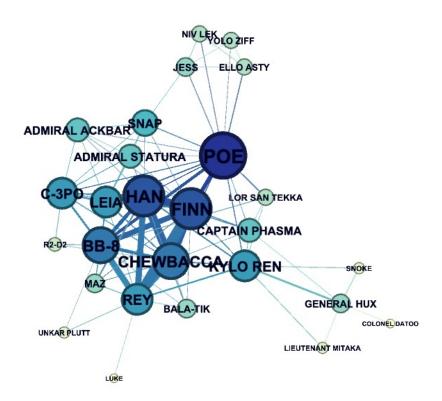
STAR WARS SENTIMENT ANALYSIS PROJECT REPORT

Star Wars is a legend that has been popular since the 1980s. We still wait for the new movie of this legend to come out. From kids to adults everyone knows what Star Wars is in worldwide. However, most people know Star Wars with the old characters and old story. Ten years after Episode III, Star Wars introduced new characters and a new story in 2015 with Episode 7, The Force Awakens. I guess that with the innovated version of this legend, producers are trying to maintain continuity. But, to satisfy people, they need to build new characters carefully and make them as favorable as the old ones.

Here, with this project I provided a wide perspective about people's judgement by showing the results of twitter users' comments about new heroes.

Initially, by looking at the network analysis of the seventh movie, I first tried to pick out new dominant characters from the new movie. I first take the json data and organize it by using R to make it suitable for Gephi to analyze. By creating network graph via Gephi, I picked Poe, Rey and Finn from the network by considering their degree measures.



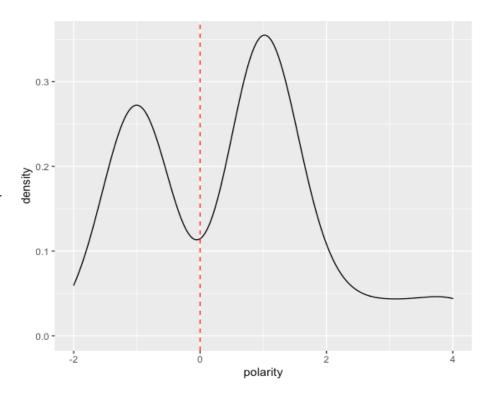
Then, I investigated whether people love these characters. From the results of the sentiment analysis, I put some graphs of them.

FINN

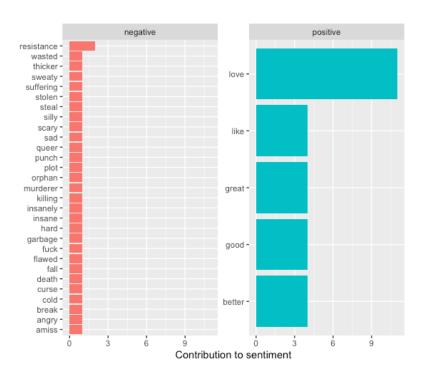
```
dat %>%
inner_join(get_sentiments("bing")) %>%
count(word, sentiment, sort = TRUE) %>%
acast(word ~ sentiment, value.var = "n", fill = 0)
%>%
comparison.cloud(colors = c("red", "blue"),
max.words = 100)
```



rey_counts %>%
group_by(sentiment) %>%
spread(sentiment, n, fill = 0)
%>%
mutate(polarity = positive negative) %>%
filter(abs(polarity)<10) %>%
ggplot(aes(polarity)) +
geom_density(alpha = 0.3) +
geom_vline(xintercept=0,
linetype="dashed", color = "red")+
ggtitle("Polarity of Rey
Comments")

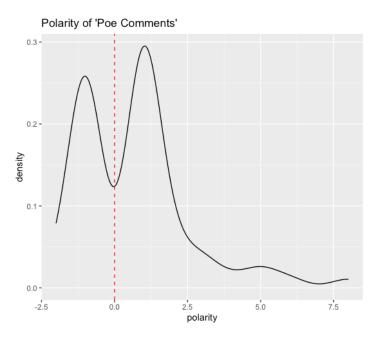


rey_counts %>%
 group_by(sentiment) %>%
 top_n(5) %>%
 ungroup() %>%
 mutate(word = reorder(word, n)) %>%
 ggplot(aes(word, n, fill = sentiment)) +
 geom_col(show.legend = FALSE) +
 facet_wrap(~sentiment, scales = "free_y") +
 labs(y = "Contribution to sentiment",
 x = NULL) +
 coord_flip()

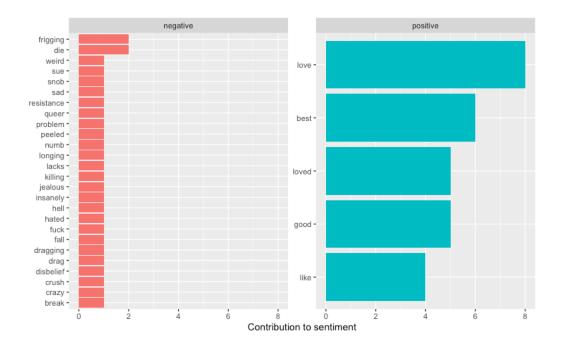


- We can see high frequency of positive comments about him. However, we need to keep in mind that for lexicon does not provide a perfect analysis regarding especially some words. For example, it takes words "insane", "resistance" as negative which can be used to support positive comments and on the other hand generic words "like", "work", "well" are considered as positive.

POE

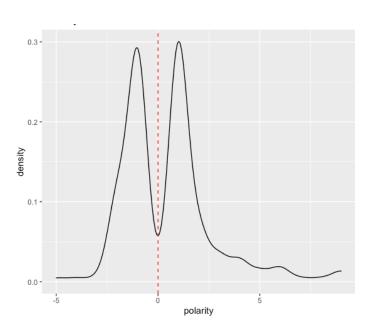




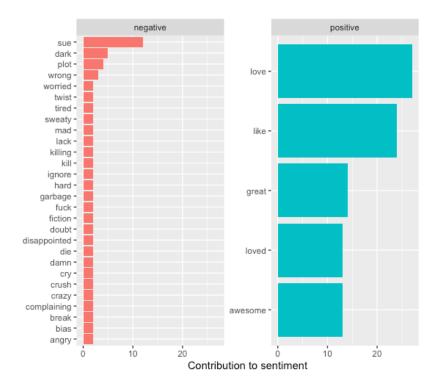


- Poe has also quite more positive feedbacks than negatives as clearly seen from polarity graph.

REY







- And here, there are quite equally distributed positive and negative comments about Rey.

CONCLUSION

Even though the fans are emotionally connected to the old characters who still have their roles in the new movie, the production was very successful at creating even more favorable new characters.