

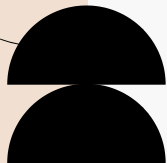


# Posts with the most (comments)

In the “climatechange” subreddit



Lara Strachan

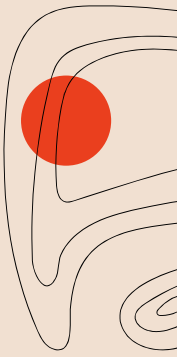
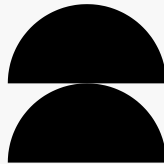


# What gets a post commented on?

topic | title | main text | link to external website

## Why does it matter?

Getting as much engagement as possible is critical for involvement and education around climate change.



# How and What



## Reddit Scraping

10k+ submissions collected  
from the r/climatechange  
subreddit



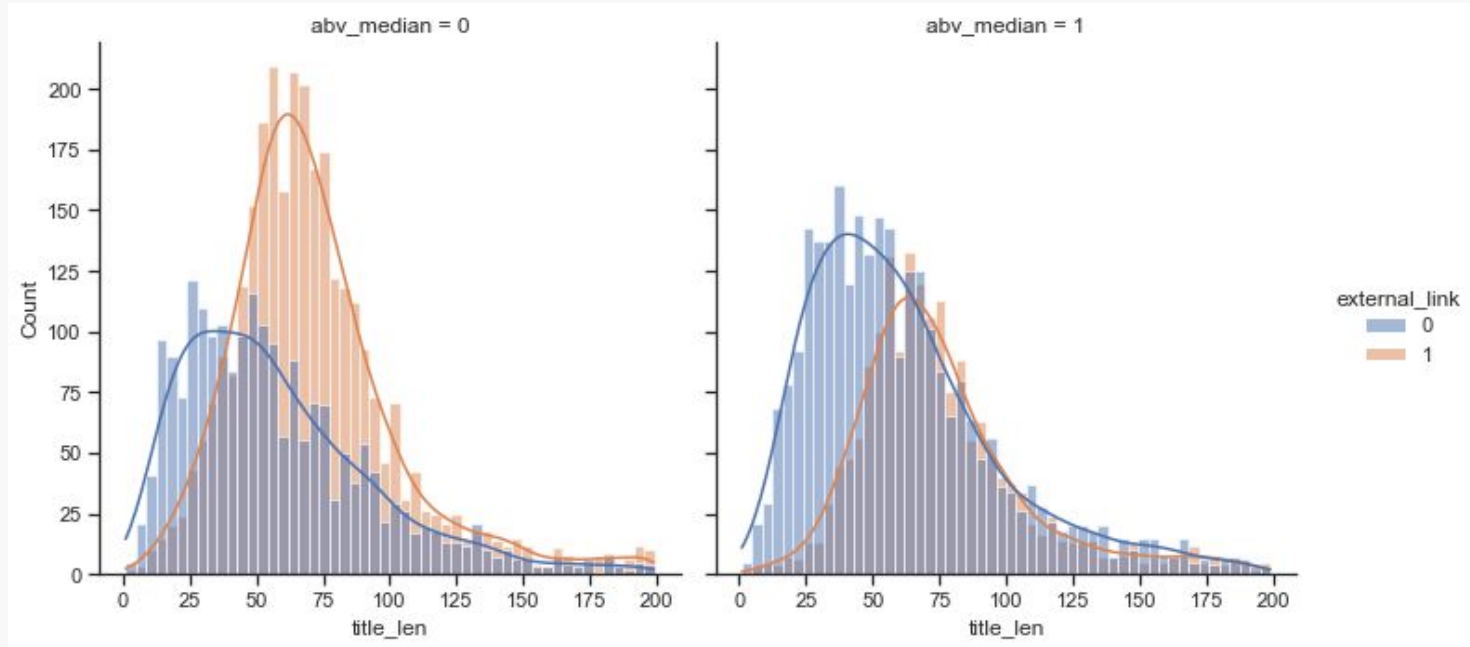
## Process and Model

Scraped data was cleaned,  
explored, engineered, and  
run through multiple  
models

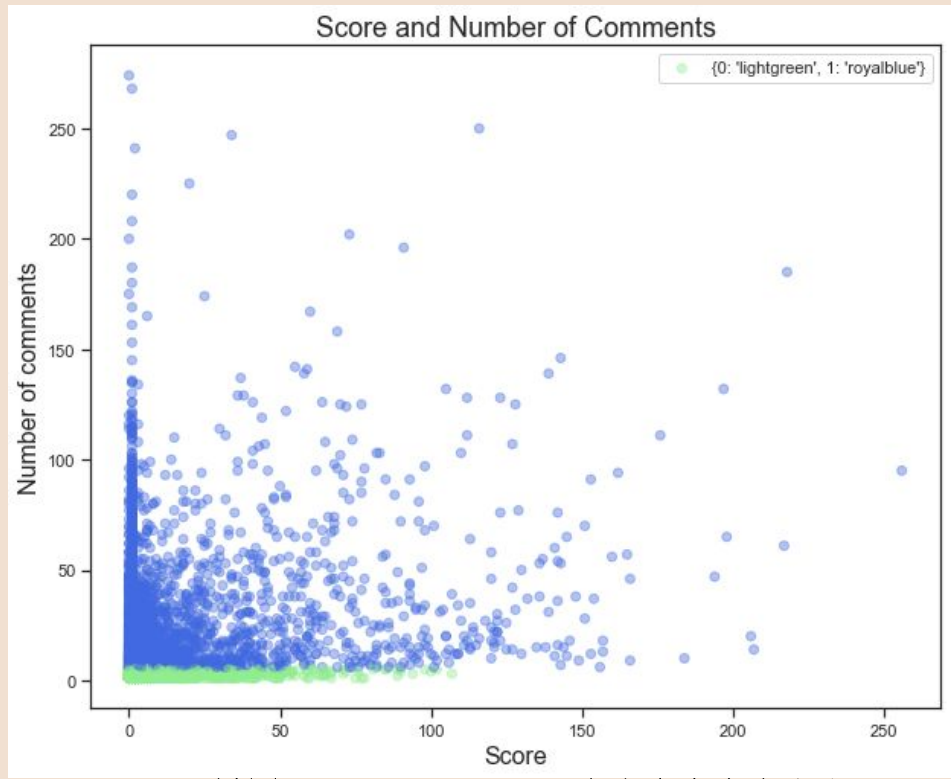


# Feature exploration

Title Length



This visualization suggests that posts that are NOT just external links are more frequently receiving more than the median of 5 comments.



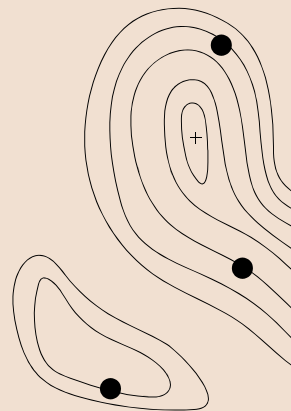
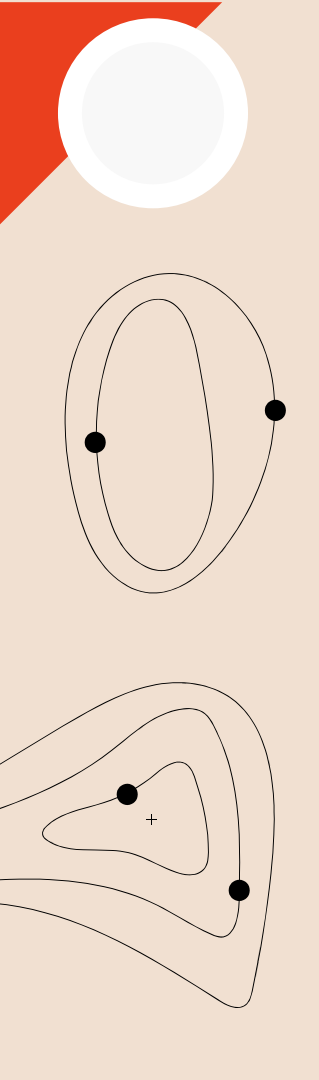
The majority of posts have both a score and total number of comments less than 50.



Baseline

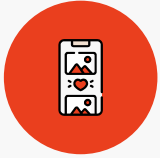
**52.5%**

Posts with 5 or fewer comments



# Title Text

**Normalize**



Remove  
non-alphanumeric  
characters

**Tokenize**



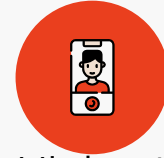
Separate words

**Stem**



Isolate word root

**Model**



Highest  
accuracy score  
was 59%

Words with largest feature importance from RandomForest:  
'what', 'co2', 'trump', 'question', 'are we', 'skeptical'



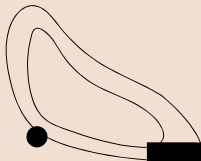
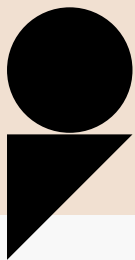


# Numeric Features

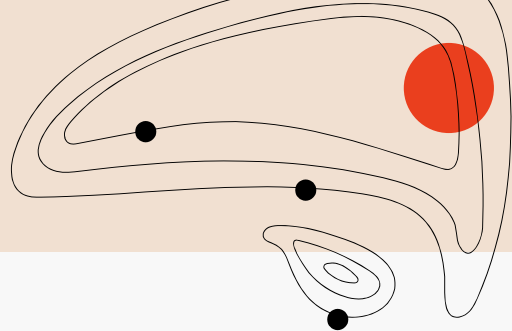
- Title length
- Body length
- Score
- External link y/n

	score	title_len	body_len	external_link
0	0.681998	0.098498	0.167752	-0.435614

Highest accuracy score was 63%



# Best Model



Used both title text and numeric features.

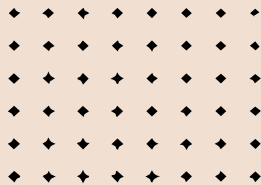
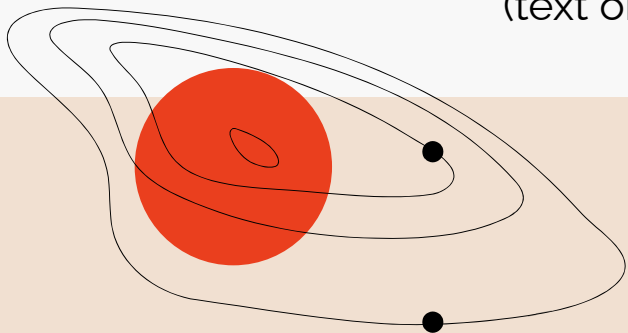
Count Vectorizer and TfidfTransformer to prepare text data

Standard scaled the numeric data

Logistic Regression

Accuracy score of 66.1%

(text only was 59% and numeric only was 63%)





# Conclusions

Using text AND additional features gave highest accuracy

Better at predicting when a post would \*not\* get more than 5 comments

Ask away! Questions get answers

Next steps:

Look at timing - day of week, time of year, around natural disaster

Original poster engagement

