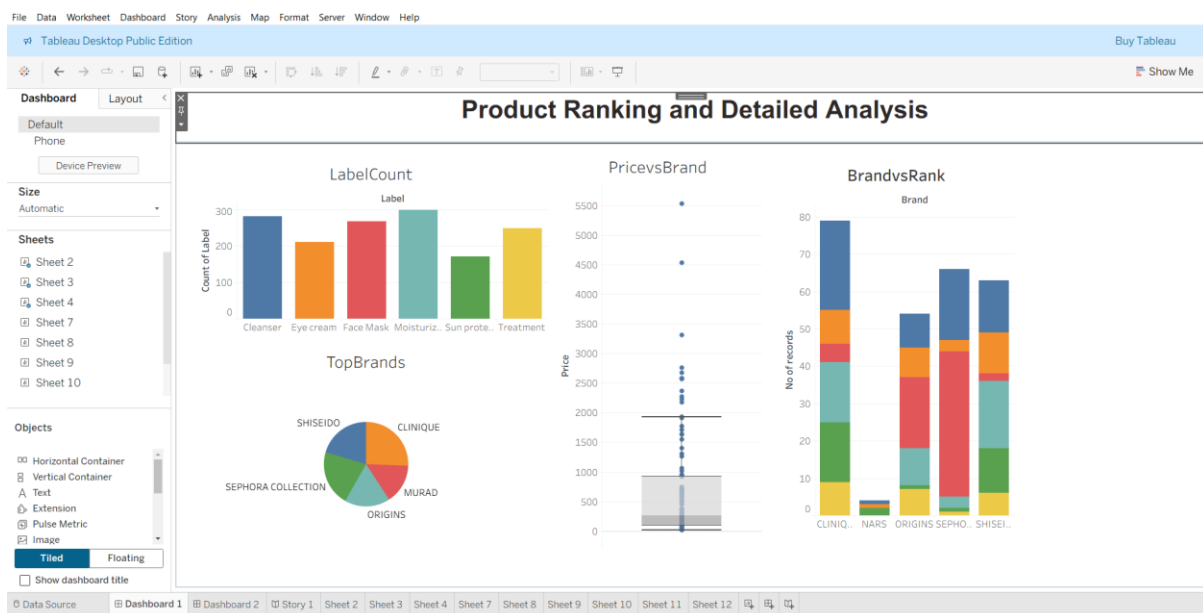
Description:

This dashboard provides a detailed analysis of cosmetic products, highlighting the count of product types, price distribution by brand, and brand rankings. It offers insights into

product variety, pricing trends, and brand performance. This helps in identifying market leaders and consumer preferences.

2.Product suitability overview
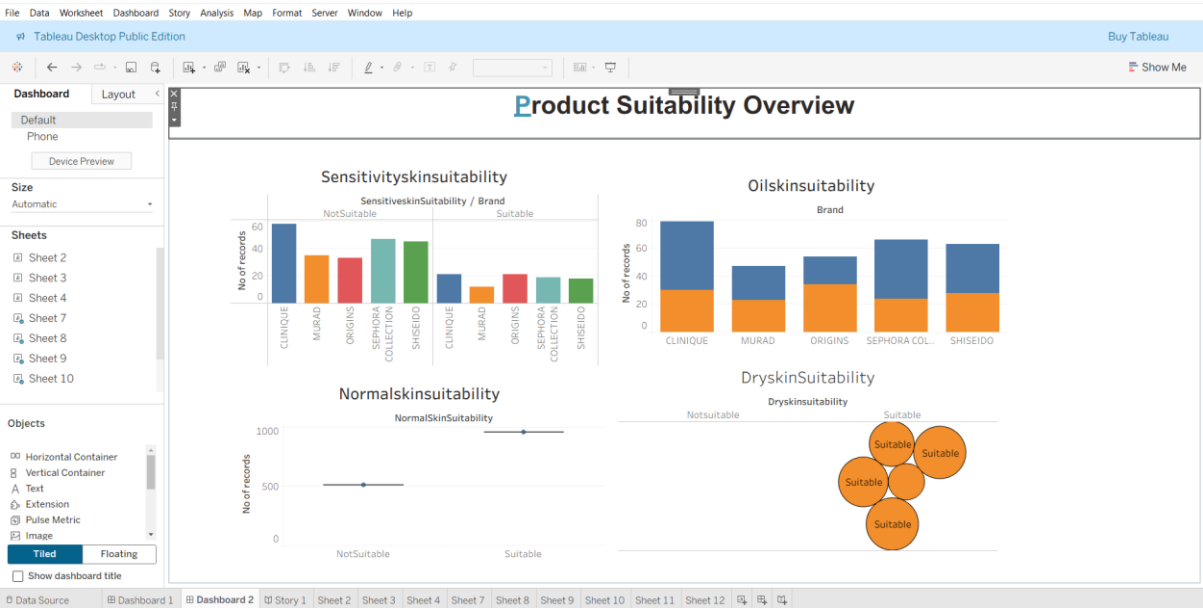
Description:

This dashboard titled "Product Suitability Overview" visualizes the suitability of cosmetic products for different skin types across various brands. It includes bar charts showing sensitivity skin, oil skin, and dry skin suitability, along with a scatter plot for normal skin suitability, helping to compare brand performance in meeting diverse skin care needs.

Story: Understanding Product suitability and Brand performance
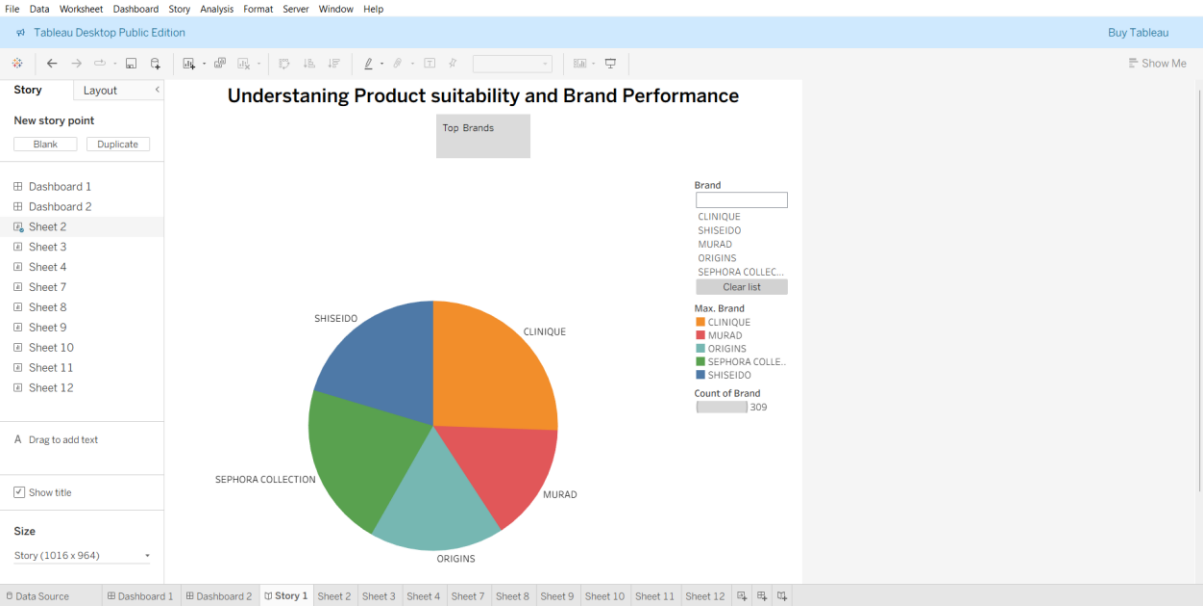
Description:

This pie chart visualizes the market share of top cosmetic brands based on product count. It highlights the distribution of products among Clinique, Shiseido, Murad, Origins, and Sephora Collection. Users can filter and analyze brand performance for better product suitability insights.