

“Cat and Dog Food Brand Analysis: Insights into Consumer Perceptions and Preferences on Reddit”

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A light pink, rounded rectangular area is centered on a light blue background. Inside this pink area, there are several dark purple paw prints of varying sizes scattered around the central text. The number '01' is written in a large, bold, dark red font. Below it, a thin horizontal line is centered. The words 'Problem' and 'Statement' are written in a dark purple, sans-serif font, stacked vertically below the line.

01

Problem
Statement

About the Project

- Have you ever wondered what other pet owners think about the different pet food brands available on the market?
- Are you curious about the most commonly discussed brands and the overall sentiment around them?



About the Project



r/dogs



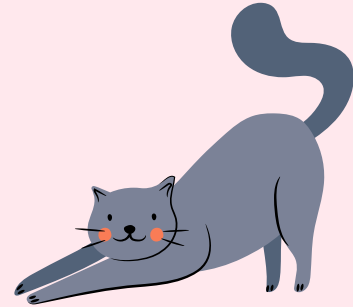
r/cats

02

Data collection and preparation

Data Collection and Preparation

- Using Pushshift's API
- Pulling both Posts and Comments and merging them
- Vectorizing the text
- Removing non-English words

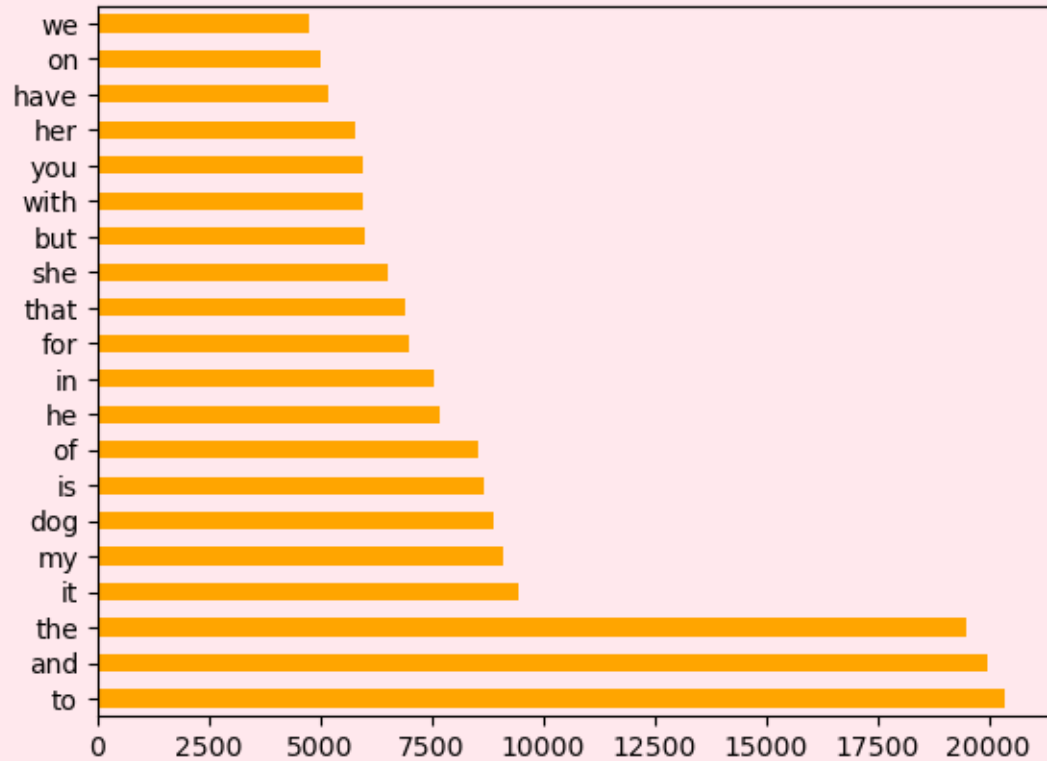


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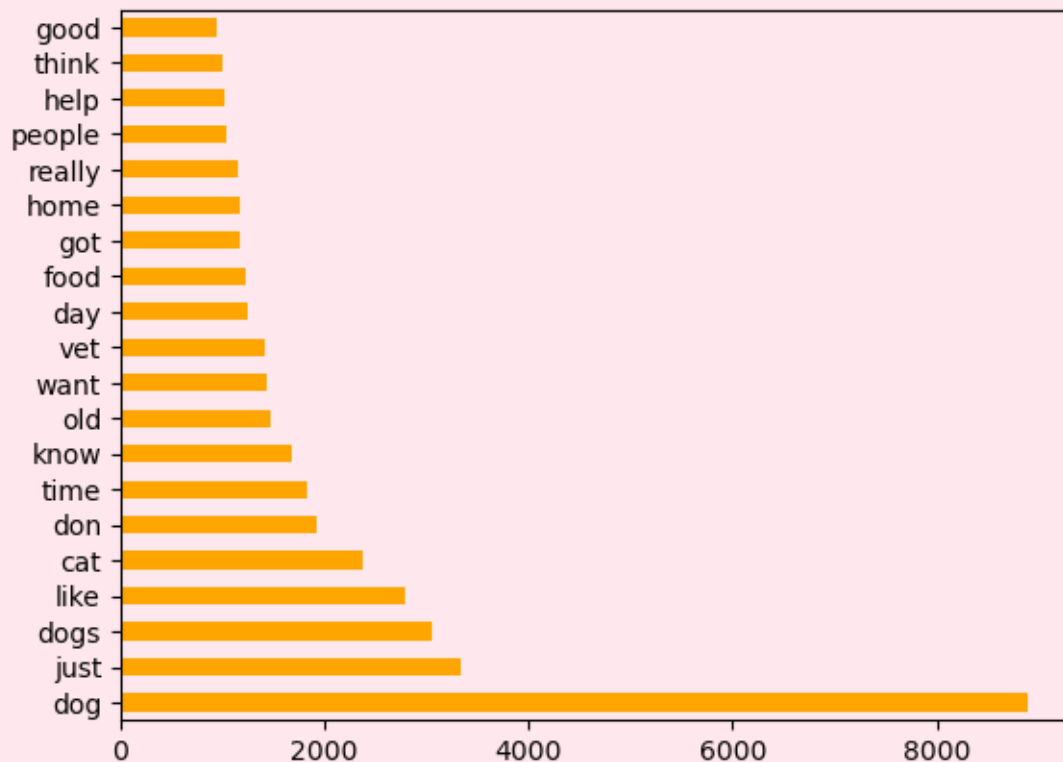
03

Exploratory data analysis

The most common words including stop words 🐾



The most common words without stop words





Which food brands have been mentioned by users on subreddits?

- Acana
- Advantage
- American Journey
- Blue Buffalo
- Diamond Naturals
- Eukanuba
- Fromm
- Iams
- Instinct
- Mars
- Merrick
- Natural Balance
- Nutro
- Orijen
- Pedigree
- Purina
- Royal Canin
- Solid Gold
- Wellness Core



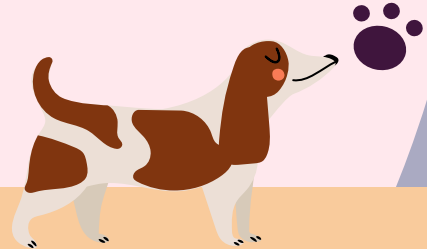
Let's look at some sentences!

r/Cats

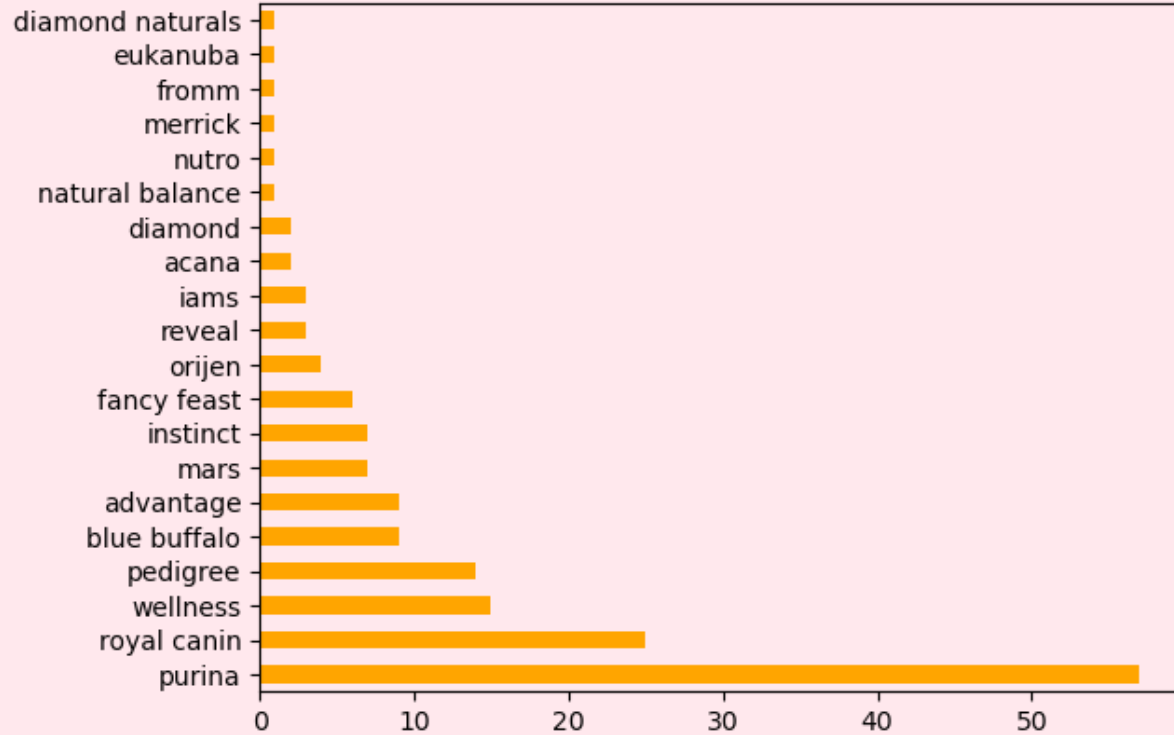
- "Purina dry food is much lower quality than Tiki cat where the first few ingredients were fish."
- "There has been a pet food Recall for Royal Canin!"
- "I'm honestly about done with the wellness brand."
- I'm honestly about done with the wellness brand. Their customer service is not helpful and always insists they "haven't changed their formula."

r/Dogs

- "I was feeding him royal canin first but recently found out it has corn , Chicken byproducts , soy and wheat that's really bad for dogs should I still go with royal canin or switch to orijen or acana?"
- "The current recommended food to feed is kibble that follows WSAVA guidelines. These brands are as follows: Purina, Royal Canin, Hill's Science Diet, Eukanuba, and Iams."



How many times each brand is mentioned?



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04

Sentiment Analysis



Do people have
positive or negative
opinions about each
food brand on cats
subreddit?

Do people have positive or negative opinions about each food brand on cats subreddit?

Brand	Overall Sentiment Score
Purina	-0.70
Blue Buffalo	-0.82
Instinct	-0.82
Tiki Cat	-0.23
Nutro	-0.82
Pedigree	-0.34
Wellness Core	-0.82
Mars	0.16
Reveal	0.55



Do people have
positive or negative
opinions about each
food brand on dogs
subreddit?

Brand	Overall Sentiment Score
Royal Canin	-0.07
Purina	0.23
Blue Buffalo	0.00
Orijen	-0.55
Acana	-0.32
Pedigree	0.08
Advantage	0.35
Reveal	0.00
Instinct	0.18

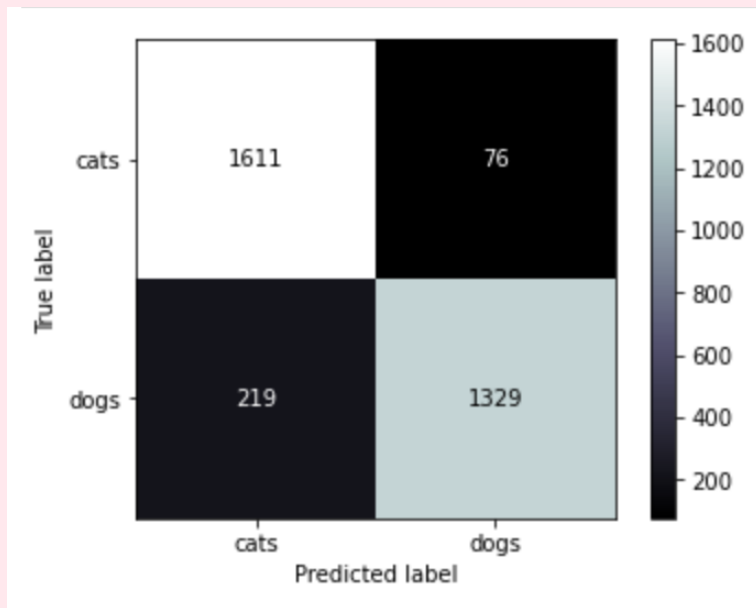
Do people have positive or negative opinions about each food brand on dogs subreddit?

A light pink, rounded rectangular area is centered on a light blue background. Inside this pink area, there are ten dark purple paw prints of varying sizes scattered around the central text. The paw prints are located at approximately: top-left, top-center, top-right, middle-left, middle-center, middle-right, bottom-left, bottom-center, bottom-right, and bottom-center-right.

05

Model

Classifier's Accuracy



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06

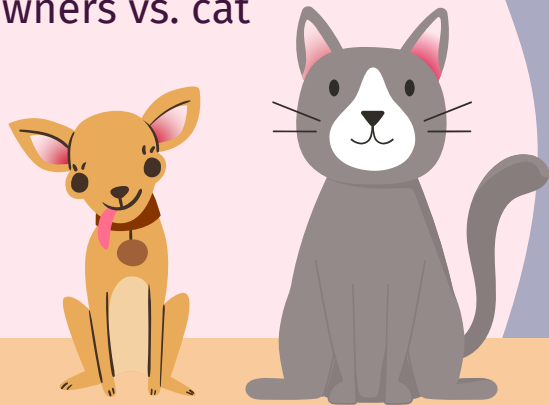
Recommendations

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Recommendations

- Collecting more data to increase the sample size and improve the accuracy of the sentiment analysis.
- Experimenting with different sentiment analysis techniques or lexicons to see if they produce different results.
- Doing same analysis on other websites and reviews.
- Conducting further analysis to identify any patterns or trends in the sentiment scores for different pet food brands (e.g. do certain brands tend to have more positive sentiment among dog owners vs. cat owners?)



Thank you

Do you have any questions?



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