



# Used Car Dataset Analysis

A Comprehensive Data Cleaning and Exploratory Data Analysis

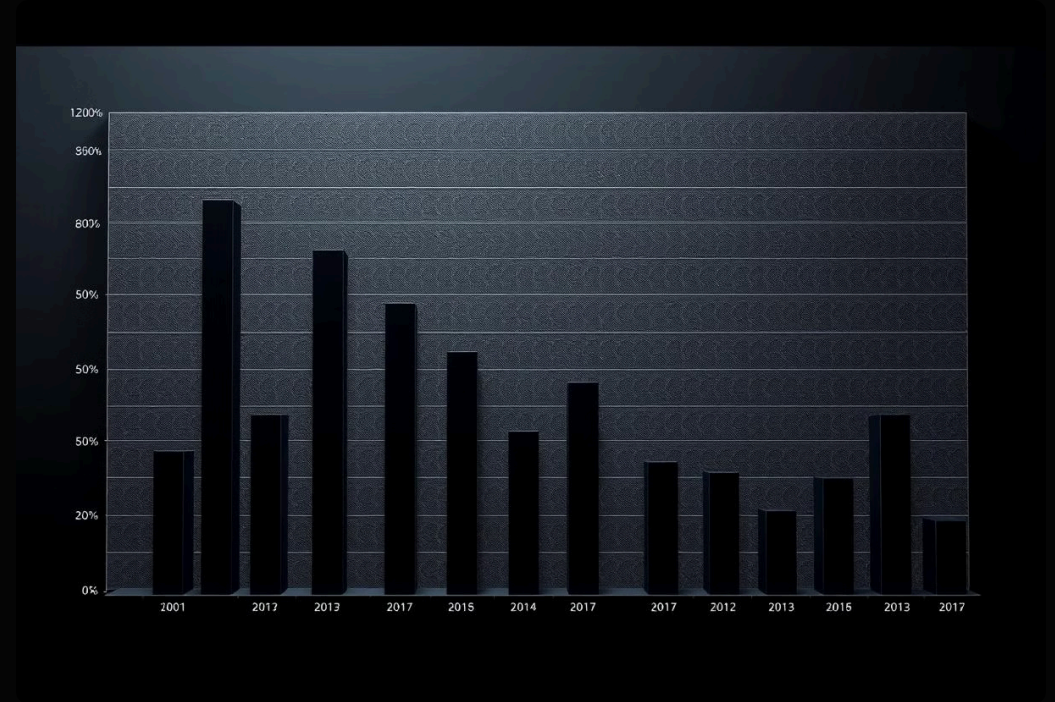
 by **RISHABH SINGH**

# Objective of the Analysis



## Key Question

What insights can be drawn from the used car dataset?

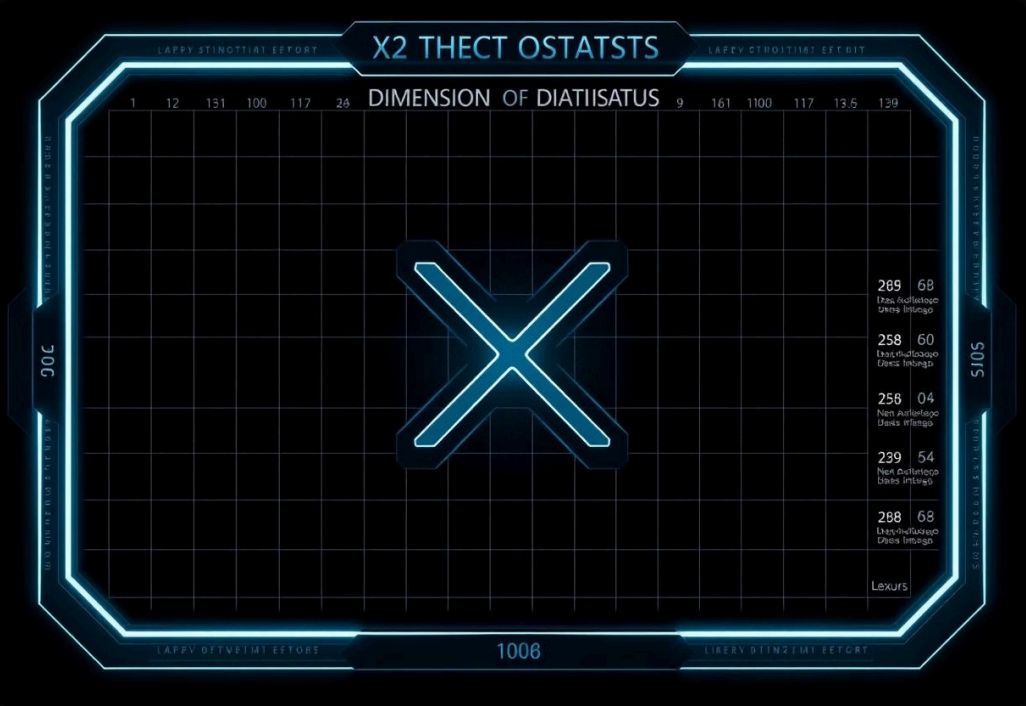


## Focus Areas

- Data Cleaning
- Exploratory Data Analysis (EDA)
- Insights for Decision-Making

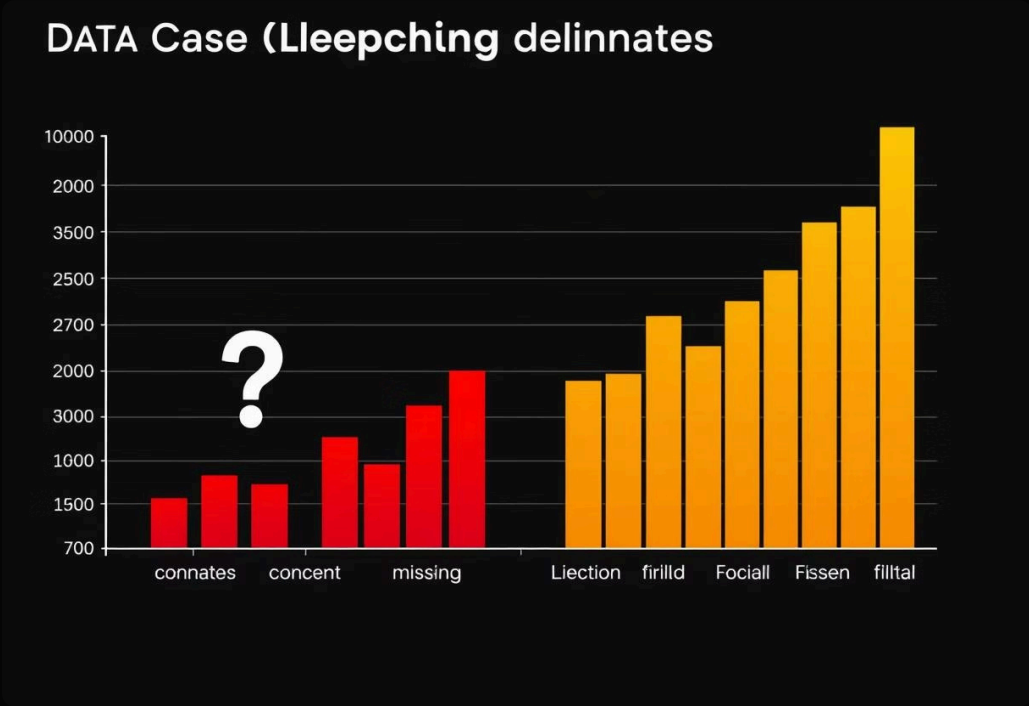
# Dataset Overview

## Dataset Description



- Number of rows and columns
- Key features (e.g., 'kmDriven,' 'AskPrice,' 'FuelType')

## Challenges



- Missing values
- Inconsistent formatting

# Data Cleaning Process

1

## Column Standardization

Removed commas and units from 'kmDriven'. Cleaned currency symbols in 'AskPrice.'

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2

## Missing Values

Removed the values for 'kmDriven.'

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3

## Duplicates

Identified and removed.

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4

## Date Formatting

Removed 'PostedDate' as it was not crucial.

# Key Statistics of Cleaned Data

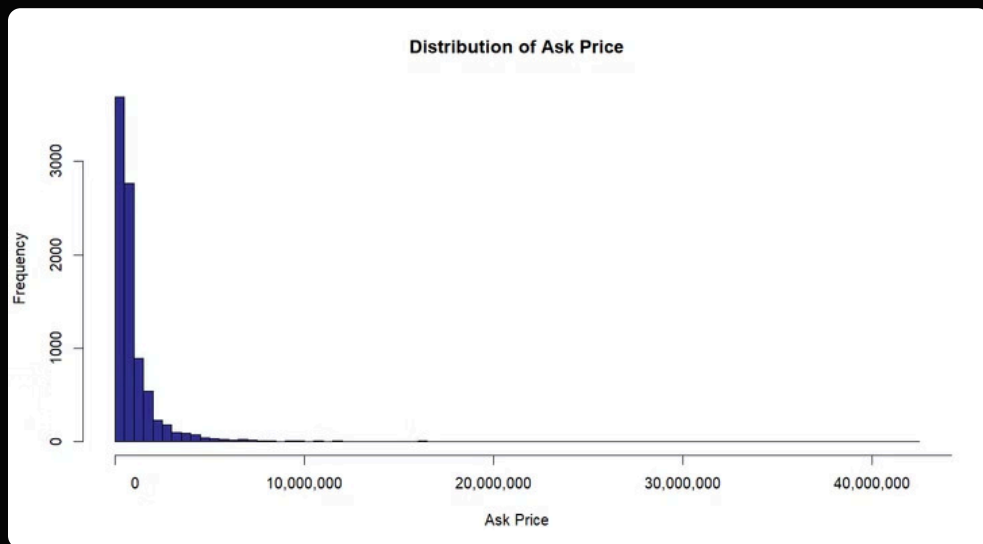
## Numerical Summaries

- 'Year'
- 'Age'
- 'kmDriven'
- 'AskPrice'

## Examples

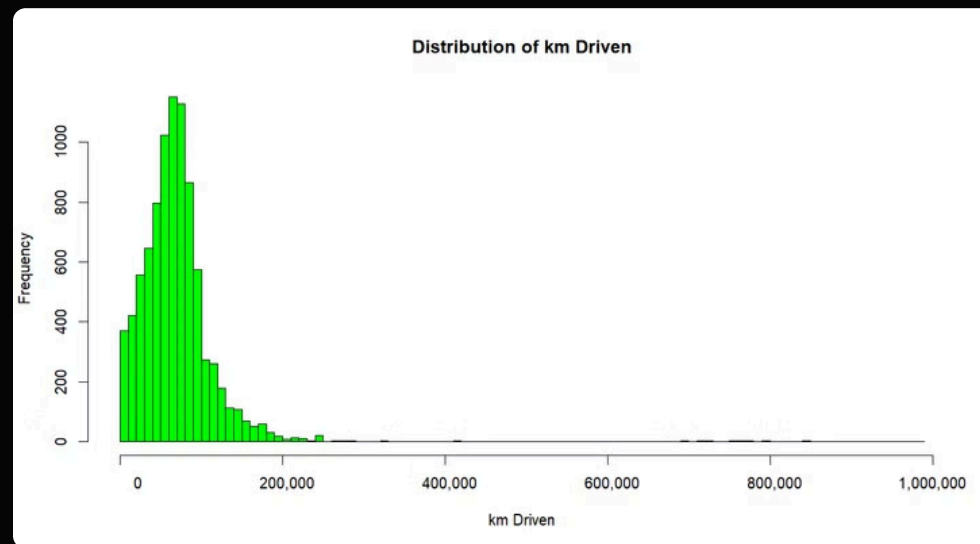
- Removed the Missing values and duplicates
- Ranges of key metrics

# Visualizing Distributions



## 1 Histogram for 'AskPrice'

Shows price distribution.

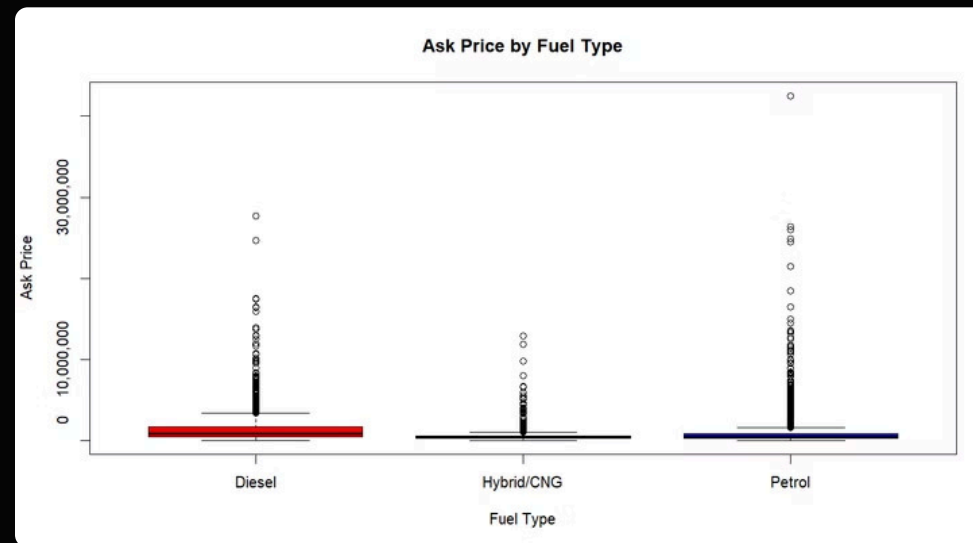
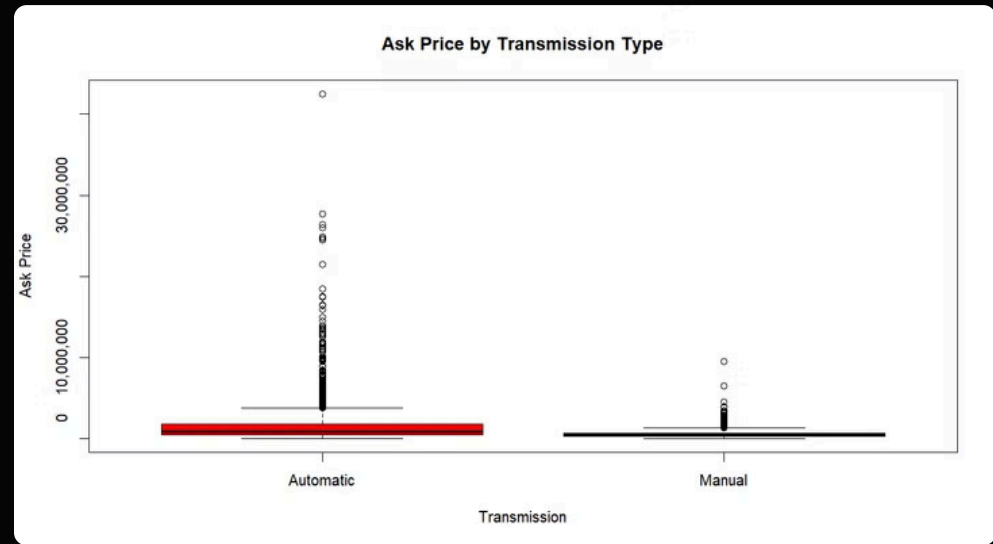
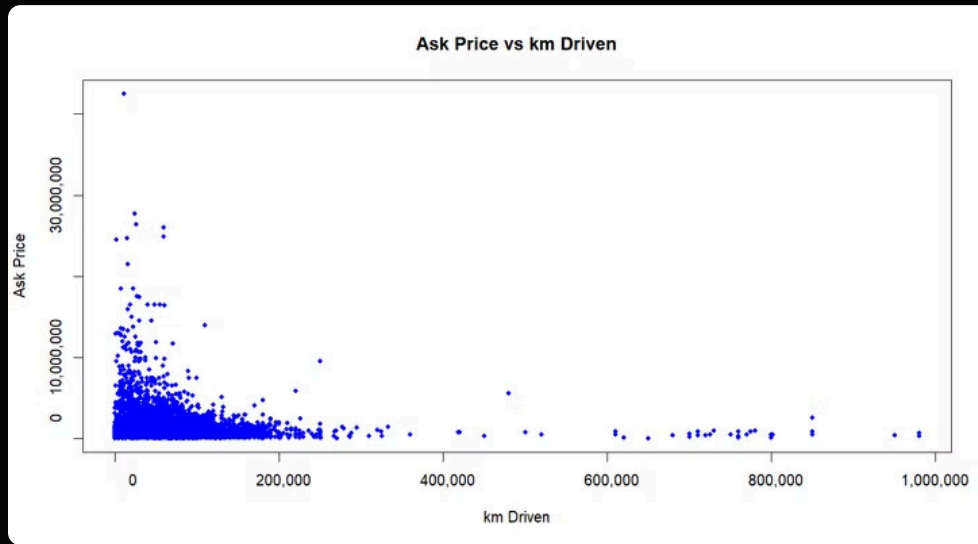


## 2 Histogram for 'kmDriven'

Highlights variations in car mileage.



# Exploring Relationships



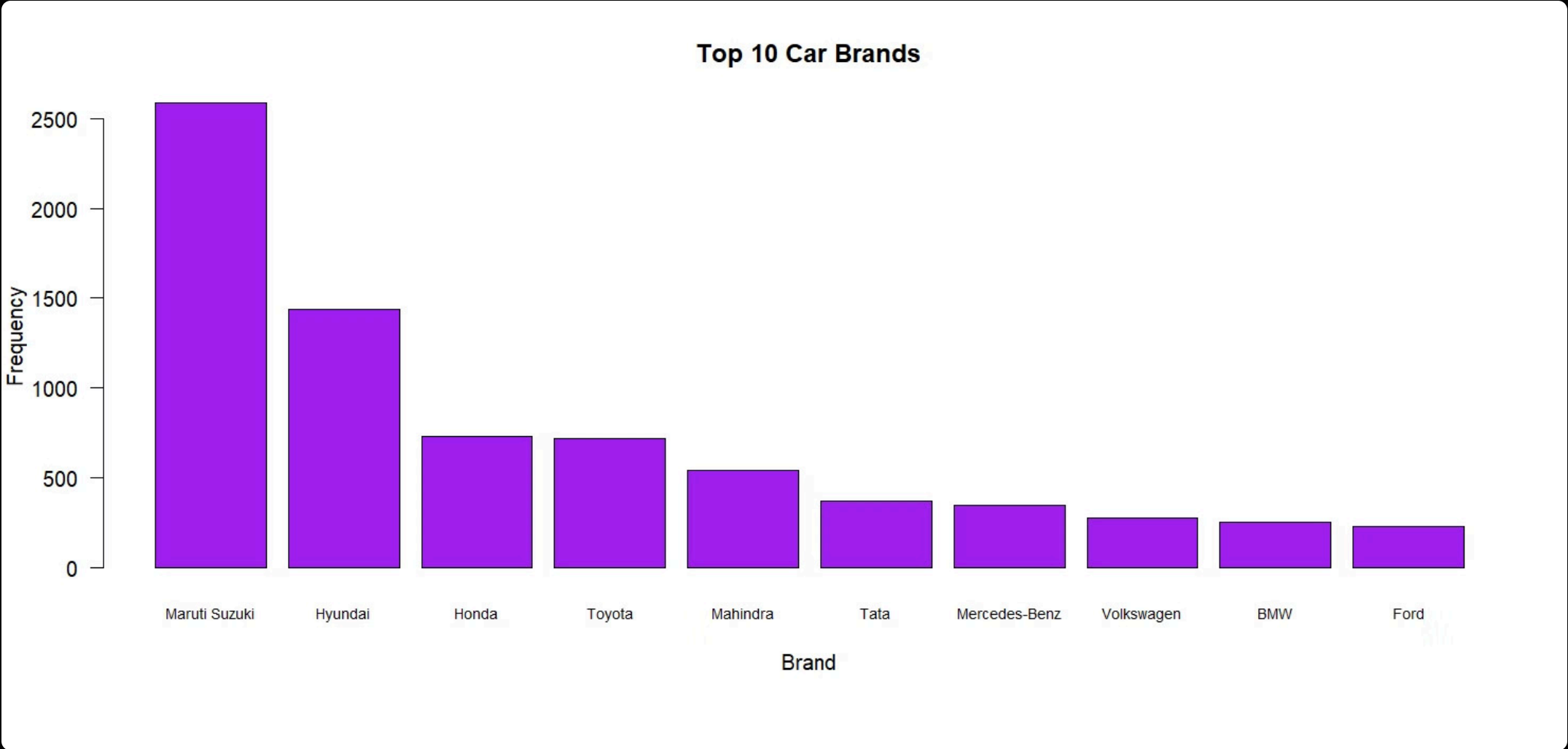
## Scatter Plot

Relationship between 'AskPrice' and 'kmDriven.'

## Boxplots

Price distribution by Fuel Type and Transmission Type.

# Top 10 Car Brands



1. Maruti Suzuki

Frequency in dataset.



2. Hyundai

Frequency in dataset.



3. Honda

Frequency in dataset.



4. Toyota

Frequency in dataset.



# Summary of Findings

## Numerical Insights

Key patterns in 'AskPrice' and 'kmDriven.'

## Categorical Analysis

Price variation based on Fuel Type and Transmission Type.

## Brand Trends

Concentration among a few leading brands.





# Next Steps

## Predictive Modeling

Build models for price prediction.

## Deeper Analysis

Focus on brand-specific insights.

## Data Enrichment

Integrate additional features for a richer analysis.