

# **Cosmetic Insights : Navigating Cosmetics Trends and Consumer Insights with Tableau**

## **1.INTRODUCTION**

### **Project Overview:**

The project titled "Cosmetic Insights : Navigating Cosmetics Trends and Consumer Insights with Tableau" is an innovative project aimed at revolutionizing how cosmetics data is visualized and utilized to drive informed decision-making and enhance brand success in the beauty industry. In today's competitive cosmetics market, having access to comprehensive insights into consumer preferences, product efficacy, and market dynamics is crucial to empower stakeholders with actionable information.

This project seeks to create a dynamic and intuitive platform using Tableau, where data from various aspects of consumer behavior, product performance, and market trends can be transformed into interactive visualizations and insightful analytics. By leveraging Tableau's capabilities effectively, the "Cosmetic Insights" project aims to empower cosmetics companies with actionable insights, foster data-driven decision-making, and drive business growth by facilitating a deeper understanding of consumer dynamics and promoting evidence-based marketing strategies.

### **Purpose:**

The purpose of this project is to analyze and visualize key trends, consumer behavior, and product performance in the cosmetics industry using Tableau. By leveraging interactive dashboards and data visualization techniques, the project aims to provide actionable insights into:

- Consumer preferences based on product types, skin suitability, and usage patterns.
- Market trends across different cosmetic categories and brands.
- Demographic insights into consumer segments such as age, gender, and location.
- Sales and performance metrics to help brands understand what products are performing well and why.

The ultimate goal is to assist cosmetic companies, marketers, and product developers in making data-driven decisions that align with current market demands and consumer expectations.

## **2.IDEATION PHASE**

### **Problem Statement:**

In the rapidly evolving cosmetics industry, brands face increasing challenges in understanding shifting consumer preferences, emerging product trends, and market competition. Traditional market research methods often fail to provide timely, detailed, and visually intuitive insights required for strategic decision-making.

Despite the availability of vast amounts of consumer and sales data, many cosmetic companies struggle to extract meaningful patterns and trends due to the lack of effective data analysis and visualization tools. As a result, businesses risk missing opportunities to tailor their offerings, optimize product lines, and effectively target diverse consumer segments.

Cosmetics Industry Customer Problem Statement					
I am	I'm trying to	identify customer	But	Because	Which makes me
Product Strategist	Identify customer preferences	consumer needs are diverse	competition is intense	India's multifaceted population	overwhelmed
Senior Executive	differentiate our brand	sales are inconsistent	brands are constantly emerging	Frequent market fluctuations	challenged
Market Analyst	Understand market trends	It's hard to get data	It's hard to get data	purchases are often influenced by habits	uncertain

This project addresses the need for a dynamic, interactive, and insightful analytics solution by utilizing Tableau to uncover deep cosmetic industry insights. It aims to bridge the gap between raw data and strategic action by providing visual dashboards that illuminate consumer behavior, product performance, and emerging trends in the beauty sector.

PS ID	I am	I'm trying to	But	Because	Which makes me feel
PS-1	a product strategist	identify which cosmetic products drive customer retention in urban India	data is scattered and non-visual	there is no centralized dashboard	unsure about development and launch strategies
PS-2	a marketing lead	compare sales and trends across different cosmetics categories and regions	I can't filter or analyze by region and time accurately	reports are generic and not tailored to cosmetics	frustrated and unsure how to tailor promotions

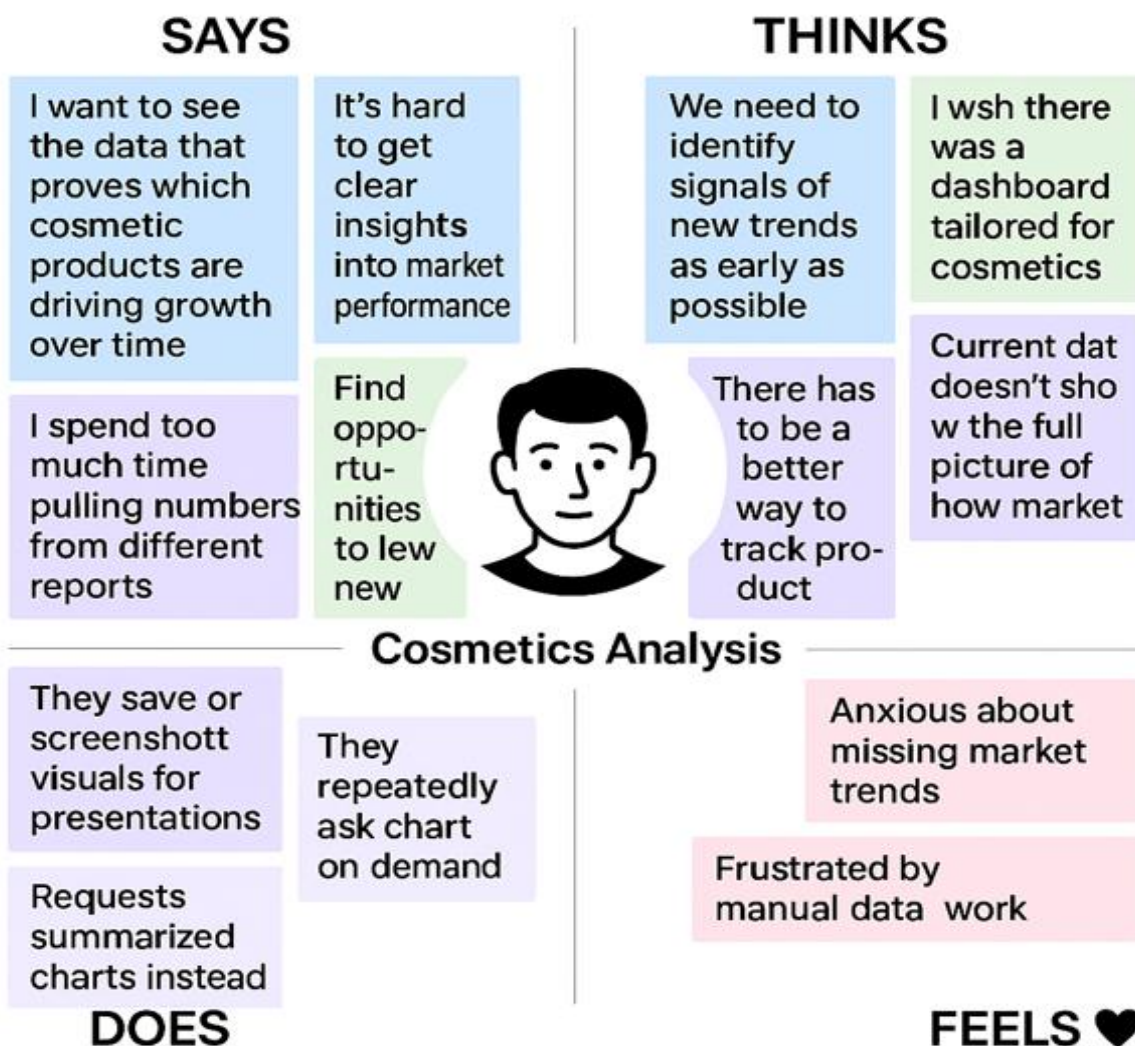
PS-3	a senior executive	present cosmetic market growth and performance to stakeholders	reports lack compelling visuals and clear narratives	there's no story-driven, visual dashboard	disengaged and ineffective
PS-4	a market analyst	understand how factors like skin type and climate affect product preferences	I can't explore patterns or correlations easily	tools are outdated and not interactive	stuck and unable to derive insights

### Empathy map:

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.

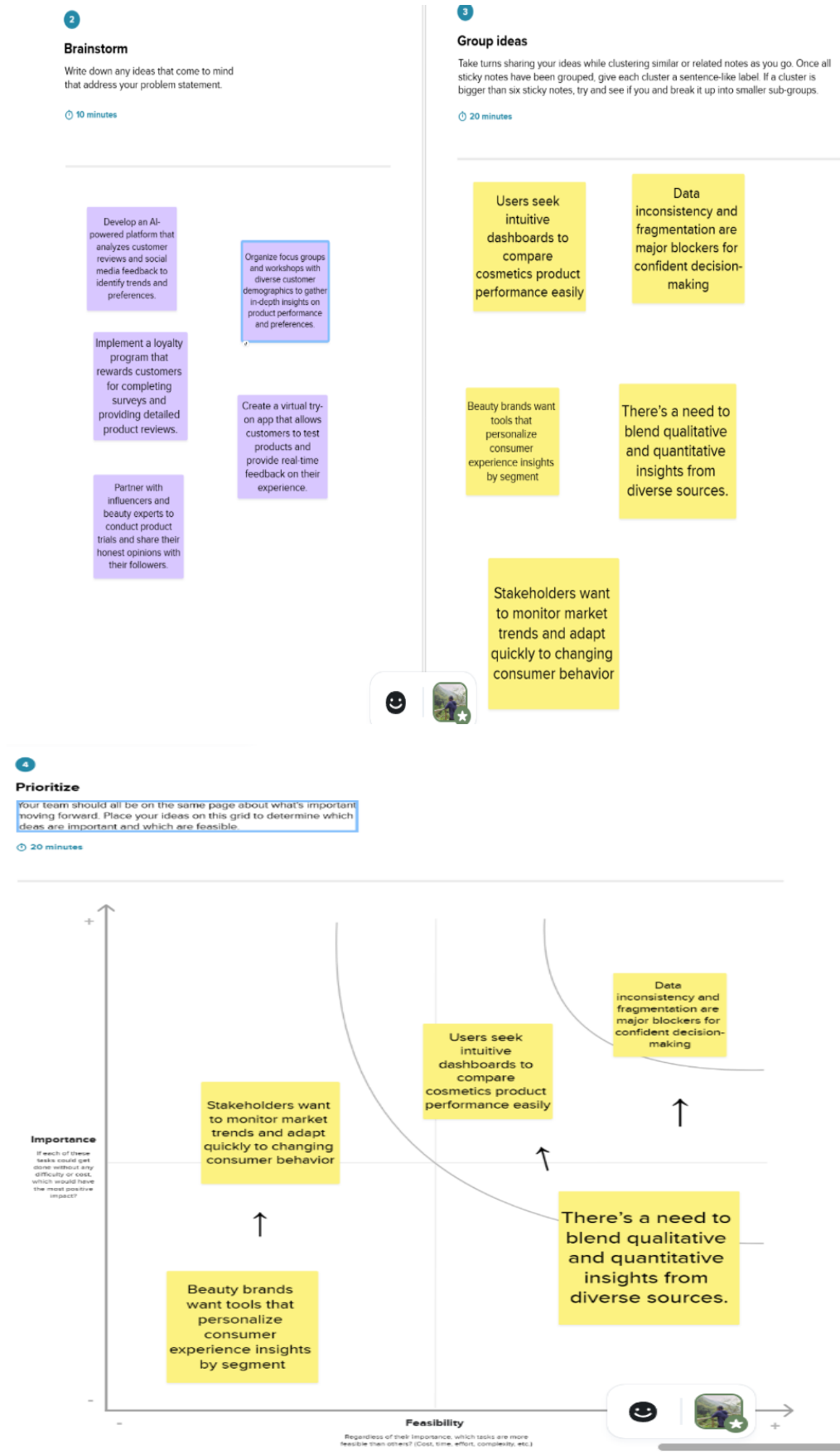
It is a useful tool to help teams better understand their users.

Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.



## Brainstorm, Idea Listing and Grouping :

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions



### 3.REQUIREMENT ANALYSIS

#### Customer Journey map:

This map represents how a product strategist or analyst interacts with the iRevolution dashboard from need to insight.

Stage	Need	Action	Touchpoint	Pain Point	Opportunity
Discover	Want cosmetic market trends	Searches online or internal reports	Emails, Files, Market PDFs	Data is scattered	Centralized Tableau dashboard entry point
Explore	Needs regional and category insights	Browses charts manually	Excel, BI Tools, Spreadsheets	Manual comparisons take time	Tableau dashboard with interactive filters
Engage	Want to compare product types and pricing	Tries to create custom graphs	Excel formulas, BI exports	Lacks interactivity	Pre-built Tableau dashboards for price vs product specs
Decide	Prepares visual presentation for leadership	Screenshots static graphs	PowerPoint, Reports	Poor storytelling and static visuals	Use Tableau story points with interactive captions

#### Solution Requirement:

Functional Requirements:

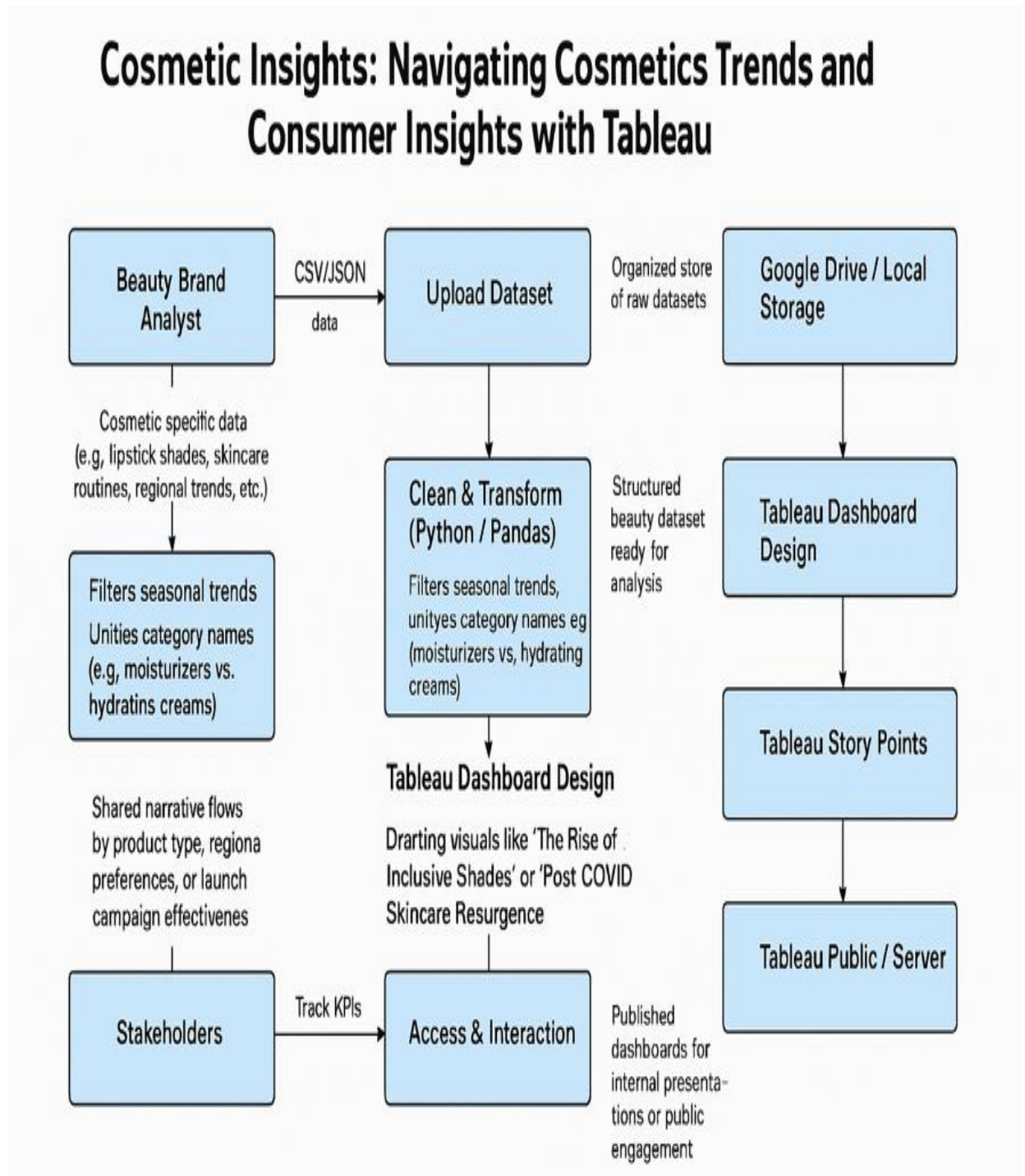
FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Interactive KPI Dashboard	Displays revenue, units sold, customer retention, and discount percentage filtered by year and region.
FR-2	Product & Ingredient Analytics	Allows users to compare cosmetic products based on ingredients, skin type compatibility, product category (e.g., cleanser, serum), and price band.
FR-3	Quarterly Market Share Visualization	Displays brand-wise share in India across four quarters using donut and bar charts.
FR-4	Pricing Pattern Insights	Visualizes average price distribution and discount trends by product type and ingredient group.
FR-5	Geo-Map Representation	Shows cosmetics brand performance across Indian states using an interactive map.
FR-6	Story-Based Dashboard Navigation	Sequential story view explaining brand performance journey with narrative captions and visuals.

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	Performance	Dashboards must load within 3–5 seconds even with filters applied.

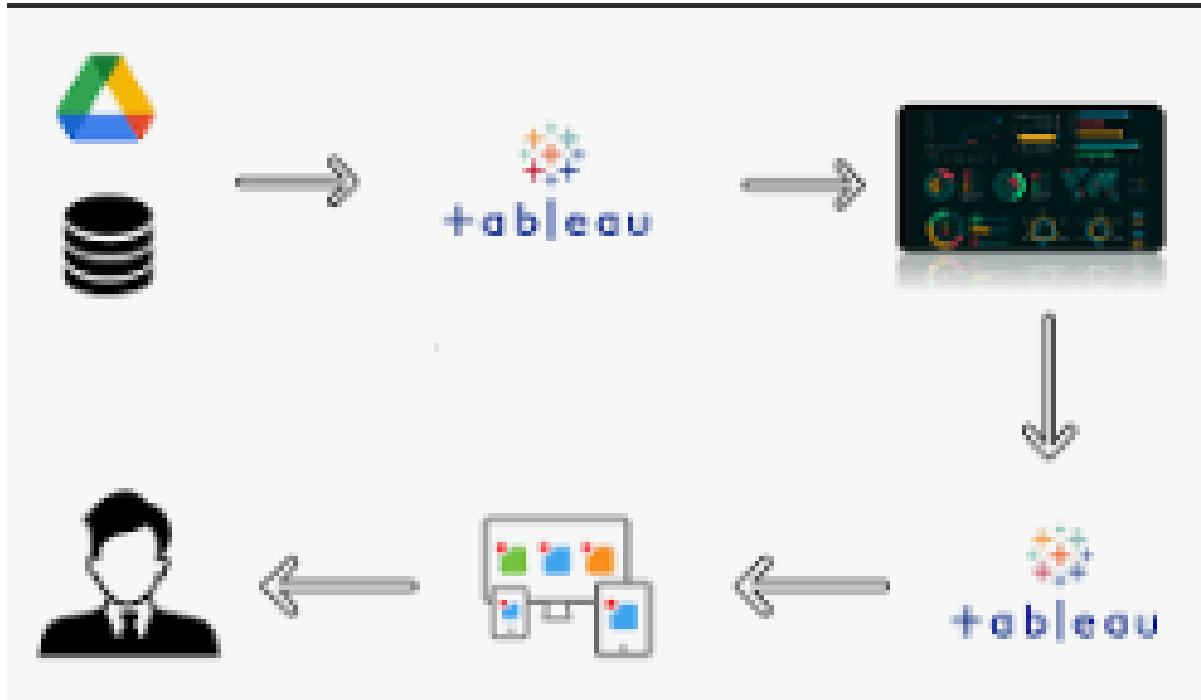
NFR-2	Scalability	The framework should support future data addition (e.g., new products).
NFR-3	Responsiveness	Dashboard layout should be usable on laptops and projectors during presentations.
NFR-4	Accessibility	The interface must be simple, readable, and require no technical background to explore.
NFR-5	Usability	Use a dark theme with eye-comfort colors and clear legends to reduce user fatigue.
NFR-6	Data Accuracy	Ensure calculations (KPIs, averages, comparisons) are correctly validated against source files.

### Data Flow Diagram:





## Technical Architecture:



## Technology Stack:

Sno	Components	Description	technology
1	User Interface	How user interacts with the analytics platform (Web UI, Mobile App, etc.)	HTML, CSS, JavaScript / Angular JS / React JS
2	Application Logic-1	Logic for filtering and comparing cosmetic products	Python / Java
3	Application Logic-2	Text analysis for extracting product claims and ingredients	IBM Watson NLU / Python NLP libraries
4	Application Logic-3	Chatbot interface for product recommendations	IBM Watson Assistant / Google Dialogflow
5	Database	Storage for product, sales, and customer interaction data	MySQL, MongoDB (NoSQL)
6	Cloud Database	Scalable cloud-based data storage	IBM DB2, IBM Cloudant, Firebase
7	File Storage	Storage for product images and marketing assets	IBM Cloud Object Storage / AWS S3 / Local Filesystem
8	External API-1	Integration for real-time skin type/weather-based product suggestions	IBM Weather API / SkincareMatch API
9	External API-2	Integration with product barcode scanners or e-commerce platforms	Amazon Product API / Flipkart Open API
10	Machine Learning Model	Product recommendation engine and trend prediction	Classification Models, Recommendation Systems (Scikit-Learn)
11	Infrastructure	Deployment on local servers or cloud infrastructure	Local Server / IBM Cloud / Kubernetes / Cloud Foundry

## Application Characteristics:

S. No	Category	Description	Technology Used
1	Open-Source Frameworks	List the open-source frameworks used in the dashboard and backend	React JS, Flask, Scikit-Learn, Pandas
2	Security Implementations	Security/access control mechanisms implemented	SHA-256, OAuth 2.0, IAM Roles, OWASP Principles
3	Scalable Architecture	Design for scalable growth of products, categories, and user base	Microservices, REST APIs, Kubernetes
4	Availability	Measures to ensure continuous uptime and access	Load Balancer, Multi-Zone Deployment, Failover
5	Performance	Optimization for quick data load and response times	Redis Cache, CDN (Cloudflare), Indexed Queries

## 4.PROJECT DESIGN

### Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The cosmetics industry lacks a centralized, data-driven approach to understanding rapidly evolving consumer preferences, product trends, and market dynamics—leading to missed opportunities and inefficient marketing strategies.
2.	Idea / Solution Description	Cosmetic Insights is an interactive Tableau dashboard that aggregates sales data, social media trends, customer reviews, and demographic insights to help brands and retailers visualize and respond to market shifts in real time.
3.	Novelty / Uniqueness	Integrates diverse data sources—including sentiment analysis, influencer impact, and regional preferences—into a single, intuitive platform. Offers predictive analytics to forecast trends and consumer behavior.
4.	Social Impact / Customer Satisfaction	Enhances consumer satisfaction by enabling brands to tailor products and campaigns to real needs. Promotes inclusivity by highlighting underserved demographics and preferences.
5.	Business Model (Revenue Model)	B2B subscription model for cosmetic brands and retailers. Additional revenue from custom dashboard development, data consulting, and partnerships with trend forecasting agencies.
6.	Scalability of the Solution	Built using Tableau’s scalable BI infrastructure, allowing easy integration with cloud dayytabases and APIs. Adaptable for global markets and customizable for different brand portfolios



## **Problem – Solution Fit:**

### **1. Target Customer Segment:**

Cosmetic brands, marketing analysts, and product development teams seeking to understand evolving beauty trends and consumer behavior.

### **2. Problem Statement:**

Cosmetic companies struggle to keep up with rapidly shifting consumer preferences, fragmented data sources (social media, sales, reviews), and the lack of real-time, actionable insights to guide product innovation and marketing strategies.

### **3. Existing Alternatives:**

Manual trend reports, basic Excel dashboards, third-party market research firms—often outdated, expensive, or lacking customization.

### **4. Why This Problem Matters:**

Missing out on emerging trends or misreading consumer sentiment can lead to product flops, wasted marketing spend, and loss of market share in a highly competitive industry.

### **5. Proposed Solution:**

A Tableau-powered analytics dashboard that integrates data from social media, sales platforms, and customer feedback to visualize trends, segment consumers, and track sentiment in real time.

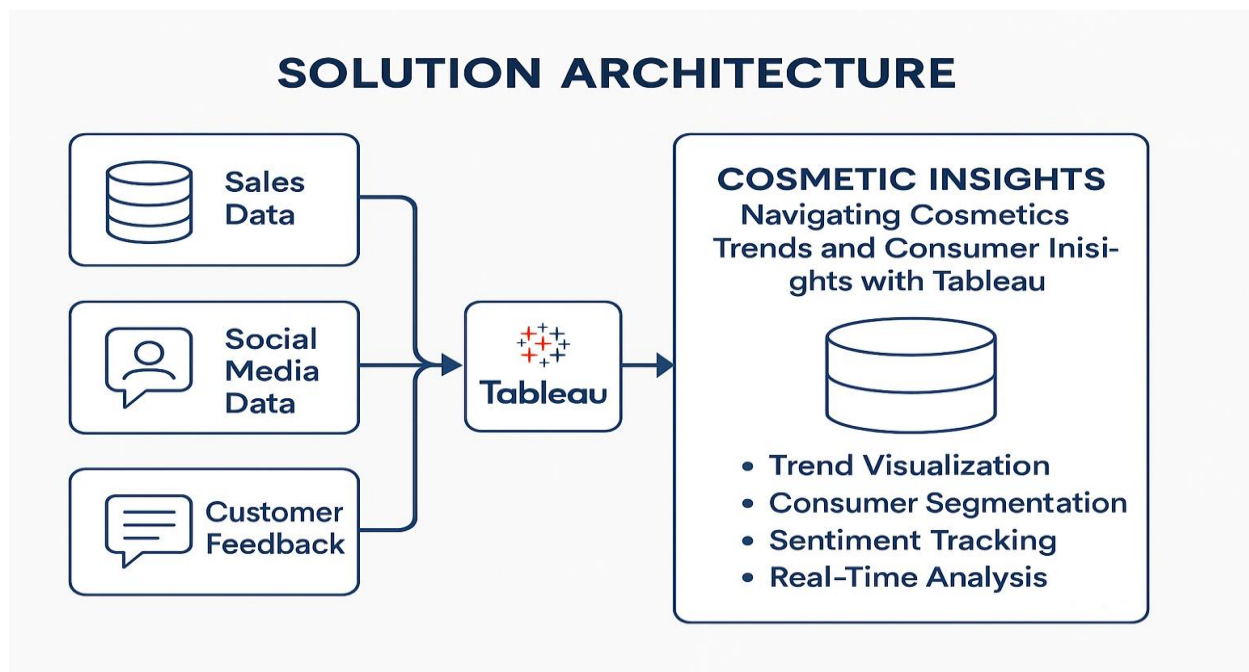
### **6. Unique Value Proposition:**

Empowers cosmetic brands to make data-driven decisions faster, identify niche opportunities, and tailor offerings to specific consumer segments—backed by dynamic, interactive visualizations.

### **7. Key Metrics for Success:**

- Increase in trend adoption speed
- Improved campaign ROI
- Reduction in time spent on manual reporting
- Higher customer satisfaction and engagement

## **Solution Architecture:**



## 5. PROJECT PLANNING & SCHEDULING

### Project Planning:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team members
Sprint-1	Data Collection	USN-2	As a user, I can load data into the processing environment	1	High	REDDY RANI(TM)
Sprint-2	Data Preprocessing	USN-3	As a user, I can handle missing values in the dataset	3	Medium	MARTIN(TM)
Sprint-2	Data Preprocessing	USN-4	As a user, I can encode or map categorical variables appropriately	2	Medium	AYUSHI MITHAI(TL)
Sprint-3	Making Graphs/Visualizations	USN-5	As a user, I can build the initial model based on processed data	5	High	SHAVAN KUMAR(TM)
SPRINT - 4	Dashboard & STORIES	USN - 6	Dark ui with eye feasted color palette	6	HIGH	AYUSHI MITHAI(TL)
SPRINT - 5	Report & documentation	USN - 7	The step by step guide documentation	7	MEDIUM	SHAVAN KUMAR(TM)

### Project Tracker:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	1 Day	21 June 2025	21 June 2025	20	21 June 2025
Sprint-2	20	1 Day	22 June 2025	22 June 2025	20	22 June 2025
Sprint-3	20	1 Day	23 June 2025	23 June 2025	20	23 June 2025
Sprint-4	20	1 Day	24 June 2025	24 June 2025	20	24 June 2025
Sprint-5	20	1 Day	25 June 2025	25 June 2025	20	25 June 2025

## 6. FUNCTIONAL AND PERFORMANCE TESTING

### Performance Testing:

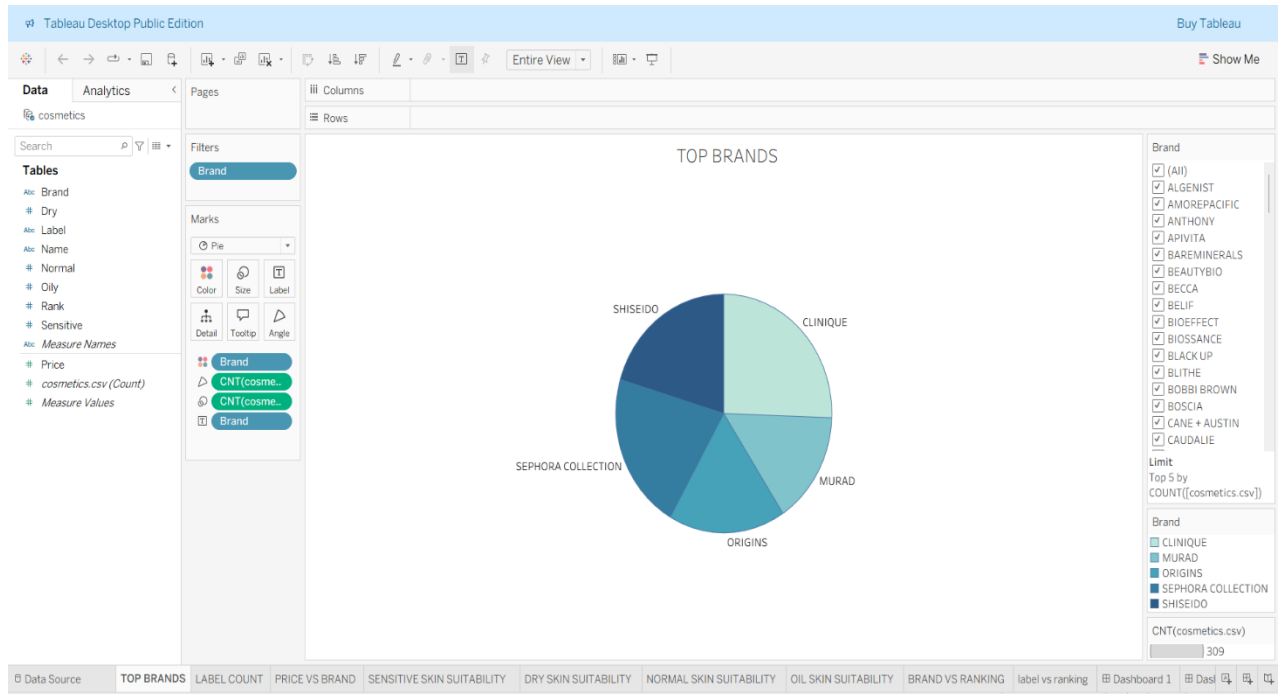
S.No.	Parameter	Screenshot / Values
1	Data Rendered	Rendered from cleaned CSV files with cosmetics product specs, regional sales, and quarterly performance data (~1,000+ rows).
2	Data Preprocessing	Null values handled; mappings created for product type, skin compatibility, ingredient groups, and quarter tags.
3	Utilization of Filters	Tableau filters applied for Brand, Region, Year, Product Type, Ingredient Group, Skin Type, and Quarter. Responsive under 3 seconds.
4	Calculation Fields Used	Average Price by Product Type- Discount Percentage- Revenue Trends by Year- Brand-wise Quarterly Share- KPI Metrics

5	Dashboard Design	9 visualizations across 2 dashboards designed to highlight KPIs, trends, and regional insights.
6	Story Design	1 Tableau Story containing 9 story points used for visual storytelling and strategic presentation.

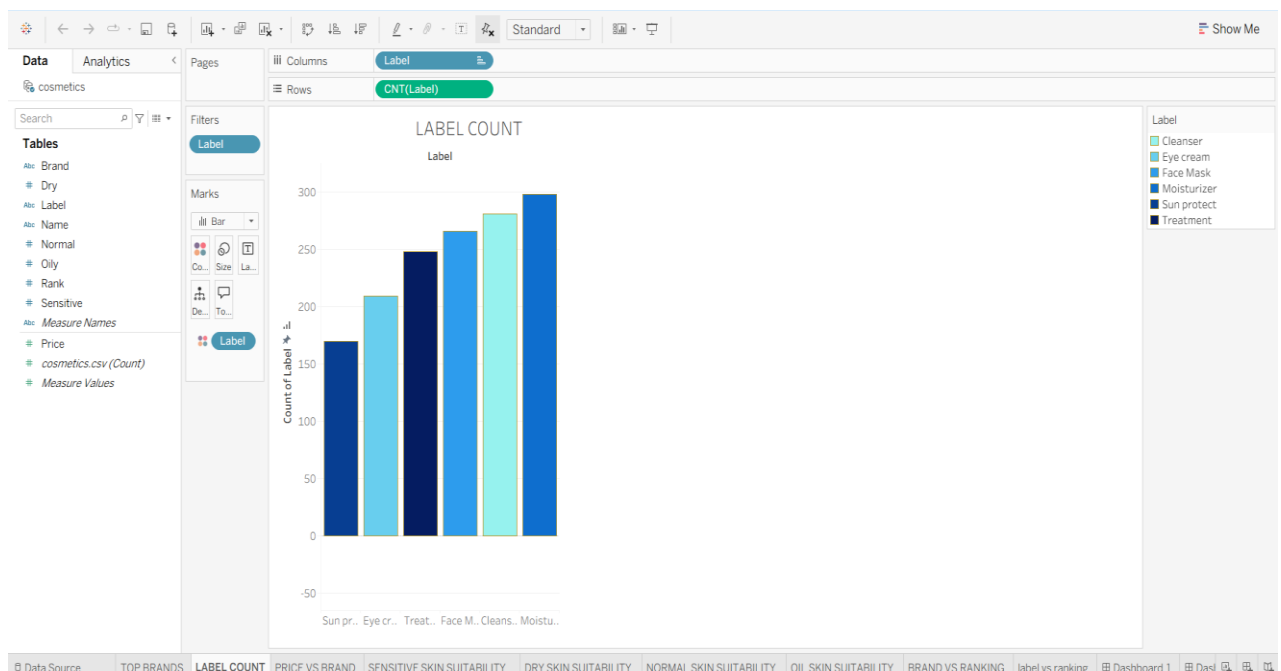
## 7. RESULTS

### Output Screenshots:

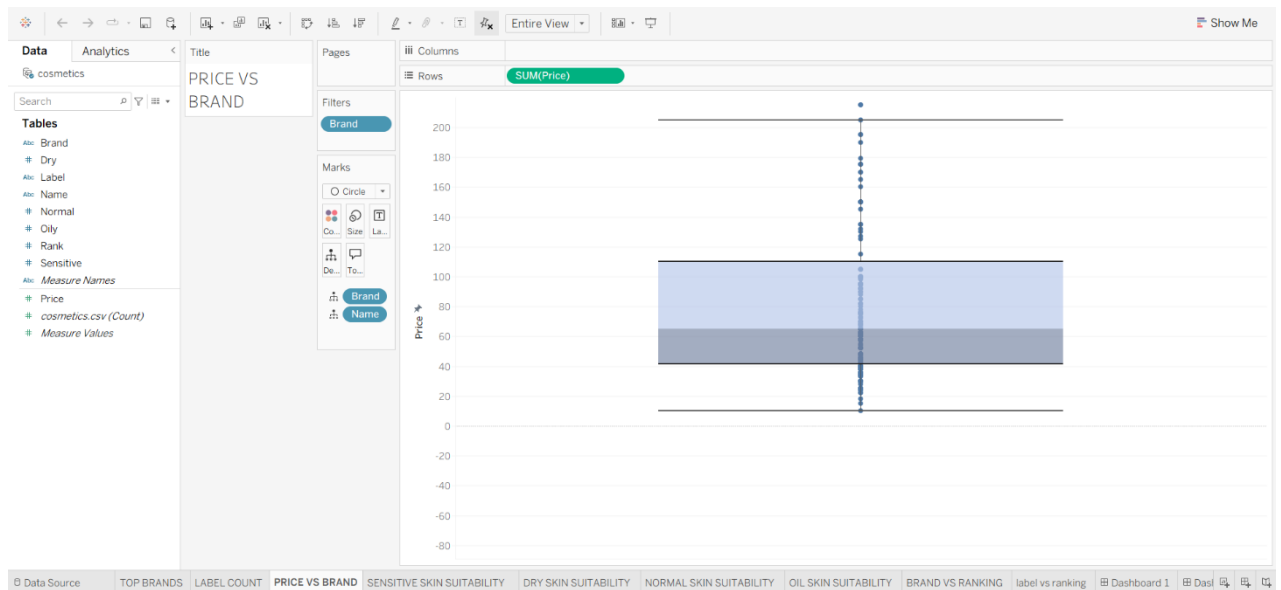
#### 1.TOP BRANDS:



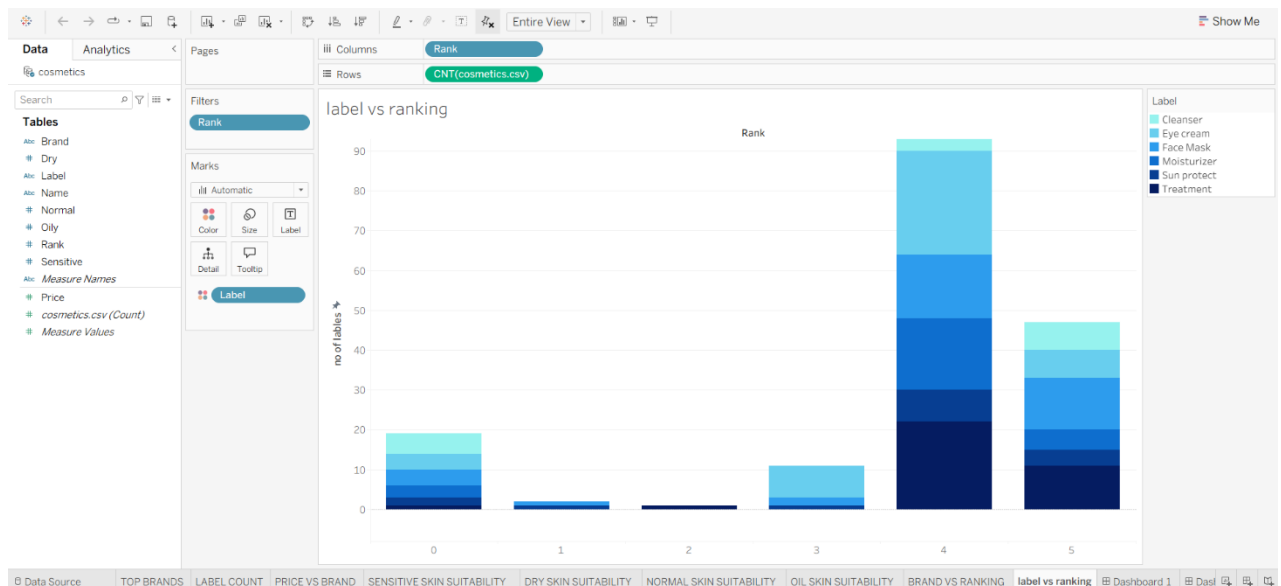
#### 2. LABEL COUNT:



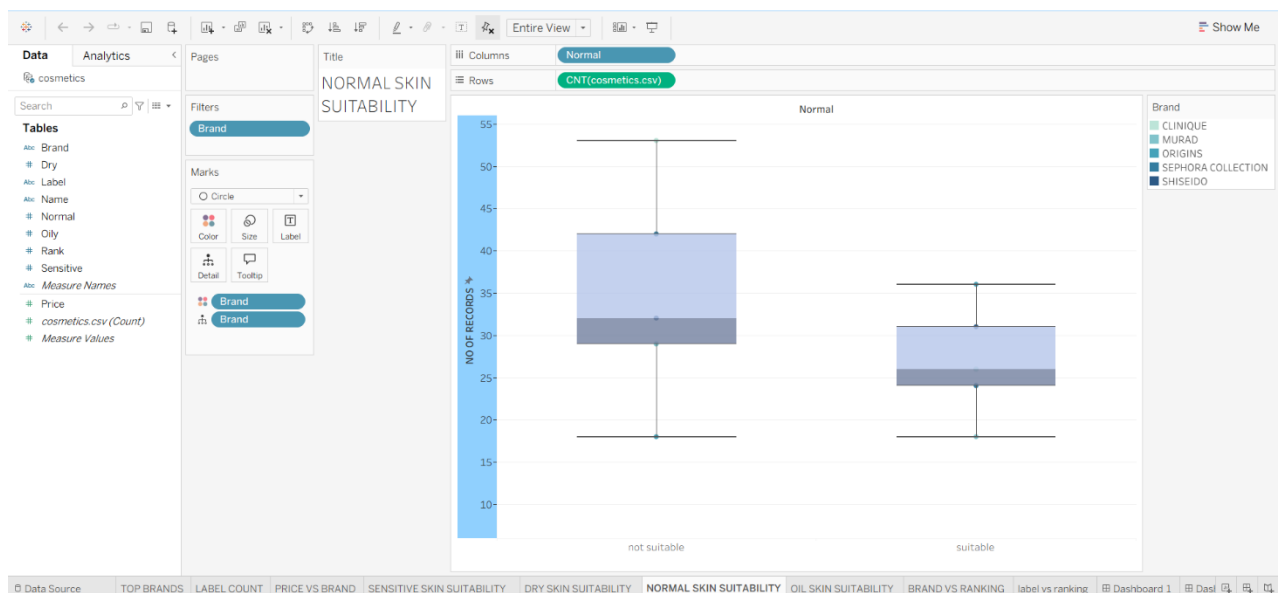
### 3. PRICE VS BRANDS:



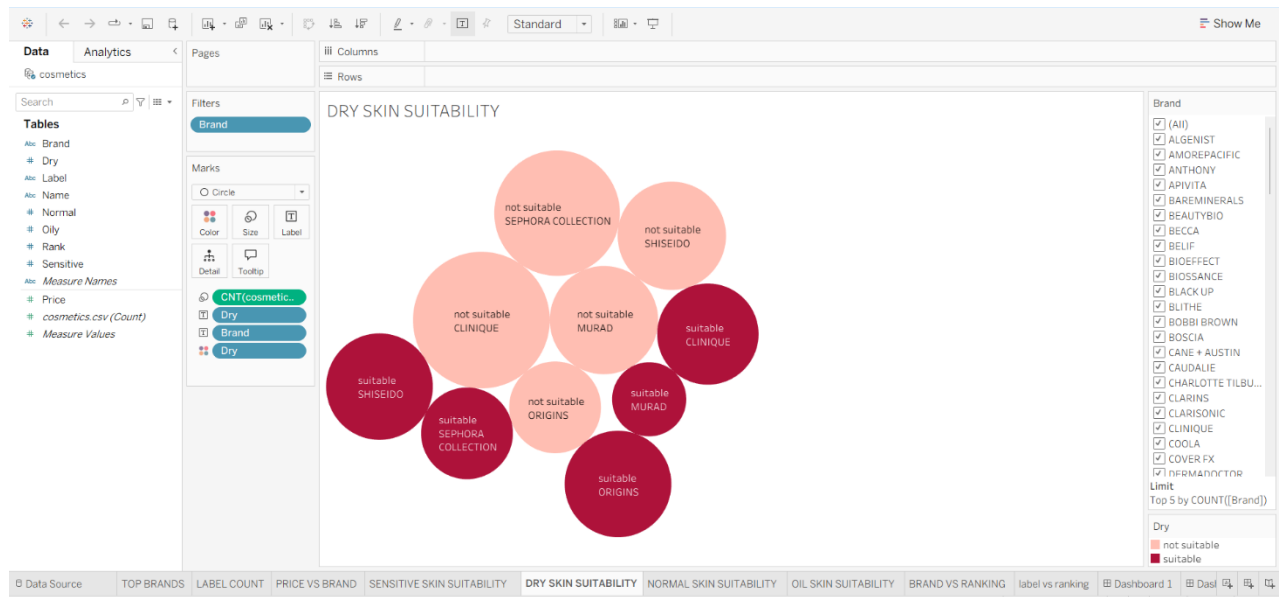
### 4. LABEL VS RANKING:



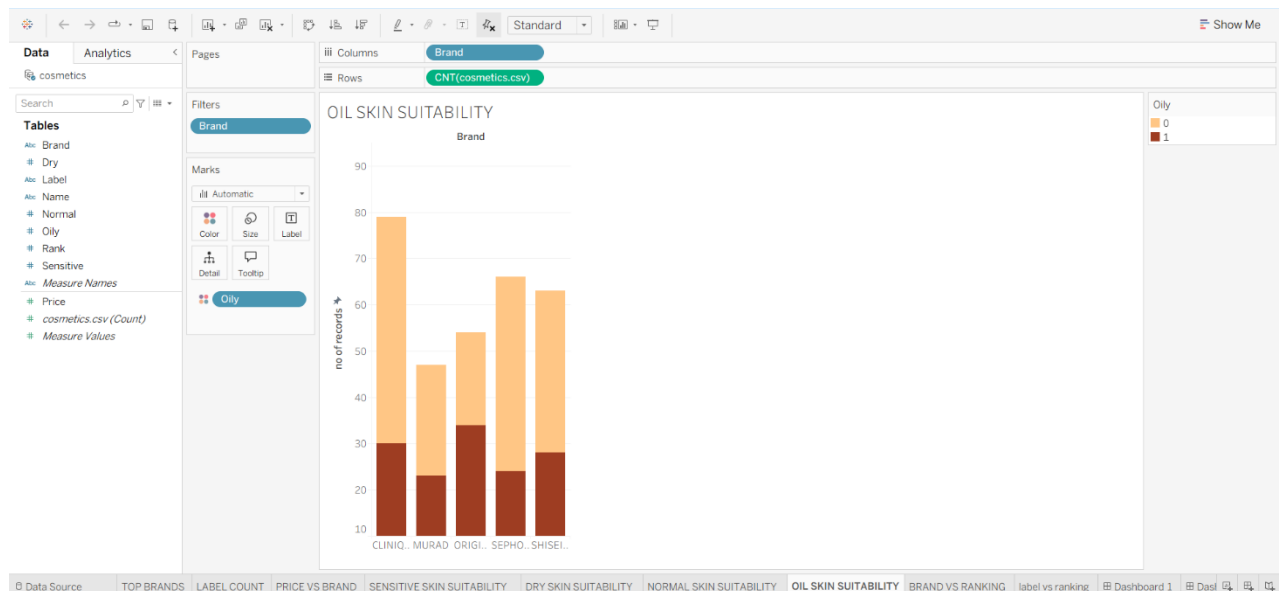
### 5.NORMAL SKIN SUITABILITY:



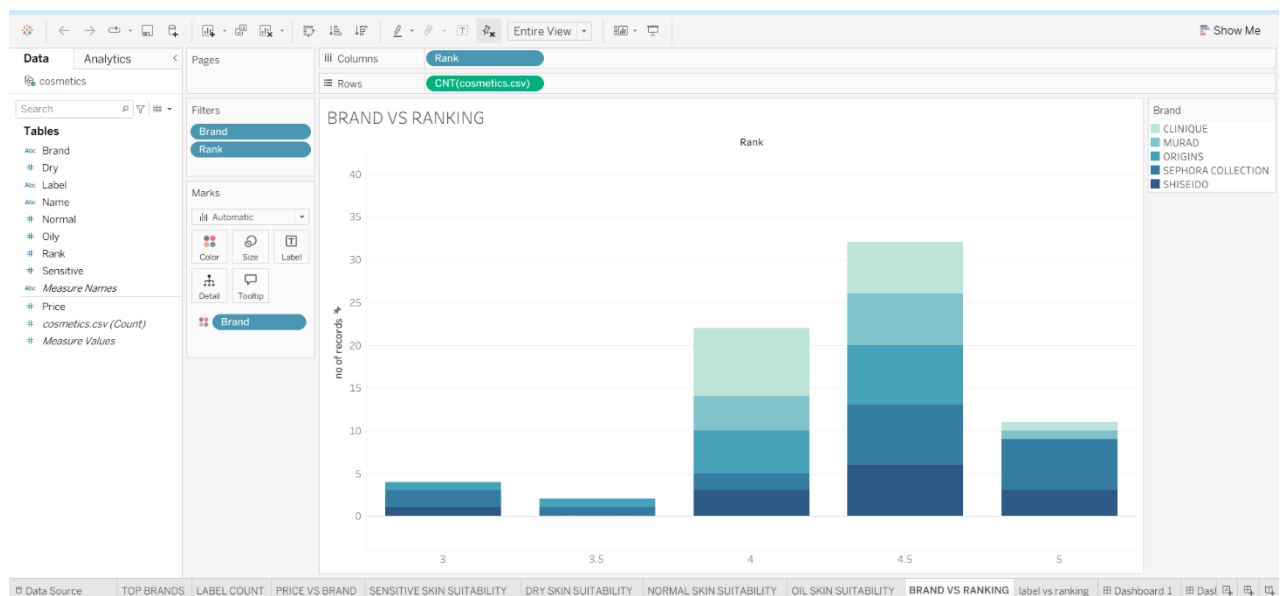
## 6.DRY SKIN SUITABILITY:



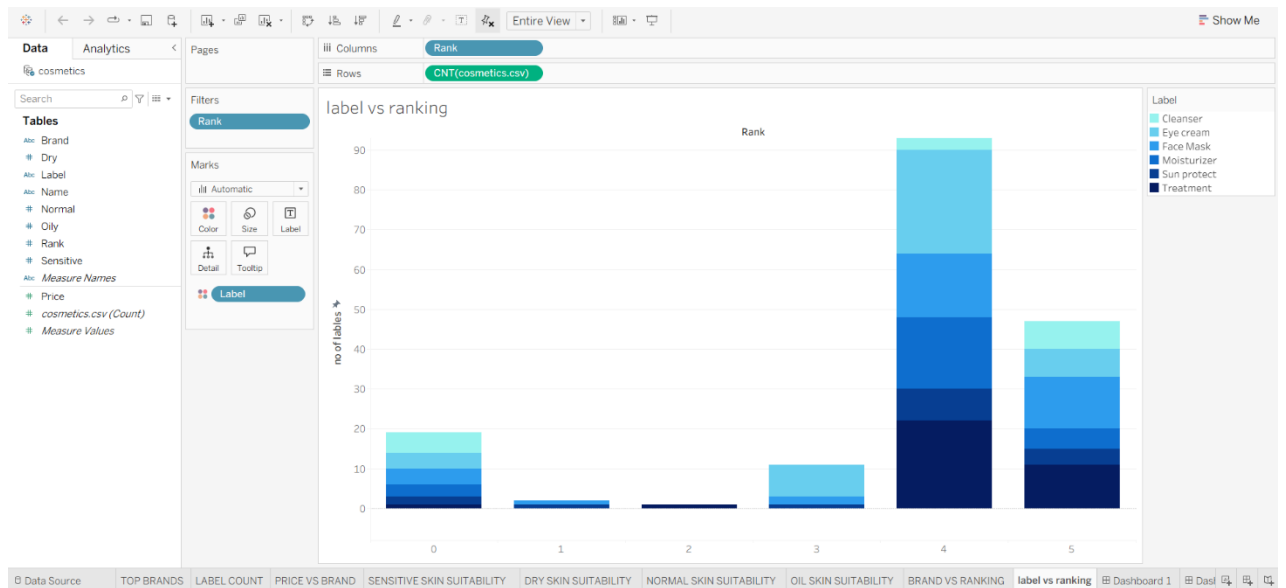
## 7.OIL SKIN SUITABILITY:



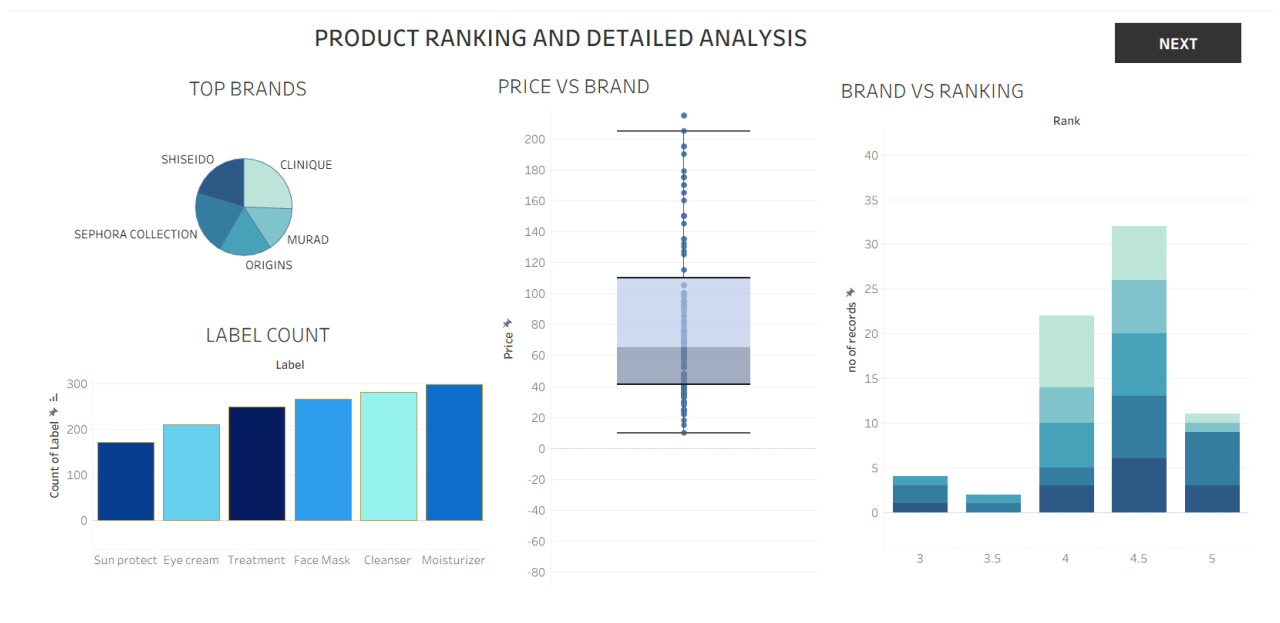
## 8. BRAND VS RANKING:



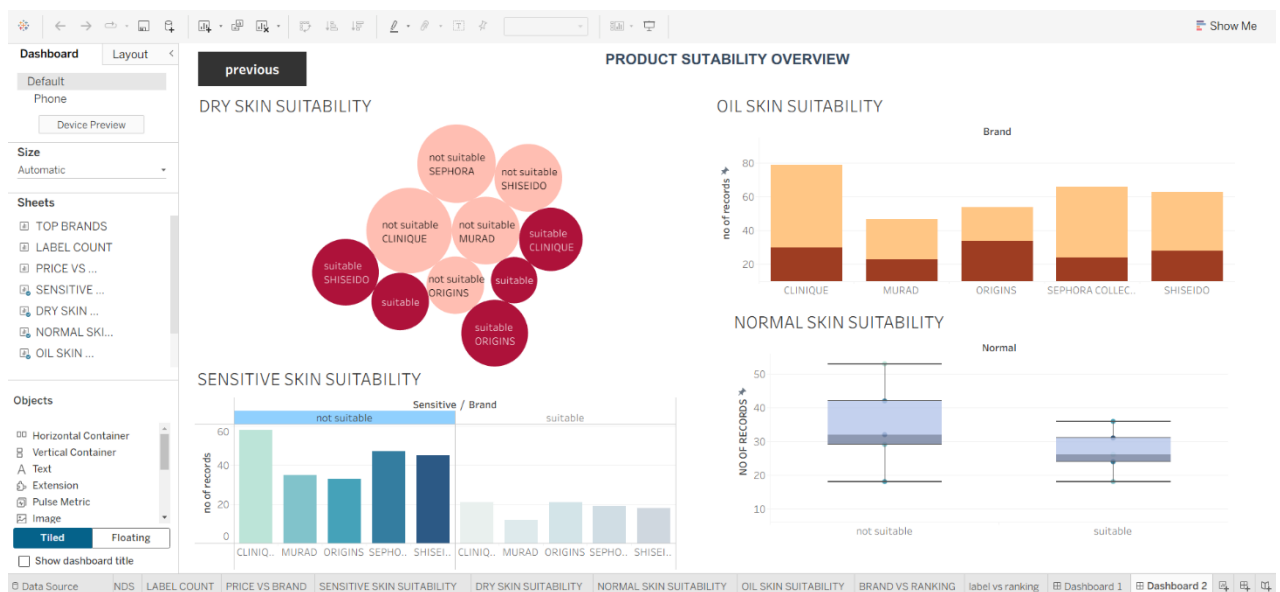
## 9.LABEL VS RANKING:



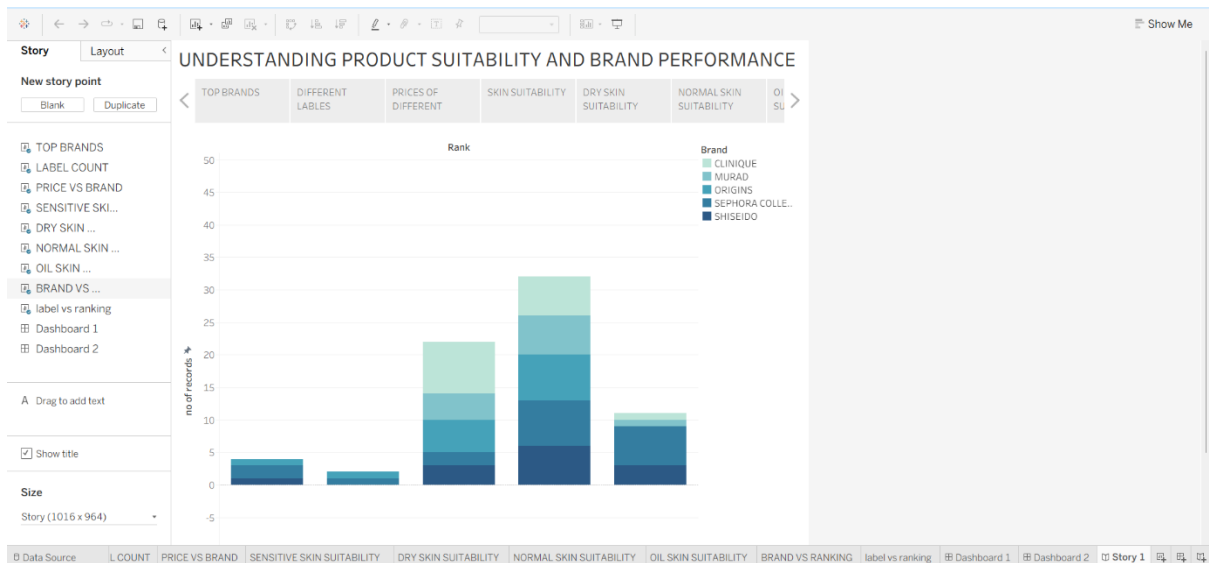
## DASHBOARD-1:



## DASHBOARD -2:



## STORY:



## 8.ADVANTAGES & DIS ADVANTAGES:

Advantages	Disadvantages
Offers interactive, visually intuitive dashboards suitable for both technical and non-technical	Tableau's advanced features require a learning curve for new users.
Enables real-time tracking and visualization of beauty trends using dynamic filters and live data.	Real-time data integration requires complex setups and reliable data sources.
Helps understand diverse consumer behaviors, preferences, and sentiments through demographic analysis.	Real-time data integration requires complex setups and reliable data sources.
Helps understand diverse consumer behaviors, preferences, and sentiments through demographic analysis.	Consumer sentiment analysis may require integration with external text-mining or NLP tools.
Supports data-driven marketing and product development decisions with clear visual insights.	Depends heavily on quality and completeness of underlying data.
Combines data from sales, social media, and reviews into a unified dashboard for holistic insights.	Integrating multiple data sources can be time-consuming and may require advanced ETL processes.
Encourages fast response to market shifts, keeping cosmetic brands competitive.	Frequent dashboard updates are needed to reflect the most recent market conditions



## 9. CONCLUSION:

The Cosmetic Insights: Navigating Cosmetics Trends and Consumer Insights with Tableau project has successfully demonstrated how data visualization can revolutionize the way the cosmetics industry understands market dynamics and consumer behavior. By transforming raw, multi-source data into interactive and insightful Tableau dashboards, the project empowers stakeholders to explore emerging beauty trends, analyze demographic preferences, and make informed, data-driven decisions.

This solution bridges the gap between static reports and dynamic market intelligence, providing cosmetic brands with the tools to stay agile, competitive, and aligned with consumer expectations. Ultimately, it lays a foundation for smarter product development, targeted marketing strategies, and sustainable growth in a fast-evolving industry.

## 10. FUTURE SCOPE:

- **Expand Dataset** to include global cosmetics markets and newer data (post-2020) for more relevant and up-to-date insights.
- **Integrate AI/ML** to forecast future beauty trends, detect consumer behavior shifts, and identify anomalies in market patterns.
- **Enhance Accessibility** through mobile-optimized dashboard deployment or integration with tools like Power BI for broader user reach.
- **Add Consumer Segmentation** to align product development and marketing strategies with specific buyer demographics and preferences.
- **Incorporate Real-Time Feeds** from industry APIs, social media platforms, trend trackers, and retail sales systems for live market insights.

## 11. APPENDIX:

### Source Code:

### INDEX.HTML:

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8" />

<title>Cosmetics Analysis - Full Site</title>

<meta name="viewport" content="width=device-width, initial-scale=1" />

<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
rel="stylesheet">

<script src="https://cdn.jsdelivr.net/npm/chart.js"></script>

<script src="https://kit.fontawesome.com/a076d05399.js"
crossorigin="anonymous"></script>

<!-- Font: Libertinus Mono -->

<link rel="preconnect" href="https://fonts.googleapis.com">

<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>

<link
href="https://fonts.googleapis.com/css2?family=Libertinus+Mono&display=swap" rel="stylesheet">


<style>

body {

    font-family: "Libertinus Mono", monospace;

    background-color: #f5f5f5;

    color: #333;

    margin: 0;

    padding: 0;

}


/* Sticky Navbar with Gradient Background */

.navbar {

    background: linear-gradient(90deg, #00c2c2, #007d8c, #5f4b8b);

    padding: 20px;
```

```
display: flex;
justify-content: space-between;
align-items: center;
flex-wrap: wrap;
position: sticky;
top: 0;
z-index: 999;
box-shadow: 0 2px 10px rgba(0,0,0,0.2);
}

.navbar h2 {
font-size: 28px;
color: #ffffff;
margin: 0;
}

.navbar a {
font-size: 16px;
padding: 10px 20px;
margin: 5px;
text-decoration: none;
background-color: rgba(255, 255, 255, 0.2);
color: #fff;
border-radius: 8px;
transition: background 0.3s;
}

.navbar a:hover {
```

```
background-color: rgba(255, 255, 255, 0.4);  
}
```

```
.navbar a.active {  
  background-color: #004080 !important;  
  color: #fff !important;  
}
```

```
/* Hero Section (Dark Overlay Style) */
```

```
.hero-section {  
  
  position: relative;  
  width: 100%;  
  height: 100vh;  
  display: flex;  
  justify-content: center;  
  align-items: center;  
  text-align: center;  
  margin-top: 0;  
  overflow: hidden;  
}
```

```
.hero-section .hero-bg {  
  position: absolute;  
  top: 0;  
  left: 0;  
  width: 100%;  
  height: 100%;
```

```
z-index: 0;
}
```

```
.hero-section .hero-bg img {
  width: 100%;
  height: 100%;
  object-fit: cover;
}
```

```
.hero-section::after {
  content: "";
  position: absolute;
  top: 0;
  left: 0;
  width: 100%;
  height: 100%;
  background: rgba(0, 0, 0, 0.5); /* Dark overlay */
  z-index: 1;
}
```

```
.hero-section .hero-content {
  position: relative;
  z-index: 2;
  padding: 30px;
  max-width: 900px;
  color: #fff;
}
```

```
.hero-section h2 {  
  font-size: 3rem;  
  font-weight: bold;  
  margin-bottom: 20px;  
}  
.hero-section h3 {  
  font-size: 1.6rem;  
  font-weight: 400;  
}  
@media (max-width: 768px) {  
  .hero-section h2 {  
    font-size: 2rem;  
  }  
  
  .hero-section h3 {  
    font-size: 1.1rem;  
  }  
}  
  
/* Sections */  
.section {  
  padding: 80px 20px 60px;  
}  
  
.chart-container {  
  display: flex;  
  flex-wrap: wrap;
```

```
gap: 20px;  
margin-top: 20px;  
}
```

```
.chart-box {  
  flex: 1 1 45%;  
  padding: 20px;  
  background-color: #fff;  
  box-shadow: 0 2px 8px rgba(0,0,0,0.1);  
  border-radius: 8px;  
}
```

```
.insights {  
  background-color: #e0f7fa;  
  padding: 20px;  
  border-radius: 8px;  
}
```

```
canvas {  
  width: 100% !important;  
  height: 300px !important;  
}
```

```
footer {  
  background-color: #f8f9fa;  
  text-align: center;  
  padding: 20px;
```



```
    font-size: 14px;
  }
  .tableauPlaceholder {
    margin:auto;
  }
</style>
</head>
<body>

<!-- Navbar -->
<div class="navbar">
  <h2>COSMETICS ANALYSIS</h2>
  <div>
    <a href="#home" class="active">Home</a>
    <a href="#about">About</a>
    <a href="#dashboard">Dashboard</a>
    <a href="#story">Story</a>
    <a href="#insights">Insights</a>
  </div>
</div>

<!-- Hero Section -->
<section id="home" class="hero-section">
  <div class="hero-content">
    <h2>Welcome to Skincare Companion</h2>
    <h3>Uncover products that truly suit your skin—guided by smart analysis
and expert insights, all customized with you in mind.</h3>
```

<p>Find the best products tailored to your unique skin type using data-driven analysis and expert insights</p>

</div>

<div class="hero-bg">



</div>

</section>

<!-- About Section -->

<section id="about" style="min-height: 100vh; background-color: #f9f9f9; padding: 100px 0; display: flex; align-items: center;">

<div style="display: flex; flex-wrap: wrap; justify-content: center; align-items: center; max-width: 1200px; margin: 0 auto; padding: 0 20px;">

<!-- Left Image -->

<div style="flex: 1 1 400px; text-align: center; padding: 20px;">



</div>

<!-- Right Text Content -->

<div style="flex: 1 1 400px; padding: 20px;">

<h2 style="font-size: 40px; font-weight: bold; color: #1d2b44; margin-bottom: 24px; text-align: center;">Discover Your Perfect Skincare</h2>

<p style="font-size: 18px; color: #333; margin-bottom: 24px; text-align: center;">

Find the best products for your skin with our expert analysis and personalized recommendations.

</p>

<div style="font-size: 16px; color: #555; line-height: 1.6;">

<p><strong>TAILORED FOR YOU:</strong> Products that match your unique skin type and goals.</p>

<p><strong>EASY AND INFORMATIVE:</strong> Simple, jargon-free skincare advice.</p>

<p><strong>TRUSTED RECOMENDATIONS:</strong> Expert-curated insights for better decisions.</p>

</div>

</div>

</div>

</section>

<!-- Dashboard Section -->

<section id="dashboard" class="section">

<h2 class="text-center">Dashboard</h2>

<div class="container chart-container">

<div class="chart-box">

<h5>Product Suitability Overview (Tableau Dashboard)</h5>

<div class='tableauPlaceholder' id='viz1751007172211' style='position: relative'><noscript><a href='#'><img alt='PRODUCT RANKING' src='https://public.tableau.com/static/images/te/templates\_17509373607330/Dashboard1/1\_rss.png' /></a></noscript><object class='tableauViz' style='display:none;'><param name='host\_url' value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param name='name' value='templates\_17509373607330/Dashboard1' /></object></div>

<script type='text/javascript'>

```

var divElement = document.getElementById('viz1751007172211');
var vizElement = divElement.getElementsByTagName('object')[0];
vizElement.style.width = '100%'; vizElement.style.height =
(divElement.offsetWidth * 0.75) + 'px';

var scriptElement = document.createElement('script');
scriptElement.src = 'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement);

</script>
</div>
</div>
</section>

```

<!-- Story Section -->

<section id="story" class="section">

<h2 class="text-center">Story - Understanding Product Suitability</h2>

<div class="container">

<div class='tableauPlaceholder' id='viz1751007890808' style='position: relative'><noscript><a href='#'><img alt='PRODUCT STORY' src='https://public.tableau.com/static/images/te/templates\_17509373607330/Story1/1\_rss.png' /></a></noscript><object class='tableauViz' style='display:none'><param name='host\_url' value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param name='name' value='templates\_17509373607330/Story1' /></object></div>

<script type='text/javascript'>

```

var divElement = document.getElementById('viz1751007890808');
var vizElement = divElement.getElementsByTagName('object')[0];
vizElement.style.width = '100%'; vizElement.style.height = '900px';
var scriptElement = document.createElement('script');
scriptElement.src = 'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement);

```

```

</script>
</div>
</section>
<section id="insights" class="section" style="background-color: #ffffff;">
  <div class="container" style="max-width: 960px; margin: 0 auto;">
    <div style="background: linear-gradient(to right, #f0fbfc, #e9fdfb); padding: 30px 25px; border-radius: 12px; box-shadow: 0 4px 10px rgba(0,0,0,0.05);">
      <h2 style="font-size: 26px; color: #1d2b44; font-weight: bold; margin-bottom: 20px;">Key Insights</h2>
      <p><strong>Top Brands:</strong> Clinique and Shiseido dominate with top sales and visibility.</p>
      <p><strong>Skin Compatibility:</strong> Gaps exist in offerings for dry/sensitive skin types.</p>
      <p><strong>Premium Positioning:</strong> La Mer remains the premium luxury leader.</p>
      <p><strong>Quality Ratings:</strong> Top brands average 4.0–4.5 stars in satisfaction.</p>
    </div>
  </div>
</section>

<!-- Footer -->
<footer>© 2025 Your Skincare Company. All rights reserved.</footer>

<!-- Nav click activation script -->
<script>
  document.querySelectorAll('.navbar a').forEach(link => {
    link.addEventListener('click', function () {
      document.querySelectorAll('.navbar a').forEach(el =>
        el.classList.remove('active'));
    });
  });

```

```
        this.classList.add('active');
    });
});
</script>
</body>
</html>
```

### **APP.PY:**

```
from flask import Flask, render_template
app = Flask(__name__)
@app.route("/")
def home():
    return render_template("index.html")
if __name__ == "__main__":
    app.run(debug=True)
```

### **REQUIREMENTS:**

```
blinker==1.9.0
click==8.2.1
colorama==0.4.6
Flask==3.1.1
itsdangerous==2.2.0
Jinja2==3.1.6
lxml==5.4.0
MarkupSafe==3.0.2
```

python-docx==1.2.0

typing\_extensions==4.14.0

Werkzeug==3.1.3

gunicorn==21.2.0

**Dataset Link:**

<https://www.kaggle.com/datasets/kingabzpro/cosmetics-datasets>

**GitHub & Project Demo Link:**

<https://github.com/MShavankumar/COSMETICS--ANALYSIS>