Cosmetic Insights: Final Project Documentation

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Tool Used: Tableau Public

# Project Summary

“Cosmetic Insights” is a data analytics project using Tableau to analyze consumer preferences, product suitability, and market trends in the cosmetics industry. Through interactive dashboards and a narrative story, the project highlights key product insights, identifies performance gaps, and supports data-driven innovation. It shows how visualization tools can turn raw data into strategic insights for beauty brands.

# 1. Project Objective

Enable cosmetics brands to make data-informed decisions regarding product performance, user preferences, and innovation opportunities using interactive dashboards and a Tableau story.

# 2. Data Collection & Cleaning

- Source: Dataset from Kaggle  
- Fields Included: Brand, Label, Name, Price (USD), Ingredients, and Skin Type Suitability (Dry, Oily, Sensitive, Normal)  
- Cleaning Steps:  
 • Replaced “No Info” with “Not Available”  
 • Removed null entries in key fields  
 • Standardized skin type and brand names  
 • Saved cleaned version as Excel for Tableau

# 3. Data Visualization

Created individual charts to reveal insights like:  
- Top Brands by Ranking  
- Label-wise Count of Products  
- Price vs Brand Distribution  
- Skin Type Suitability Visuals  
- Ingredient Patterns

# 4. Dashboard Design

Two key dashboards were created:  
1. Product Ranking and Analysis – Ranking, brand price comparison, label-wise counts  
2. Product Suitability Overview – Filters and visuals for skin type compatibility  
  
Features:  
- Interactivity through filters  
- 2x2 visual arrangement  
- 'Use as Filter' option enabled for dynamic viewing

# 5. Storytelling with Tableau

A multi-scene Tableau Story was created to explain:  
- Declining consumer preferences  
- Product concerns (e.g., safety or ingredients)  
- Predictive innovation based on past feedback  
  
Each scene narrates a use-case and how dashboards support decision-making.

# 6. Performance Testing

Evaluated Tableau dashboard performance:  
- Dashboard Load Time: < 5 seconds  
- Filter responsiveness: Instant  
- Story switching: Smooth  
- Calculation fields: Limited to essential formulas  
- No lag or freezing observed

# 7. Publishing to Tableau Public

All visualizations and story were published to Tableau Public:  
🔗 https://public.tableau.com/views/Book16\_17504885963580/Story1

# 8. Conclusion

This project developed strong data analytics and visualization skills. From data cleaning to storytelling, the final dashboards offer business-ready insights to help cosmetics brands adapt to trends, resolve product issues, and drive innovation.