

Cosmetics Sales Visualization Project

Tool Used: Tableau

Dataset: Cosmetics Sales Data (3 Months)

1. INTRODUCTION

1.1 Project Overview

This project visualizes a cosmetics brand's historical sales data using Tableau to uncover customer behaviour, top-selling products, and marketing insights. It focuses on analyzing sales across product categories, customer demographics, regions, and payment methods. Interactive dashboards help explore business trends and purchasing patterns.

1.2 Purpose

The purpose of this project is to help brand managers and decision-makers explore key performance indicators such as region-wise sales, popular cosmetic categories, customer segments, and promotional impact. It provides actionable insights through visuals, filters, and drill-down interactions.

2. IDEATION PHASE

2.1 Problem Statement

Cosmetic brands often struggle to derive insights from scattered or raw transaction data. Without visual analytics, identifying bestsellers, seasonal trends, or regional preferences is difficult. This project solves that using intuitive Tableau dashboards.

2.2 Empathy Map Canvas

- **Think & Feel:** Need insights into product demand and seasonal spikes
- **See:** Dashboard with clear views of category performance, customer types
- **Say & Do:** Want to tailor promotions based on purchase behavior
- **Pain:** Manual reports are time-consuming and unclear
- **Gain:** Better promotional strategy and inventory planning through visuals

2.3 Brainstorming

Initially considered Power BI and Google Data Studio. Tableau was selected for its drag-and-drop interface, storytelling capabilities, and shareable dashboards.

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

Users open the dashboard, select product category or region, analyze trends like top-performing products or repeat customers, and plan campaigns accordingly.

3.2 Solution Requirement

- Cosmetics dataset (Jan–Mar 2019)
- Tableau Public/Desktop
- Clean, preprocessed CSV/Excel data

3.3 Data Flow Diagram

Raw Sales Data → Excel Cleaning → Tableau Connection → Visual Sheets → Final Dashboard

3.4 Technology Stack

- **Data Source:** Cosmetics Dataset (CSV)
 - **Tools:** Tableau, Excel/Google Sheets (for preprocessing)
-

4. PROJECT DESIGN

4.1 Problem Solution Fit

Enables a cosmetics brand to visually analyze customer preferences, identify fast-moving items, and understand regional dynamics.

4.2 Proposed Solution

Create a Tableau dashboard including bar charts, pie charts, and trend lines for various KPIs like brands , rankings, labels and sensitive skin.

4.3 Solution Architecture

Excel Preprocessing → Tableau Data Import → Individual Sheet Creation → Dashboard Assembly

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

- **Phase 1:** Data understanding and cleaning
 - **Phase 2:** Identify KPIs and metrics
 - **Phase 3:** Sheet creation and visual design
 - **Phase 4:** Final dashboard compilation and testing
-

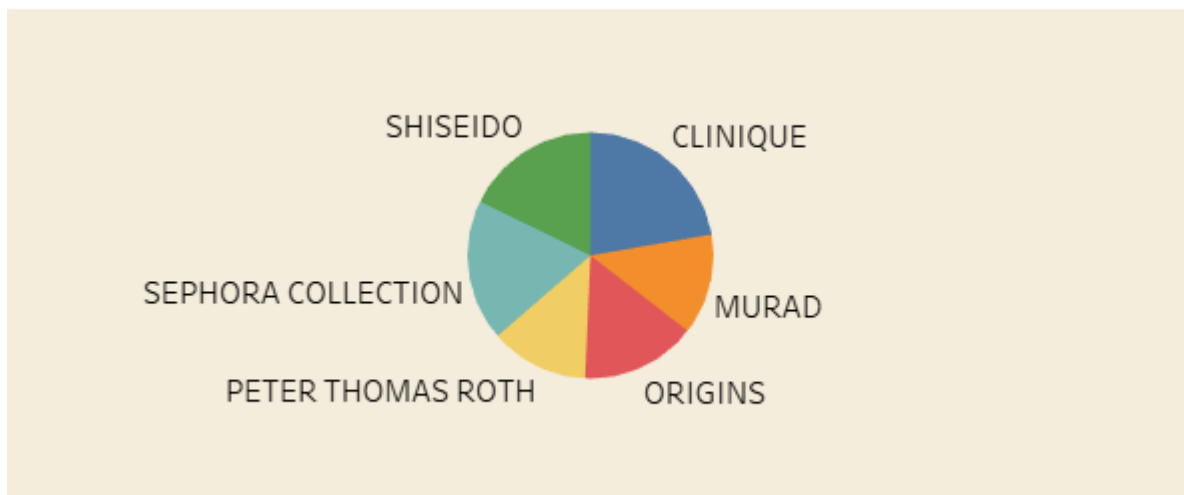
6. FUNCTIONAL AND PERFORMANCE TESTING

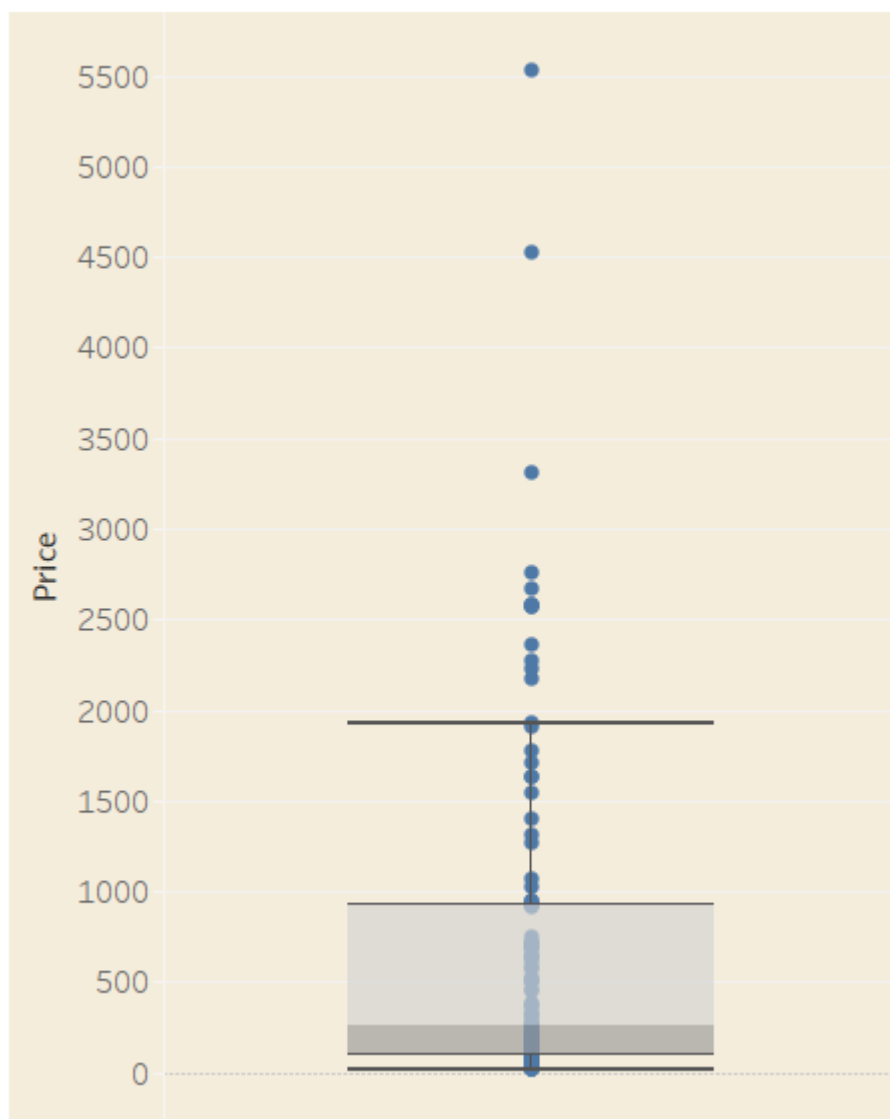
6.1 Performance Testing

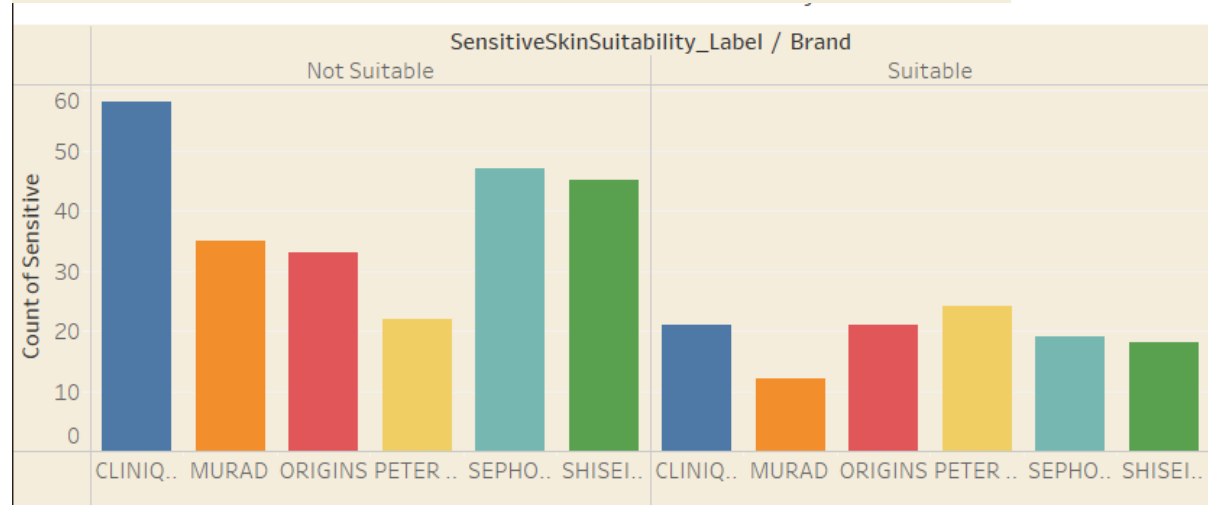
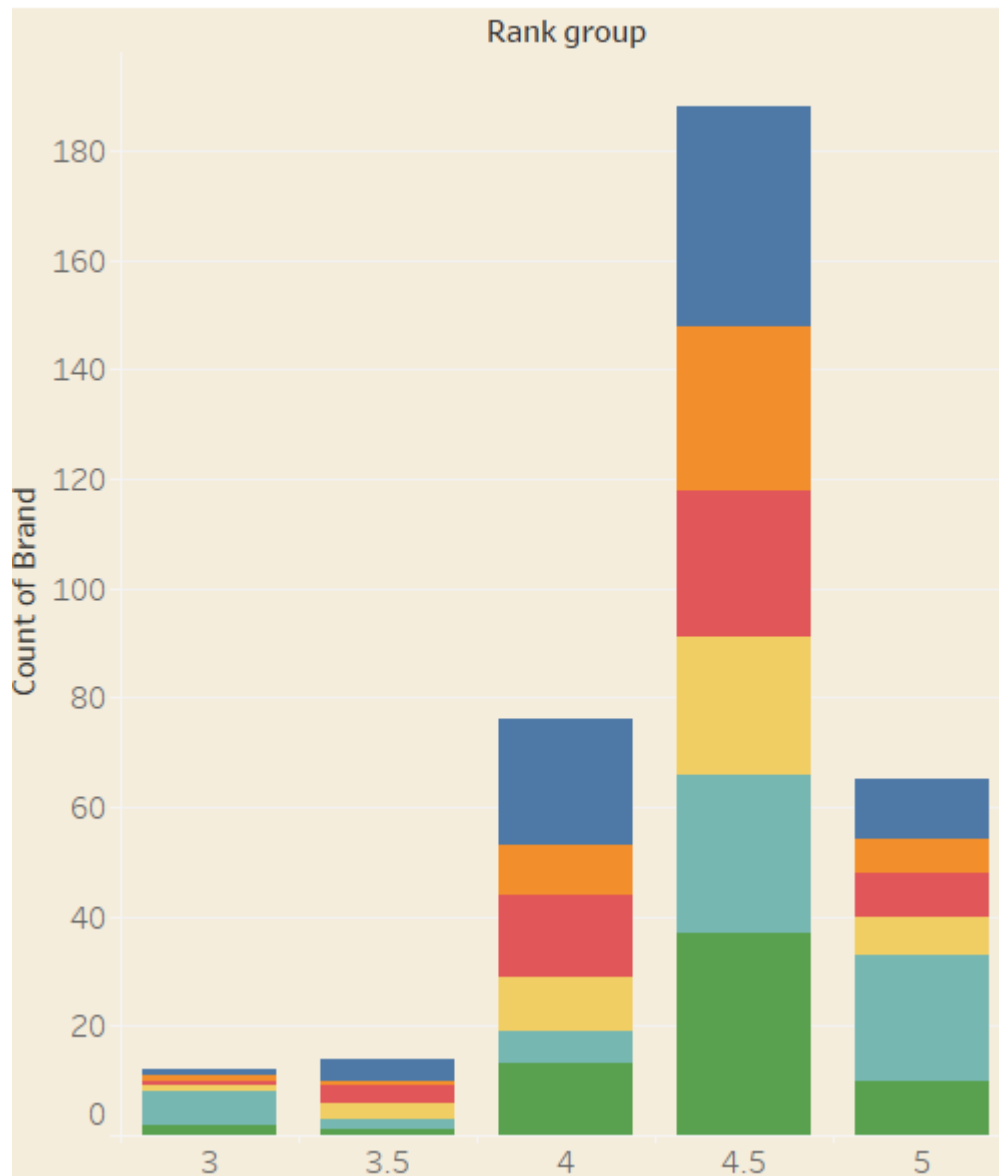
- Verified dashboard responsiveness across filters
 - Calculations like total revenue and customer counts tested
 - Chart interactions and drill-downs tested for accuracy
-

7. RESULTS

7.1 Output Screenshots







8. ADVANTAGES & DISADVANTAGES

Advantages:

- Clean, interactive visuals
- Insightful customer and product behavior tracking
- Time-saving for stakeholders

Disadvantages:

- Limited to 3 months of data
 - Does not update in real-time (static CSV)
-

9. CONCLUSION

This Tableau project successfully enables deep insight into cosmetics data. It highlights high-performing branches and products, preferred payment methods, and valuable customer behaviors through a clean, interactive dashboard.

10. FUTURE SCOPE

- Integrate real-time data sources via APIs
 - Add monthly/year-over-year comparisons
 - Embed predictive analytics (e.g., expected revenue, inventory needs)
 - Include cost analysis and profit margin visualizations
-

11. APPENDIX

- **Dataset Link:** Provided in project resources
- **Tool Used:** Tableau Public
- **GitHub / Project Demo:** *[Include link if uploaded]*