



What Do We Do For A Trending Topic

Echo



Problem we are Solving

- The client is focus on printing product and promotional item industry with end-user based website, for Game of throne, what can he sell and how can he sell
- Is there anything people talk about can leads to products?
- What can I do for marketing?



To Solve:

- Use subreddit BranWinTheThone and SansaWinTheThone to get words people are using
- Build up classification model to find words with strong indication who is their supported leader





Data we have:

- 1 981 post from Sansa sub with all top comments
- 2 747 post from Bran sub with all top comments
- 3 After turn into words, we have a vector frame of 1728x6172
- 4 Combined in one Dataframe but label differently (Sansa for 1, Bran for 0)



Model Process

CV and TIFDF: Transfer words

Logistic , Random Forest, Multinomial,
Gaussian to predict the team

Model Performance

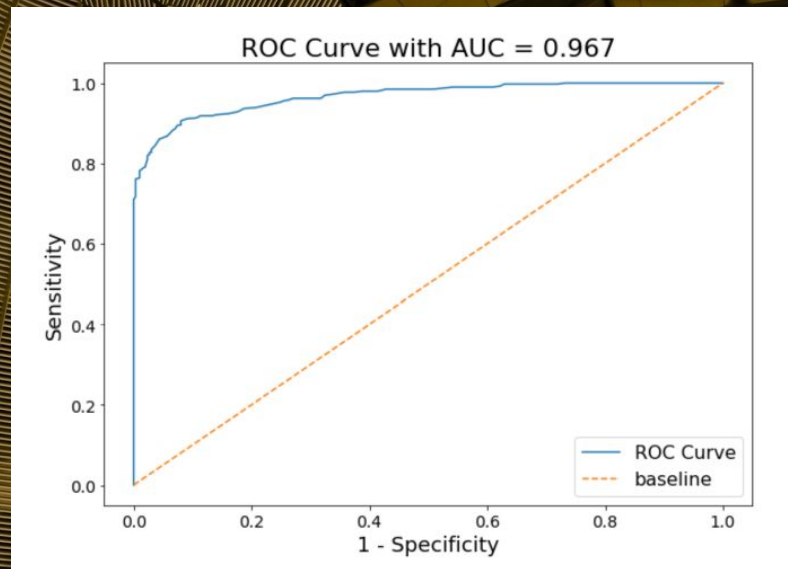
Based on the score, TIFDF with Logistic regression perform best

Test score

0.91(predicted 91%
of all outcomes)

Specificity: 0.9197

Sensitivity: 0.9033



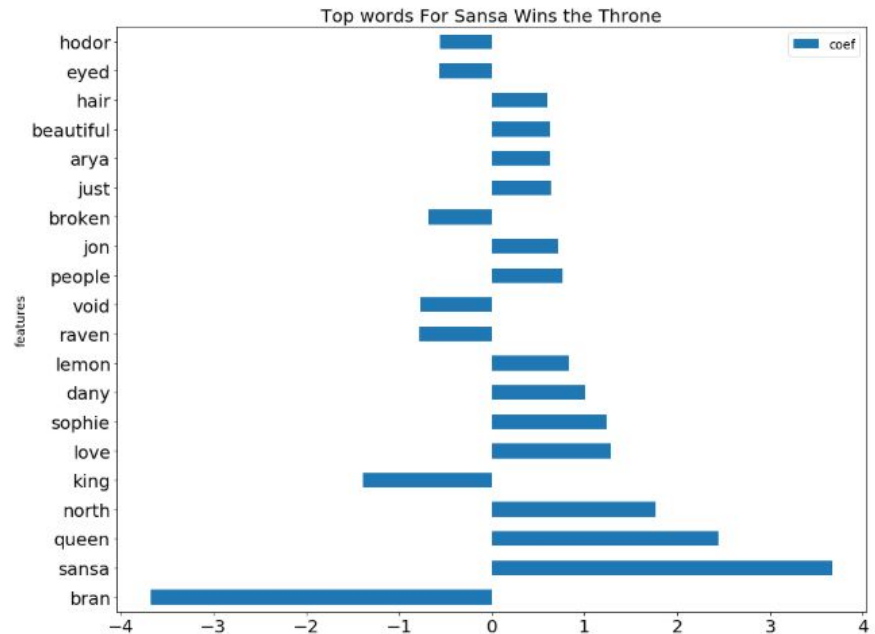


Top 20 words first round

“Sansa” :39 times as likely to show in “SansaWinsTheThrone”

“Queen”: 11 times as likely to show in “SansaWinsTheThrone”

“Bran”: 0.025 times as likely to show in “SansaWinsTheThrone”



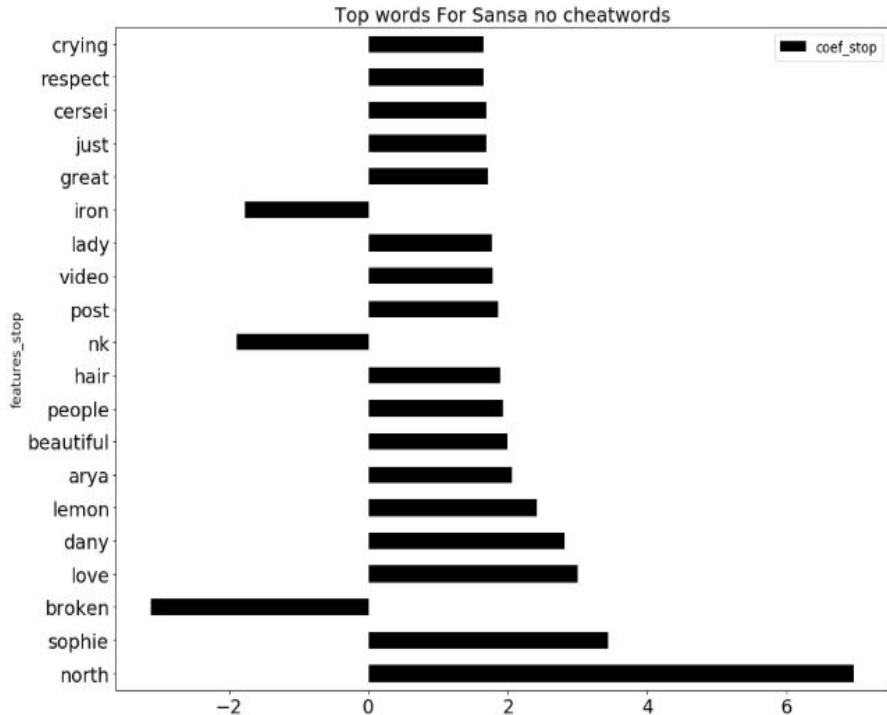
Cheat word: sansa, bran, queen, king, hodor, raven

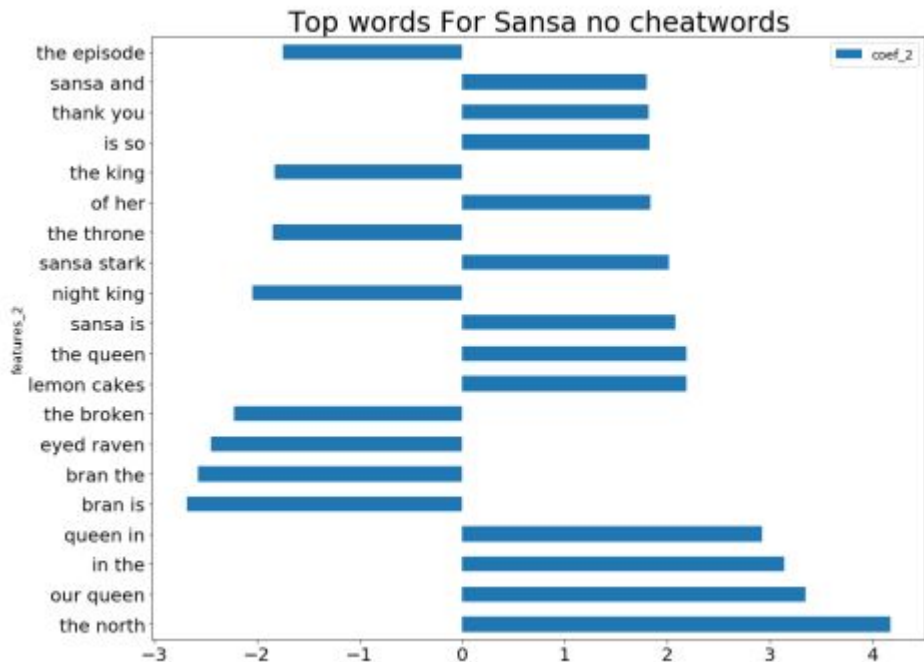


Words without cheatwords

North: 1061 times as likely to be on Sansa side

Broken: 0.04 times as likely to be talk about Sansa



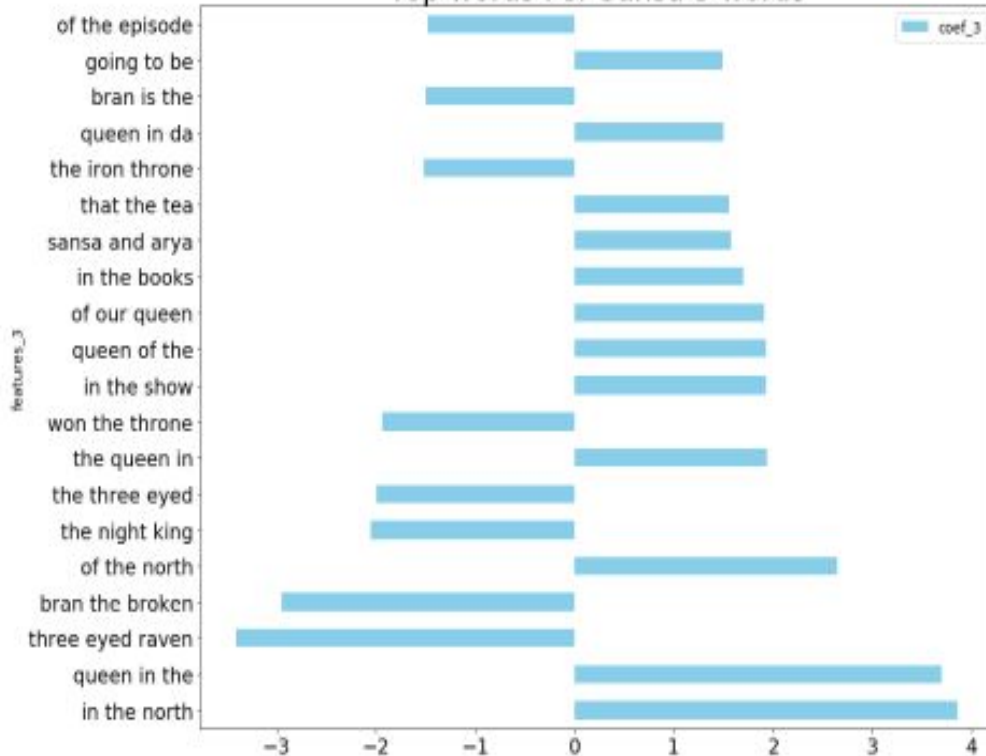


Two word phrases:

Looks like the expand of one word or part of 3 or 4 words: we need to explore more

Lemon cake and night king are the top pick from this round as they are something company can produce related product

Top words For Sansa 3 words



3 word phrase that can turn into product:

The iron throne

Sansa and Arya

Three eyed raven



Four words

Most of these phrases
are very interesting and
are great ideas for
stickers and T-shirts





Summary and Recommendation:

- We did find the working classification model that filtered out words with strong emotion on either side
- We can use the one word and two word phrase to buy ad words for website pop up on reddit
- We can also develop product (posters, souvenirs, toys based on two word or three word expressions
- For word word phrases as they have strong emotion with it, we can put them on large posters, stickers or T-shirts
- We can compare more candidate if this is a practical approach



Thank you.

