

# Sephora Data Analysis

BUSINESS INSIGHTS & ETL IMPLEMENTATION



Group 12 - Big Data II Term Project



# Introduction

With the modern-day digital marketplace, it is imperative that firms are aware of customers' choice and product performance for success. In this project, the Sephora Products and Skincare Reviews Kaggle dataset was examined to show customer feelings, product performance, and market trends. Processes involved data cleansing using SSMS and VS Code, ETL processing using Alteryx, and data analysis using SSMS. OLAP Cube modeling extends the scope of multidimensional insight, while Power BI visuals provide interactive dashboards to analyze trends. The aim is to derive actionable insights for understanding customer choice and product influence effectively.



## ABOUT SEPHORA:

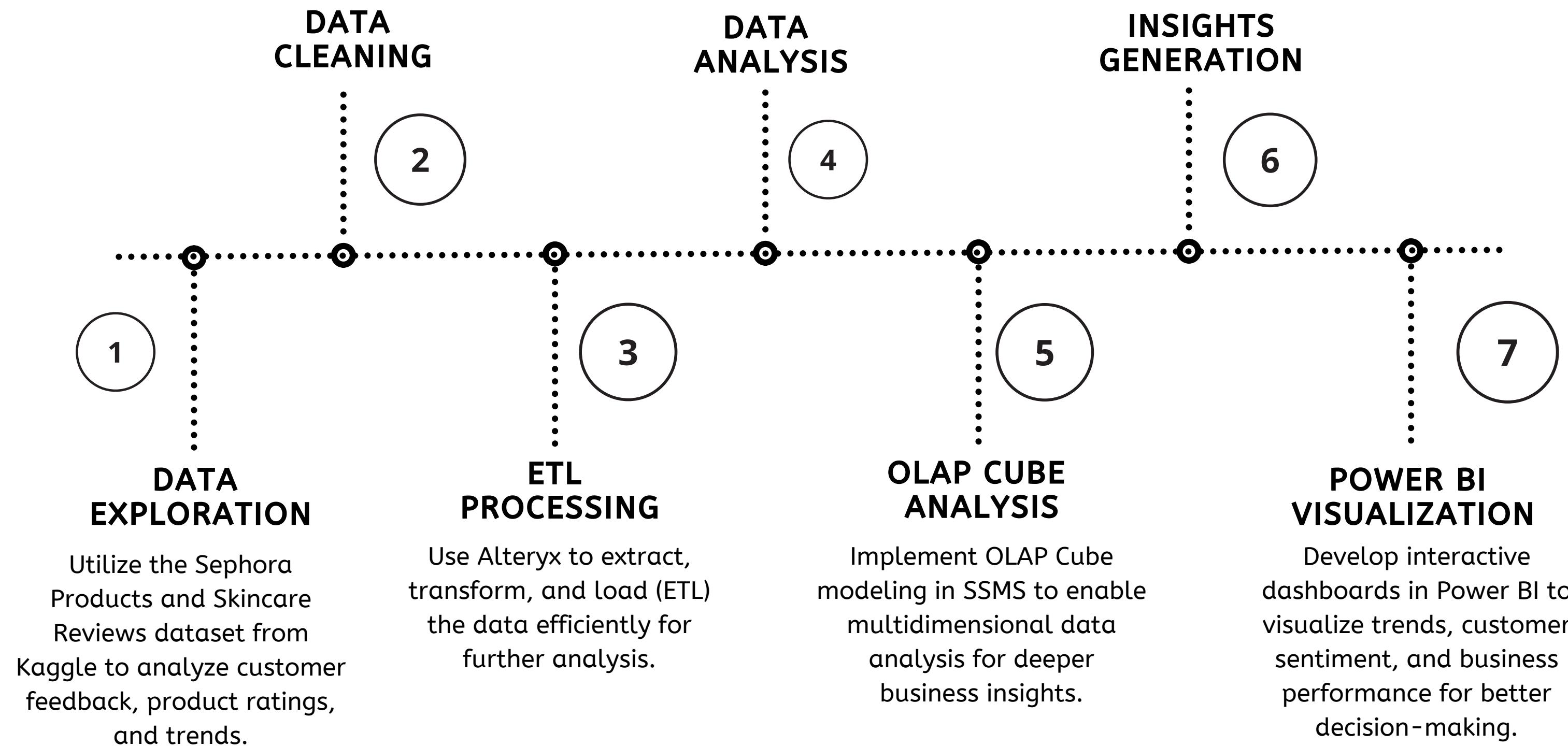
A global beauty retailer with thousands of products and brands. Customer engagement and product popularity are key metrics.

## BUSINESS PROBLEM?

- How can Sephora leverage customer feedback and product sales data to optimize inventory and enhance customer experience?
- What are the top-loved products, out-of-stock trends, and customer sentiment analysis insights?

# OBJECTIVES

Extract actionable insights by identifying trends in customer preferences, product performance, and market demand.



# DATA DESCRIPTION



The Sephora dataset (March 2023) provides an extensive collection of 8,000+ beauty products and 1M+ user reviews, offering deep insights into product details, pricing, customer preferences, and review sentiment.

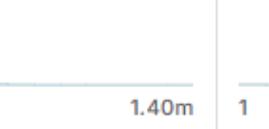
## Product Data (8,000+ Items)

- **General Details:** Product name, brand, category, and size variations
- **Pricing & Availability:** Regular, sale, and value prices; stock status; exclusivity (limited edition, online-only, Sephora-exclusive)
- **Engagement Metrics:** Number of favorites, reviews, and average ratings
- **Ingredients & Features:** List of product ingredients and highlight tags (e.g., vegan, matte finish)

## Reviews Data (5 Files, 1M+ Reviews on 2,000+ Skincare Products)

- **User Ratings & Recommendations:** 1-5 star ratings, whether the product is recommended
- **User Demographics:** Skin tone, skin type, eye color, hair color
- **Sentiment & Feedback:** Review text, title, helpfulness score, positive/negative feedback count

# DATA DESCRIPTION

<span>▲ product_id</span>	<span>▲ product_name</span>	<span>↳ brand_id</span>	<span>▲ brand_name</span>	<span># loves_count</span>	<span># rating</span>
The unique identifier for the product from the site	The full name of the product	The unique identifier for the product brand from the site	The full name of the product brand	The number of people who have marked this product as a favorite	The average product rating based on reviews
<b>8494</b> unique values	<b>8415</b> unique values		SEPHORA COLLEC... 4% CLINIQUE 2% Other (7963) 94%		
P473671	Fragrance Discovery Set	6342	19-69	6320	3.6364
P473668	La Habana Eau de Parfum	6342	19-69	3827	4.1538
P473662	Rainbow Bar Eau de Parfum	6342	19-69	3253	4.25

Product info table



Reviews table

# DATA EXPLORATION USING SSMS

DUPLICATE VALUES.sq... (84) Executing... SQLQuery

```
USE SephoraProductReview
GO

SELECT
    author_id,
    rating,
    submission_time,
    COUNT(*) AS DuplicateCount
FROM
```

Results Messages

	author_id	rating	submission_time	DuplicateCount
1	23592757832	5	2020-08-03	2
2	6046290906	5	2021-12-09	2
3	1368382924	5	2021-02-12	2
4	32573858785	5	2022-09-29	2
5	6626315083	3	2021-02-18	2
6	21152269508	4	2020-06-07	2
7	7392643642	5	2020-08-07	2
8	8441585338	2	2022-10-19	2

	author_id	rating	submission_time	DuplicateCount
1	6324872861	3	2021-10-10	3
2	6800422019	5	2019-03-03	2
3	5176002848	5	2019-06-25	3
4	7086202969	4	2023-01-26	2
5	10624026829	5	2021-10-21	2
6	6920165874	5	2023-02-10	4
7	5892463372	5	2019-03-12	2
8	10051865692	3	2021-10-18	2
9	2292500481	3	2020-05-11	2
10	9269102677	5	2020-09-20	2

SQLQuery missing r1.sql - ASIRA\_OMAR\SSQLSERVER1.SephoraProductReview (ASIRA\_OMAR\asira (83)) - Microsoft SQL Server Management Studio

```
SELECT
    COUNT(*) AS TotalRows,
    SUM(CASE WHEN column1 IS NULL OR author_id = '' THEN 1 ELSE 0 END) AS MissingAuthorId,
    SUM(CASE WHEN author_id IS NULL OR author_id = '' THEN 1 ELSE 0 END) AS MissingAuthorId,
    SUM(CASE WHEN rating IS NULL THEN 1 ELSE 0 END) AS MissingRating,
    SUM(CASE WHEN is_recommended IS NULL THEN 1 ELSE 0 END) AS MissingIsRecommended,
    SUM(CASE WHEN helpfulness IS NULL THEN 1 ELSE 0 END) AS MissingHelpfulness,
    SUM(CASE WHEN total_feedback_count IS NULL THEN 1 ELSE 0 END) AS MissingTotalFeedbackCount,
    SUM(CASE WHEN total_neg_feedback_count IS NULL THEN 1 ELSE 0 END) AS MissingTotalNegFeedbackCount,
    SUM(CASE WHEN total_pos_feedback_count IS NULL THEN 1 ELSE 0 END) AS MissingTotalPosFeedbackCount,
    SUM(CASE WHEN submission_time IS NULL OR review_text = '' THEN 1 ELSE 0 END) AS MissingSubmissionTime,
    SUM(CASE WHEN review_text IS NULL OR review_text = '' THEN 1 ELSE 0 END) AS MissingReviewText,
    SUM(CASE WHEN review_title IS NULL OR review_title = '' THEN 1 ELSE 0 END) AS MissingReviewTitle,
    SUM(CASE WHEN skin_tone IS NULL OR skin_tone = '' THEN 1 ELSE 0 END) AS MissingSkinTone,
    SUM(CASE WHEN eye_color IS NULL OR eye_color = '' THEN 1 ELSE 0 END) AS MissingEyeColor,
    SUM(CASE WHEN skin_type IS NULL OR skin_type = '' THEN 1 ELSE 0 END) AS MissingSkinType,
    SUM(CASE WHEN hair_color IS NULL OR hair_color = '' THEN 1 ELSE 0 END) AS MissingHairColor,
```

Results Messages

	MissingTotalFeedbackCount	MissingTotalNegFeedbackCount	MissingTotalPosFeedbackCount	MissingSubmissionTime	MissingReviewText	MissingReviewTitle	MissingSkinTone	MissingEyeColor	MissingSkinType	MissingHairColor	MissingProductd	MissingProductName	MissingBrandName	MissingPrice
1	0	0	0	999	167011	106056	138488	74683	141081	0	0	0	0	0
1	0	0	0	172	59728	26799	33774	15749	36544	0	0	0	0	0
1	0	0	0	125	33981	15235	16443	889	19735	0	0	0	0	0
1	0	0	0	89	35556	15249	14663	7605	20557	0	0	0	0	0
1	0	0	0	59	14378	7201	6260	3821	8851	0	0	0	0	0

Query executed successfully.

REMOVING DUPLICATES



# DATA CLEANING USING ALTERYX



The data cleaning phase was performed using Alteryx to ensure data quality and consistency before further processing. A structured workflow was created to efficiently clean and manage the dataset. The key cleaning steps included:

- Dropping unnecessary columns with a high percentage of missing values to improve processing efficiency.
- Removing duplicate ratings, ensuring that for the same author and product, only the latest submission was retained.
- Setting a composite primary key for all review tables using a combination of author\_id and product\_id to maintain uniqueness and avoid redundancy.
- Deleting incomplete product records from the dataset while ensuring they do not exist in any review-related tables before removal.



# ETL WORKFLOW

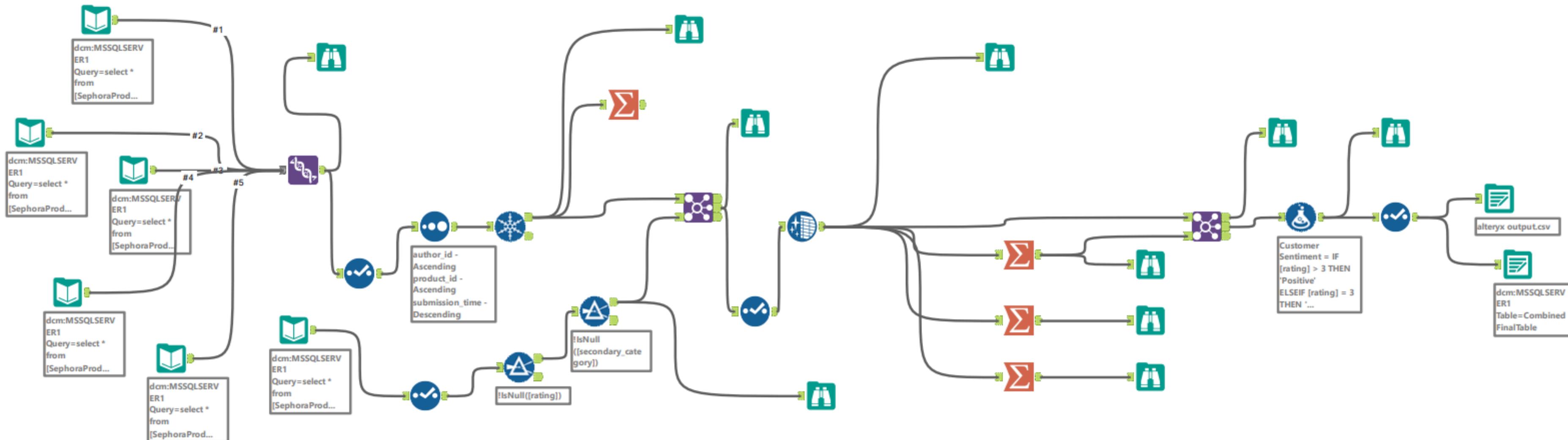
## WORKFLOW FOR SEPHORA PRODUCT REVIEWS IN ALTERYX

This Alteryx workflow extracts data from multiple SQL Server tables (Input Data Tool), including SephoraProductReviews, ProductDetails, and CustomerInfo.

- The Sort Tool arranges data by author\_id, product\_id, and submission time.
- The Filter Tool removes null values (ratings, categories).
- The Unique Tool eliminates duplicates, ensuring data integrity.
- Using the Join Tool, datasets are merged to enrich reviews with product and customer details. The Formula Tool categorizes sentiment as Positive, Neutral, or Negative.
- The Summarize Tool computes key insights like average rating per product and total reviews per category.

The final processed data is exported using the Output Data Tool and stored in SQL Server (FinalTable) for reporting and visualization in Power BI/Tableau. This streamlined ETL process ensures efficient data extraction, cleansing, enrichment, and structured reporting for better analytics and decision-making.

# ALTREYX WORKFLOW



The figure describe the workflow done on altreyx

# ALTREYX CALCULATED FIELD

Record	product_id	Avg_rating	Count
1	P433466	4.590909	22
2	P455623	4.404145	193
3	P422004	3.747253	91
4	P468143	3.567568	37
5	P458961	4.388889	18
6	P416538	4.285714	42
7	P440491	4.540541	37
8	P456193	4.530184	381
9	P458546	4.59761	251

Record	rating	Count
1	2	52882
2	5	694819
3	4	198574
4	3	81573
5	1	61038

Record	primary_category	secondary_category	Avg_rating	Count
1	Skincare	Value & Gift Sets	4.269138	12083
2	Skincare	Shop By Concern	4.266667	15
3	Skincare	Mini Size	4.284373	85089
4	Skincare	High Tech Tools	4.17665	5910
5	Skincare	Wellness	4.170813	10491
6	Skincare	Eye Care	4.178483	74769
7	Skincare	Treatments	4.303741	221462
8	Skincare	Moisturizers	4.316375	296152
9	Skincare	Self Tanners	4.081095	11912

Output Column: Customer Sentiment

Data Preview: Positive

```
fx IF [rating] > 3 THEN 'Positive'
X ELSEIF [rating] = 3 THEN 'Neutral'
ELSE 'Negative' ENDIF
```

Data type: String Size: 64

Output Column: Top Rated

Data Preview: Top Rated

```
fx IF [Avg_rating] > 4 THEN 'Top Rated'
X ELSE 'Standard' ENDIF
```

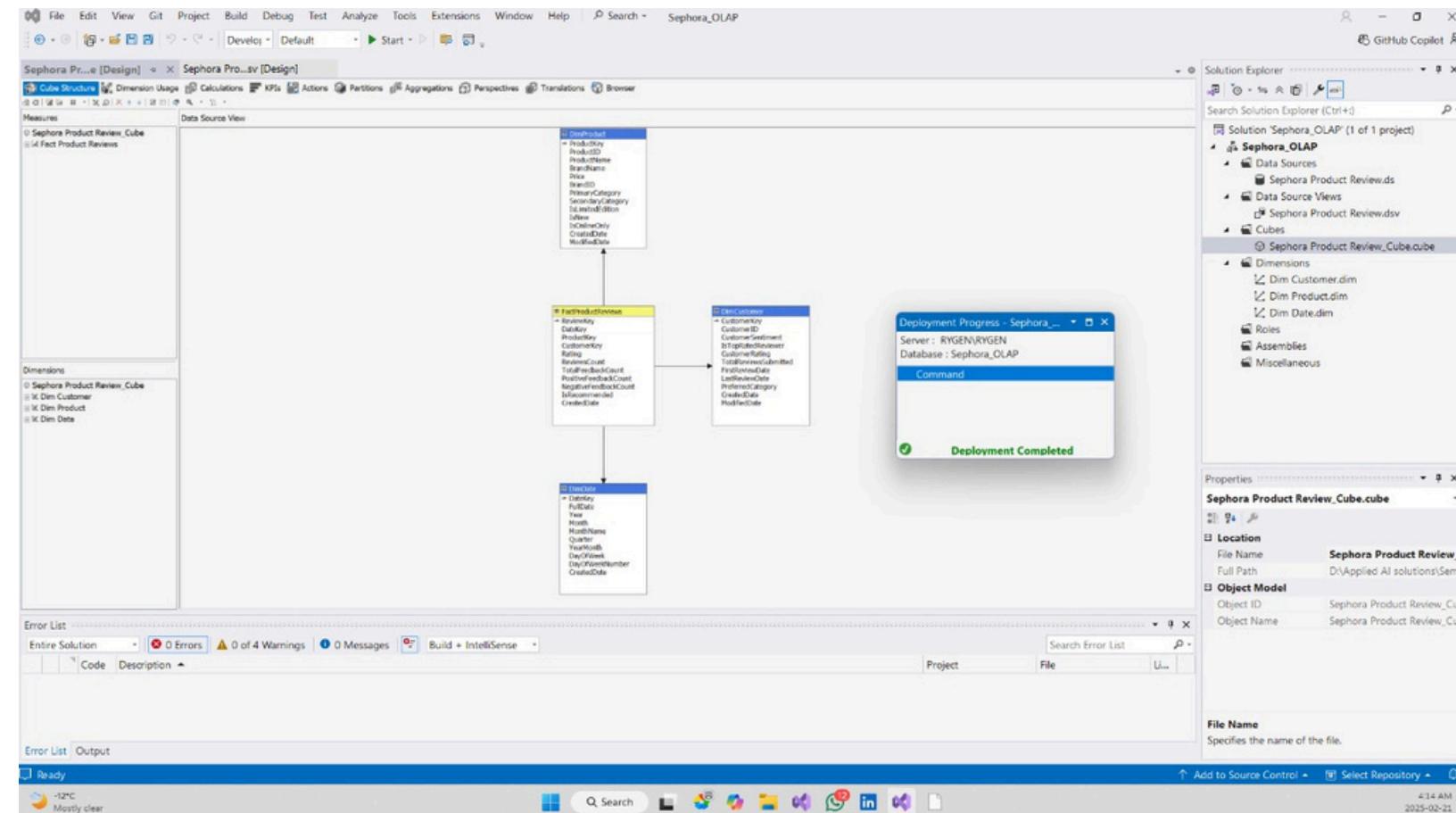


# OLAP CUBE ANALYSIS

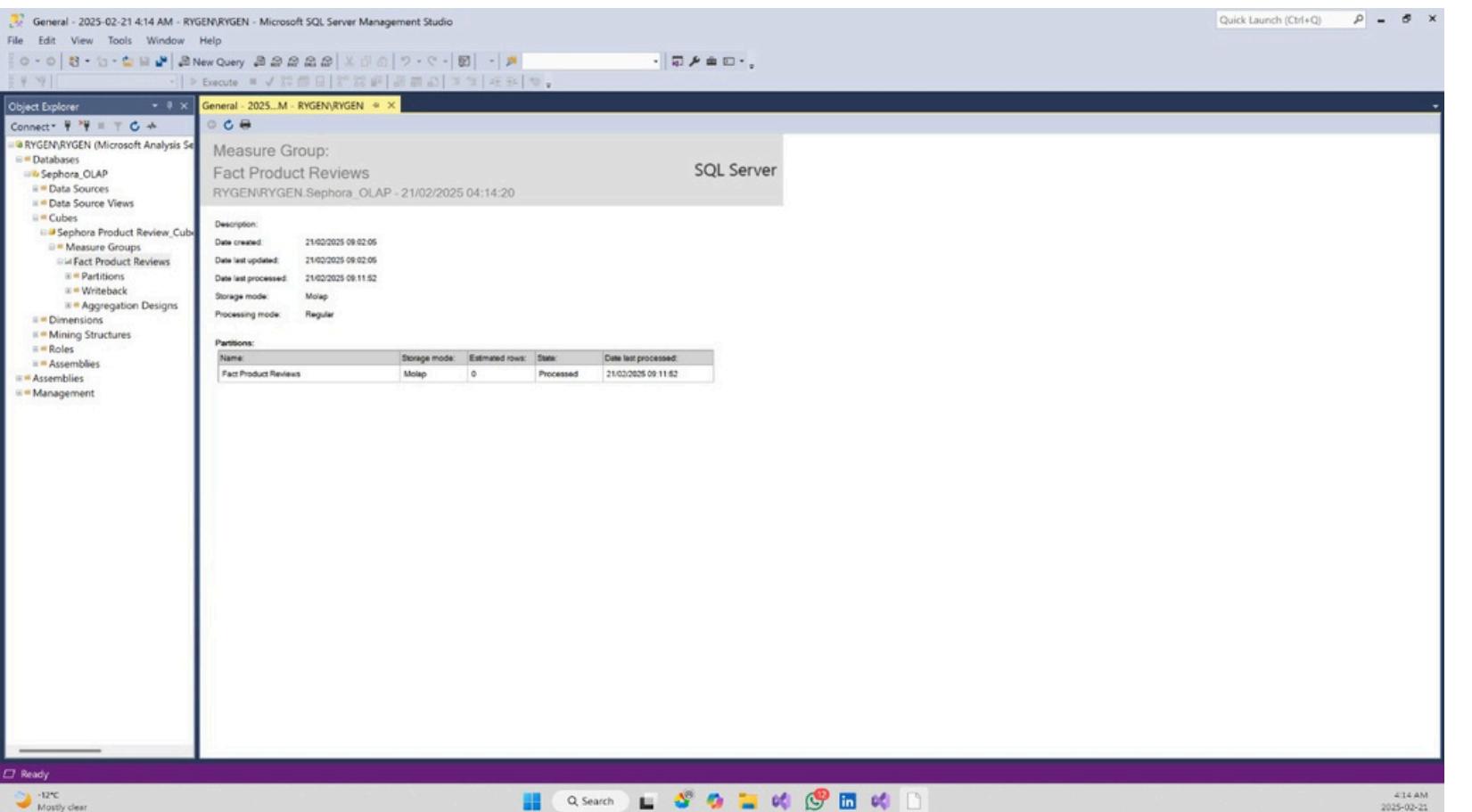
- The OLAP Cube was developed to analyze customer reviews, product performance, and sentiment trends efficiently. The data model consists of three dimension tables—DimCustomer, DimProduct, and DimDate—and one fact table (FactProductReviews) for aggregating key review metrics.
- DimCustomer tracks customer sentiment, rating behavior, and review frequency.
- DimProduct stores brand, category, and pricing details for product analysis.
- DimDate structures submission dates into a DateKey for time-based insights.
- FactProductReviews integrates all dimensions, capturing ratings, feedback counts, and recommendations.
- By structuring the data for multidimensional analysis, the OLAP Cube enables fast trend identification, efficient querying, and business intelligence insights, making it ready for Power BI visualization and advanced reporting



# OLAP CUBE ANALYSIS



OLAP Cube Successfully Deployed



OLAP Cube Verified with SSMS



# INSIGHTS GENERATION USING SSMS

## 1 Top 10 Highest Rated Products

Identified the best-rated products based on average rating (products with at least 50 reviews).

FaceGym's Youth Reformer Firming Vitamin C Oil Serum had the highest rating.

## 2 Products with the Most Negative Feedback

Listed the products with the most negative reviews to understand customer dissatisfaction.

The Ordinary's AHA 30% + BHA 2% Peeling Solution had the most negative feedback.

## 3 Impact of Price on Customer Ratings

Grouped products into Budget (<\$20), Mid-Range (\$20-\$50), and Luxury (> \$50) price categories.

Luxury products had higher average ratings, while budget products received the lowest ratings.



# INSIGHTS GENERATION USING SSMS

## 4 Most Recommended Products

Identified products with the highest number of positive recommendations.

Laneige's Lip Sleeping Mask Hydration was the most recommended.

## 5 Products Mostly Out of Stock

Analyzed which products were frequently out of stock.

Sephora Collection's Cleansing & Exfoliating Wipes was the most frequently unavailable.

## 6 Sephora Exclusive vs. Non-Exclusive Products

Compared ratings and total reviews between Sephora exclusive and non-exclusive products.

Exclusive products had slightly lower average ratings than non-exclusive ones.

## 7 Customer Sentiment Analysis

Grouped reviews into Positive, Neutral, and Negative sentiments.

Majority of customers left positive reviews, but 113,320 reviews were negative.

## 8 Best Product Categories

# INSIGHTS GENERATION USING SSMS



```

        GROUP BY product_name, brand_name
        ORDER BY total_recommendations DESC;

-----Best Product Categories

SELECT TOP 10
    primary_category,
    COUNT(*) AS total_reviews
FROM dbo.CombinedfinalTable
GROUP BY primary_category
ORDER BY total_reviews DESC;

```

```

-----Price Impact on Customer Sentiment

SELECT
    CASE
        WHEN price_usd < 20 THEN 'Budget (Under $20)'
        WHEN price_usd BETWEEN 20 AND 50 THEN 'Mid-Range ($20-$50)'
        WHEN price_usd > 50 THEN 'Luxury (Above $50)'
    END AS price_category,
    COUNT(*) AS total_reviews,
    AVG(rating) AS avg_rating
FROM dbo.CombinedfinalTable
WHERE price_usd IS NOT NULL
GROUP BY
    CASE
        WHEN price_usd < 20 THEN 'Budget (Under $20)'
        WHEN price_usd BETWEEN 20 AND 50 THEN 'Mid-Range ($20-$50)'
        WHEN price_usd > 50 THEN 'Luxury (Above $50)'
    END
ORDER BY avg_rating DESC;

```

Results Messages

price_category	total_reviews	avg_rating
Luxury (Above \$50)	378540	4.31927933639774
Mid-Range (\$20-\$50)	527126	4.29742983650968
Budget (Under \$20)	183220	4.25502128588582

```

-----Customer Sentiment Analysis

SELECT
    CustomerSentiment,
    COUNT(*) AS total_reviews
FROM dbo.CombinedfinalTable
WHERE CustomerSentiment IS NOT NULL
GROUP BY CustomerSentiment
ORDER BY total_reviews DESC;

```

Results Messages

CustomerSentiment	total_reviews
Positive	893393
Negative	113920
Neutral	81573

```

-----Products That Are Mostly Out of Stock

SELECT TOP 10
    product_name,
    brand_name,
    COUNT(*) AS out_of_stock_count
FROM dbo.CombinedfinalTable
WHERE out_of_stock = 1
GROUP BY product_name, brand_name
ORDER BY out_of_stock_count DESC;

```

Results Messages

product_name	brand_name	out_of_stock_count
Cleansing & Exfoliating Wipes	Sephora Collection	3835
D-bronz Anti-pollution Bronzing Drops With Peptides	Drunk Elephant	2045
Tonique Confort Re-hydrating Comforting Toner With ...	Lancôme	1576
Hydra Zen Glow Liquid Lightweight Moisturizer With ...	Lancôme	1511
Alpha Beta Pore Perfecting & Refining Serum	Dr. Dennis Gross Skincare	1494
Mini Glowscreen Sunscreen Spf 40 Pa+++ With Hyal...	Supergoop!	1452
Hydra Zen Gel-cream Oil-free Moisturizer With Salicy...	Lancôme	1255
Sea Deep Dive Cleansing Gel	Tarte	1158
Aqua Bomb Sleeping Mask	Belf	987
Sea Fxotion Stick Exfoliating Cleanser	Tarte	969

```

-----Most Recommended Products

SELECT TOP 10
    product_name,
    brand_name,
    COUNT(*) AS total_recommendations
FROM dbo.CombinedfinalTable
WHERE is_recommended = 1
GROUP BY product_name, brand_name
ORDER BY total_recommendations DESC;

```

Results Messages

product_name	brand_name	total_recommendations
Lip Sleeping Mask Intense Hydration With Vitamin C	Laneige	12935
Alpha Beta Extra Strength Daily Peel Pads	Dr. Dennis Gross Skincare	5489
Green Clean Makeup Removing Cleansing Balm	Farmacy	5201
Green Clean Makeup Meltaway Cleansing Balm Limit...	Farmacy	5201
The True Cream Aqua Bomb	Belf	5127
Niacinamide 10% + Zinc 1% Oil Control Serum	The Ordinary	4811
Superfood Antioxidant Cleanser	Youth To The People	4499
Mini Superfood Antioxidant Cleanser	Youth To The People	4495
Protini Polypeptide Firming Refillable Moisturizer	Drunk Elephant	4413
Daily Microfoliant Exfoliator	Dermologica	4361

```

-----Products That Received the Most Negative Feedback

SELECT TOP 10
    product_name,
    brand_name,
    SUM(total_neg_feedback_count) AS total_negative_feedback
FROM dbo.CombinedfinalTable
WHERE total_neg_feedback_count IS NOT NULL
GROUP BY product_name, brand_name
ORDER BY total_negative_feedback DESC;

```

Results Messages

product_name	brand_name	total_negative_feedback
Aha 30% + Bha 2% Exfoliating Peeling Solution	The Ordinary	13416
Niacinamide 10% + Zinc 1% Oil Control Serum	The Ordinary	10729
Lip Sleeping Mask Intense Hydration With Vitamin C	Laneige	10255
Glycolic Acid 7% Exfoliating Toning Solution	The Ordinary	7518
Protini Polypeptide Firming Refillable Moisturizer	Drunk Elephant	6961
Good Genes All-in-one Aha Lactic Acid Treatment	Sunday Riley	6695
Self Tanning Bronzing Face Drops	Isle Of Paradise	6617
Hyaluronic Acid 2% + B5 Hydrating Serum	The Ordinary	6517
Superfood Antioxidant Cleanser	Youth To The People	5822
Mini Superfood Antioxidant Cleanser	Youth To The People	5820



# PYSPARK ANALYSIS

```
Setting default log level to "WARN".
To adjust logging level use sc.setLogLevel(newLevel). For SparkR,
  ✓ PySpark Session Started Successfully!
root
|-- author_id: string (nullable = true)
|-- rating: double (nullable = true)
|-- is_recommended: boolean (nullable = true)
|-- total_feedback_count: integer (nullable = true)
|-- total_neg_feedback_count: integer (nullable = true)
|-- total_pos_feedback_count: integer (nullable = true)
|-- submission_time: string (nullable = true)
|-- product_id: string (nullable = true)
|-- product_name: string (nullable = true)
|-- brand_name: string (nullable = true)
|-- price_usd: decimal(11,2) (nullable = true)
|-- brand_id: string (nullable = true)
|-- loves_count: integer (nullable = true)
|-- reviews: integer (nullable = true)
|-- limited_edition: boolean (nullable = true)
|-- new: boolean (nullable = true)
|-- online_only: boolean (nullable = true)
|-- out_of_stock: boolean (nullable = true)
|-- sephora_exclusive: boolean (nullable = true)
|-- primary_category: string (nullable = true)
|-- secondary_category: string (nullable = true)
|-- child_count: integer (nullable = true)
|-- CustomerSentiment: string (nullable = true)
|-- TopRated: string (nullable = true)
```

## Pyspark setup

## Pyspark analysis

7.Are Negative Reviews Related to Online-Only Products?		
online_only	count	
true	10161	
false	103759	

8.Find Products That Are Most Recommended Despite Negative Reviews			
product_name	brand_name	total_negative_reviews	total_recommendations
Lip Sleeping Mask...	Laneige	1836	28
Protini Polypepti...	Drunk Elephant	1200	35
Cicapair Tiger Gr...	Dr. Jart+	931	18
Mini Cicapair Tig...	Dr. Jart+	844	14
Soy Hydrating Gen...	Fresh	833	16
Jet Lag Mask	Summer Fridays	827	11
Mini Jet Lag Mask	Summer Fridays	827	11
Niacinamide 10% +...	The Ordinary	823	31
Mini Oat Cleansin...	The Inkey List	785	5
Oat Cleansing Balm	The Inkey List	785	5
Superfood Antioxi...	Youth To The People	772	22
Mini Superfood An...	Youth To The People	770	22
The Water Cream O...	Tatcha	745	19
Mini The Water Cream	Tatcha	745	19
Salicylic Acid Ac...	Peace Out	666	9
Good Genes All-in...	Sunday Riley	664	9
Ultra Repair Crea...	First Aid Beauty	560	3
The Dewy Skin Cre...	Tatcha	553	10
Green Clean Makeu...	Farmacy	541	10
Green Clean Makeu...	Farmacy	541	10

only showing top 20 rows

9.Products That Are Mostly Out of Stock		
product_name	brand_name	count
Cleansing & Exfol...	Sephora Collection	3835
D-bronzi Anti-pol...	Drunk Elephant	2045
Tonique Confort R...	Lancôme	1576
Hydra Zen Glow Li...	Lancôme	1511
Alpha Beta Pore P...	Dr. Dennis Gross ...	1494
Mini Glowscreen S...	Supergoop!	1452
Hydra Zen Gel-cre...	Lancôme	1255
Sea Deep Dive Cle...	Tarte	1158
Aqua Bomb Sleepin...	Belif	987
Sea Frxxxtion Sti...	Tarte	969

10.Customer Sentiment Analysis		
CustomerSentiment	count	
Positive	893393	
Negative	113920	
Neutral	81573	

11.Sephora Exclusive Products vs. Non-Exclusive		
sephora_exclusive	total_products	avg_rating
true	353702	4.285242944625701
false	735184	4.303974243182659

12.Most Recommended Products		
product_name	brand_name	count
Lip Sleeping Mask...	Laneige	12935
Alpha Beta Extra ...	Dr. Dennis Gross ...	5489
Green Clean Makeu...	Farmacy	5281
Green Clean Makeu...	Farmacy	5281
The True Cream Aq...	Belif	5127
Niacinamide 10% +...	The Ordinary	4811
Superfood Antioxi...	Youth To The People	4499
Mini Superfood An...	Youth To The People	4495
Protini Polypepti...	Drunk Elephant	4413
Daily Microfolian...	Dermalogica	4361

# VISUALIZATION USING POWERBI



## Customer Satisfaction Trend over Benchmark

**72.95** ✓  
Goal: 65 (+12.23%)

**TOTAL REVIEWS**

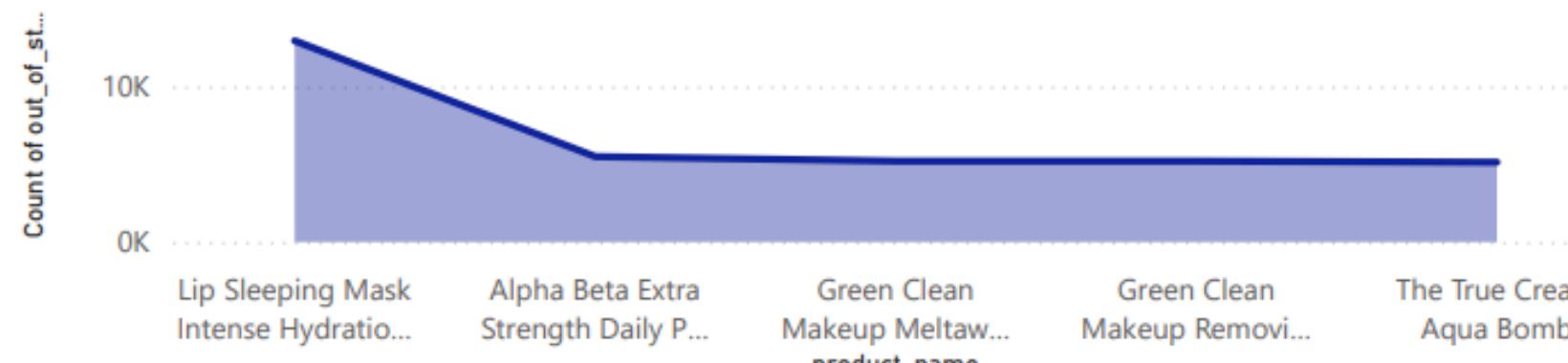
**1M**

TotalReviews

brand_name	TotalReviews	EstimatedRevenue	Average of rating	Sum of pos-feed	ReviewTrendIndicator
Josie Maran	16785	3,28,13,23,577.00	4.36	31797	▲ ●
It Cosmetics	9754	39,47,42,017.00	4.29	30732	▲ ●
Shiseido	19862	1,20,38,65,152.00	4.50	29549	▲ ●
Fenty Skin	4805	6,56,59,788.00	4.25	29379	▼ ●
Dermalogica	24361	2,18,91,23,064.00	4.61	29206	▲ ●
Hum Nutrition	4407	4,39,04,313.00	4.26	27743	▼ ●
<b>Total</b>	<b>1088886</b>	<b>1,02,06,30,90,558.03</b>	<b>4.30</b>	<b>3579910</b>	<b>▲ ●</b>

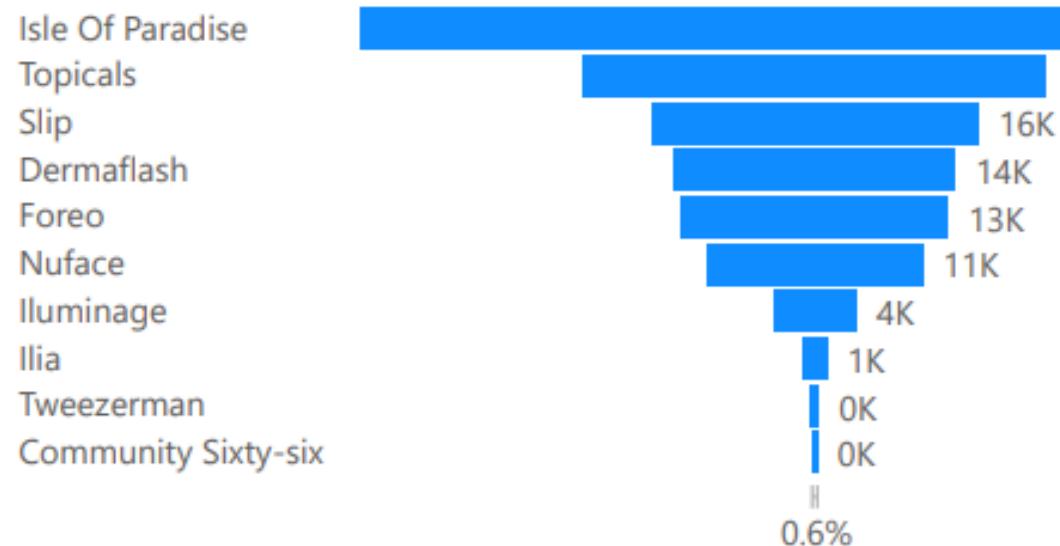
## Top 5 High-Demand Products That Are Out of Stock

is\_recommended ● True



## Positive Feedback Counts by Brand

**Isle of Paradise has the highest positive feedback with 45733 reviews**



## Top 5 brand\_name based on the rating

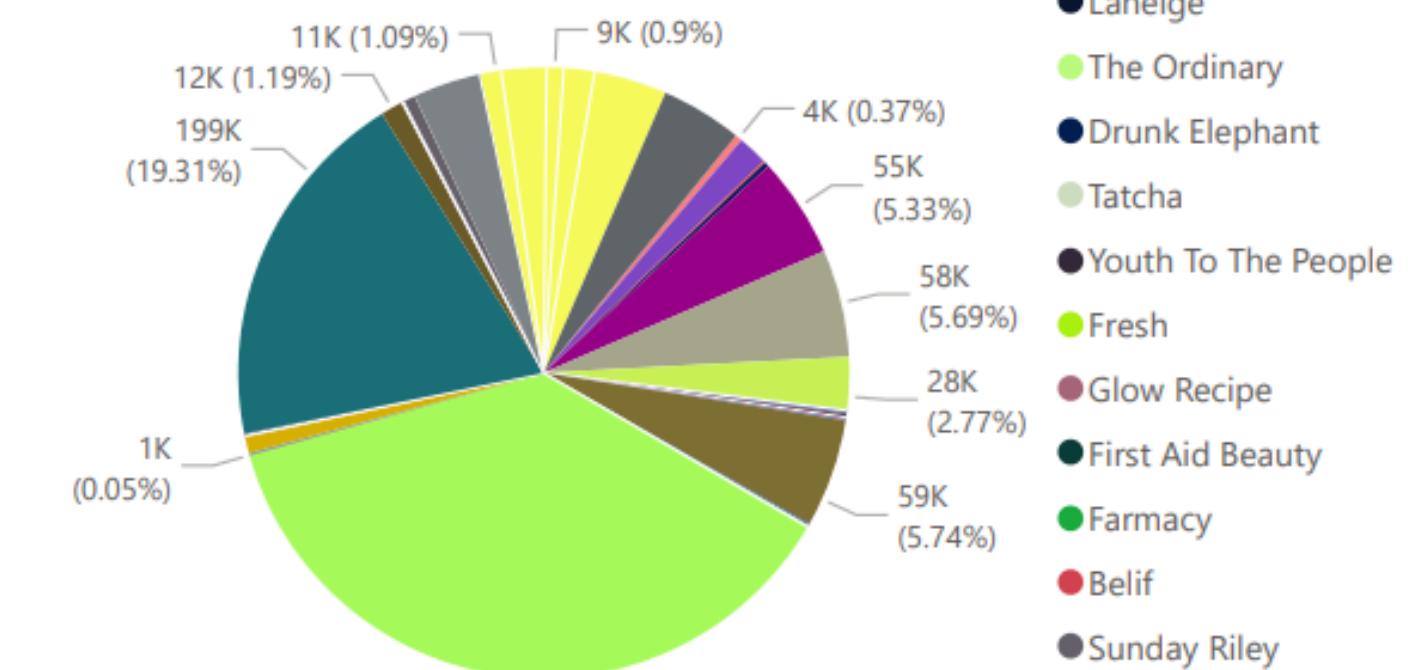
rating ● 1 ● 2 ● 3 ● 4 ● 5



**102.06bn**

EstimatedRevenue

## A Brand-Level Comparison of Sephora Favorites



**SUIWHASOO was the Top Loved Product with 37.2% Engagement, Featured in Sephora Exclusives**



# INSIGHTS FROM DASHBOARD

The Sephora Dashboard provides an in-depth brand-level analysis, customer sentiment, product demand, and engagement trends. Below are the key insights extracted from the dashboard:

## Brand Performance Insights

1. Isle of Paradise received the highest positive feedback with 45,733 reviews, indicating strong customer satisfaction.
2. Sulwhasoo was the Top Loved Product, featured in Sephora Exclusives, with 37.2% customer engagement.

## 3. Top 5 Brands Based on Ratings:

- Youth To The People
- Wishful
- Waso
- Wander Beauty
- Tweezerman

## Customer Engagement & Reviews

4. Total Reviews: Over 1 million customer reviews analyzed.



# INSIGHTS FROM DASHBOARD

5. **Customer Satisfaction Trend:** Scored 72.95, surpassing the benchmark goal of 65 by +12.23%.

6. **Positive vs. Negative Sentiment:** Brands like Josie Maran, It Cosmetics, and Shiseido received higher positive engagement trends, while Fenty Skin and Hum Nutrition showed declining sentiment.

## Product Demand & Stock Availability

### 7. Most Out-of-Stock High-Demand Products:

- Lip Sleeping Mask Intense Hydration
- Alpha Beta Extra Strength Daily Peel
- Green Clean Makeup Meltaway
- Green Clean Makeup Removing Balm
- The True Cream Aqua Bomb

8. **Revenue Estimation:** The estimated revenue across analyzed products is \$102.06 billion, with brands like Shiseido and Dermalogica leading in revenue generation.

# CONCLUSION

- The Sephora Dashboard analysis provides valuable insights into brand performance, customer sentiment, and product demand.
- Isle of Paradise led in positive feedback, while Sulwhasoo emerged as the most loved product.
- The customer satisfaction score (72.95) exceeded expectations, reflecting strong engagement.
- However, brands like Fenty Skin and Hum Nutrition showed a decline in sentiment, indicating areas for improvement.
- Additionally, high-demand products frequently went out of stock, highlighting an opportunity for inventory optimization.
- With an estimated \$102.06 billion revenue, focusing on customer preferences, stock management, and product enhancements will drive further business growth and customer loyalty.

# Our Team



**Aswin Senthil Kumar**

**Dharanidharan  
Ekambaram**

**Asira Omarkathaf**

**Indira Chetty**

**Dinesh Kesavan**

**Hari Vignesh  
Duraipandi**

