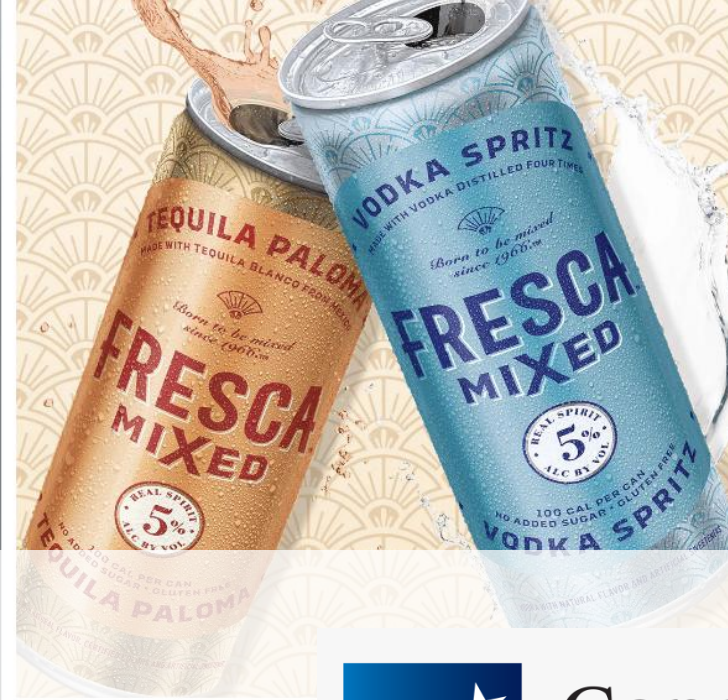




Constellation Brands

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?



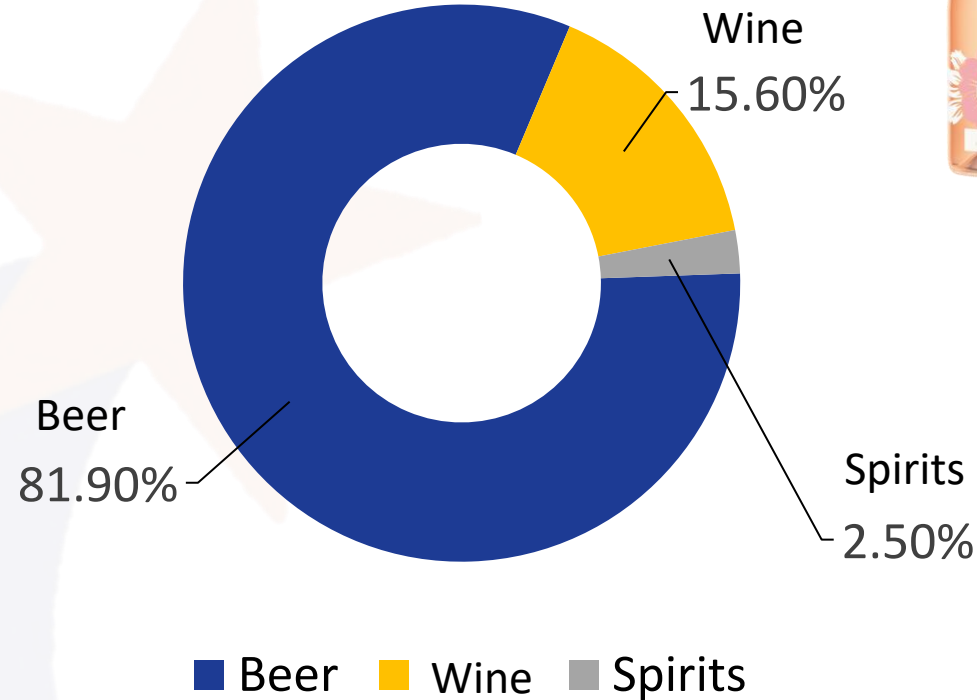


Business Overview

Revenue Breakdown and Products Examples



Revenue Breakdown
in 2024



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

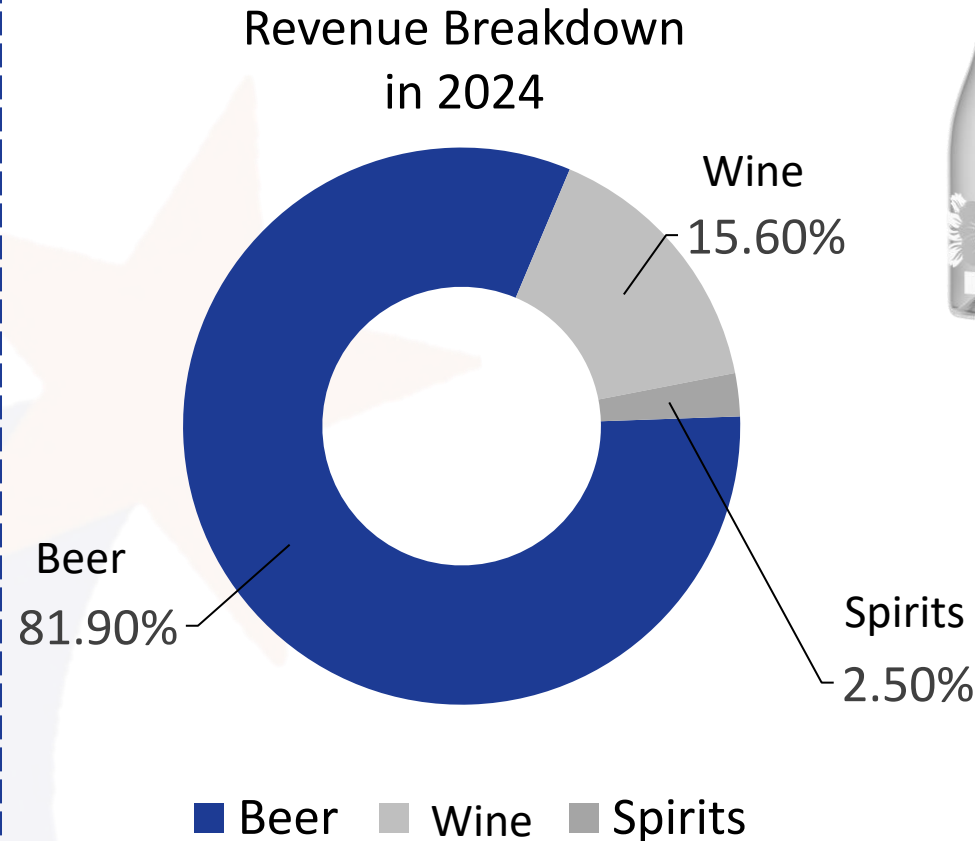




Business Overview

Revenue Breakdown and Products Examples

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



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



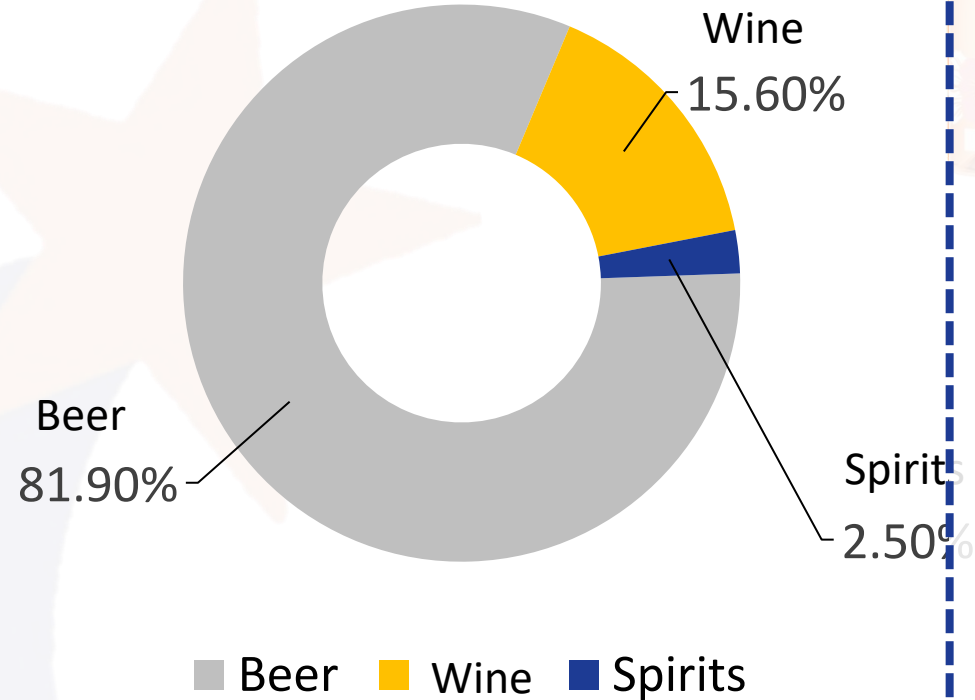


Business Overview

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

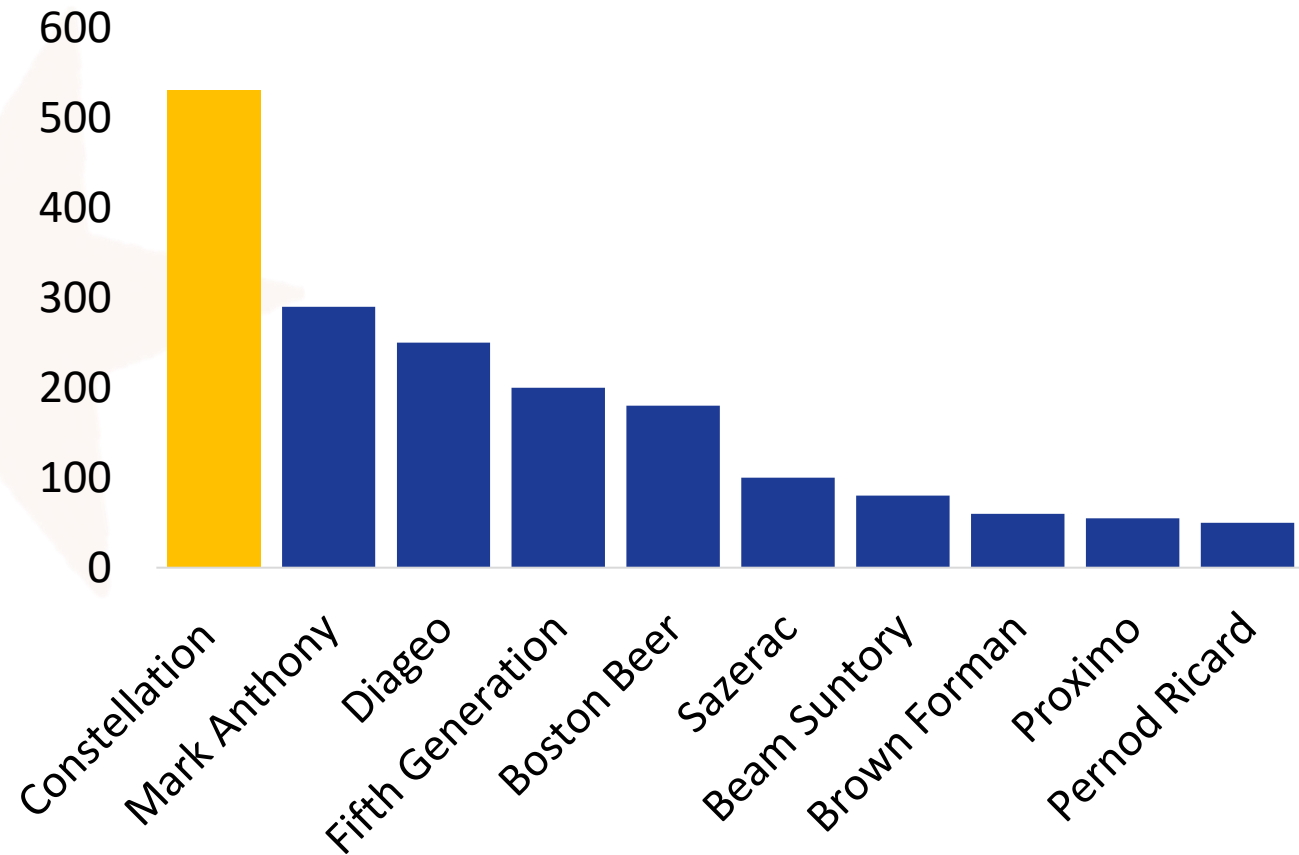
Number #1 Market Share in the U.S. Alcoholic Beverage Market

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>

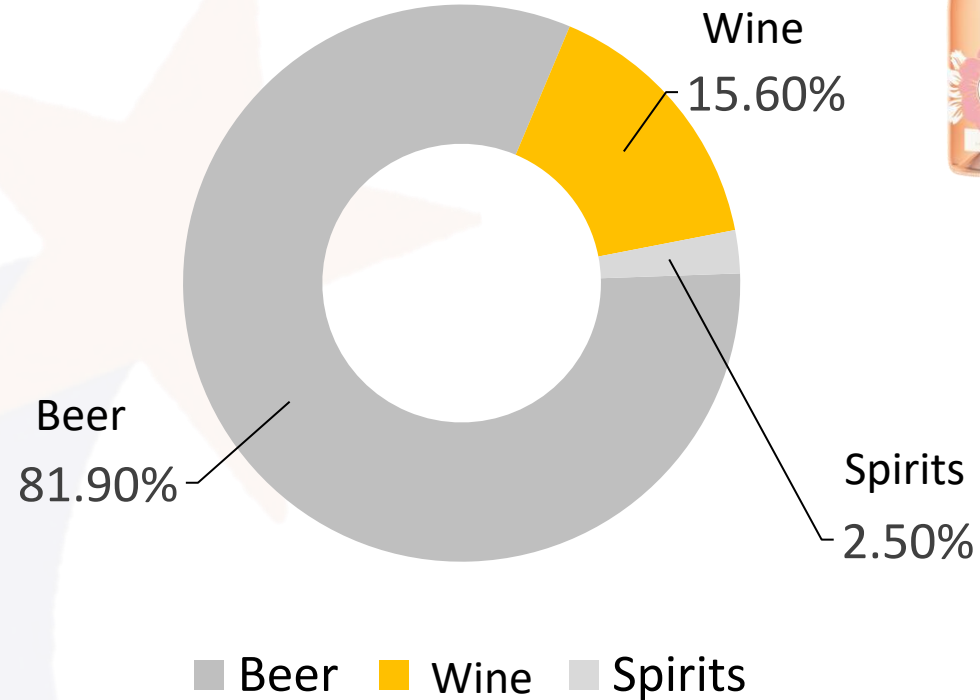


Business Overview

Focus Product: Wine Segment



Revenue Breakdown
in 2024



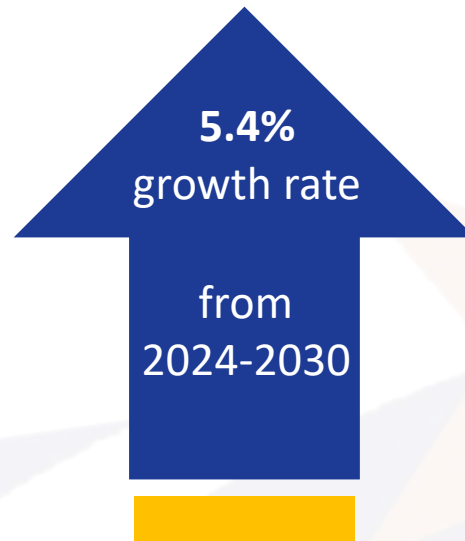
Sources: <https://ir.cbrands.com/>



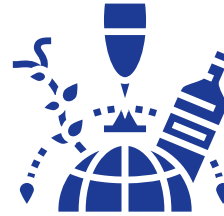


Industry and market overview

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>

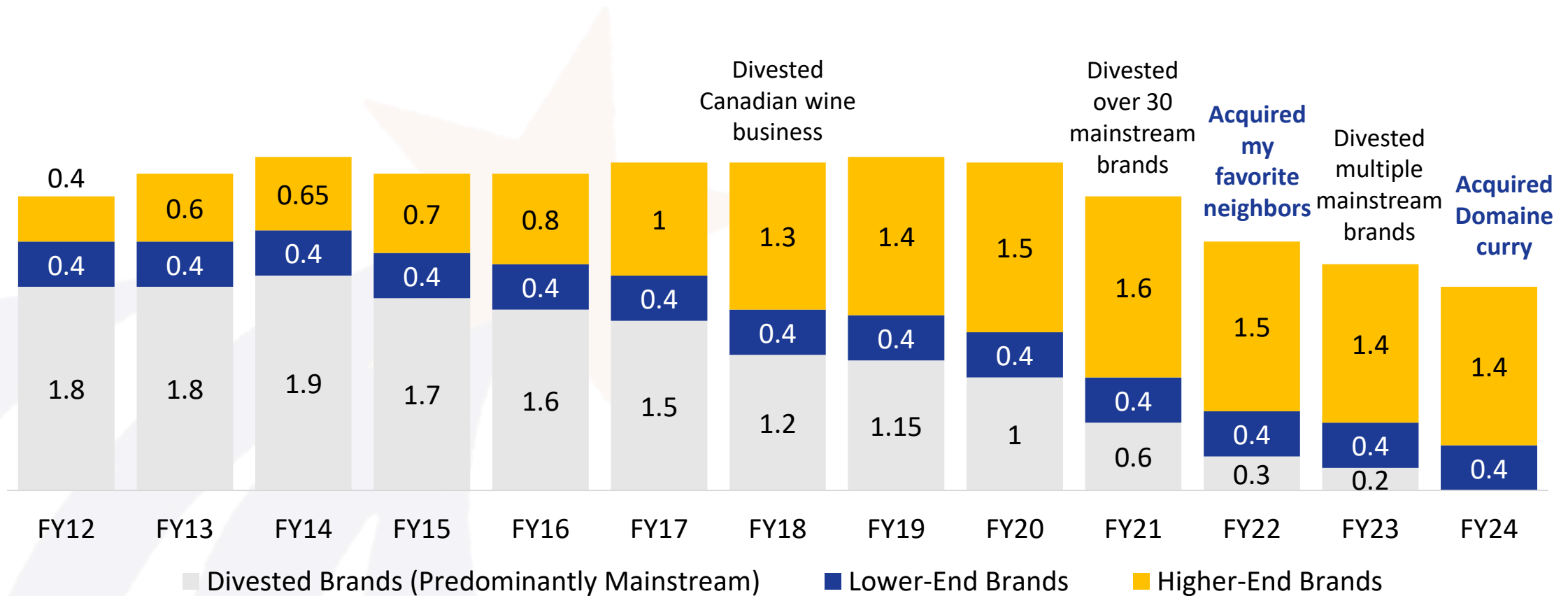




Constellation Brands Strategy

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 Subreddits (1,000 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

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- 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**

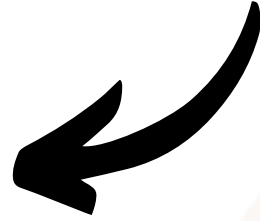
**Wine
Character**



**Wine
Taste**

**Wine
Varieties**

**Wine
Categories**



Wine
Character



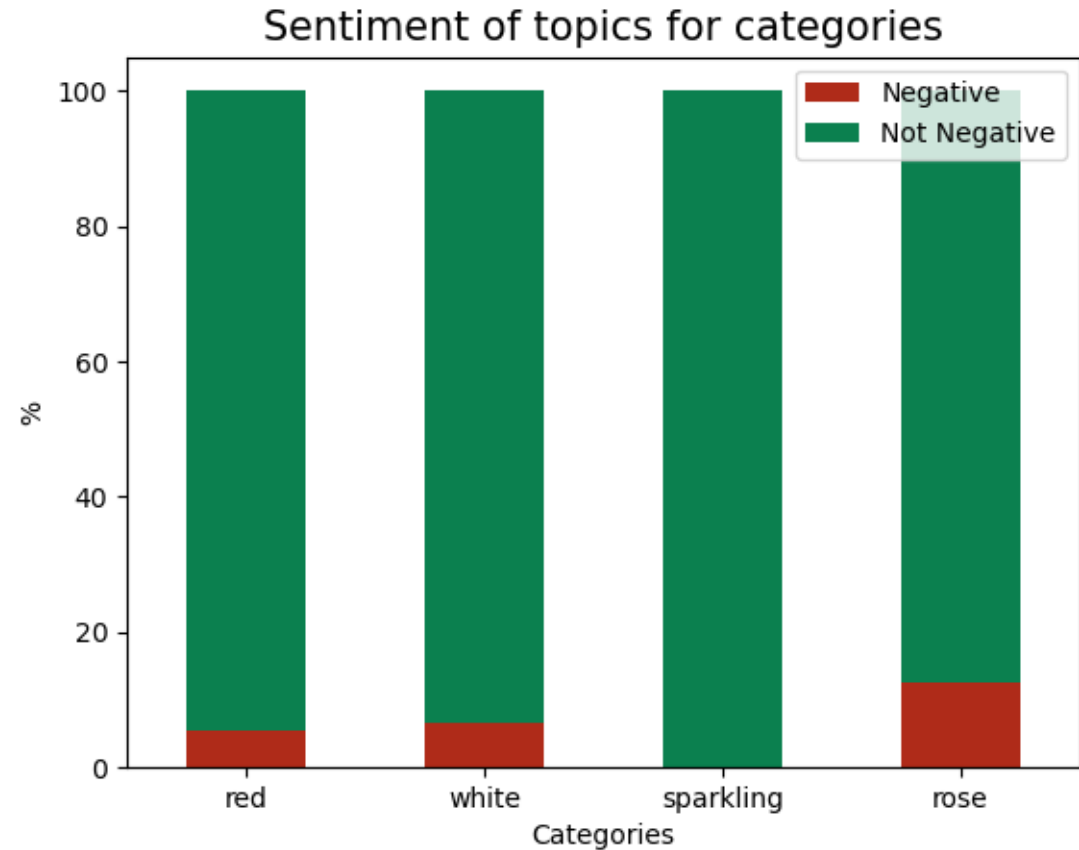
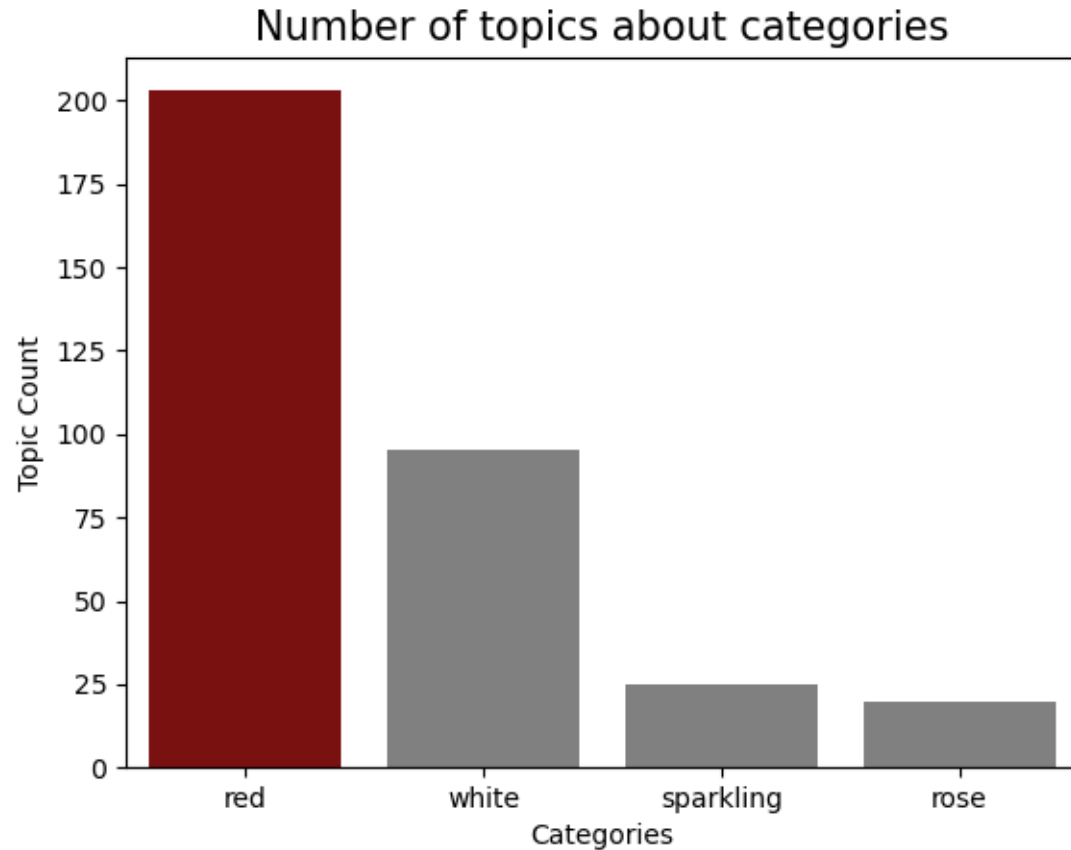
Wine
Taste

Wine
Varieties



Findings and Insights

Red wine is the most popular talking topic on Reddit



Wine
Categories

Wine
Taste

**Wine
Character**

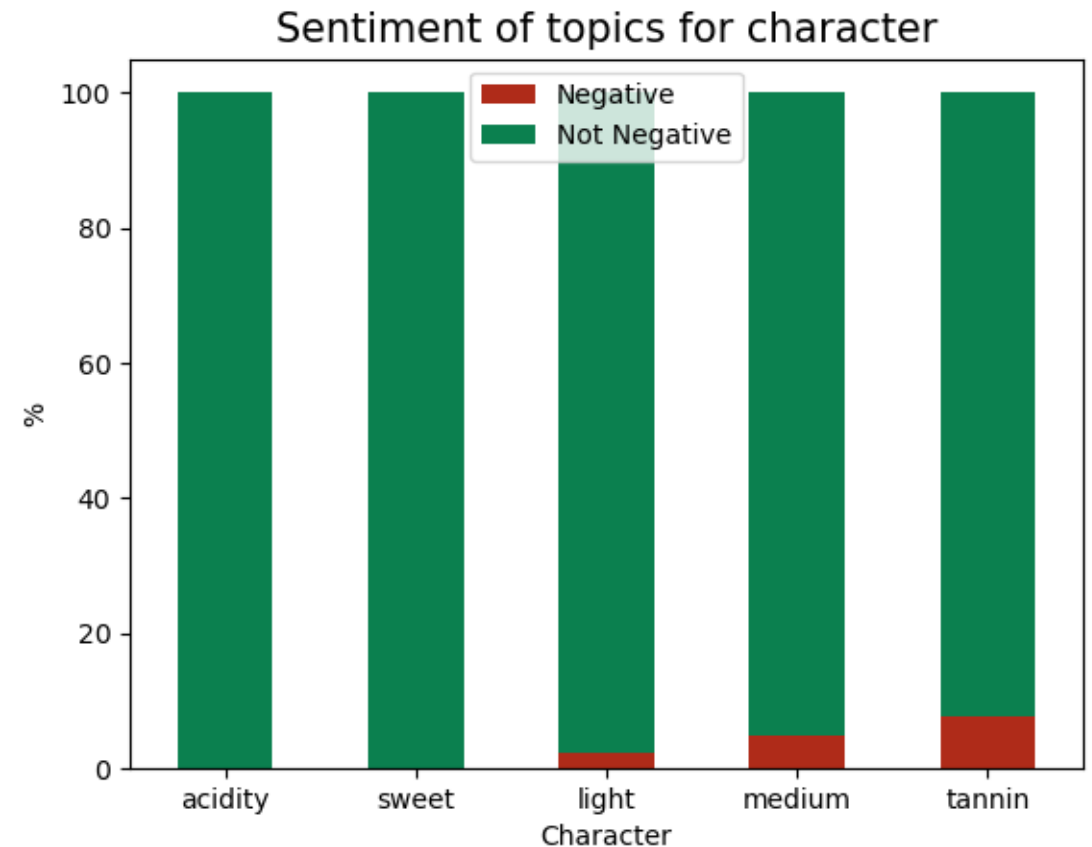
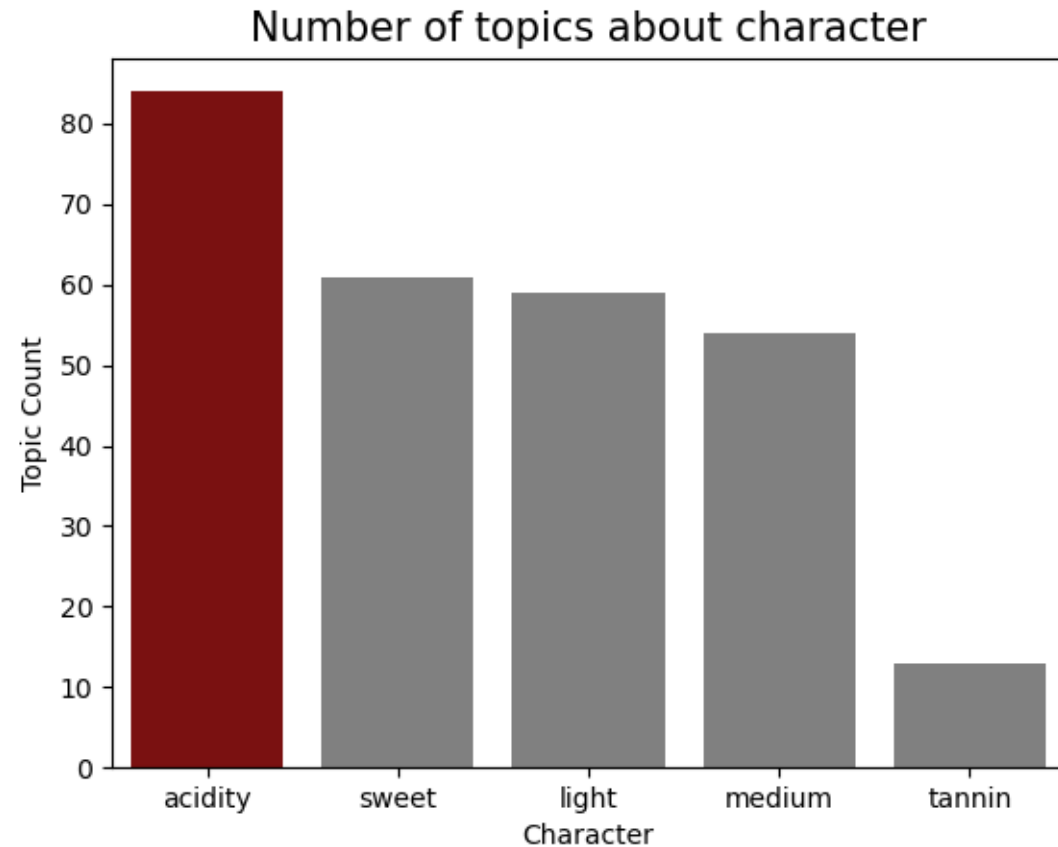
Wine
Varieties





Findings and Insights

Acidity wine widely discussed on Reddit



Wine
Categories

Wine
Character



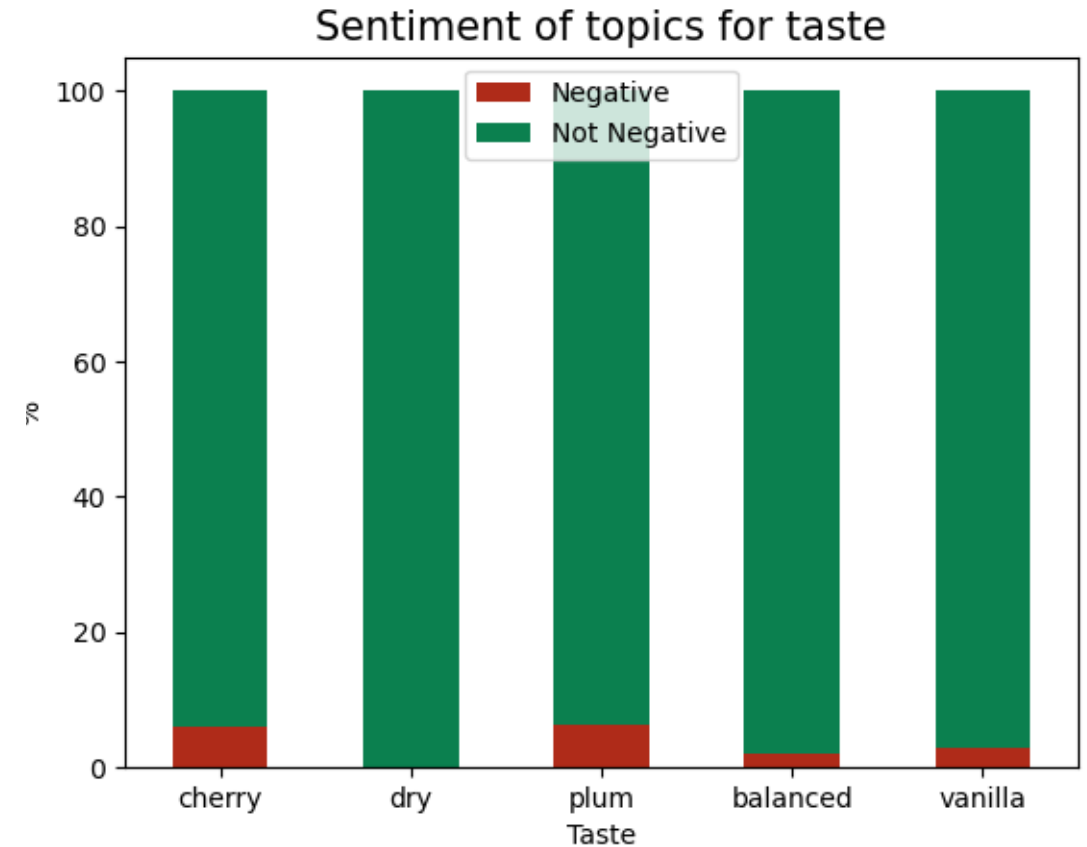
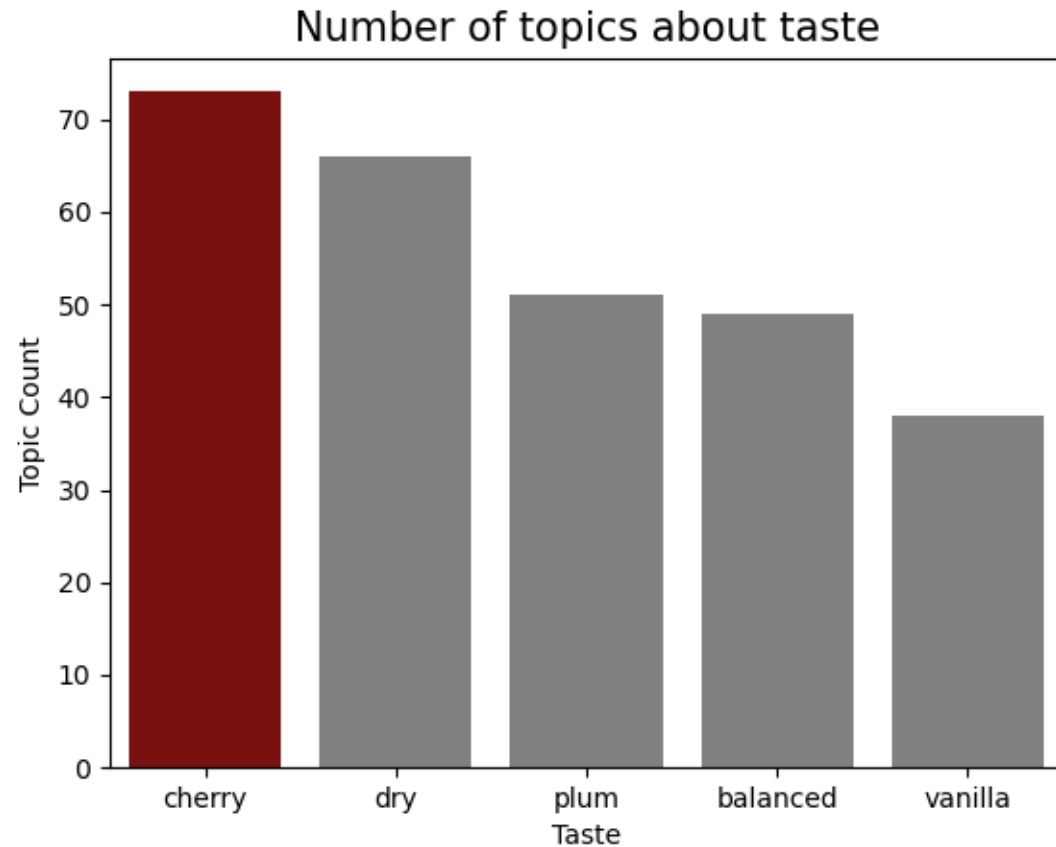
**Wine
Taste**

Wine
Varieties



Findings and Insights

Cherry is the most popular wine taste



Wine
Categories

Wine
Character



Wine
Taste

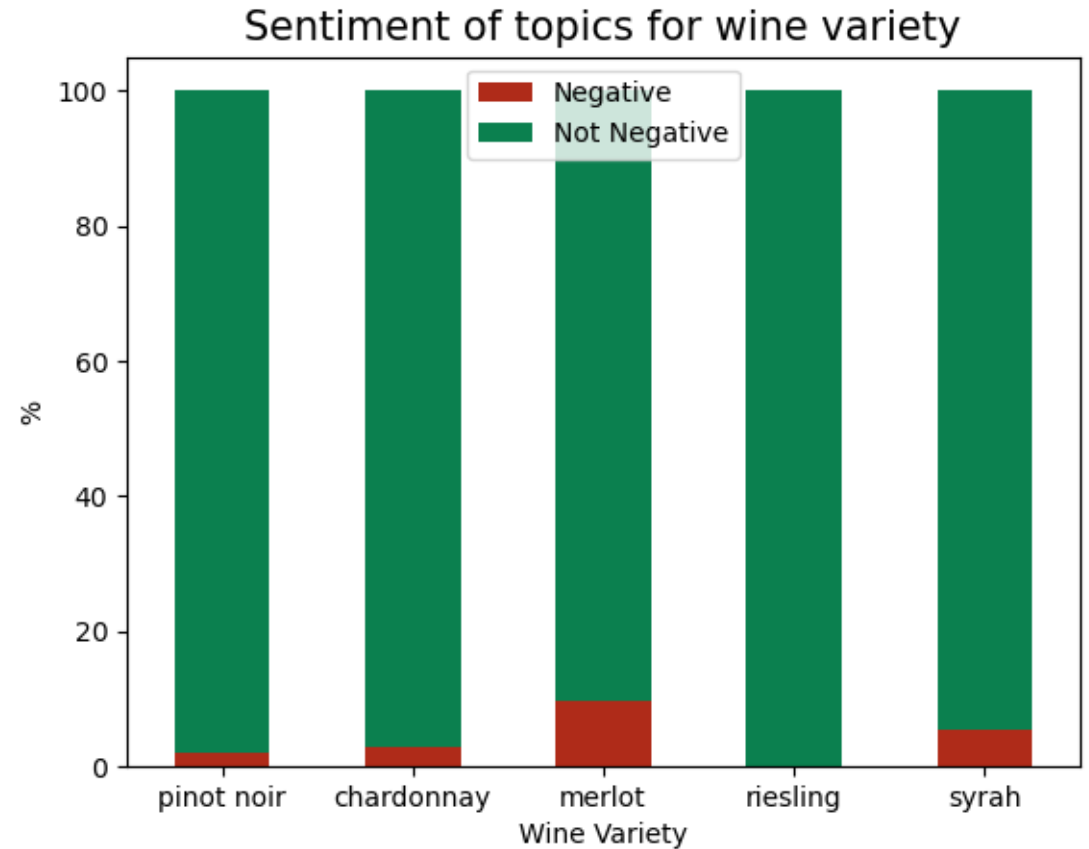
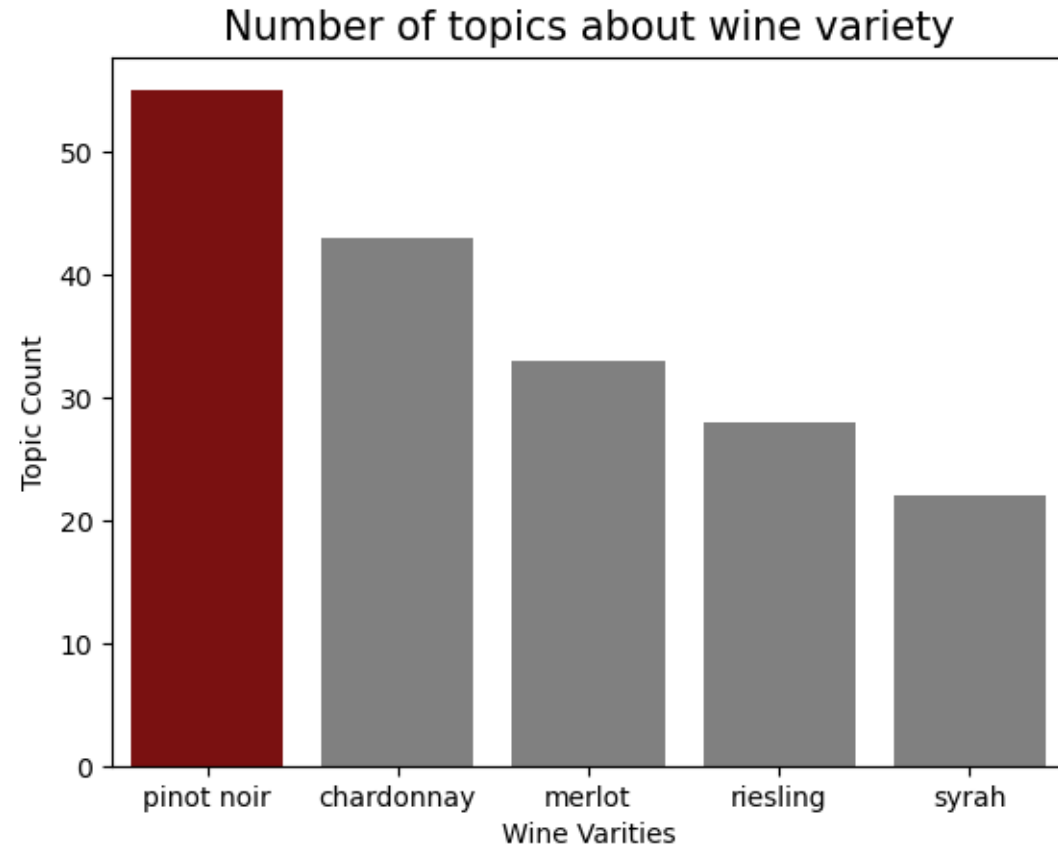
**Wine
Varieties**





Findings and Insights

Chardonnay is the most popular wine type





Recommendation



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



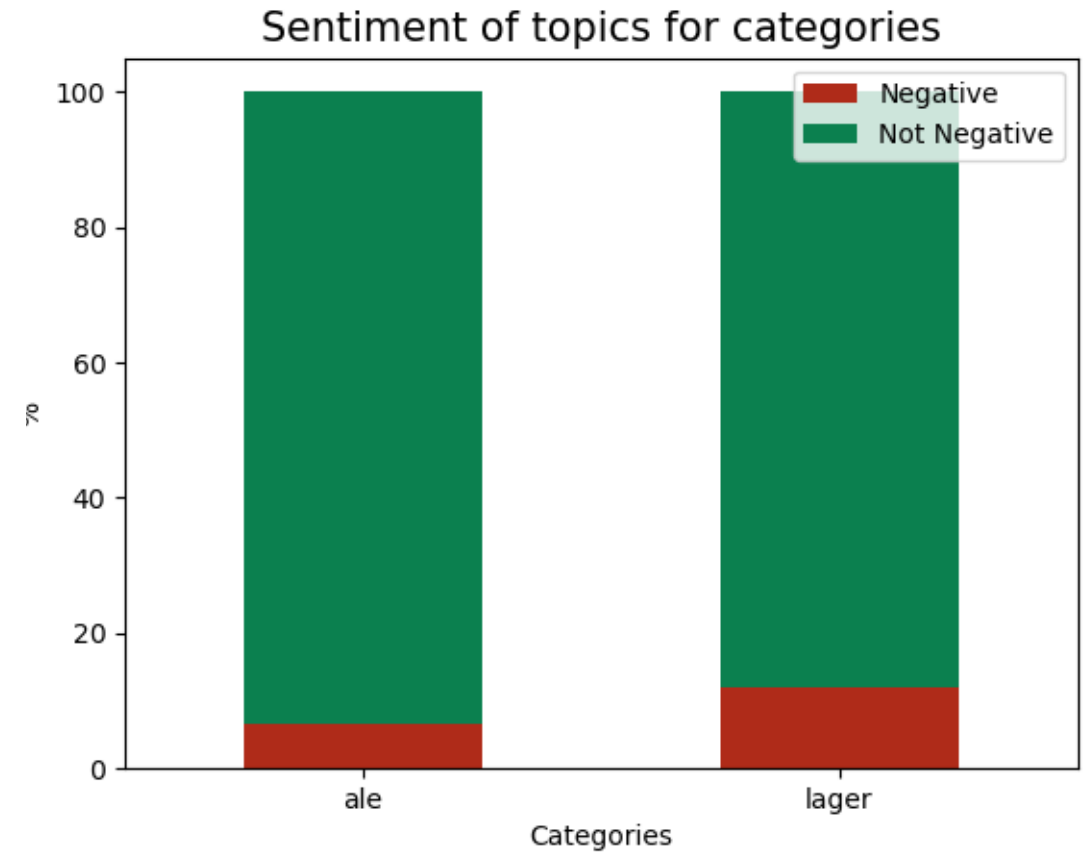
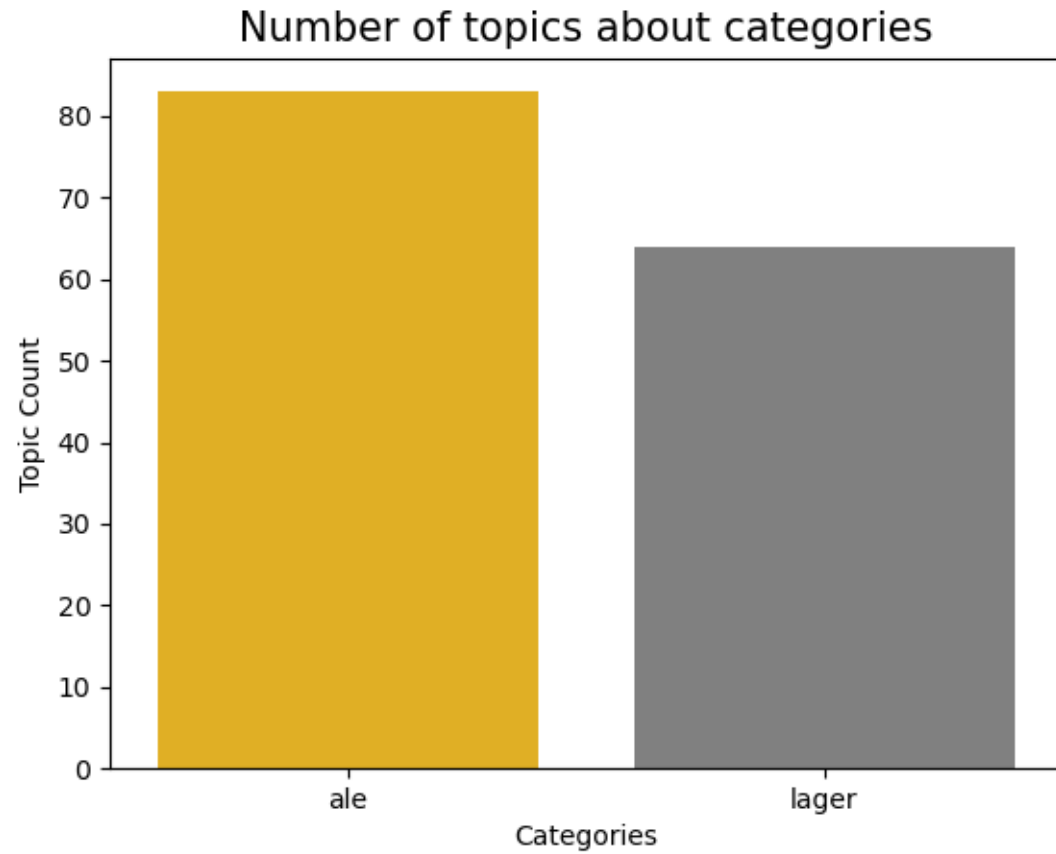
Raw
Material

Beer
Appearance



Findings and Insights

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



Beer
Categories

Mouthfeel



Beer Taste



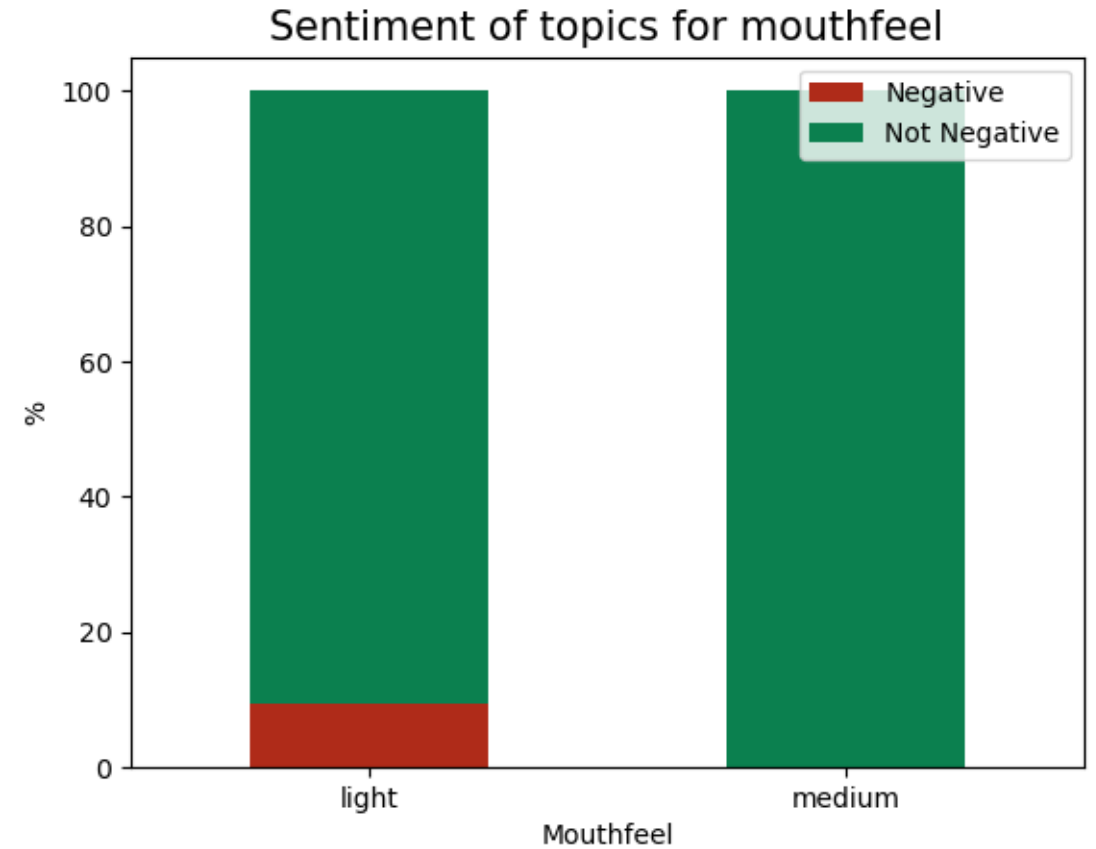
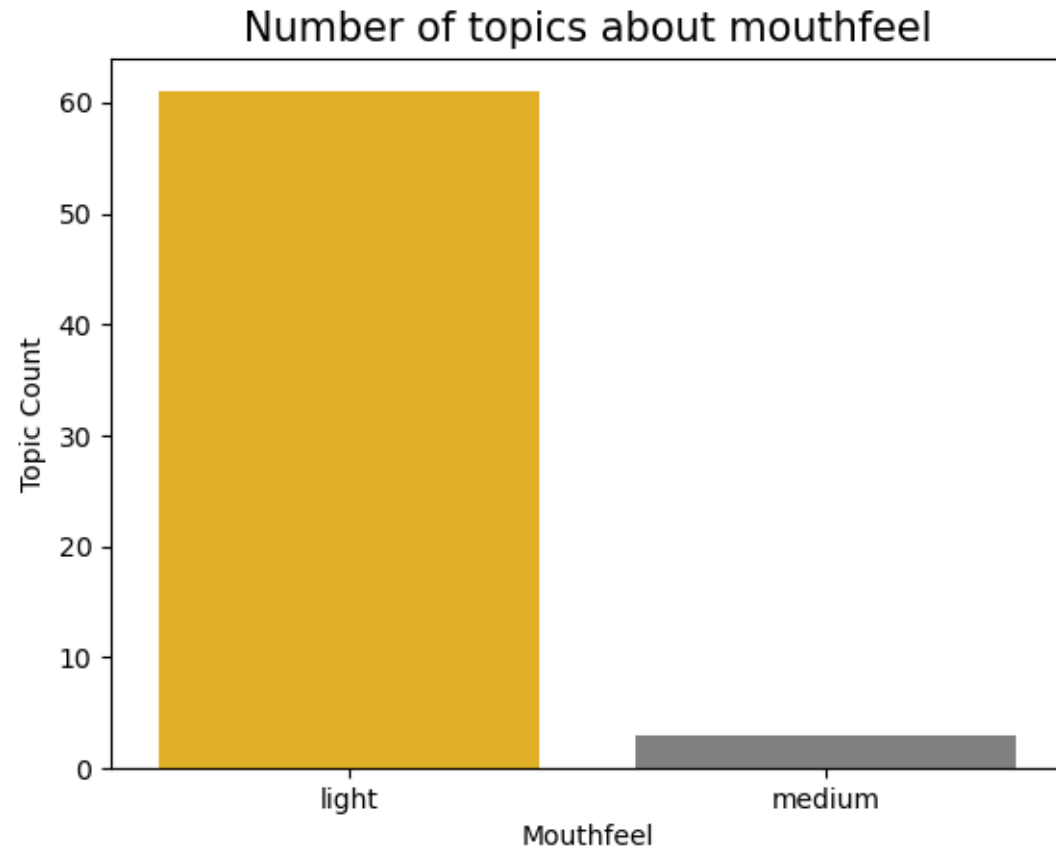
Raw
Material

Beer
Appearance



Findings and Insights

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



Beer
Categories

Raw
Material

Mouthfeel



Beer Taste

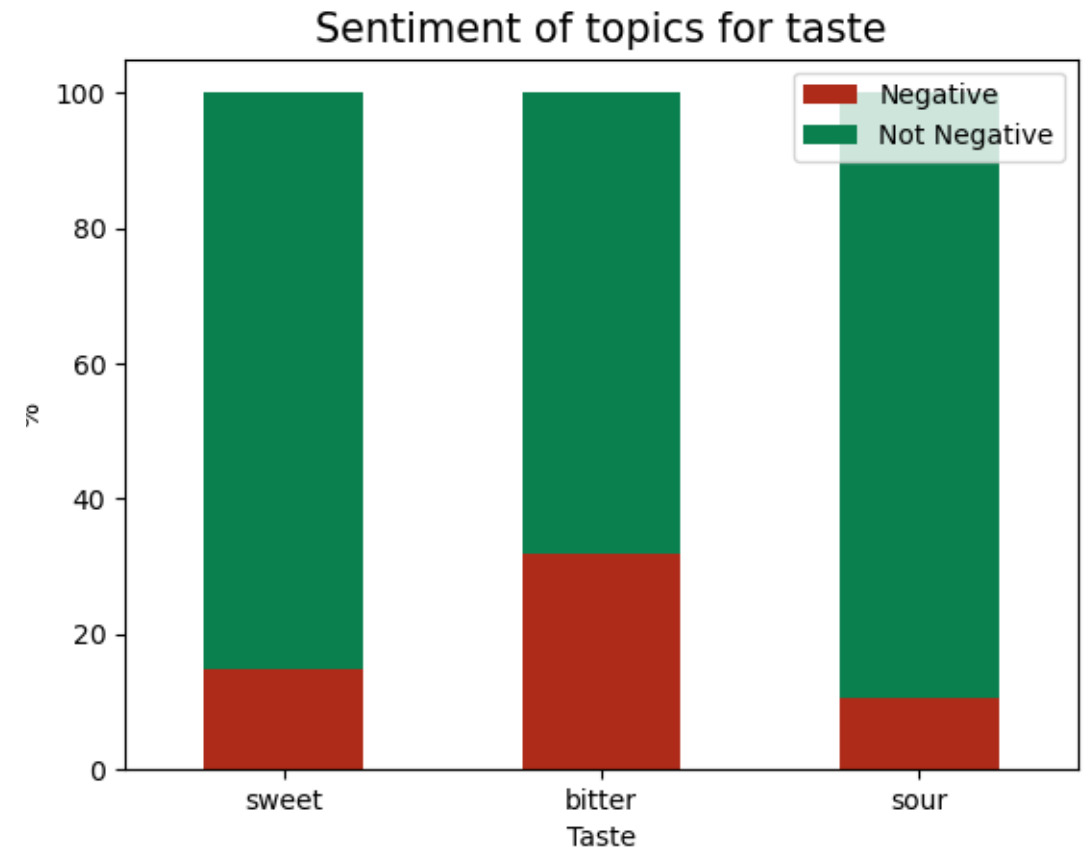
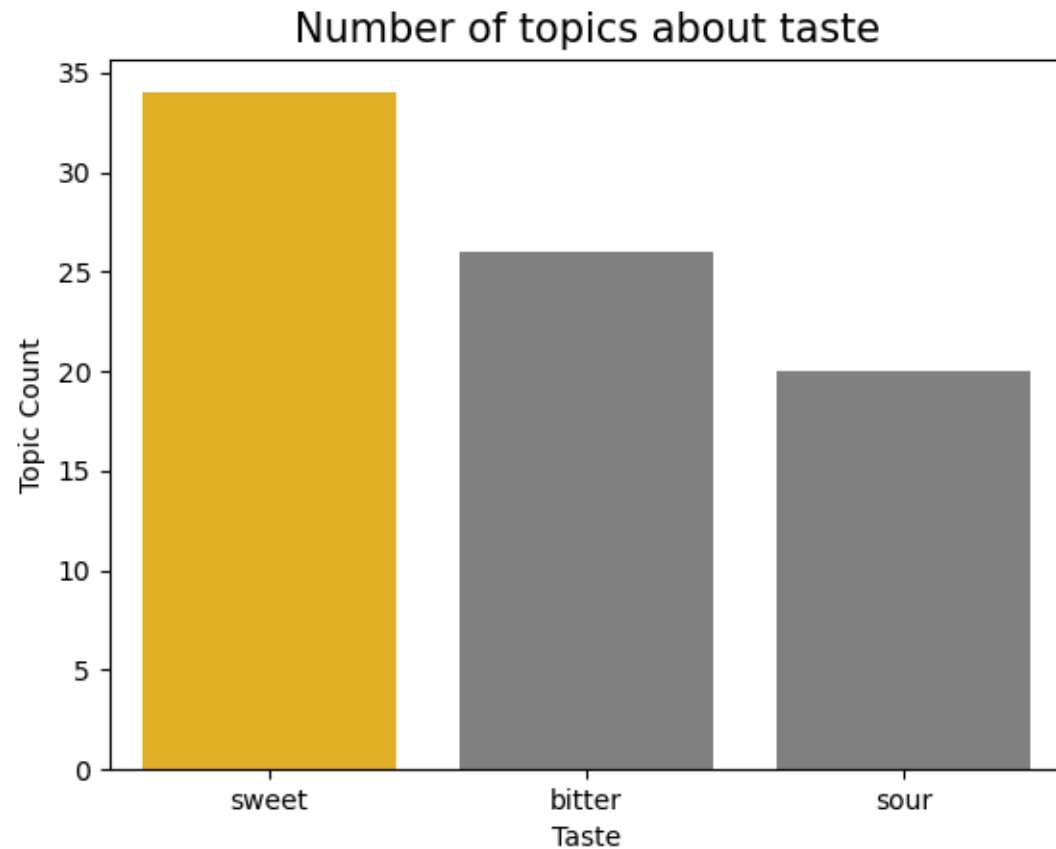


Beer
Appearance



Findings and Insights

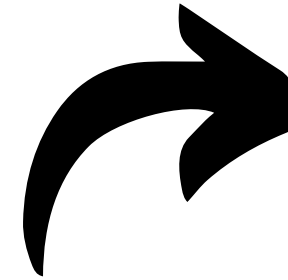
Sweet beer is the most talked about topic among Reddit users



Beer
Categories

Mouthfeel

Beer Taste



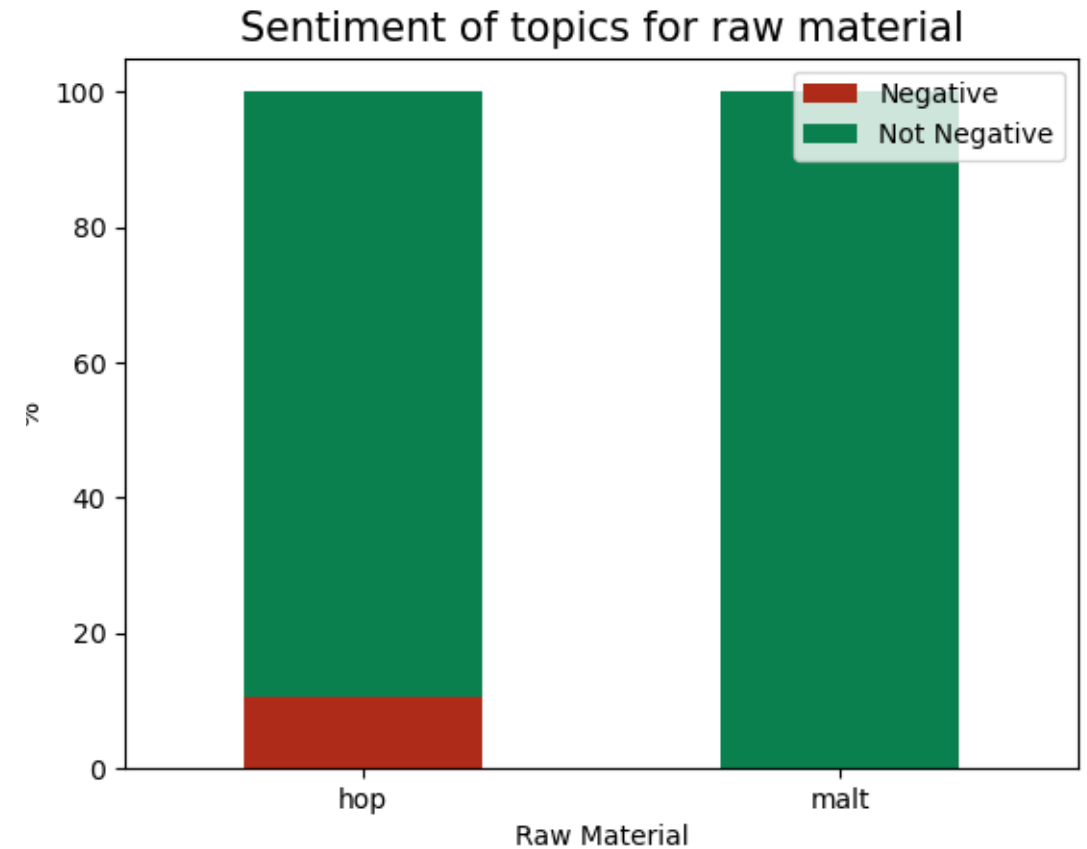
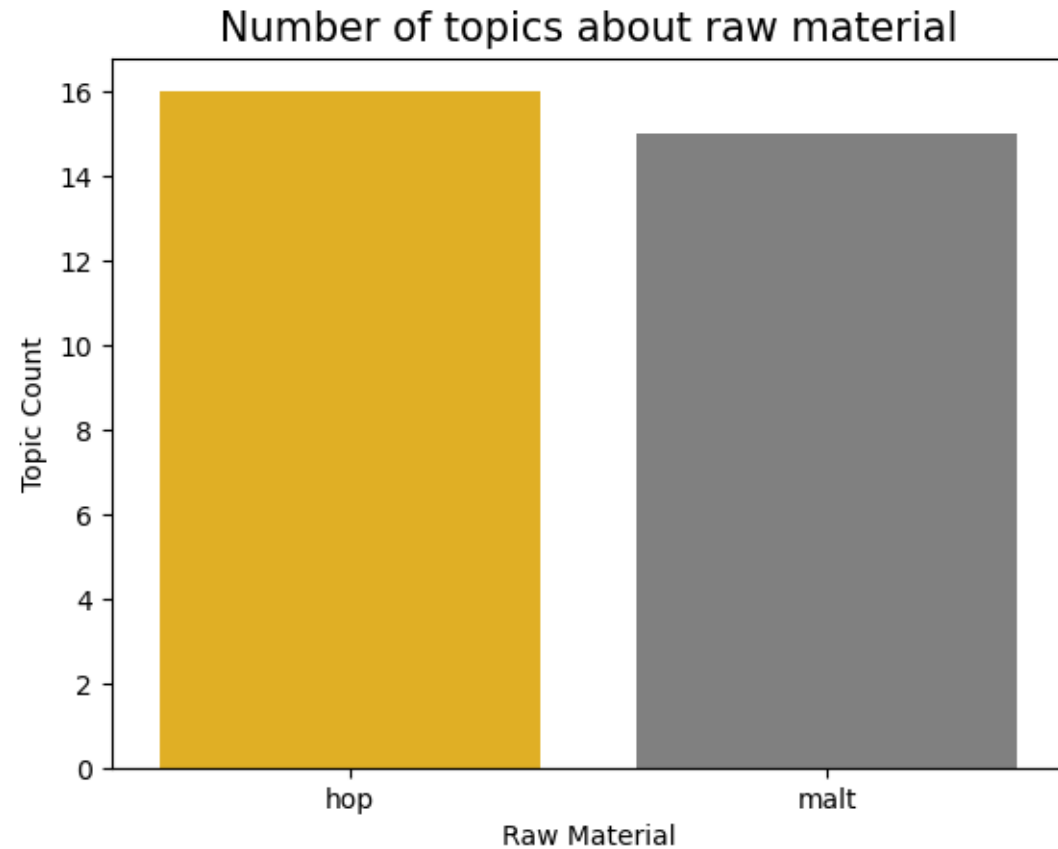
**Raw
Material**

Beer
Appearance



Findings and Insights

Hops are the most popular raw material for beer



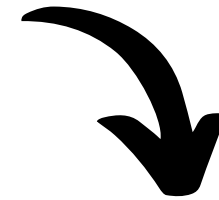
Beer
Categories

Mouthfeel

Beer Taste



Raw
Material

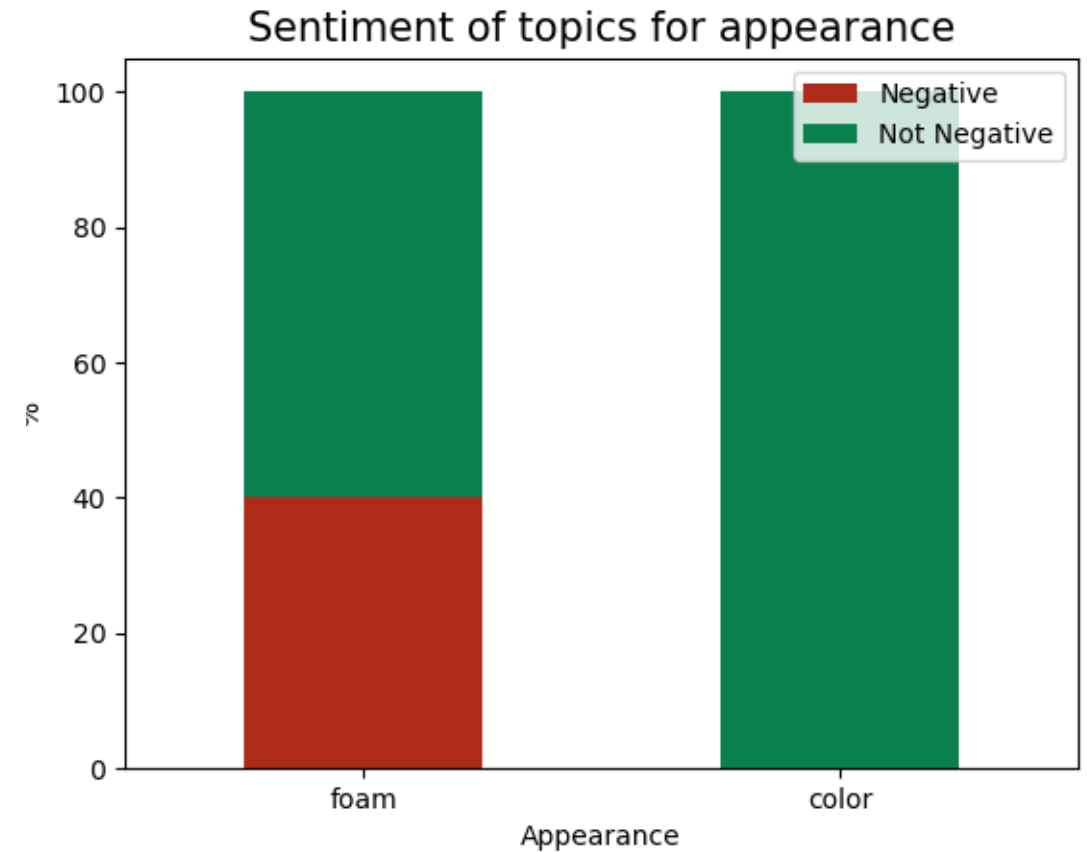
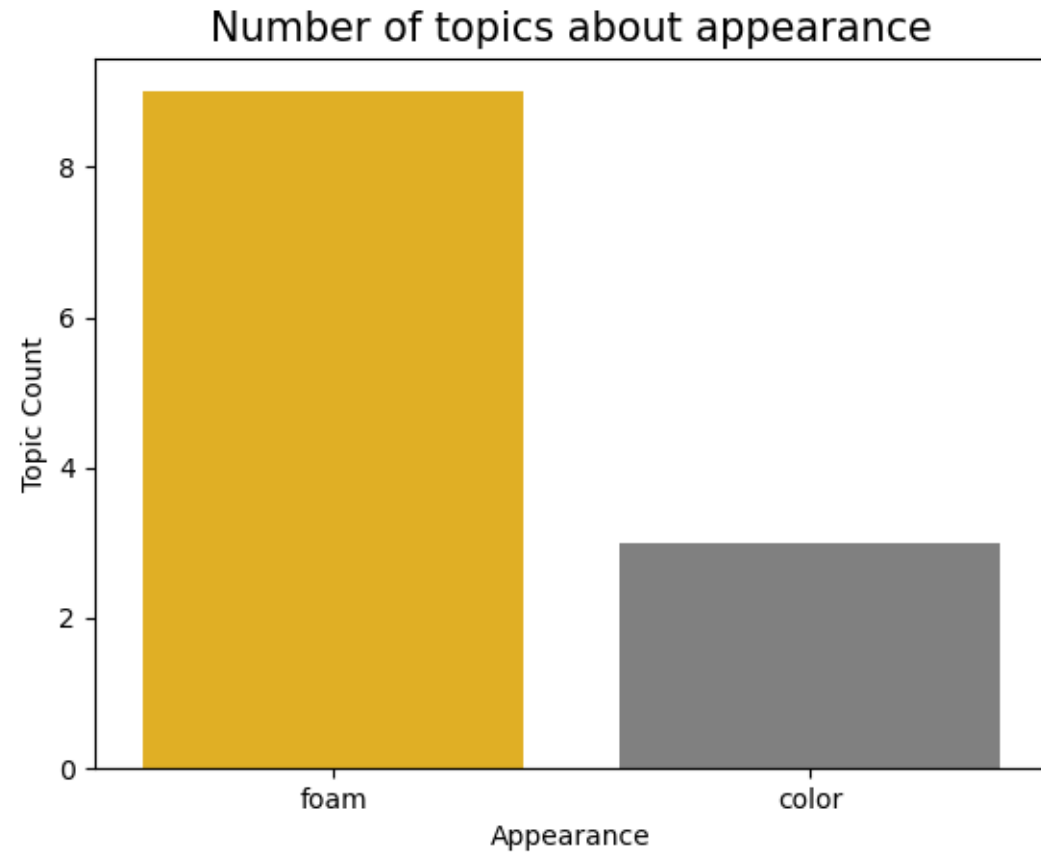


**Beer
Appearance**



Findings and Insights

Foam is the visual feature most discussed by Reddit users





Conclusion



Conclusion

Wine



- **Red Wine**
- **Cherry flavor**



Raspberry



Cherry



Mushroom



Vanilla



Hibiscus

Beer

- **Ale Beer**
- **Light mouthfeel**
- **Use more malt**
- **A lot of foam**





Constellation
Brands



Thank you

