



Draftkings Twitter NLP Analysis



***We believe life's more alive with
skin in the game.***

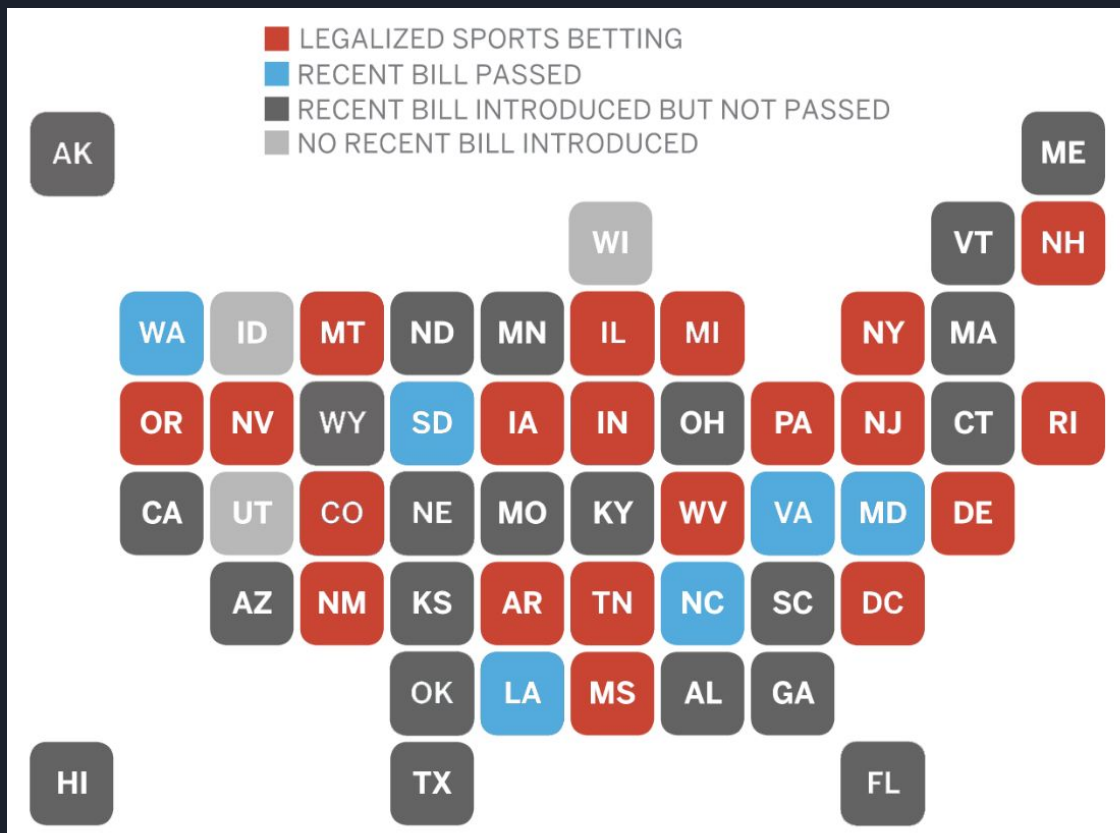
- DraftKings

Hi, I'm @LindaCho.

My first sports bet was as the #KentuckyDerby in 2017 @ChurchillDowns
#bucketlist #fascinatorsarebetterthanhats

My love for data applies to pondering about horse data.

This is me with skin the game debating on #AlwaysDreaming 🐾,
#PracticalJoke 🐾, and #IrishWarCry 🐾 for the win. Or go for the
#TRIFECTA 🐾 🐾



#checkyourstate #isitlegal
#lookup #ifnot_probablysoon



@Background

#Daily fantasy sports

#Sports betting

#Online casino gambling

@FanDuel -
The
Competition





@DataSnapshot

@DraftKings

Twitter API Search: #DraftKings, #DraftKings_bet,
#DK_Assist, #DKSportsbook, #dks, #DraftKingsNews,
#dkuk, #DraftKings_AUS, #DKCasino

Dates: 24 NOV - 01 DEC

8931 x Tweets

→ filter: anomaly retweets
→ 5257 Tweets

2795 x unique users

→ filter: common users
→ 1071 exclusive users

@FanDuel

Twitter API Search: #FanDuel,
#FDSportsbook, #FanDuelSupport

Dates: 24 NOV - 01 DEC

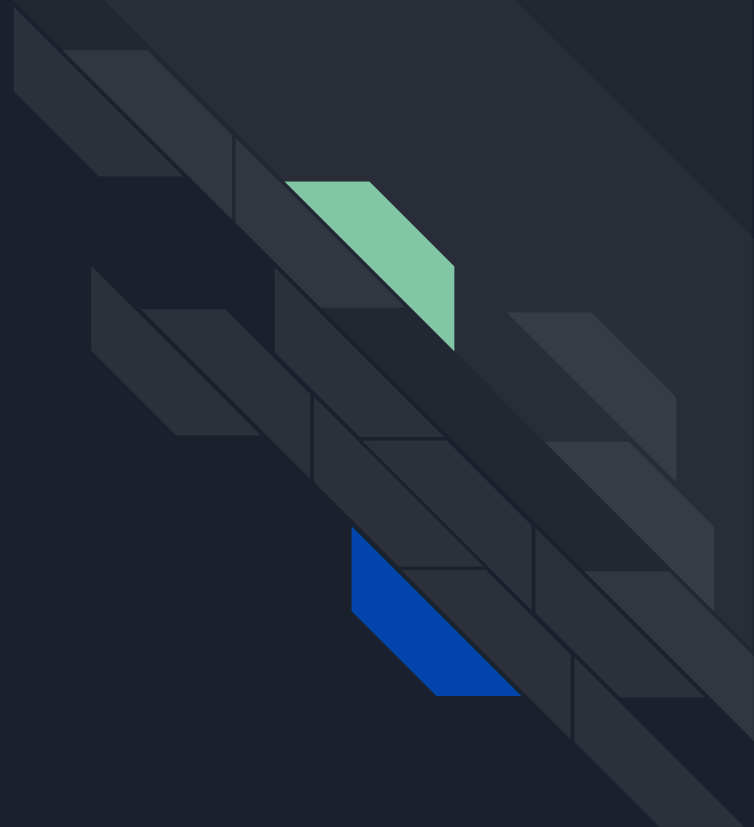
5748 x FanDuel Tweets

→ filter: anomaly retweets
→ 4319 Tweets

2076 x unique users

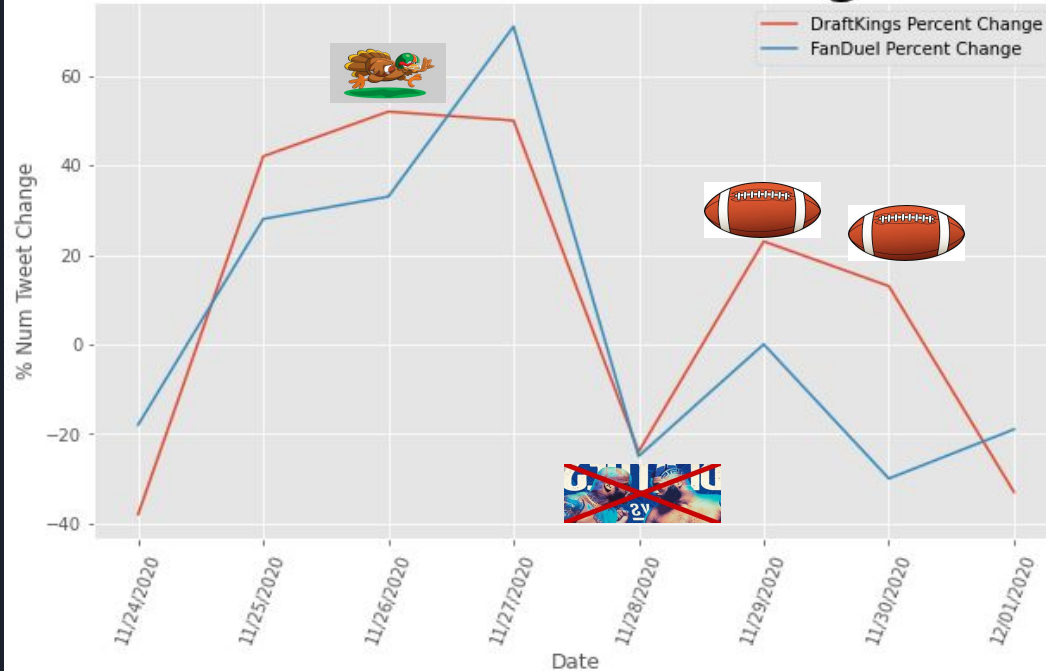
→ filter: common users
→ 352 exclusive users

@EDA



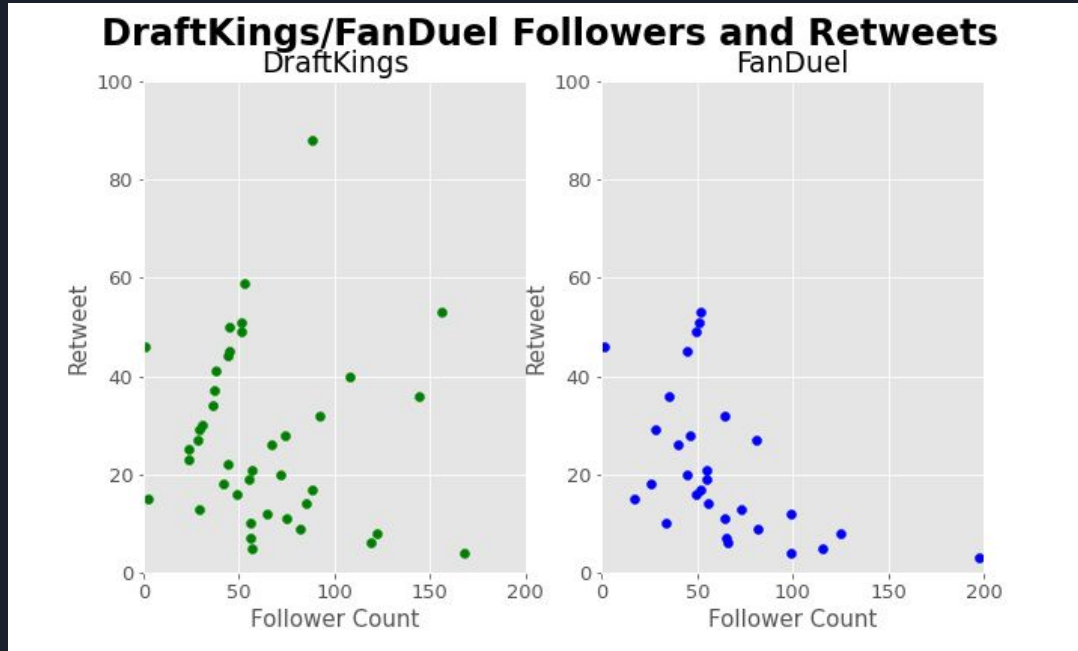
@NumTweets

Number of Tweets Percentage Change



#risetogether #falltogether #draftkingsbettertho
#Thanksgiving #canceledUFC #COVID #NLFMon,Thurs,Sun

@Influencers



#notagoodpredictor

#botsretweet

#enticewithcash

Honorable Mentions Not Shown:

@MONEYGANGJAMES1 (632 Reweets)

@VegasSyndicate (251Reweets)

@MONEYGANGJAMES1

Tweet Text: LISTEN UP FRIENDS & FAMILY:
INVEST! THE 2020 PANINI PRIZM FOOTBALL
DRAFT PICKS HOBBY BOX IS ALMOST SOLD
OUT!

Username Sample:

[6FOH1jCQse8a36v, xOykg6JWBHEXW2V,
3Cqy8i2BfJXFUFf, WqAWRnBYSZVL2zD,
UqJlu3c68vuEaXv]

Source: Twitter Web App

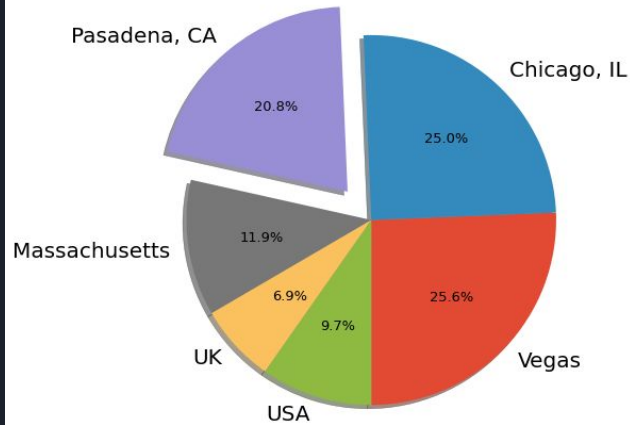
Takeaway: This one tweet is 7% of all tweets



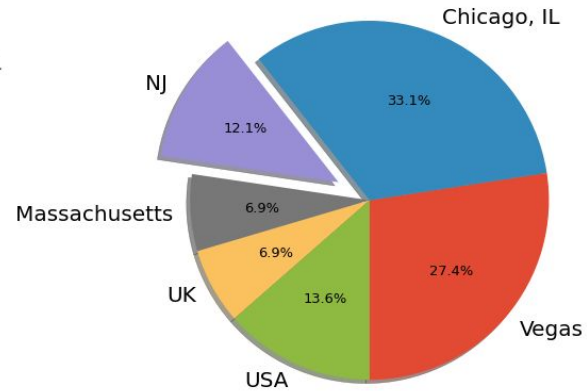
@byLocation

Top User Location

DraftKings



FanDuel

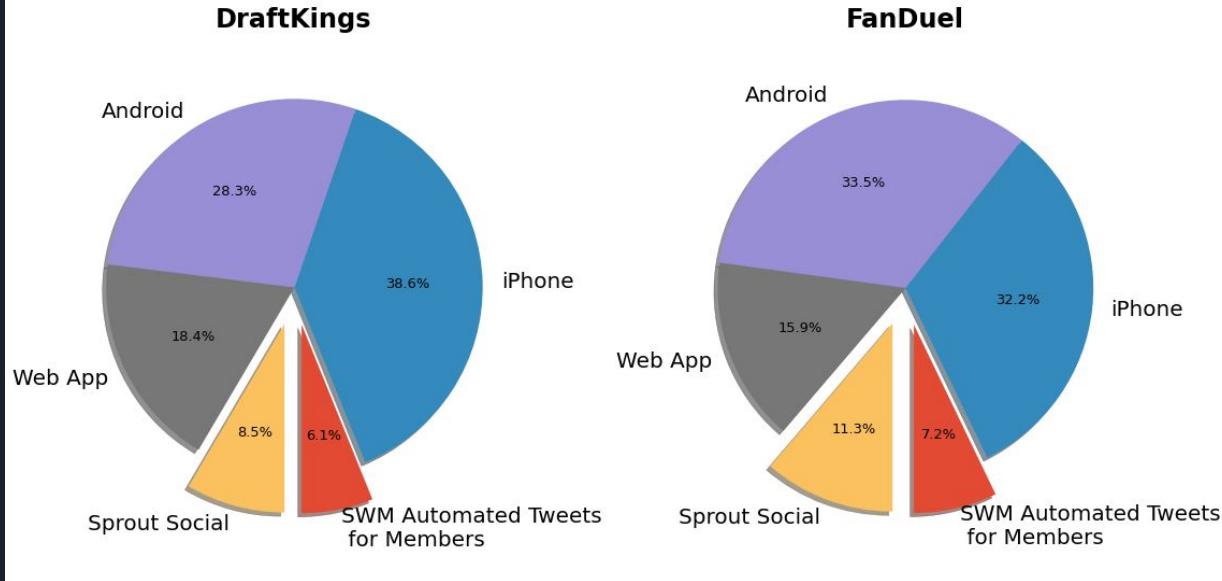


#reps30%oftweets

#almostthesame

#proportionsANDlocation

Top 5 Twitter Source Device



#reps85oftweets

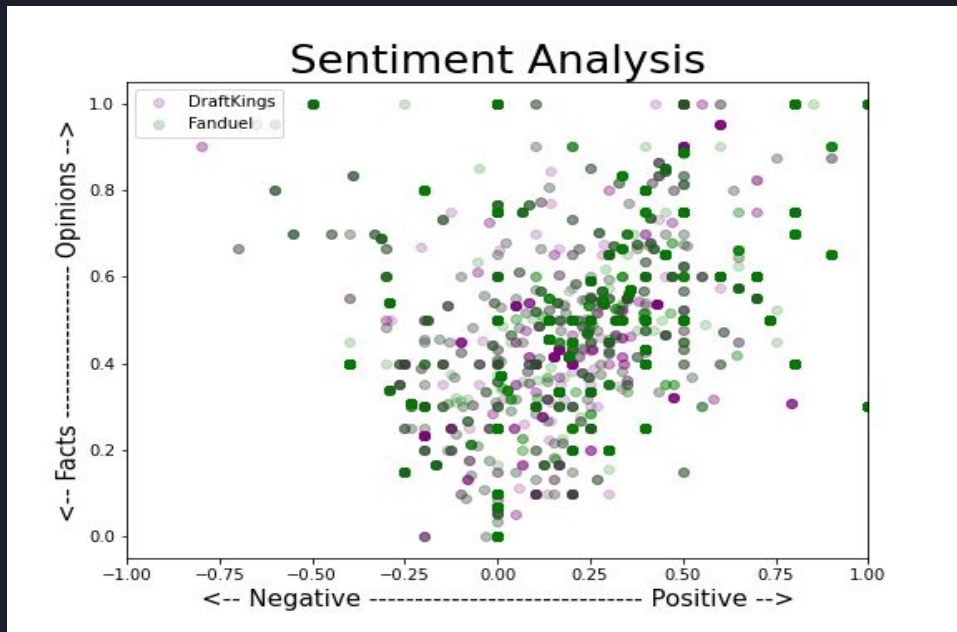
#automatedretweets

#scalecustomergrowth

@Awesomo

@Sportswatch1

@SentimentAnalysis



'DK Polarity Mean: 15.46'

'DK Subjectivity Mean: 27.19'

'DK Polarity Variance: 8.08'

'DK Subjectivity Variance: 8.03'

'FD Polarity Mean: 16.21'

'FD Subjectivity Mean: 27.93'

'FD Polarity Variance: 8.45'

'FD Subjectivity Variance: 8.51'

#prettyclose #mostlypositivesentiment

#DKslightlylessvariance



@TopicModeling with NMF

#TFIDFVectorizer

#ThreeTopics

Promotion, 73%

Picks/Bets, 18%

Upcoming Game, 8%

#ReconstructionError: 69



@Topic Guess - Promotions



b'RT @dailysportpickz:
NFL 4:05 PM Only DFS
Giveaway Get the
Premium Line for \$4 |
DM US :) We are giving
away our NFL 4:05
ONLY Lineup

b'Introducing the 1st
HandsDownDFS
Follower Freeroll. We
will be hosting a free
#DraftKings contest for
the Week '

b"NFL DFS **Seahawks** v.
Eagles - 11/30 We hit
Cash'd! A perfect Week
12 ; NFL DFS record:
34-20 DM for more
Information

b'RT
@GirlNextDoorBet: im
on the JETS .. retweet
for my 4 pm
pick#barstool
#draftkings #fanduel
#freepicks
#gamblingtwitter



@Topic Guess - Picks and Bets



b'12/02 (201169)
MANSFIELD TOWN vs.
(201170) CAMBRIDGE
UNITED

#guaranteedpick
REALBOBBASPORT

#retweetbotinfluencers

b'RT @SportsWatch1:
12/01 (625) SOUTH
DAKOTA UNIVERSITY
vs. (626) Nebraska

#guaranteedpick
REALBOBBASPORTS
#marchmad

b'RT
@TheGambleGuy_GG:
Which one of my #DFS
guys had AP in the
lineup today?
#TeamPicksCity has
everyone covered!

#PromotionsOverlap



@Topic Guess - Upcoming Game



b"RT @dailysportpickz: If the **Eagles win Tonight** on #MNF against the **Seahawks** I'll give someone who RTs this **tweet** and **follows** Me \$100 on **Venmo**"

#Overlap with promotions

b'Put money on the **@eagles** to cover **tonight**. Public going to get hammered chasing the **@Seahawks**

#Overlap with bets



@Conclusion

#TOOsimilar, #NEEDtoDistinguish - DraftKings is very similar to FanDuel and should consider more ways to distinguish themselves on social media. Most tweets include hashtags for both companies

#Promoters - 73% of the tweets related to promotions to sell game picks/lineups or products

#TopicOverlap - Overlap between all topics, especially 'Promotions' and 'Picks and Bets'

#Future Research - Analyze the images/GIFs in addition to tweet text for more insight

#CheckoutMyCode @https://github.com/choski23/DraftKings_Twitter_NLP