

Sephora

ACHIEVING HEALTHY. BEAUTIFUL SKIN



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1 - *Introduction :*

In the dynamic beauty industry, understanding customer preferences and product performance is essential. This project analyzes Sephora's data to uncover insights into customer preferences, product trends, and brand performance.

2 - Objectives :

1. Identify the most popular and profitable products.
2. Analyze product performance across categories.
3. Analyze brand product portfolio strategies.
4. Identify Top-performing brand based on customer engagements

3 - Goals :

- Optimize product assortment
- Enhance brand performance insights
- Improve customer engagement
- Drive Revenue Growth

4 - End - to - End BI Workflow :

A/ Data Gathering:

-Data was gathered from **Kaggle** from different sources (csv,json), this data was organized into three Pandas DataFrames :

df1: Brands with Number of Products

df2: Most Expensive Products

df3: Product Information



B / Data Preparation ETL process :

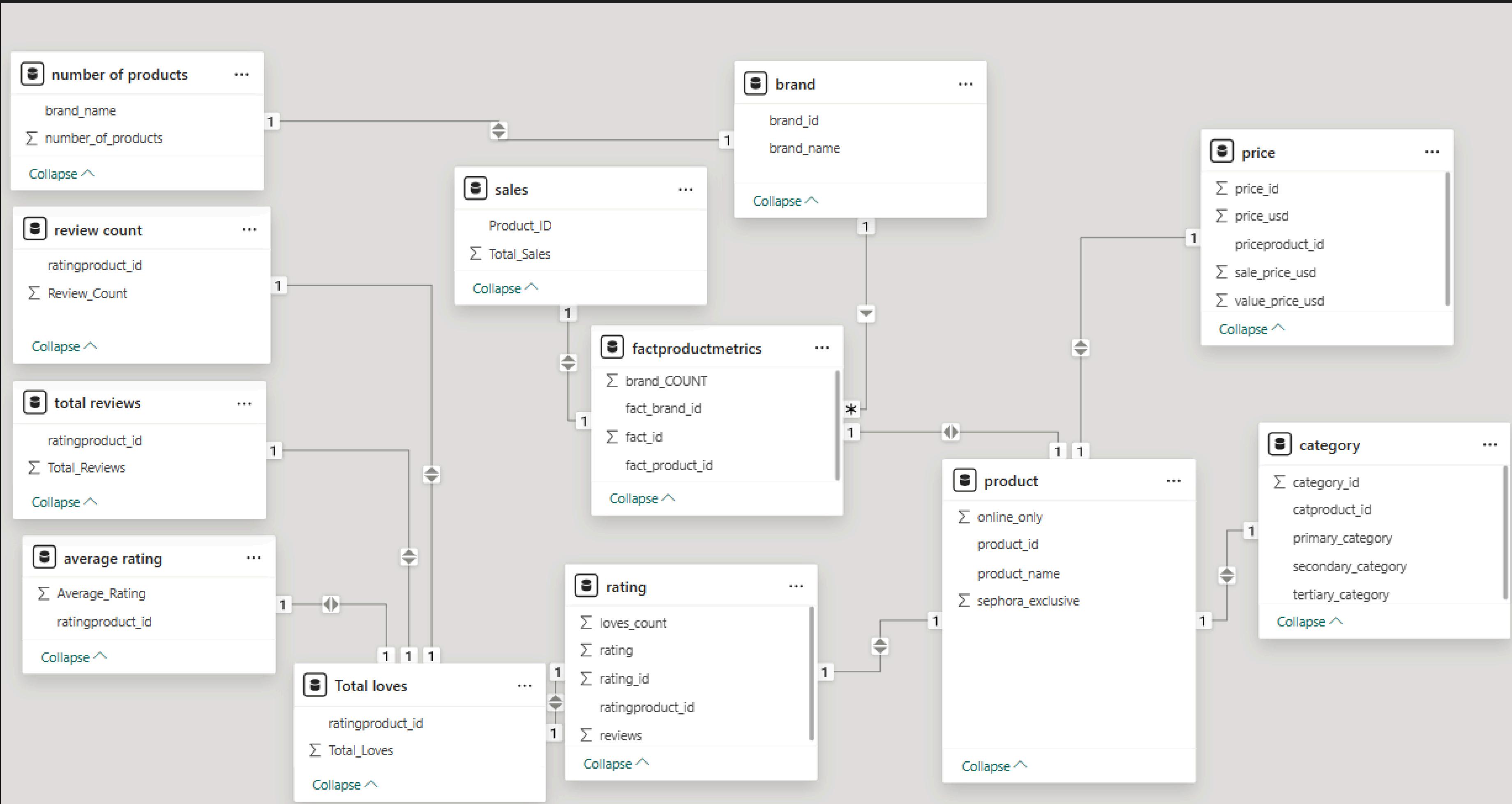
The data preparation process included handling missing values, converting data types, cleaning text, creating unique identifiers, and merging tables to ensure a standardized dataset, which was then loaded into **MySQL** data warehouse using TableConvert for seamless integration with **Power BI** for advanced analysis and visualization.



c/ Data Storage - Modeling and DWH creation :

The data was prepared and stored in a **MySQL** database, where a Snowflake Schema was created in Power BI. This structured approach, utilizing a **ROLAP (Relational OLAP)** architecture, optimized the data for efficient reporting and visualization

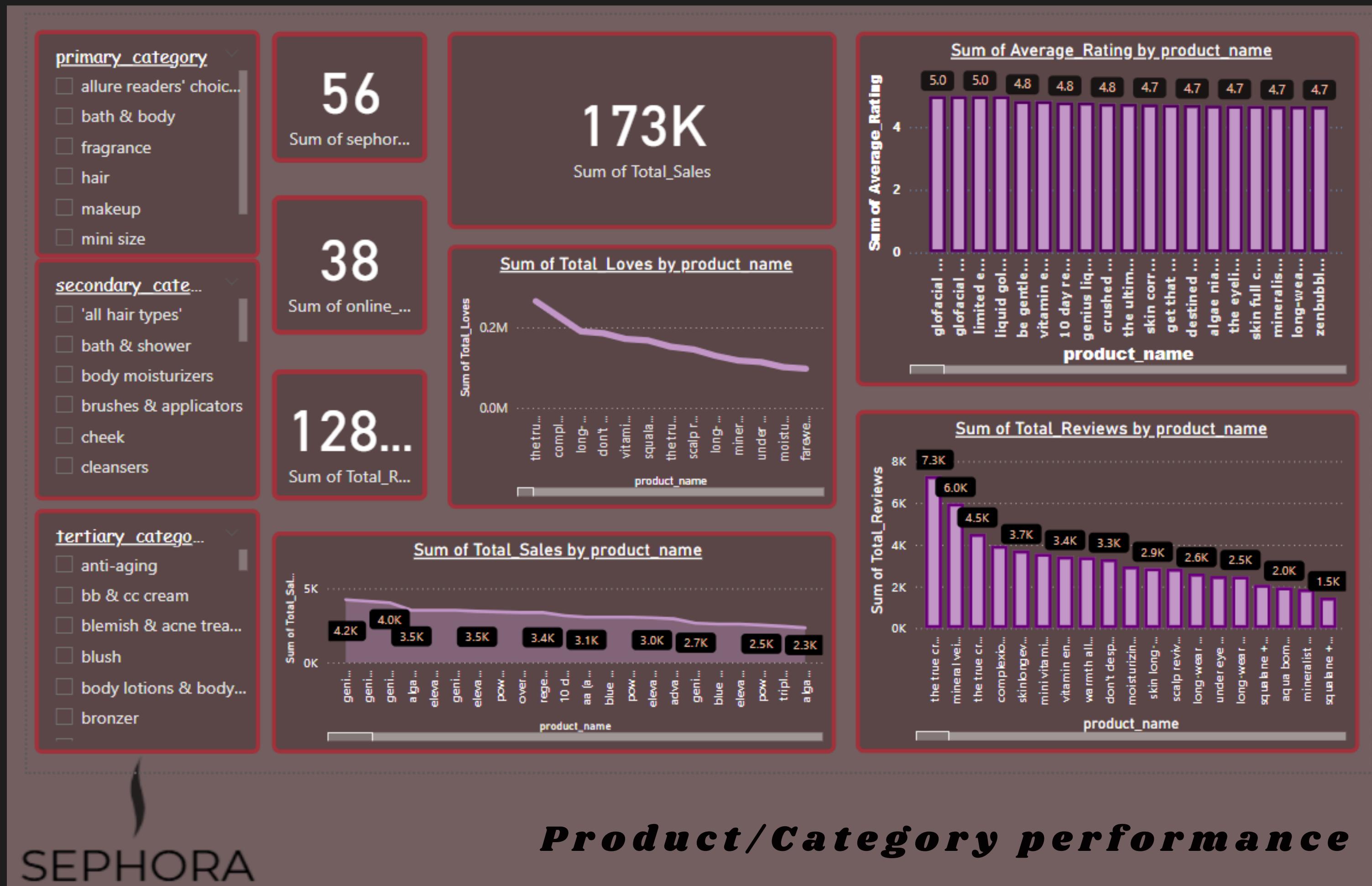




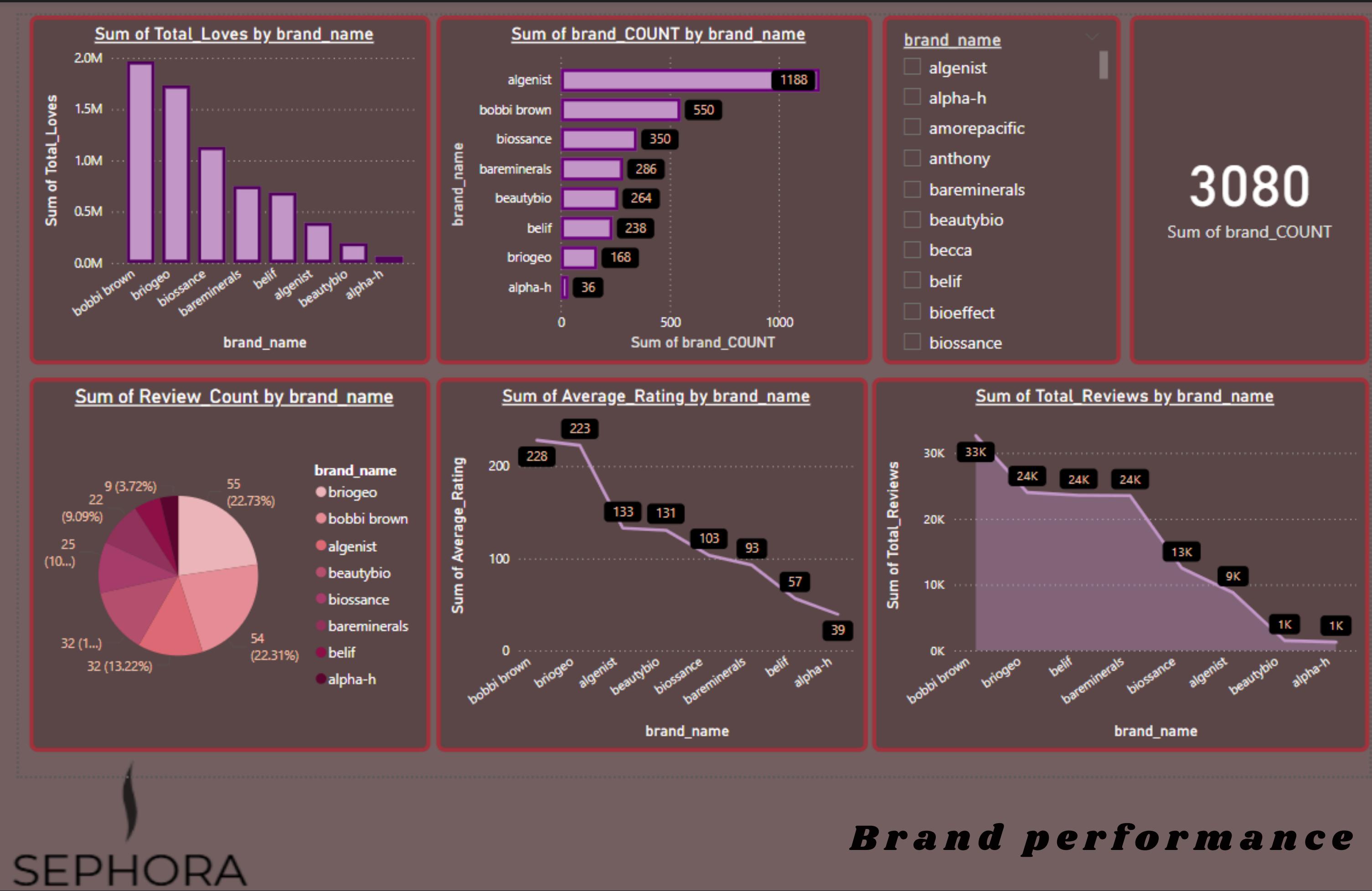
D / Data Analysis :

For the analysis phase, **Power BI** was chosen as the primary Business Intelligence tool to transform the data into actionable insights. Using the Snowflake Schema created earlier, interactive visualizations, dashboards, and reports were built to present key findings.





Product/category performance



5 - Conclusion :

The analysis uncovered key insights on Sephora's brand performance, customer engagement and satisfaction, and high-performing product categories, offering actionable data to guide strategic decisions around marketing, product assortment, and customer experience optimization.

SEPHORA

Thank You