



# **POSITIVE NEWS**

## **Analysis of Headlines**

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# Agenda

- 01 Problem
- 02 Data Collection
- 03 Explore Data
- 04 Modeling
- 05 Recommendation



# Problem

- ❑ **Great Headlines** to draw the reader's attention.
- ❑ Emphasize the **positivity** of news all over the world.
- ❑ Headlines should be **different** and **unique** compared to other news headlines.

**Are there any distinct keywords in titles, that would make someone perceived news as positive?**

# Data Collection

Reddit is a **network of communities** based on people's interests.

Web Scraping:



r/worldnews

r/positive\_news

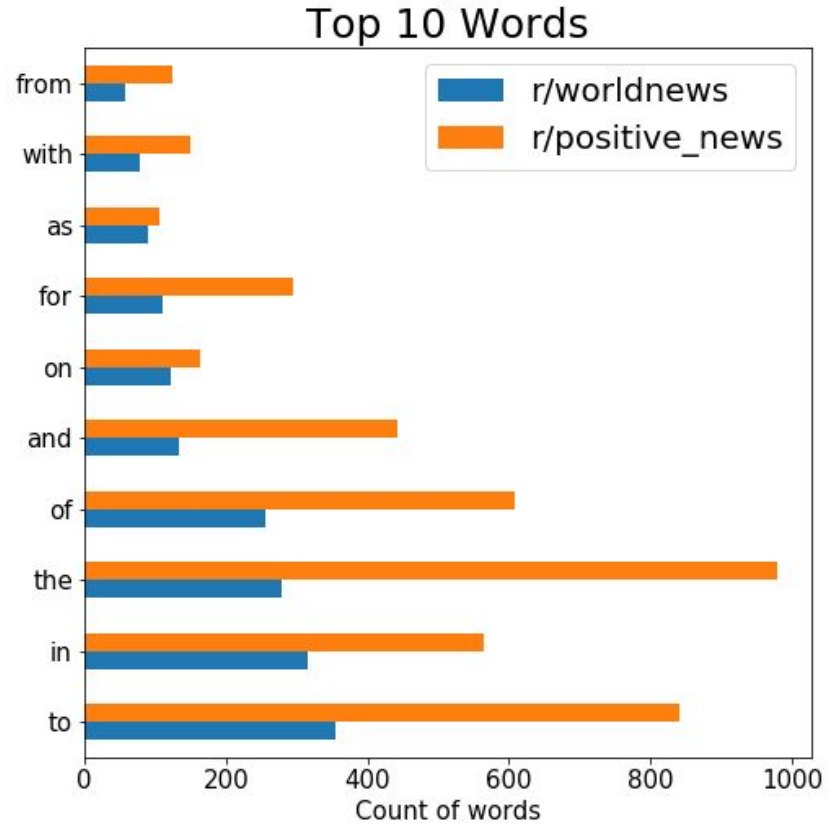
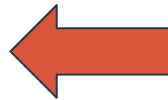
Titles

# Explore Data

## Cleaning:

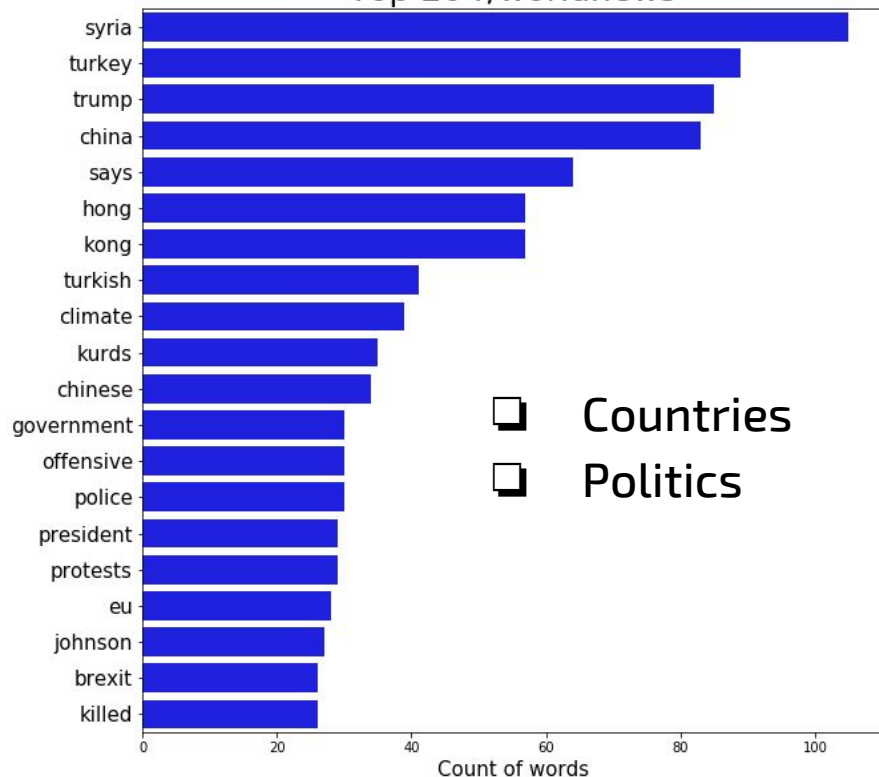
- ❑ Removed Punctuation
- ❑ Removed Duplicates

Remove stopwords

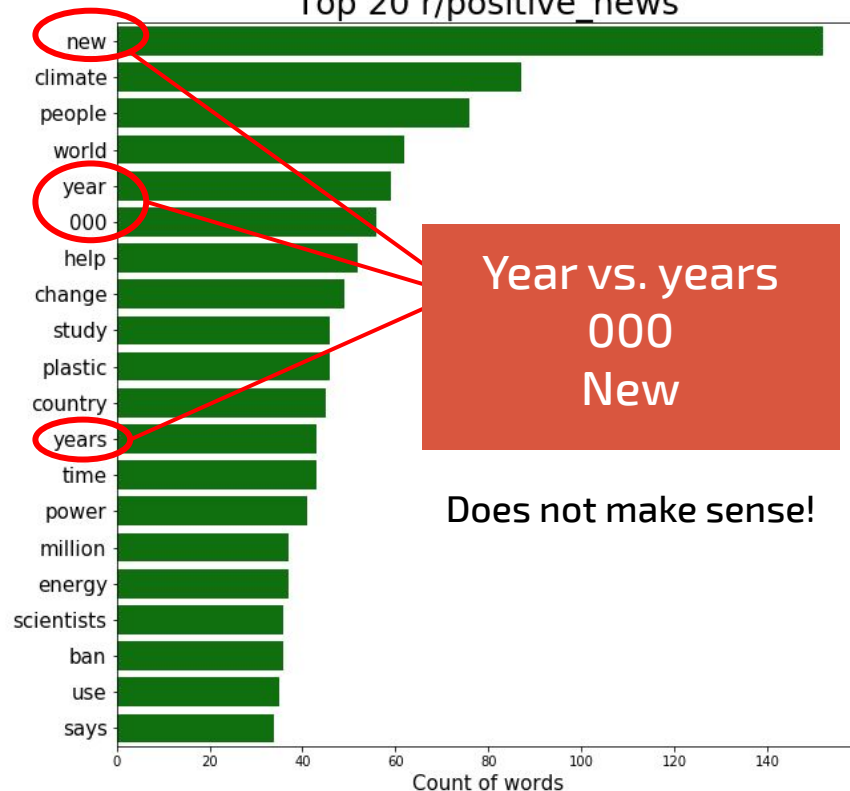


# Explore Data

Top 20 r/worldnews

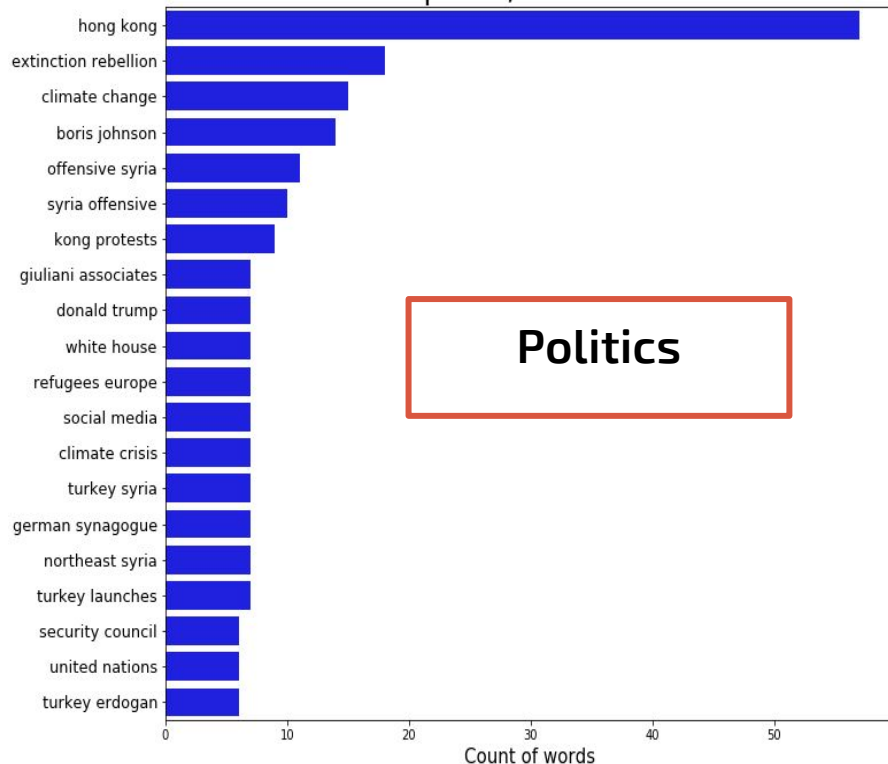


Top 20 r/positive\_news

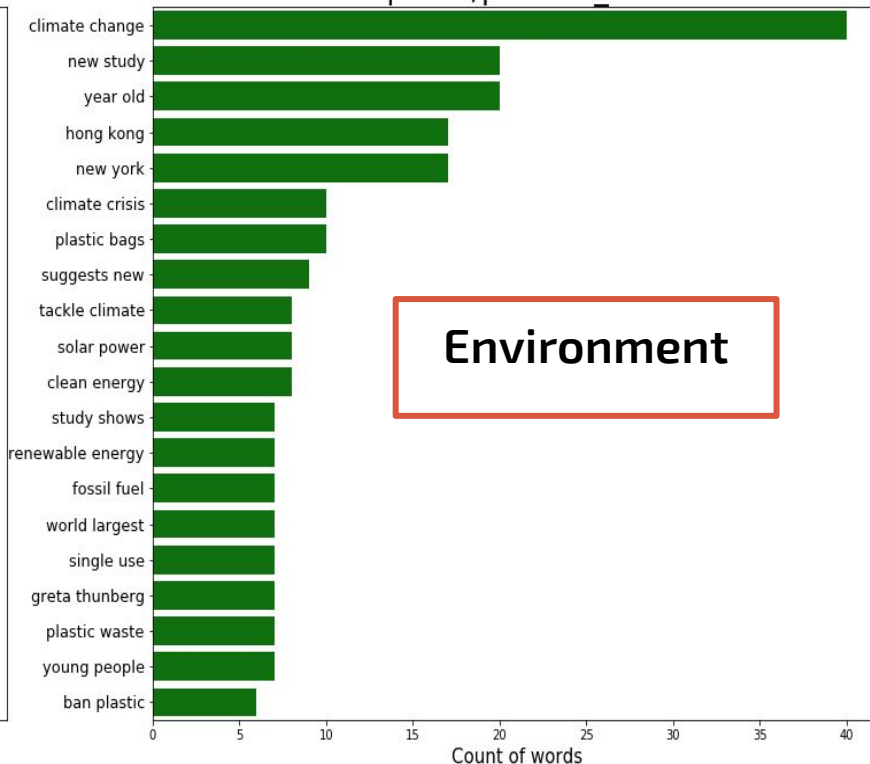


# Explore Data

Top 20 r/worldnews



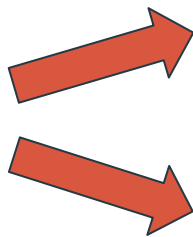
Top 20 r/positive\_news



# Modeling

## Classification Models:

- ❑ Naive Bayes Model
- ❑ Logistic Regression Model



r/worldnews

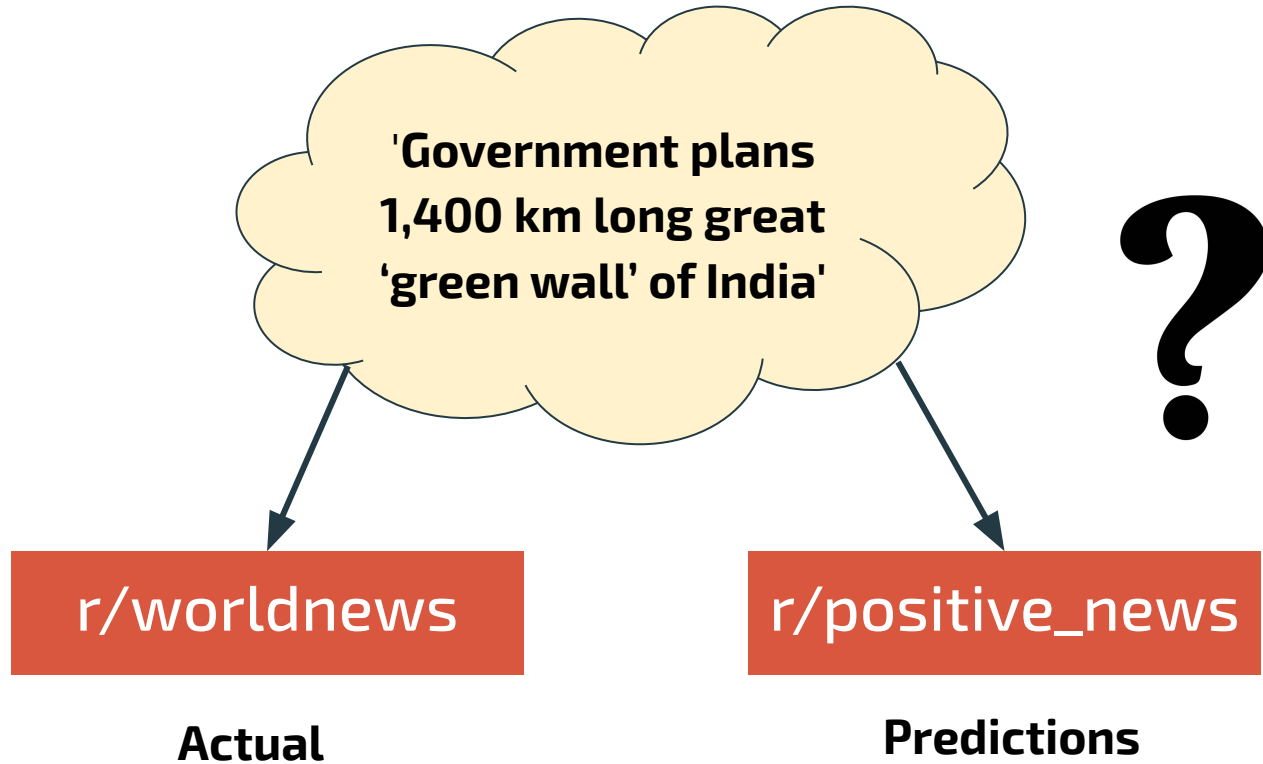
r/positive\_news

## Best Model: Naive Bayes Model

- ❖ Accuracy score to measure success
  - ❖ Misclassification are equally bad
- 86% Accuracy in Training set
- 96% Accuracy in Testing set



# What do you think?



# Recommendation

- ❑ **Overlap** between news titles
  - ❑ As shown in previous graphs
- ❑ **Improving** accuracy score by collecting more data
- ❑ There are different **keywords** in titles for positive news:
  - ❑ Climate change
  - ❑ Renewable energy
  - ❑ Fossil fuel