Hot or Not: Creating Popular Reddit Posts

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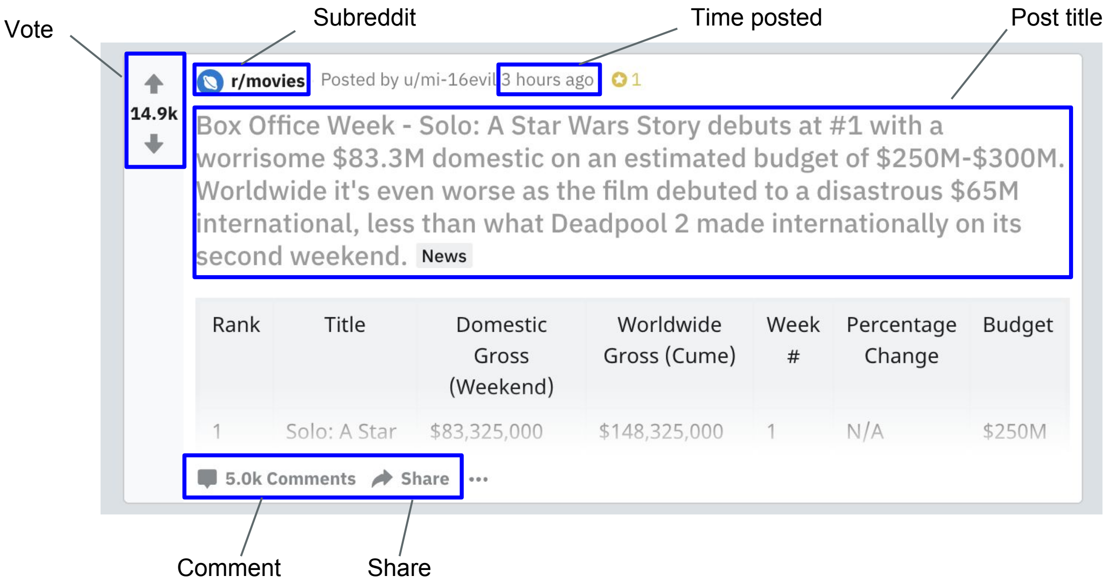
As the 6th most visited website in the world, Reddit has the power to spread content to the masses

Structure:

- Popular posts default homepage
- Subreddits for subject specific content

Engagement:

- Posts
- Comments
- Up or down vote
- Share



r/movies Posted by u/mi-16evil 3 hours ago

Box Office Week - Solo: A Star Wars Story debuts at #1 with a worrisome $83.3M domestic on an estimated budget of $250M-$300M. Worldwide it's even worse as the film debuted to a disastrous $65M international, less than what Deadpool 2 made internationally on its second weekend. News

Rank	Title	Domestic Gross (Weekend)	Worldwide Gross (Cume)	Week #	Percentage Change	Budget
1	Solo: A Star	$83,325,000	$148,325,000	1	N/A	$250M

What makes a post popular?

Using Reddit's open source API, 15k popular posts were scraped over a 7 day period

Data Science Problem Statement

What characteristics of a Reddit post are most predictive of the overall interaction on a thread (as measured by number of comments)?

Features Selected

- Post title
- Subreddit
- Post age (hours)
- Number of comments

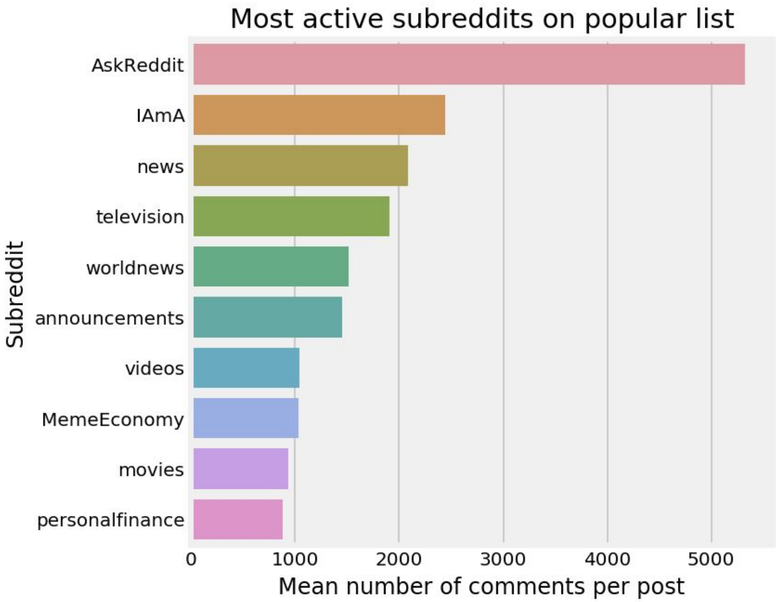
Target Classification

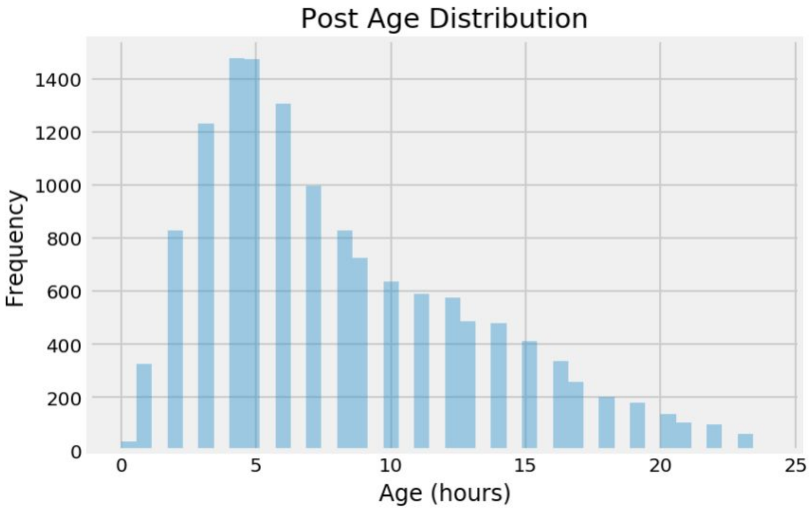
- High number of posts: above median
- Low number of posts: below median

Machine Learning Model

- Identify which features are indicative of a high number of comments based on scraped posts
- Will lead to recommendations for creating a new highly commented post

Data analysis revealed highly active subreddits and a shelf life for time spent on the popular list





Natural language processing is required to convert text features into numerics for use in modeling

Utilized Bag of Words NLP methods

- Frequency of words
- Common words are penalized
- Rare words have more influence

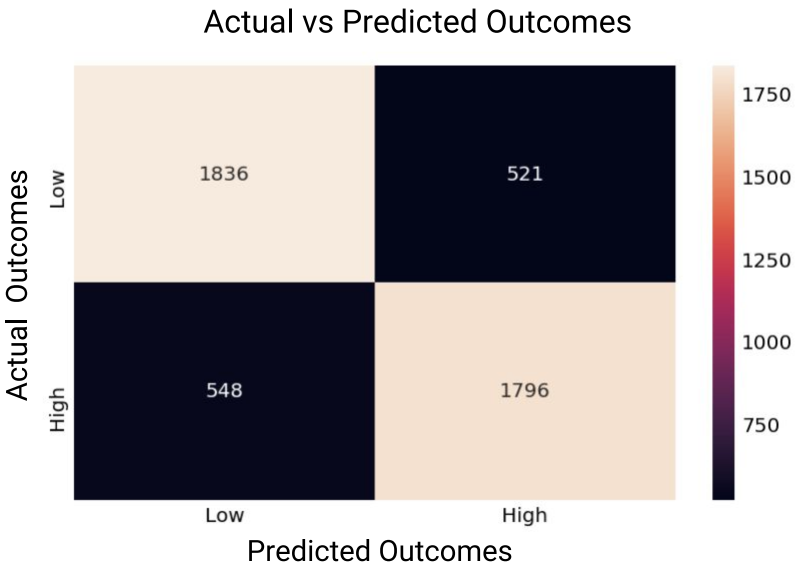
Reddit is a very popular website

1	0	1	1	0	1	1	0	1
very	dog	website	is	hot	Reddit	popular	not	a

Final model has 77% accuracy rate using subreddit, title, and post age as predictors

Key Takeaways

- Subreddit is the strongest indicator for how popular a post will be
- Some subreddits have more followers and thus a higher activity than others
- The odds of having a large number of comments increase the longer the post is on Reddit



Post to funny, FortNiteBR, and gaming subreddits to increase odds of creating a highly commented post

Top predictive post features

1. Gaming subreddit
2. FortNiteBR subreddit
3. Pics subreddit
4. Funny subreddit
5. Todayilearned subreddit

All subreddits, except FortNiteBR, are in the **top 20 most subscribed** to list

Next steps

- Create a post based on recommendations to test outcome
- Look at additional interaction features
  - Voting
  - Shares
  - Comment content
  - Post date and time
- Change target classification thresholds