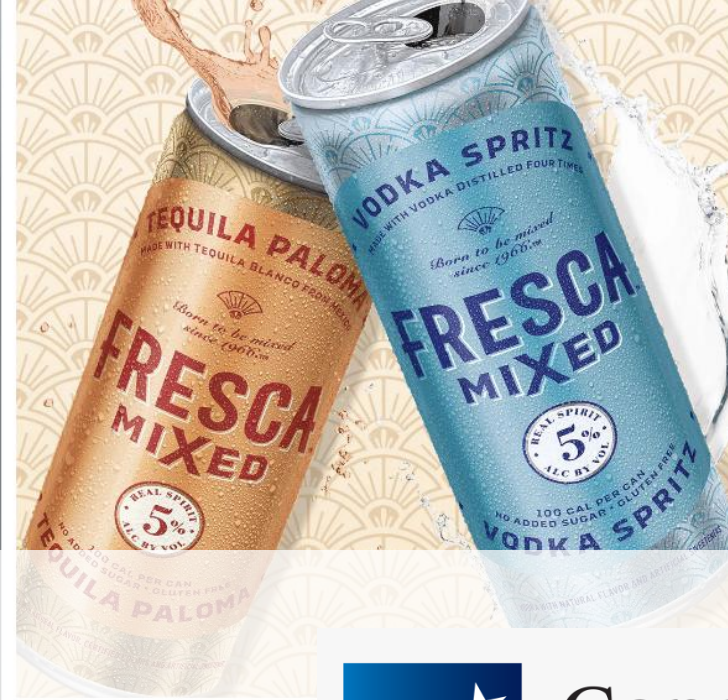






# Constellation Brands

A LEGACY OF PUSHING BOUNDARIES



Constellation  
Brands







Constellation  
Brands

# Problem Statement

**Can Reddit topics be effectively** utilized as a source of data to predict consumer sentiment towards a specific product?



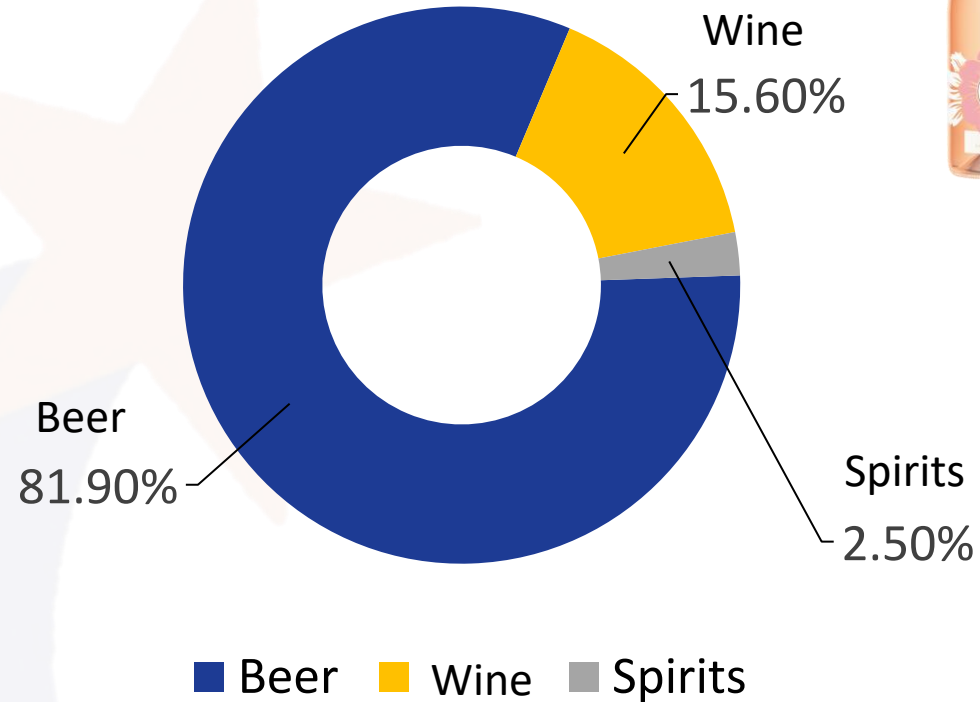


## Business Overview

### Revenue Breakdown and Products Examples



Revenue Breakdown  
in 2024



Sources: <https://ir.cbrands.com/>

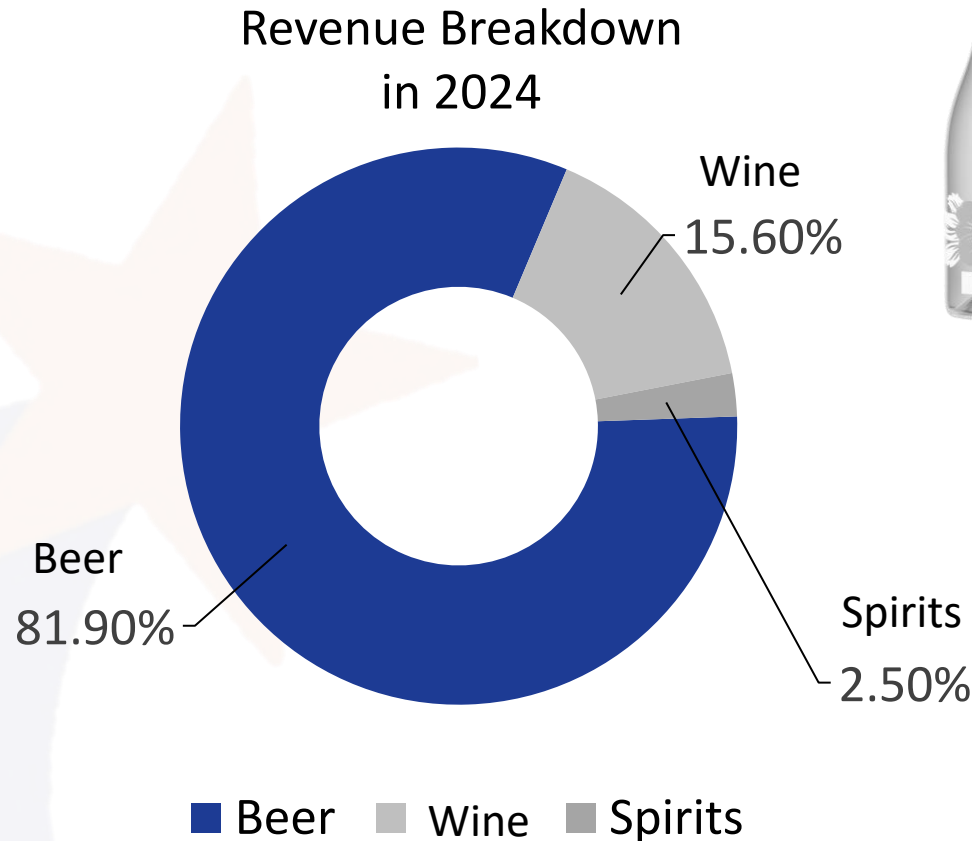




## Business Overview

### Revenue Breakdown and Products Examples

**#1**  
supplier of  
imported beer  
& in the high-end  
U.S. beer market



Sources: <https://ir.cbrands.com/>



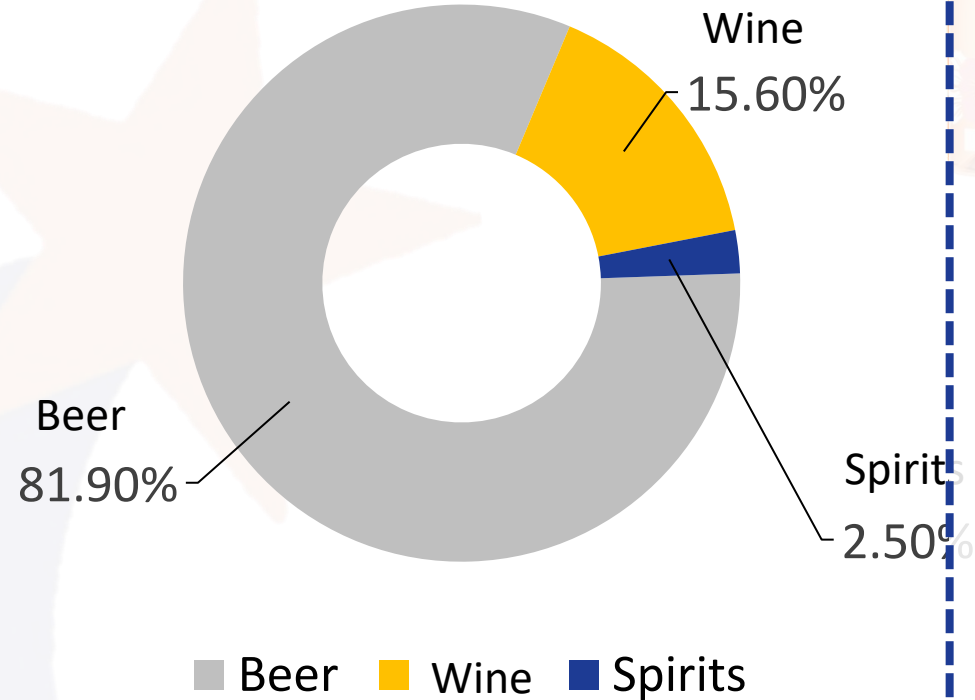


## Business Overview

### Revenue Breakdown and Products Examples



Revenue Breakdown  
in 2024



Sources: <https://ir.cbrands.com/>







## Business Overview

### Exporting to countries around the world



Sources: <https://ir.cbrands.com/>





## Business Overview

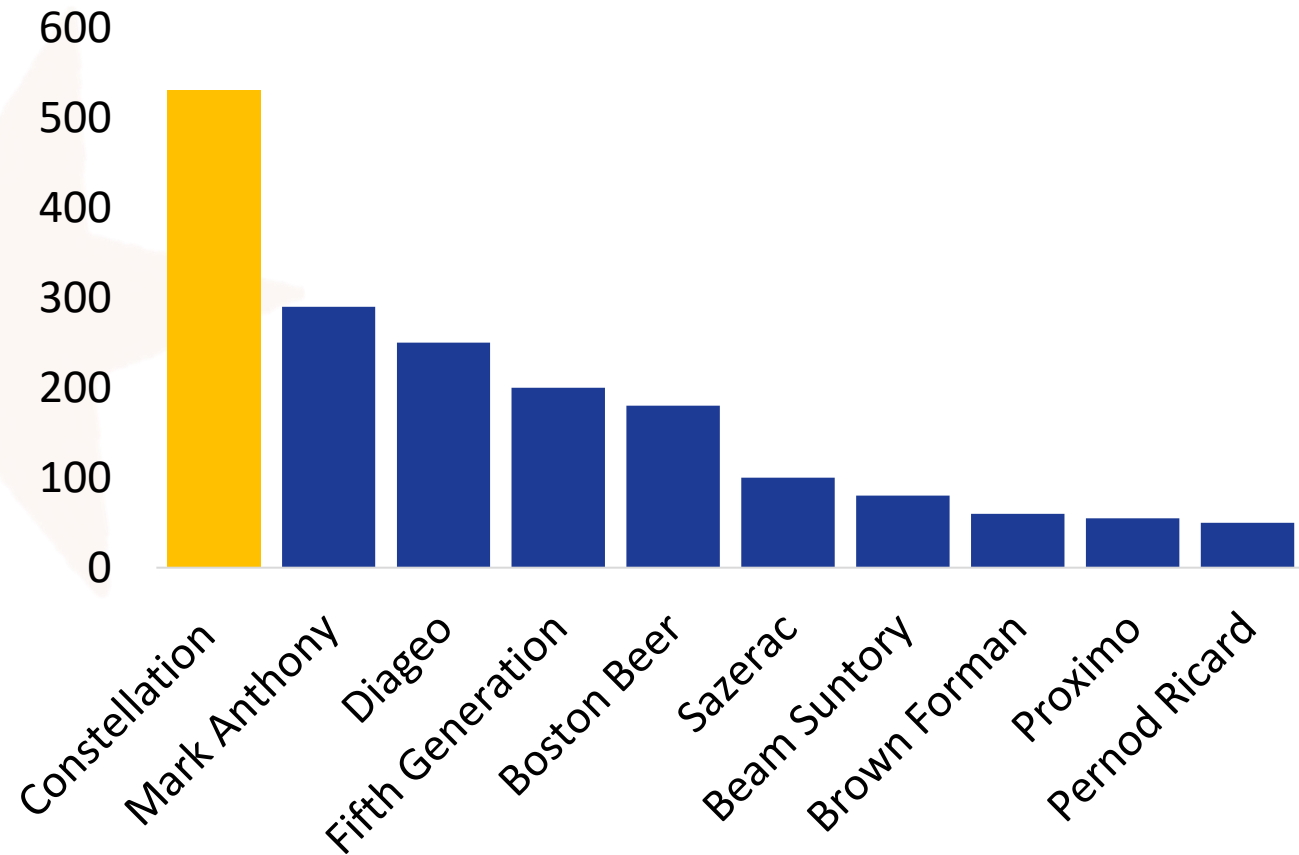
Number #1 Market Share in the U.S. Alcoholic Beverage Market

Constellation brands is

**# 1**

in retail dollars sales  
**growth** contributing  
almost **25%** of TBA\*  
growth

Sales Growth (\$ Millions)



\*Remark: TBA stands for Total Beverage Alcohol

Sources: <https://ir.cbrands.com/>





EARNINGS RESULTS

# Constellation Brands books large loss on wine and spirits, but beer sales rise

Modelo, Corona beer brewer tops profit expectations, after excluding \$2.25 billion impairment charge

By [Tomi Kilgore](#) [Follow](#)

Last Updated: Oct. 3, 2024 at 1:50p.m. ET

First Published: Oct. 3, 2024 at 7:49 a.m. ET

<https://www.marketwatch.com/story/constellation-brands-books-large-loss-on-wine-and-spirits-business-but-stock-rises-after-adjusted-profit-beats-eae99bff>

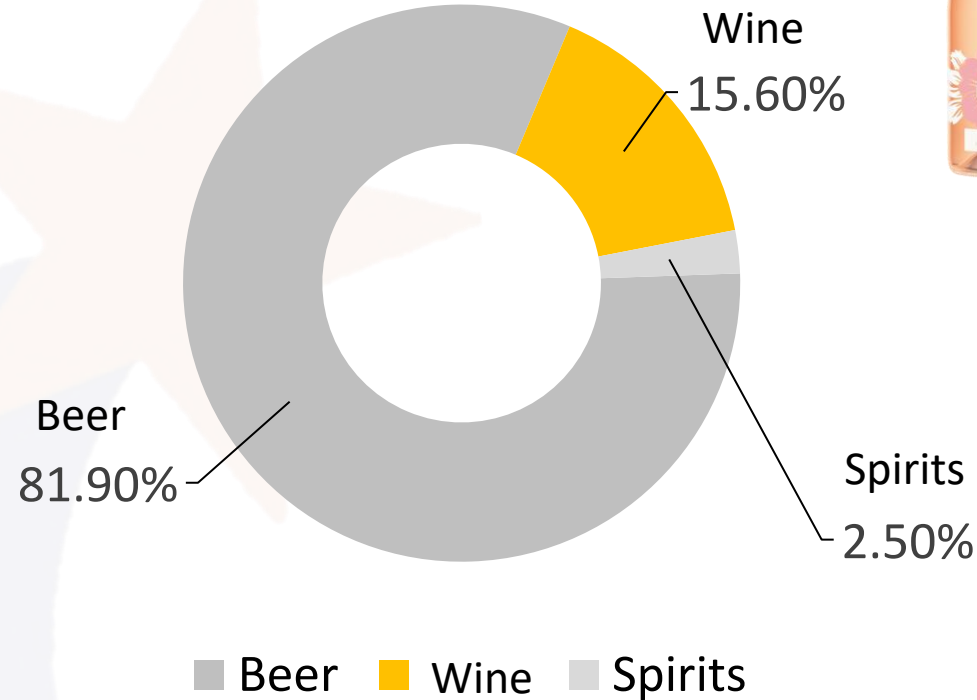


## Business Overview

### Focus Product: Wine Segment



Revenue Breakdown  
in 2024



Sources: <https://ir.cbrands.com/>

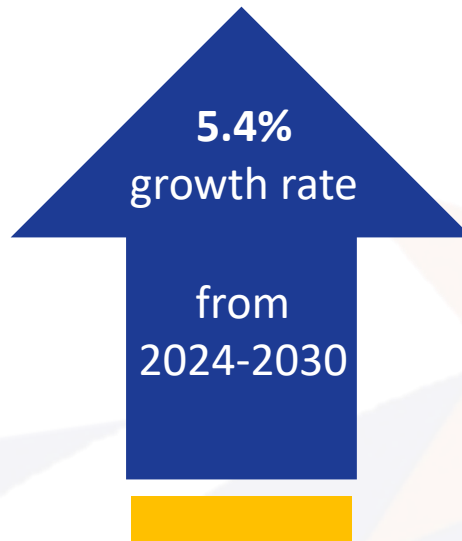




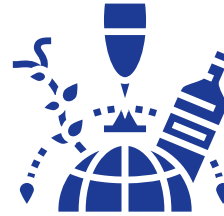


## Industry and market overview

### Positive Wine Market Growth in the U.S.



### Growing U.S. Wine Market



#### **Growing Wine Tourism:**

Providing immersive vineyard experiences



#### **Changing Lifestyles and Preferences:**

Shift from hard liquor to milder alcoholic



#### **Premiumization and Innovation:**

Brands are focusing on premium wine offerings

Source: <https://www.grandviewresearch.com/industry-analysis/us-wine-market>

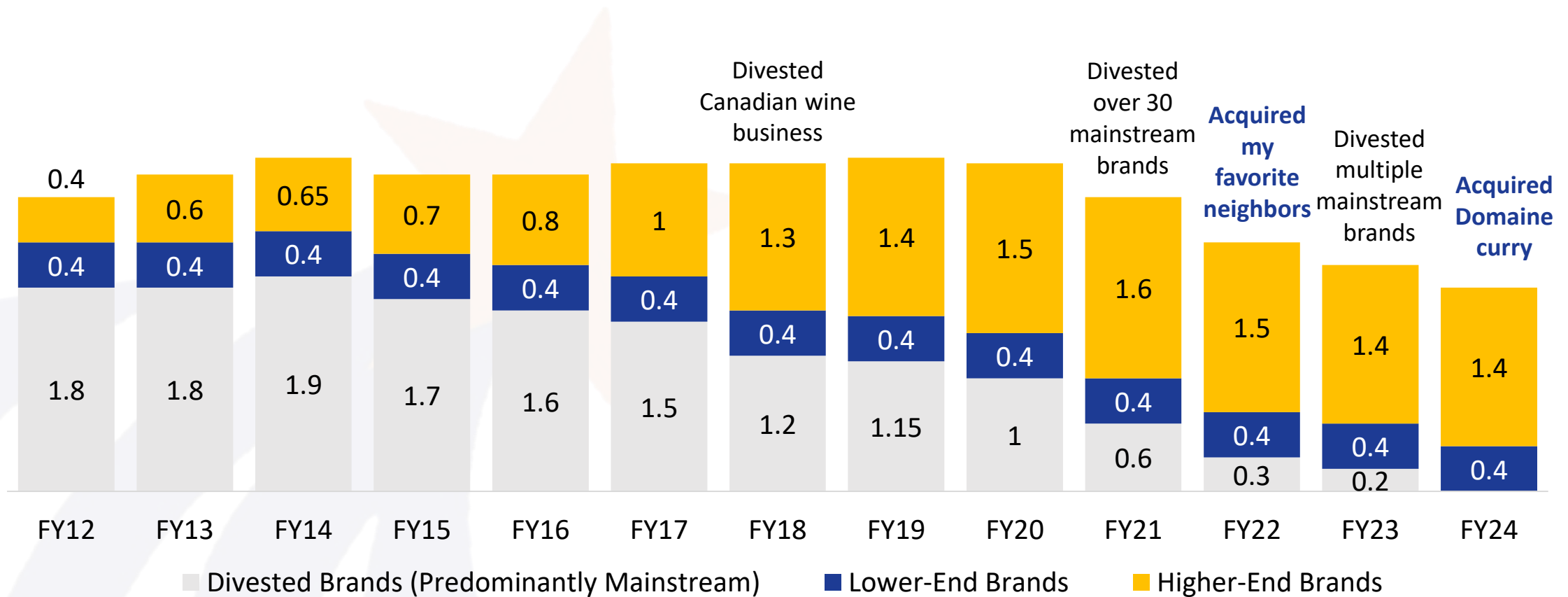




## Constellation Brands Strategy

### What is the Constellation Brand Doing?

Wine Business Net Sale in Billion \$

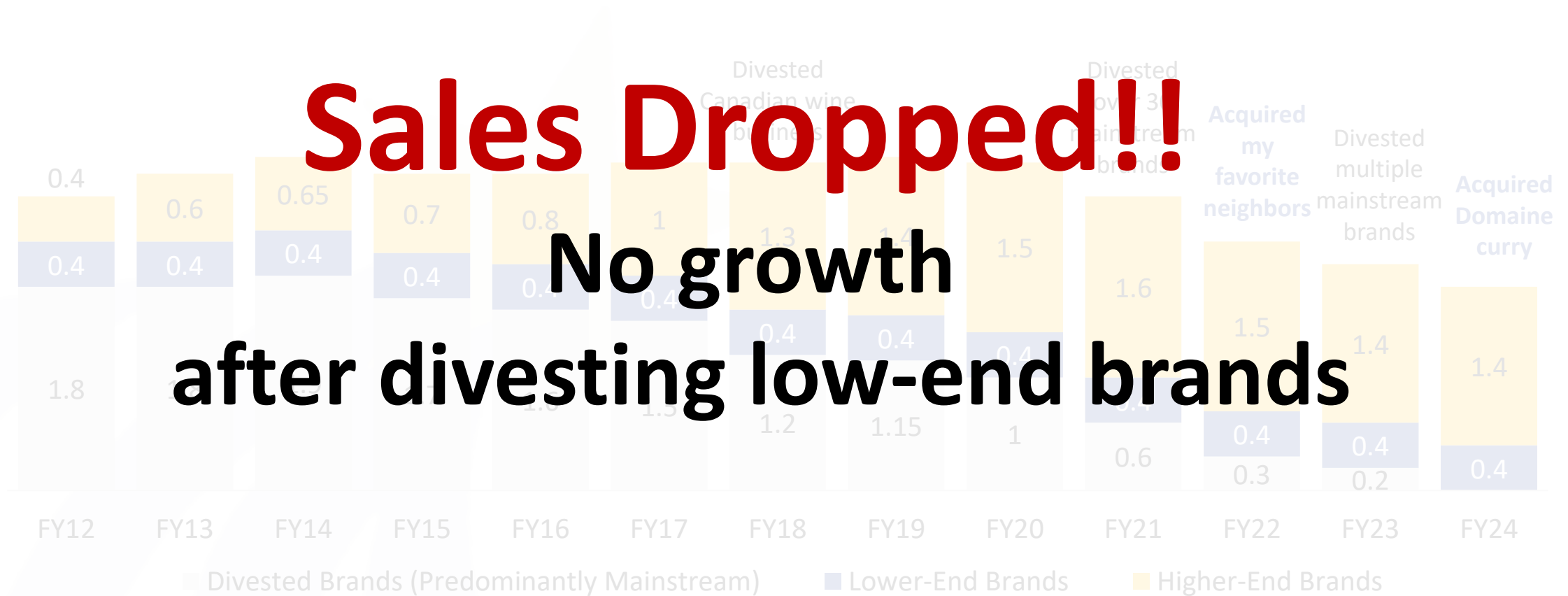




# Constellation Brands Strategy

## What is the Constellation Brand Doing?

Wine Business Net Sale in Billion \$





# Problem Statement

**Can Reddit topics be effectively** utilized as a source of data to predict consumer sentiment towards a specific product?







# Methodology



## Approaches

### Data Collection: Reddit

**45%**

of wine consumers use **social media** platforms to seek information about wines, wineries, and wine-related events.



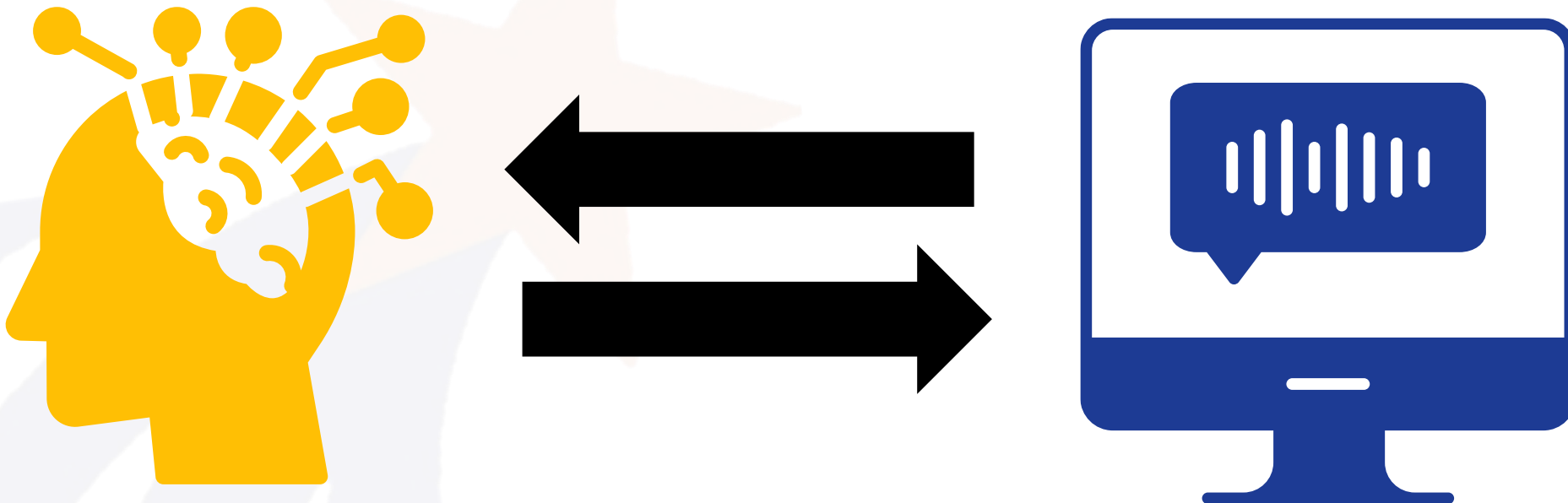
**> 240K**

Reddit users are on r/wine



# NLP

## Natural Language Processing







## Approaches

### Road map of the process

#### Data Collection

- 2 sub-Reddits (1000 each)
- Sub-Reddit r/beer, r/wine

#### Data Preprocessing

- Cleaning
- Drop duplicate id
- Drop nan record
- Merged files

#### Exploratory Data Analysis (EDA)

- Select two features (title & body)

#### Model Selection

- Word Normalization
- Vectorization, Frequency
- Sentiment Analysis





## Approaches

### Road map of the process

#### Data Collection

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## Approaches

### Road map of the process

#### Data Collection

- 2 sub-Reddits (1000 each)
- Sub-Reddit r/wine

#### Data Preprocessing

- Cleaning
- Drop duplicate id
- Drop nan record
- Merged files

#### Exploratory Data Analysis (EDA)

- Select two features (title & body)

#### Model Training

- Model selection by GridSearch over
  - vectorization,
  - machine learning model,
  - Normalization (Lemmatizing & Stemming)
- Further Tuning







## Approaches

### Road map of the process

#### Data Collection

- 2 sub-Reddits (1000 each)
- Sub-Reddit r/wine

#### Data Preprocessing

- Cleaning
- Drop duplicate id
- Drop nan record
- Merged files

#### Exploratory Data Analysis (EDA)

- Select two features (title & body)
- Generate word list

#### Model Selection

- Word Normalization Lemmatizing
- Vectorization, Frequency
- Sentiment Analysis,





## Approaches

### Road map of the process

#### Data Collection

- 2 sub-Reddits (1000 each)
- Sub-Reddit r/wine

#### Data Preprocessing

- Cleaning
- Drop duplicate id
- Drop nan record
- Merged files

#### Exploratory Data Analysis (EDA)

- Select two features (title & body)

#### Model Selection

- Word Normalization
- Vectorization, Frequency
- Sentiment Analysis





## Modeling

We have used

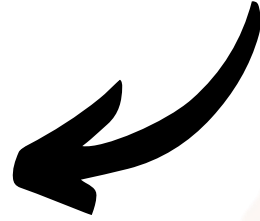
- **Word Normalization**
  - WordNetLemmatizer
- **Vectorizer**
  - CountVectorizer
- **Sentiment Analysis**
  - Vader





# **Findings for wine**

**Wine  
Categories**



Wine  
Character



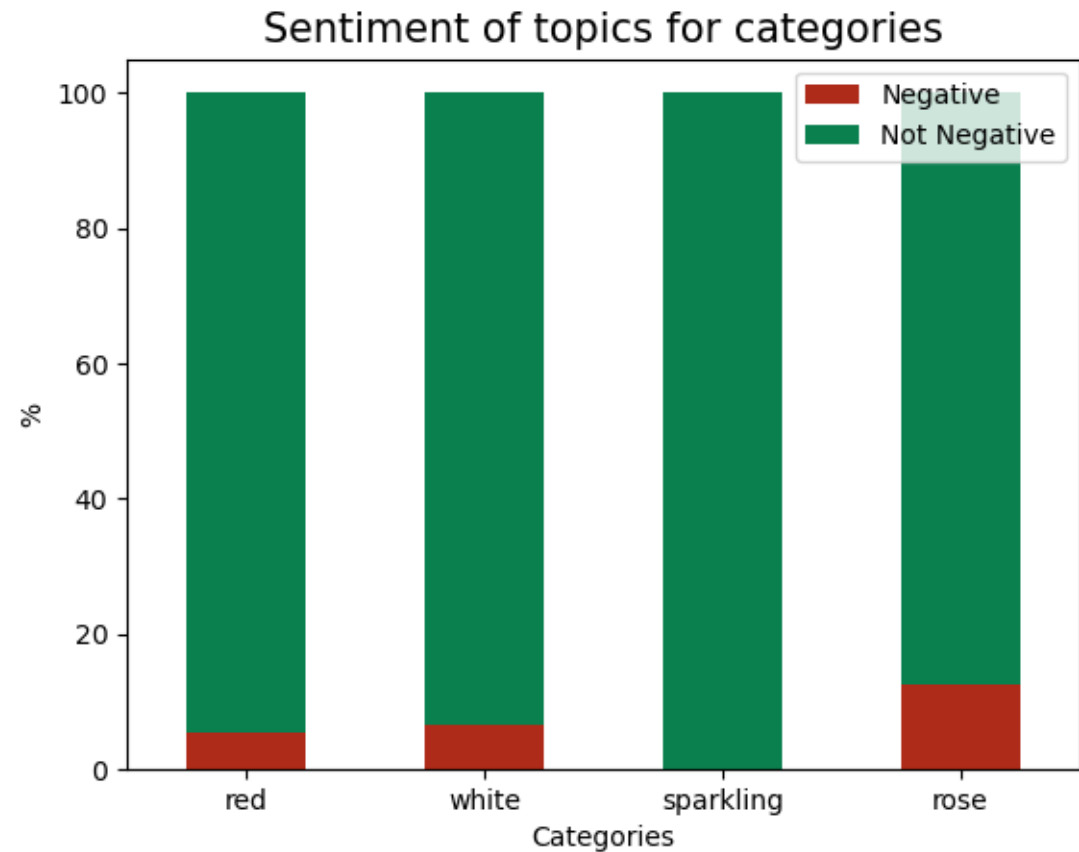
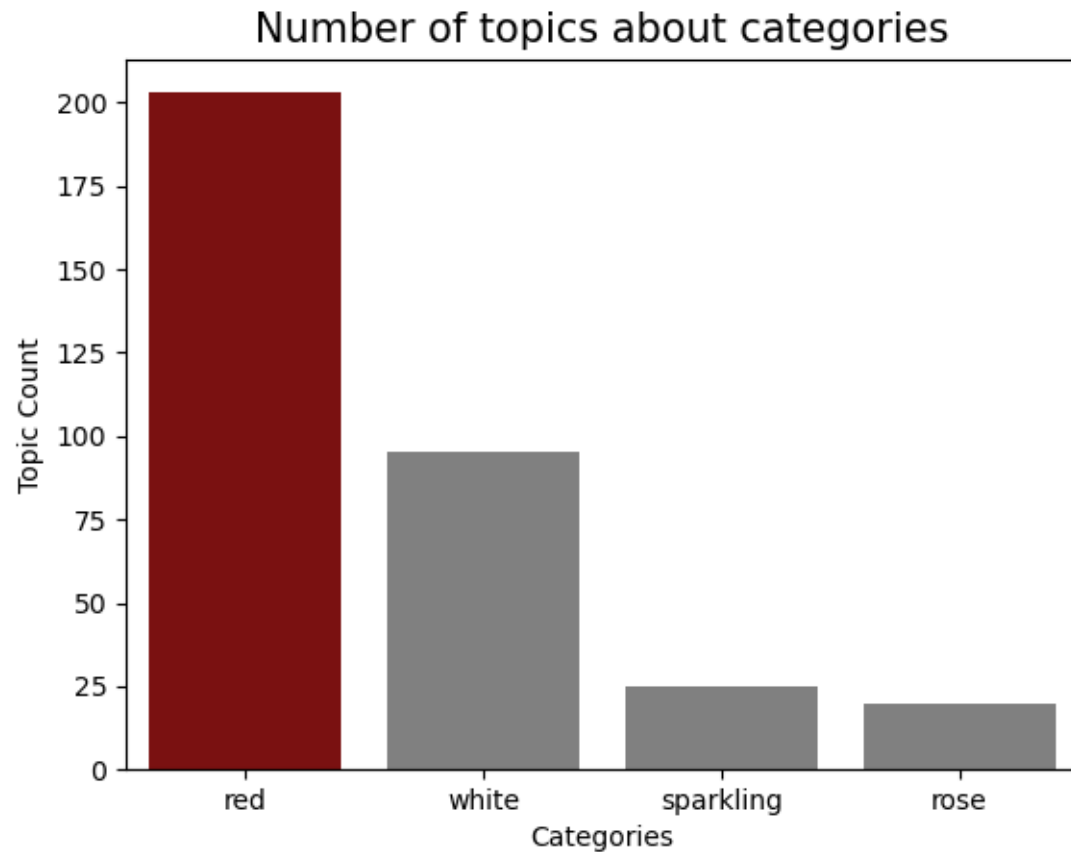
Wine  
Taste

Wine  
Varieties



## Findings and Insights

**Red wine** is the most popular talking topic on Reddit





Wine  
Categories

**Wine  
Character**



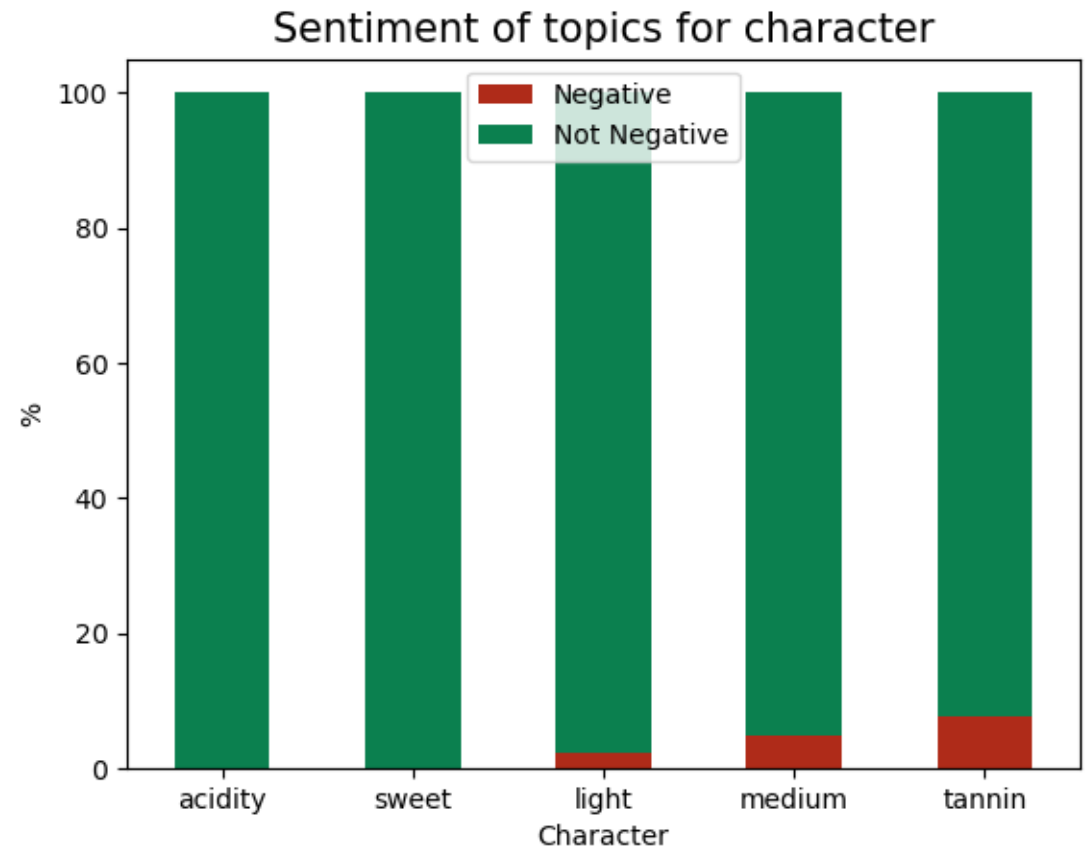
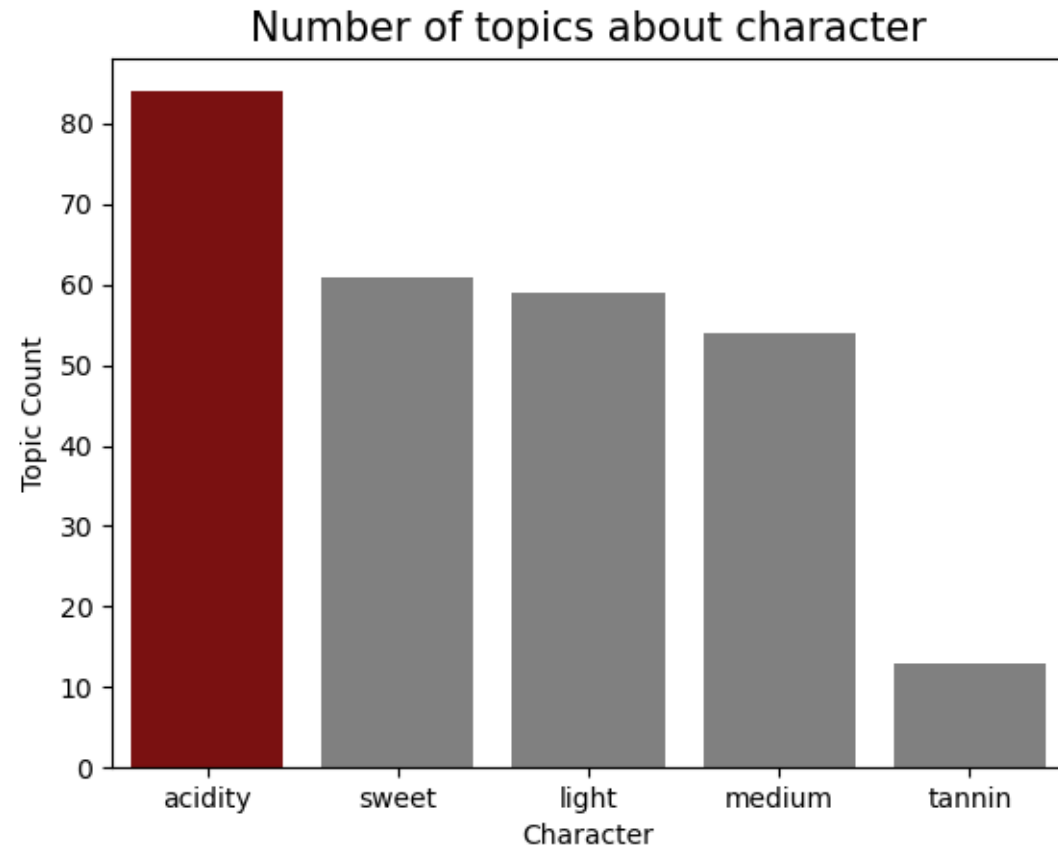
Wine  
Taste

Wine  
Varieties



## Findings and Insights

### **Acidity** wine widely discussed on Reddit



Wine  
Categories

Wine  
Character



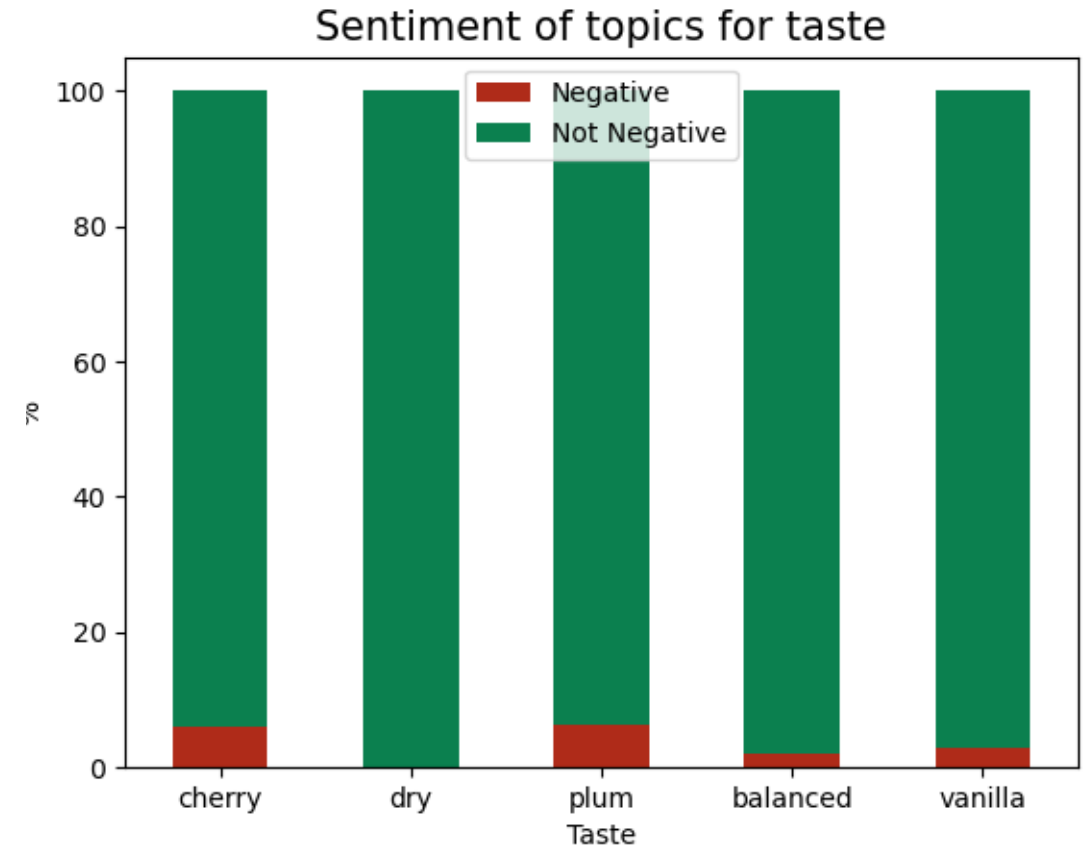
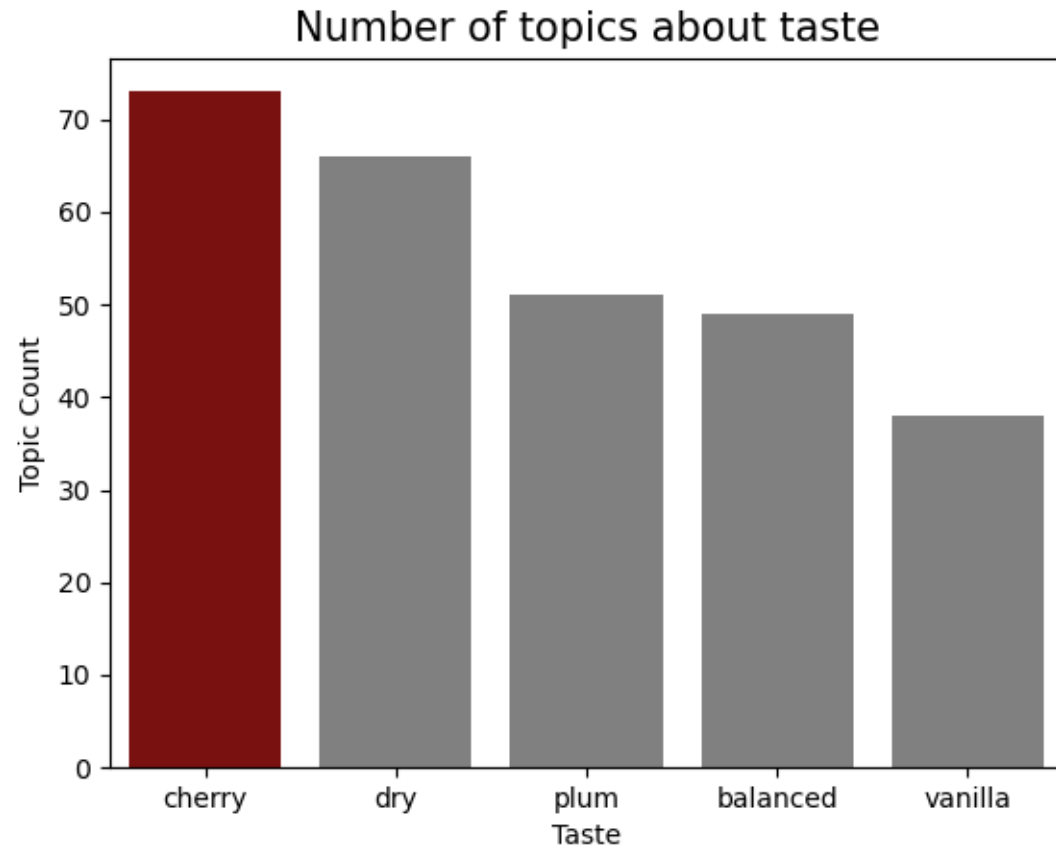
**Wine  
Taste**

Wine  
Varieties



## Findings and Insights

**Cherry** is the most popular wine taste



Wine  
Categories

Wine  
Character



Wine  
Taste

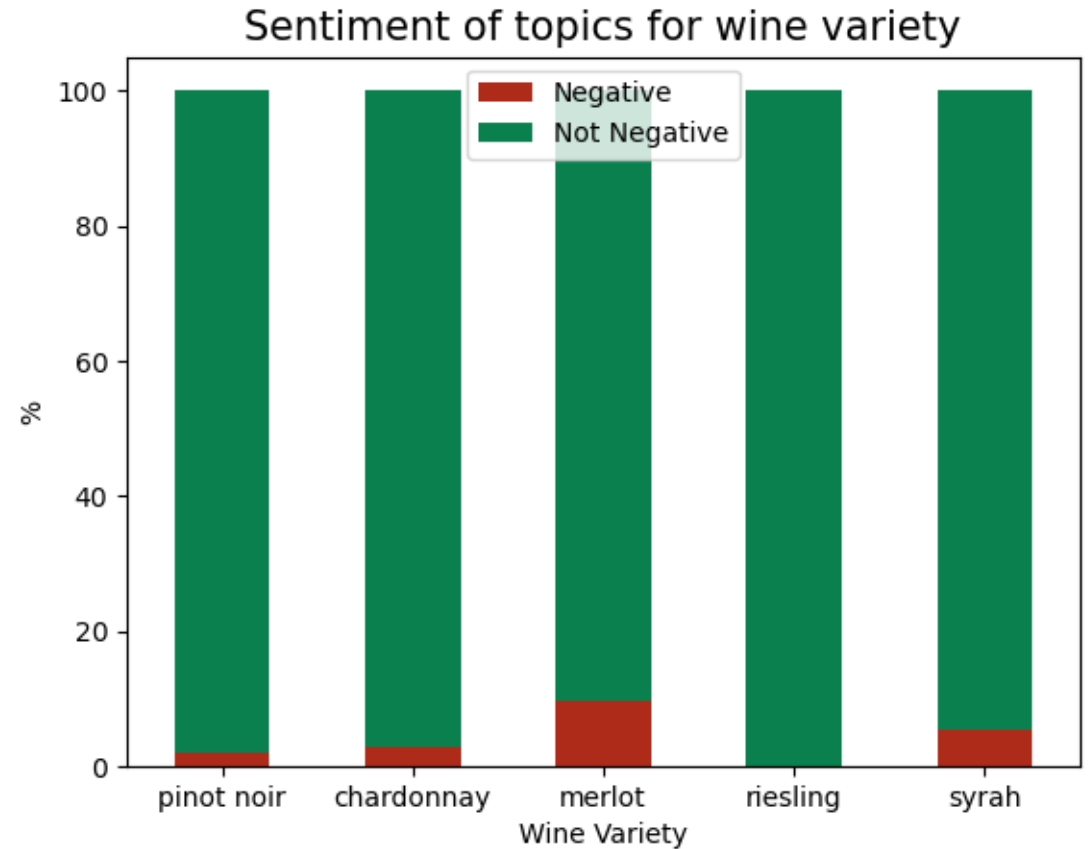
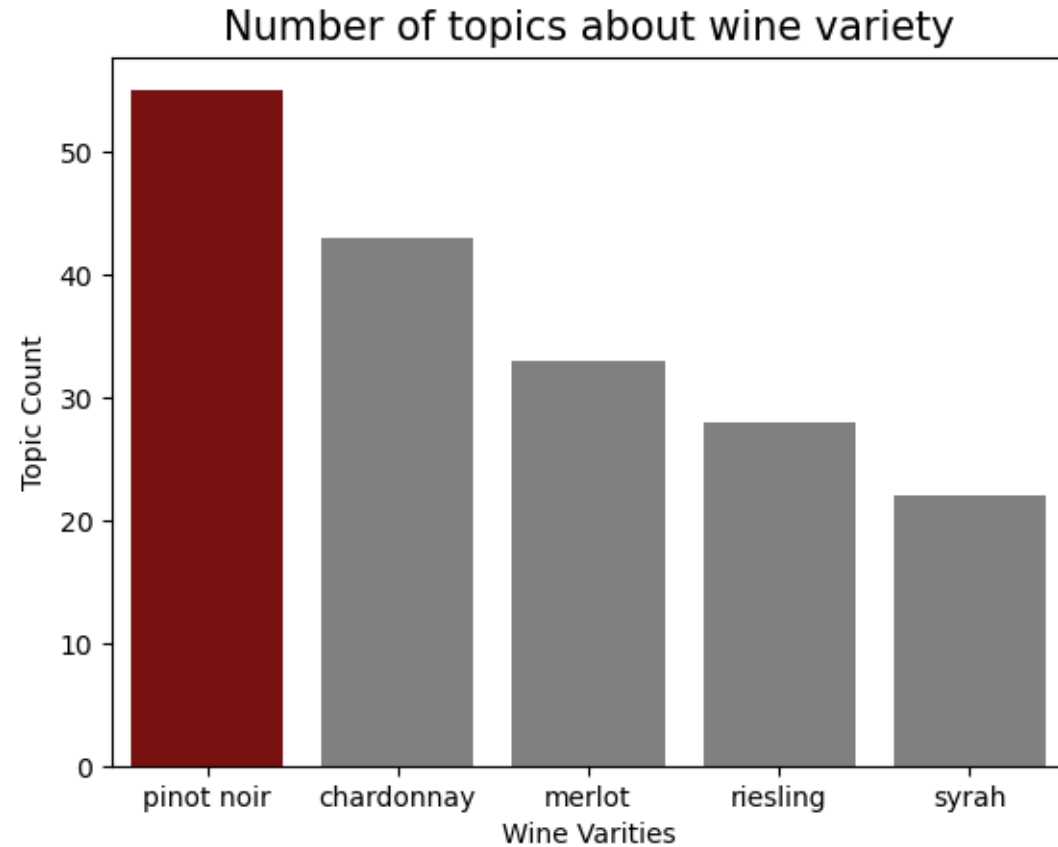
**Wine  
Varieties**





## Findings and Insights

**Chardonnay** is the most popular wine type





## Recommendation

Chardonnay



### Cool Climate

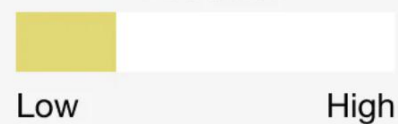
#### Body



#### Acidity



#### Alcohol



#### Notes:



### Warm Climate

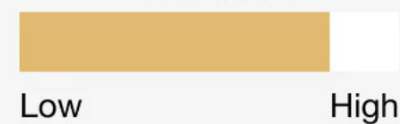
#### Body



#### Acidity



#### Alcohol



#### Notes:



Chardonnay





## Recommendation



### Body



Pinot Noir grapes have thinner skins

### Tasting Notes



Cranberry



Cherry



Forrest Floor

### Sweetness



Pinot Noir contains one to three grams of residual sugar per glass.

# Red wine



A close-up photograph of two hands holding tall, slender glasses of beer. The glasses are filled with a golden beer topped with a thick, white head of foam. The hands are positioned to clink the glasses together. A semi-transparent white horizontal band is overlaid across the middle of the image, containing the text 'Findings for beer' in a bold, dark blue font.

## Findings for beer



# Beer Categories



Mouthfeel

Beer Taste



Raw  
Material

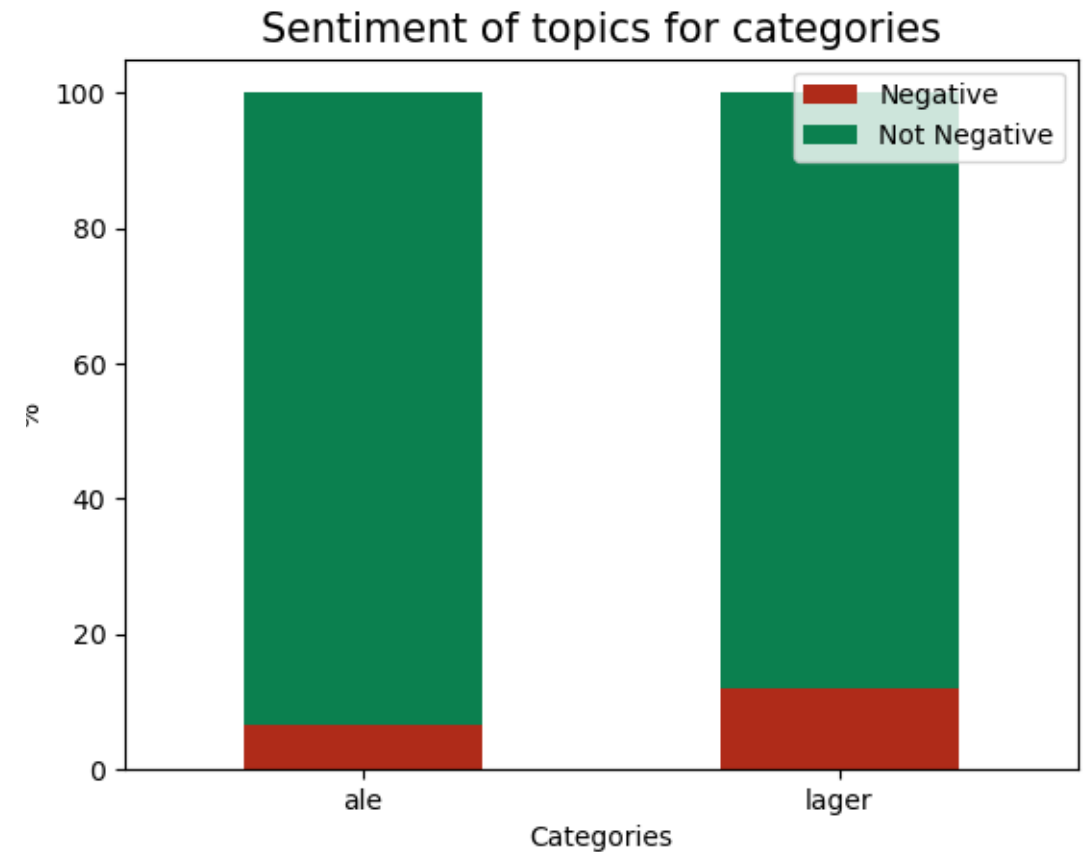
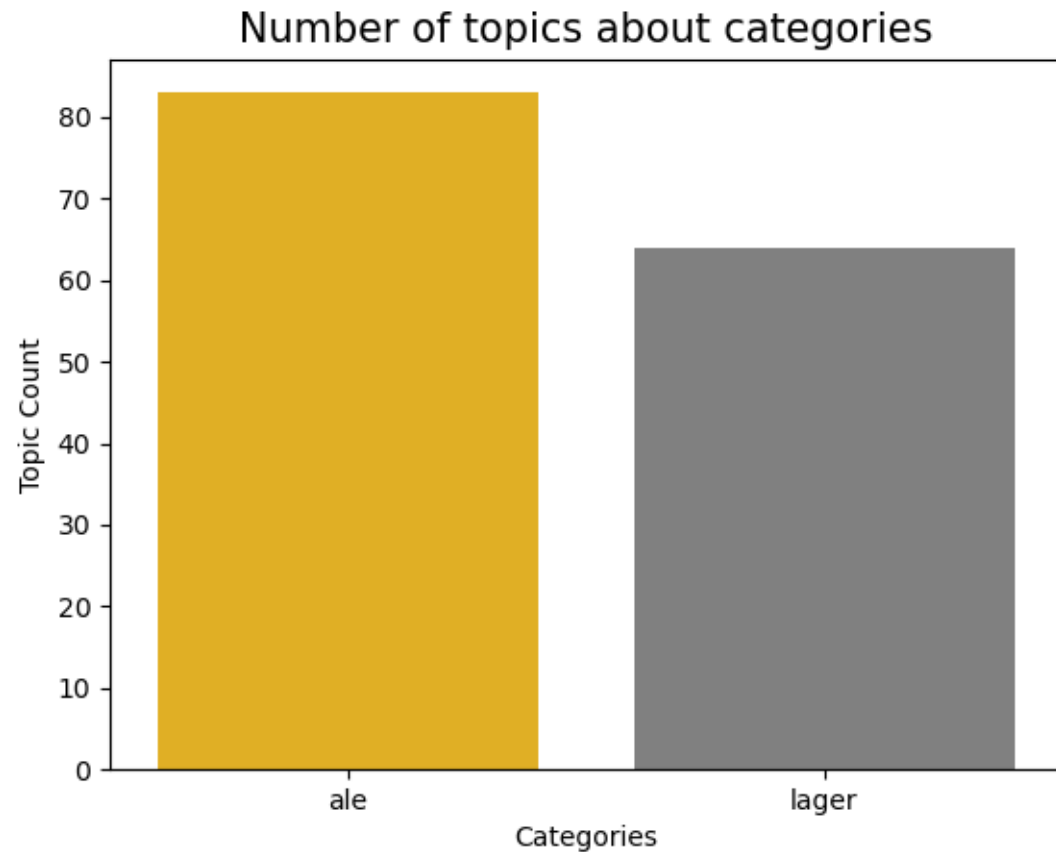
Beer  
Appearance





## Findings and Insights

Most popular type of beer discussed is **Ale**



Beer  
Categories

**Mouthfeel**



Beer Taste



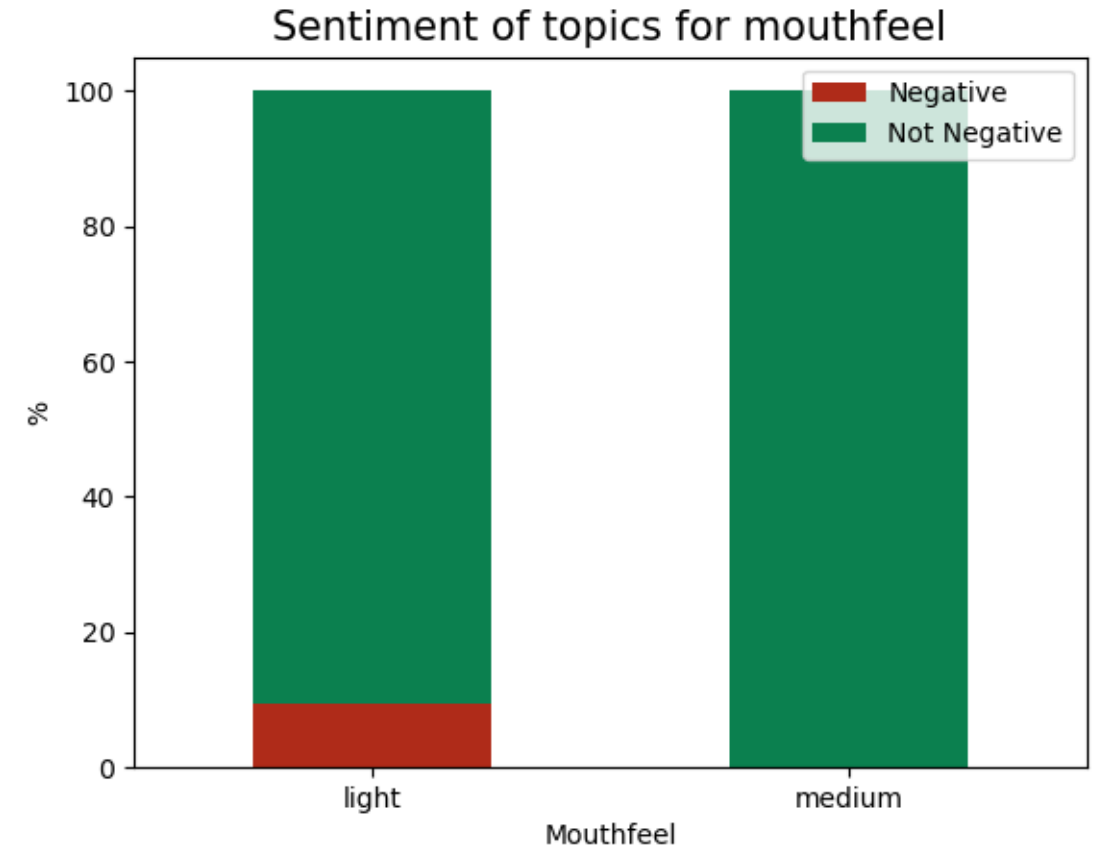
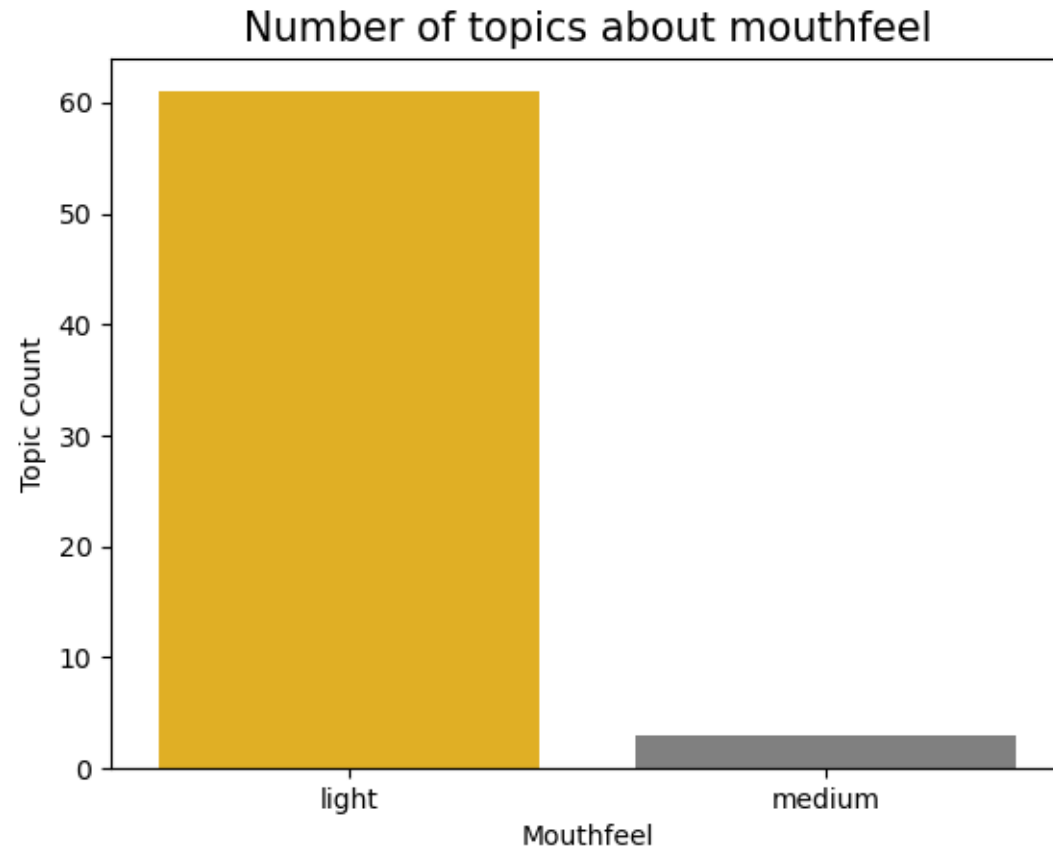
Raw  
Material

Beer  
Appearance



## Findings and Insights

More than 60 topics on Reddit mentioned **LIGHT** beer



Beer  
Categories

Raw  
Material

Mouthfeel



**Beer Taste**

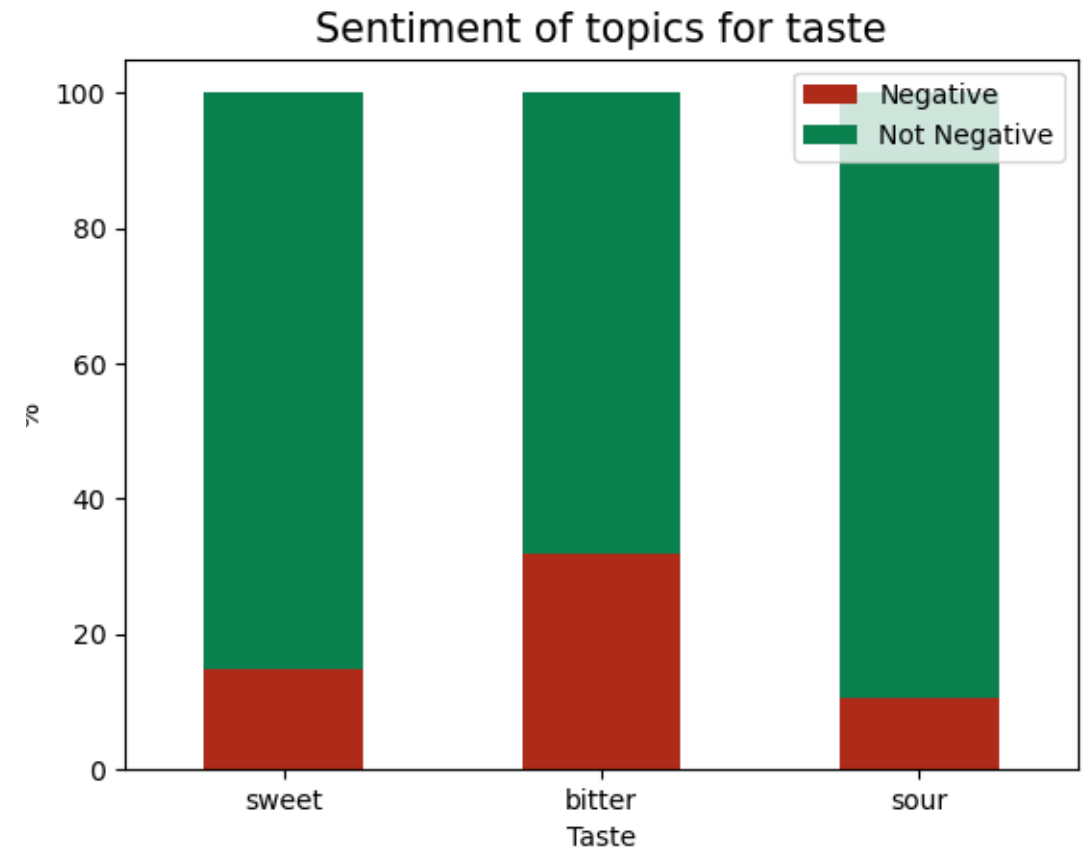
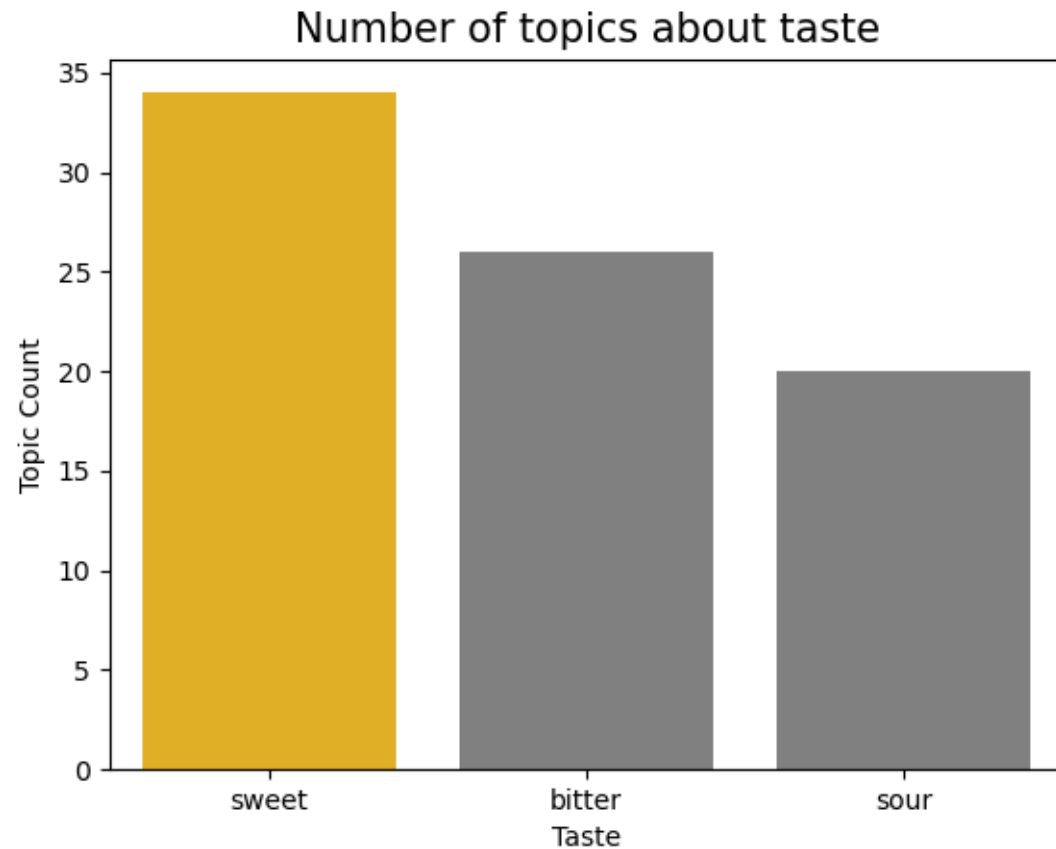


Beer  
Appearance



## Findings and Insights

**Sweet beer** is the most talked about topic among Reddit users

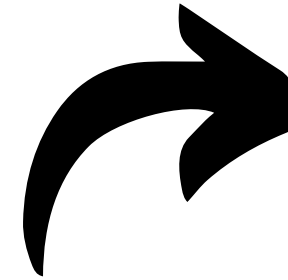




Beer  
Categories

Mouthfeel

Beer Taste



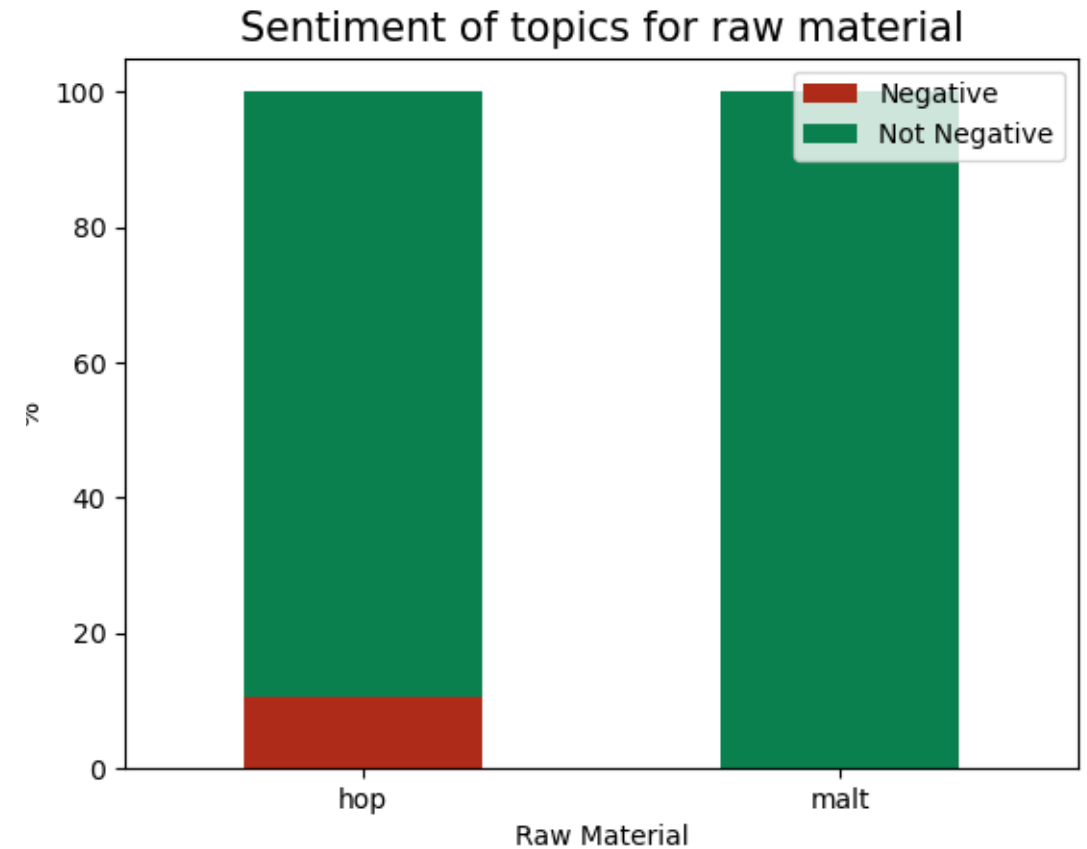
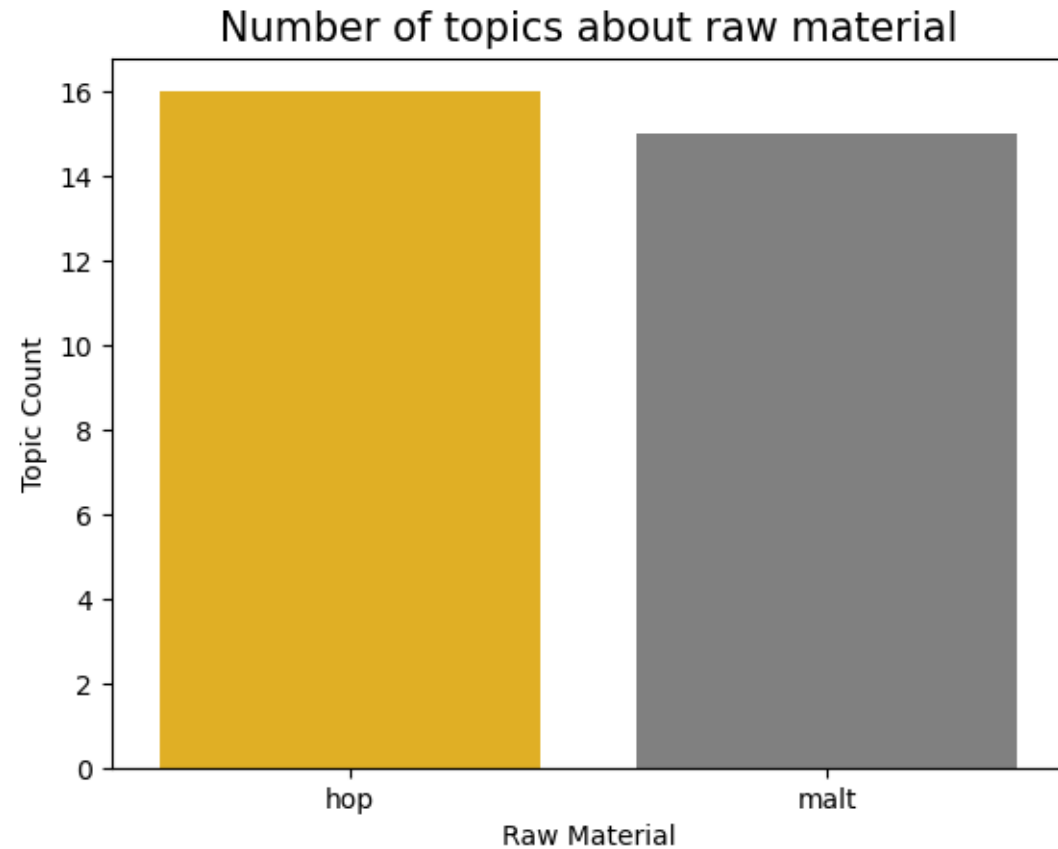
**Raw  
Material**

Beer  
Appearance



## Findings and Insights

**Hops** are the most popular raw material for beer



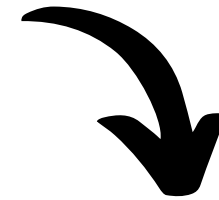
Beer  
Categories

Mouthfeel

Beer Taste



Raw  
Material

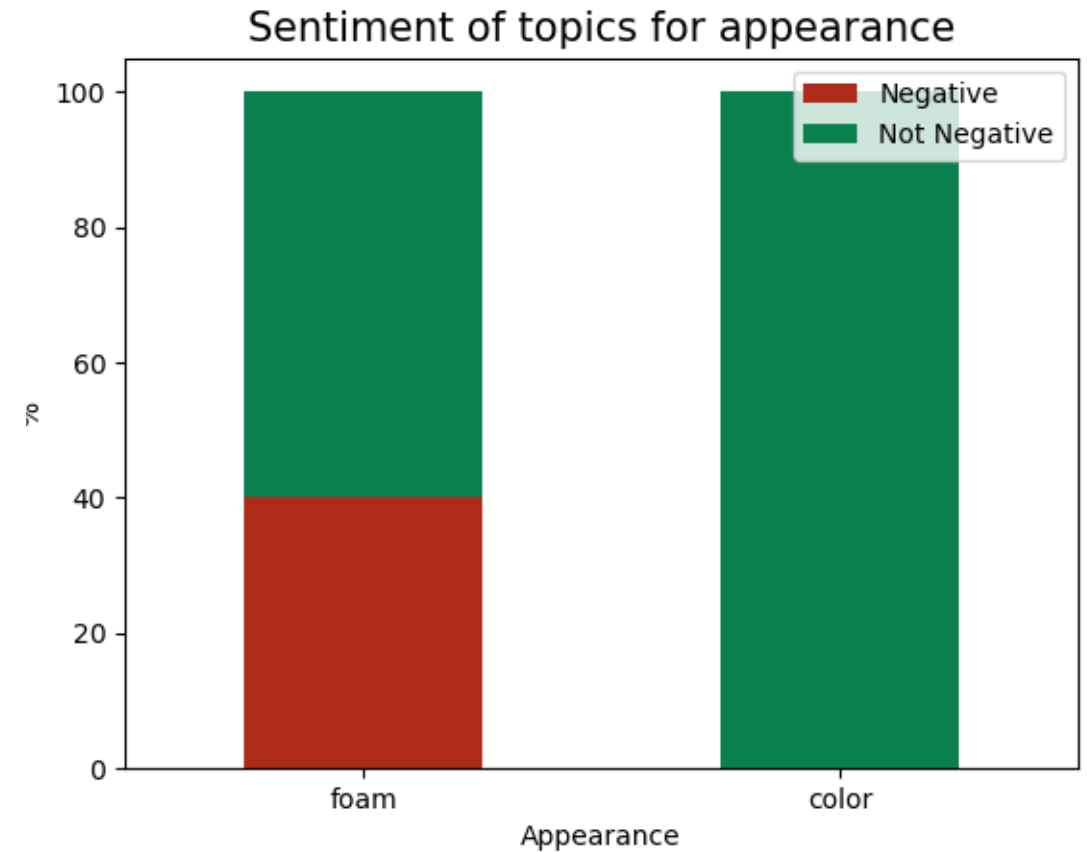
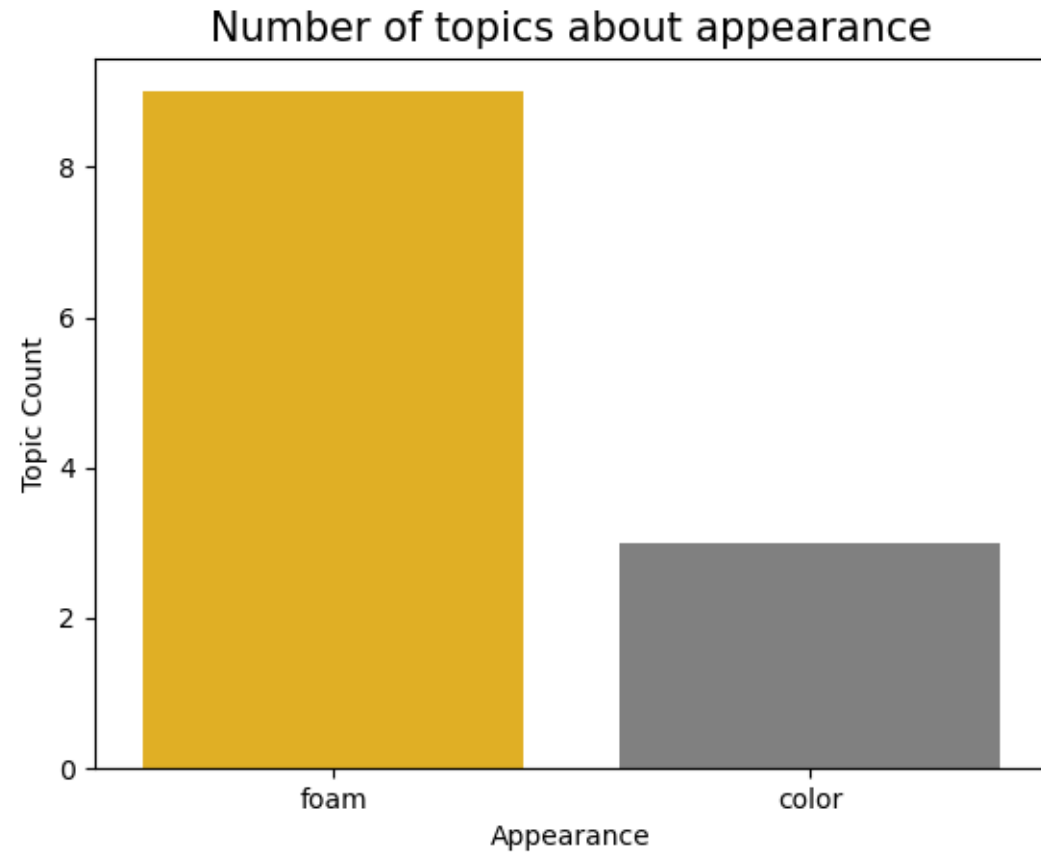


**Beer  
Appearance**



## Findings and Insights

**Foam** is the visual feature most discussed by Reddit users







# Conclusion





# Problem Statement

**Can Reddit topics be effectively** utilized as a source of data to predict consumer sentiment towards a specific product?

## Answer

We did get some **insights** from Reddit





## Conclusion

### Limitations:

- Limited data from Reddit
- Not all wine drinkers are on Reddit

### Further research:

- Study the high-end market of wine
- Access more information on other social media platforms





Constellation  
Brands



Thank you

