

# Harris Blitzler Sports & Entertainment

Drexel Datathon 2022 - Informaniacs

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# OBJECTIVE

**UNLEASH THE DEVILS – NJ DEVILS  
ON SOCIAL MEDIA**

# Research questions

1. Optimal period for marketing and sponsorship acquisition.
2. Reputation of the team based on the sentiment of tweets.
3. Players with high mentions in tweets are likely to bring more sponsorship / brand awareness for the team.

# METHODOLOGY



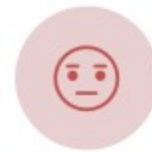
RESEARCH  
QUESTION



TEXT MINING



TEXT  
ANALYSIS



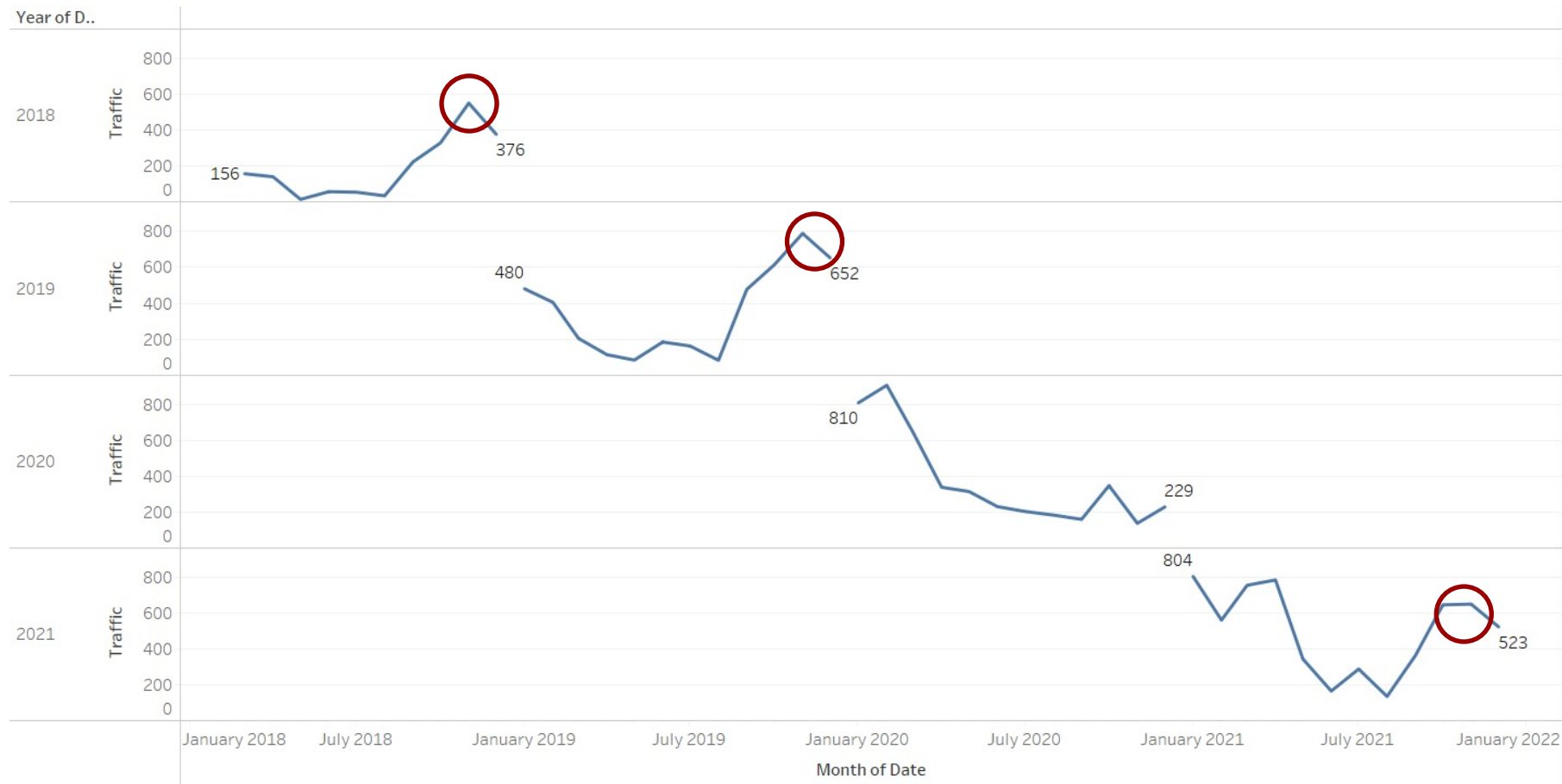
SENTIMENT  
ANALYSIS



CONCLUSION

# Tweet traffics from 2018-2021

Tweet traffic per month



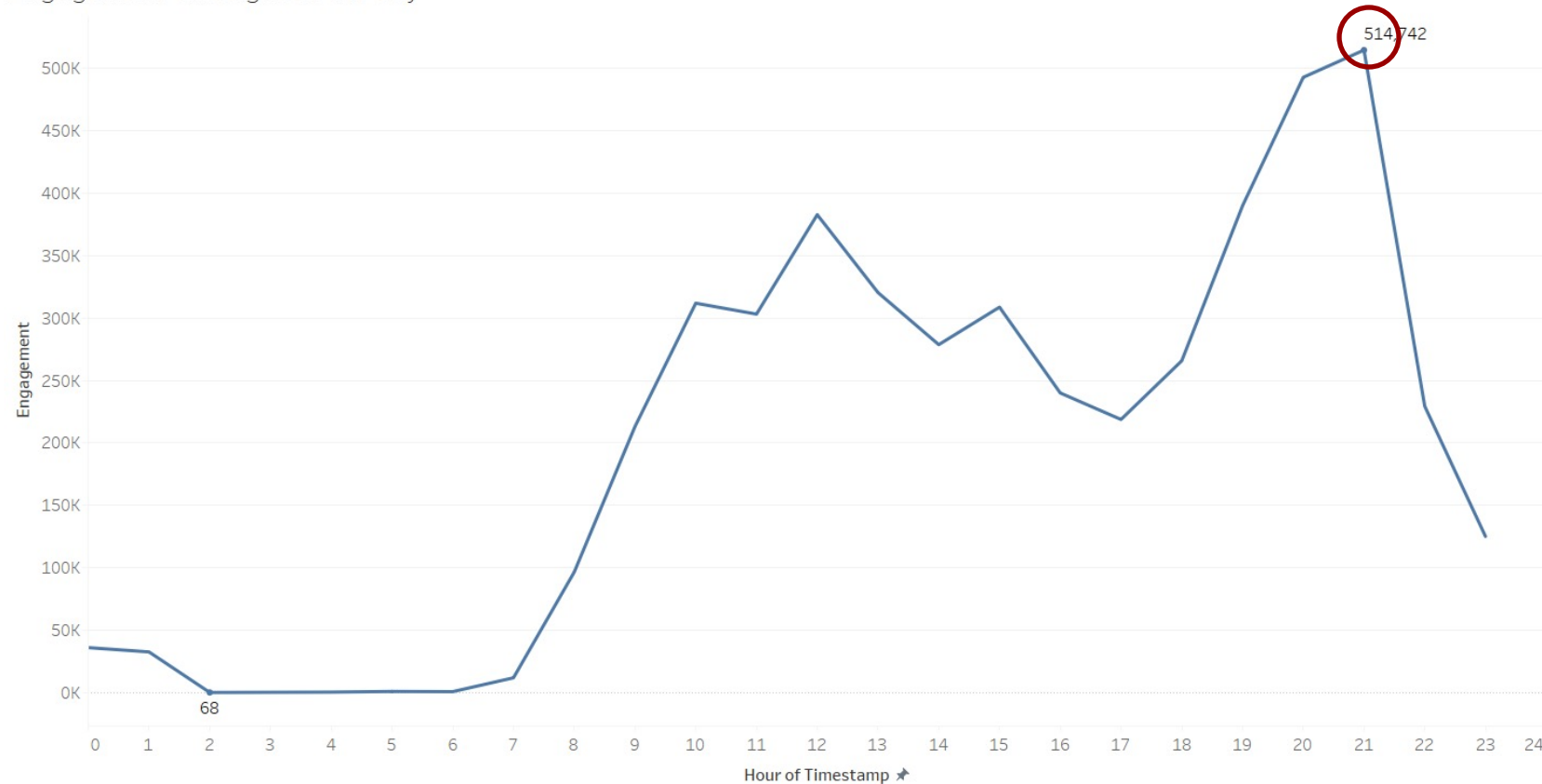
- Traffic is usually highest at the end of the year (around Oct – Nov), with the exception of 2020 due to Covid-19

The trend of count of in for Date Month broken down by Date Year. The view is filtered on Date Year, which keeps 2018, 2019, 2020 and 2021.

○ : Highest traffic periods

# Hours that have highest impact in the day

Engagement throughout the day



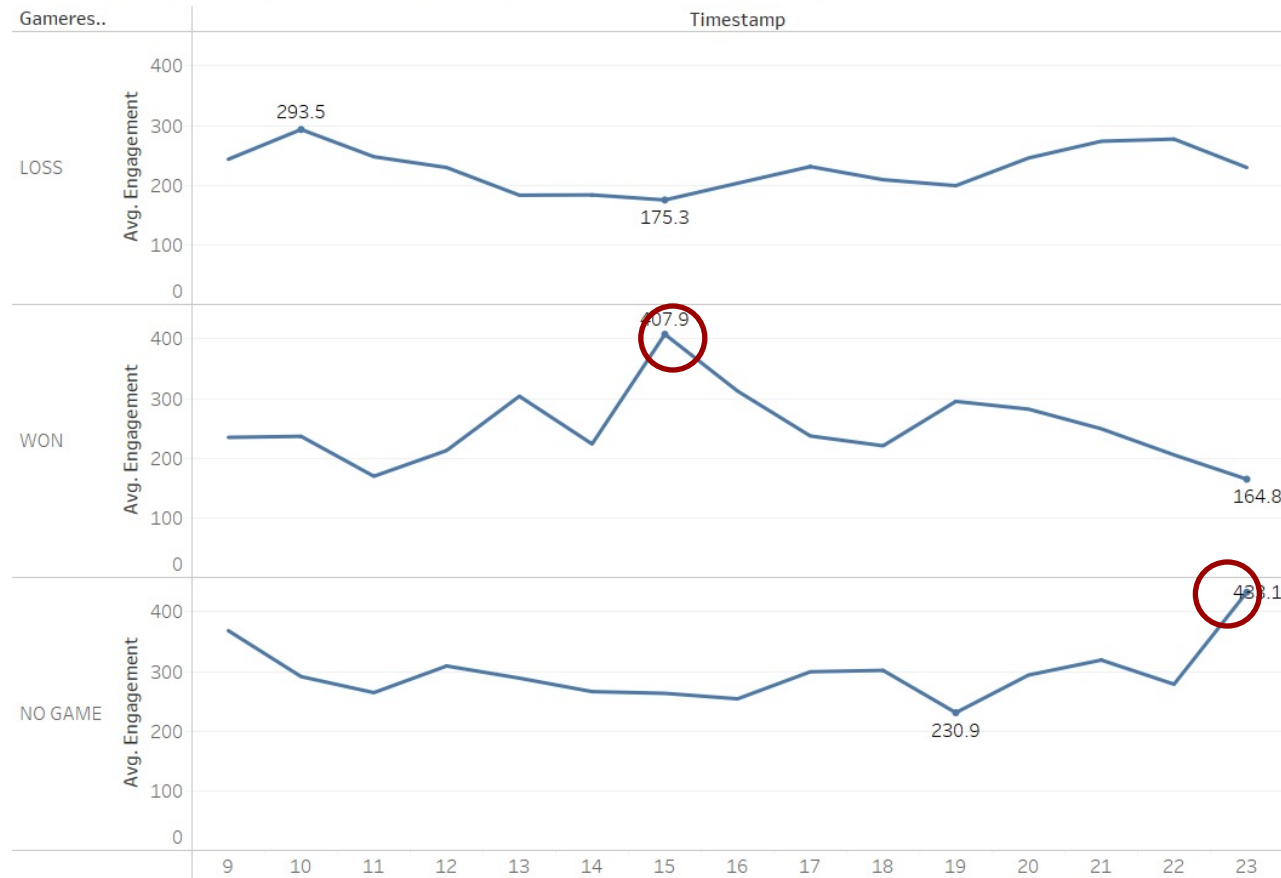
- Within the hours of the day, traffic is usually highest at 20:00 – 22:00

The trend of sum of Engagement for Timestamp Hour.

○ : Highest traffic periods

# Hours that have highest impact in the day

Average impact by hours in the day - filtered by win/loss/no game day



The trend of average of Engagement for Timestamp Hour broken down by Gameresults. The view is filtered on Timestamp Hour, which keeps 15 of 23 members.

- ❑ Winning Matches: Average impact is highest surprisingly at 15:00 PM.
- ❑ Losing Matches: Impact stays the same
- ❑ No Game days: Highest at 22:00 – 23:00 PM

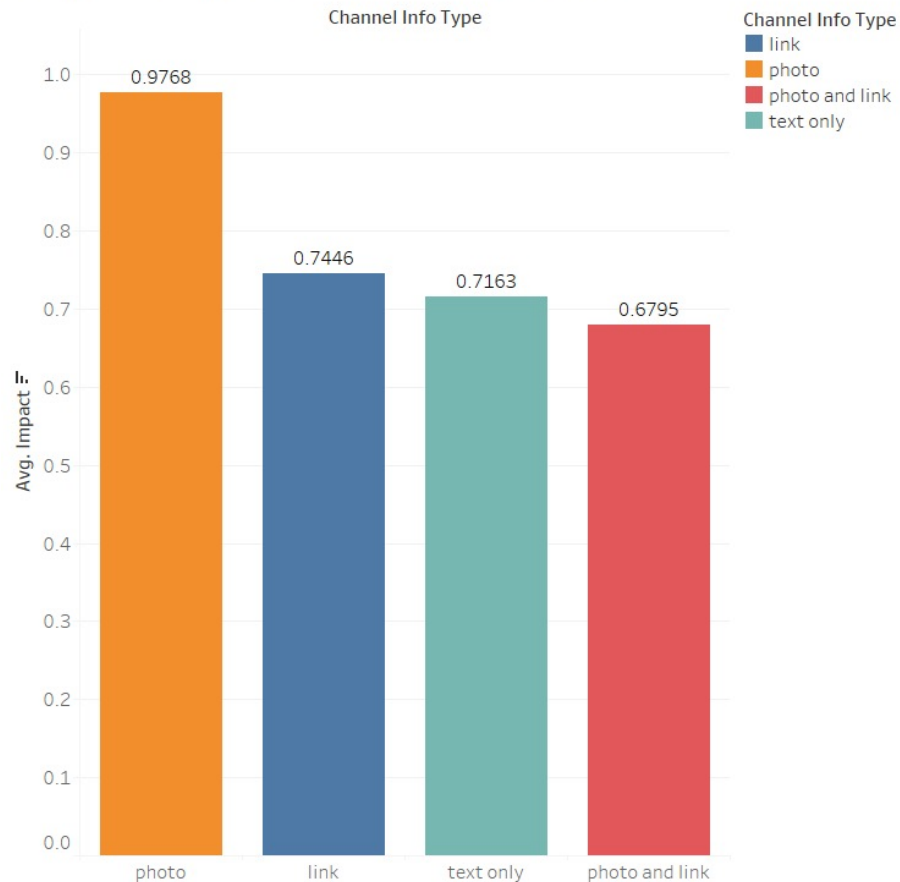
Opportunities:

- ❑ Need to engage on twitter more during losing matches.

○ : Highest traffic periods

# Impact of different types of tweet

Comparing impact of different tweet types



Average of Impact for each Channel Info Type. Color shows details about Channel Info Type.

- ❑ Tweets with photos only has the highest average amount of impact.
- ❑ Other types of tweets have approximately equal impact.

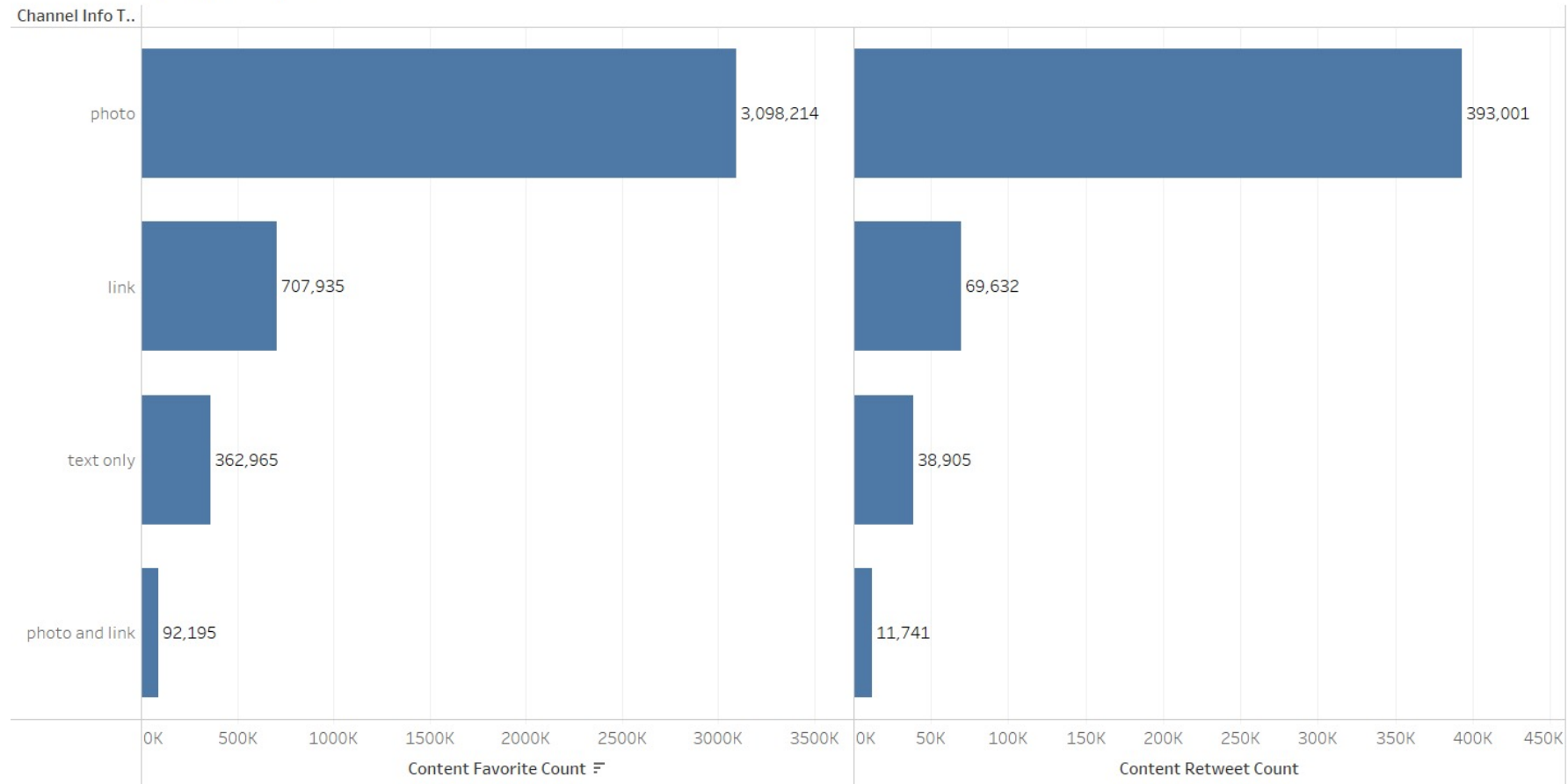
## Opportunities:

- ❑ Tweets should include images that captivates fans to interact.



# Content Favorite and Retweet

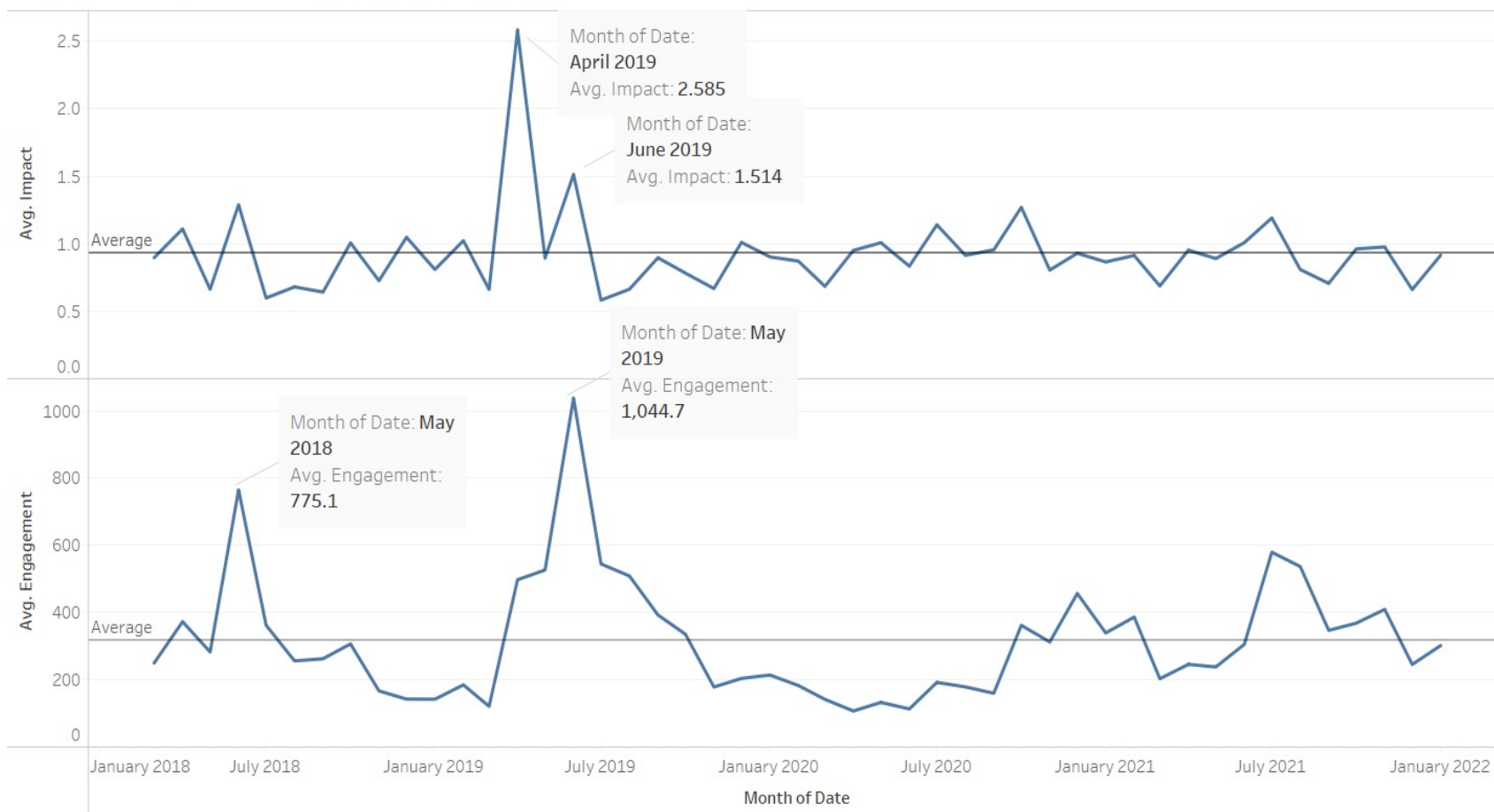
Favorites by type of post



Sum of Content Favorite Count and sum of Content Retweet Count for each Channel Info Type.

# Engagement vs. Impact throughout the year

Engagement vs. Impact throughout the year



The trends of average of Impact and average of Engagement for Date Month.

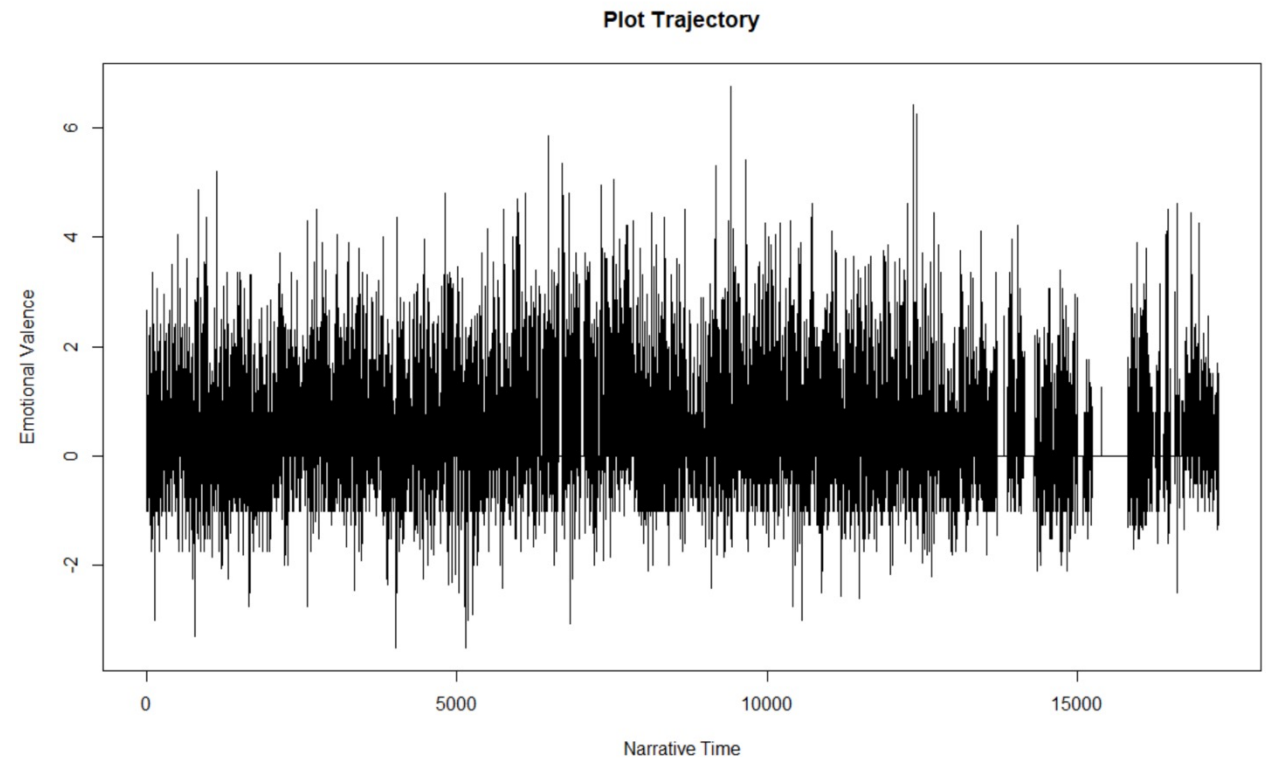
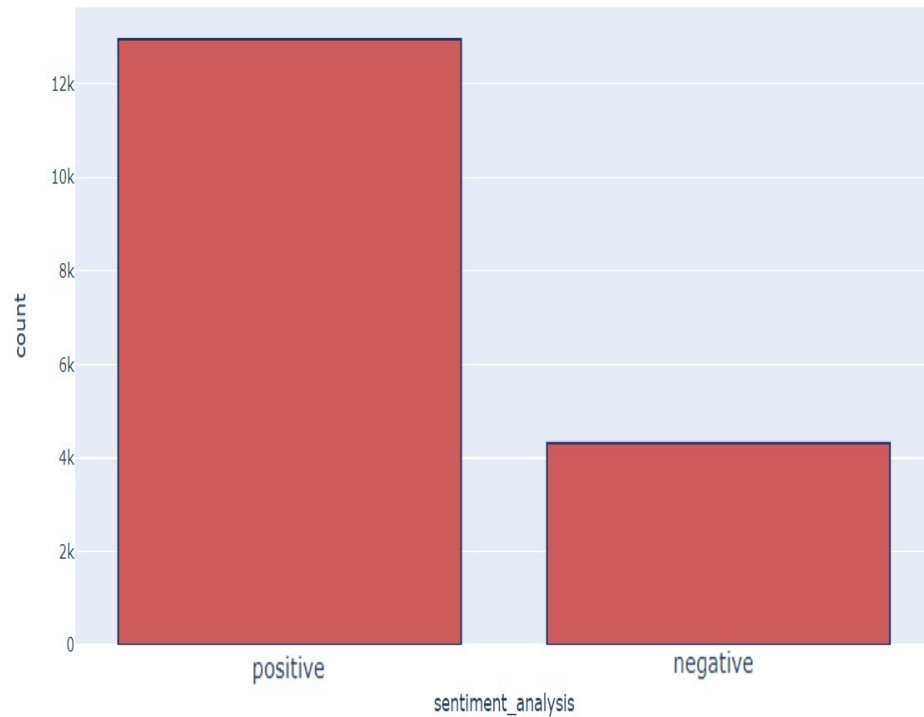
- ❑ The National Hockey League hosted the Stanley Cup playoffs from April to June, which might explain the spike in engagement/impact in April 2019.
- ❑ Users mostly engage in the beginning and the end time of the season

## Opportunities:

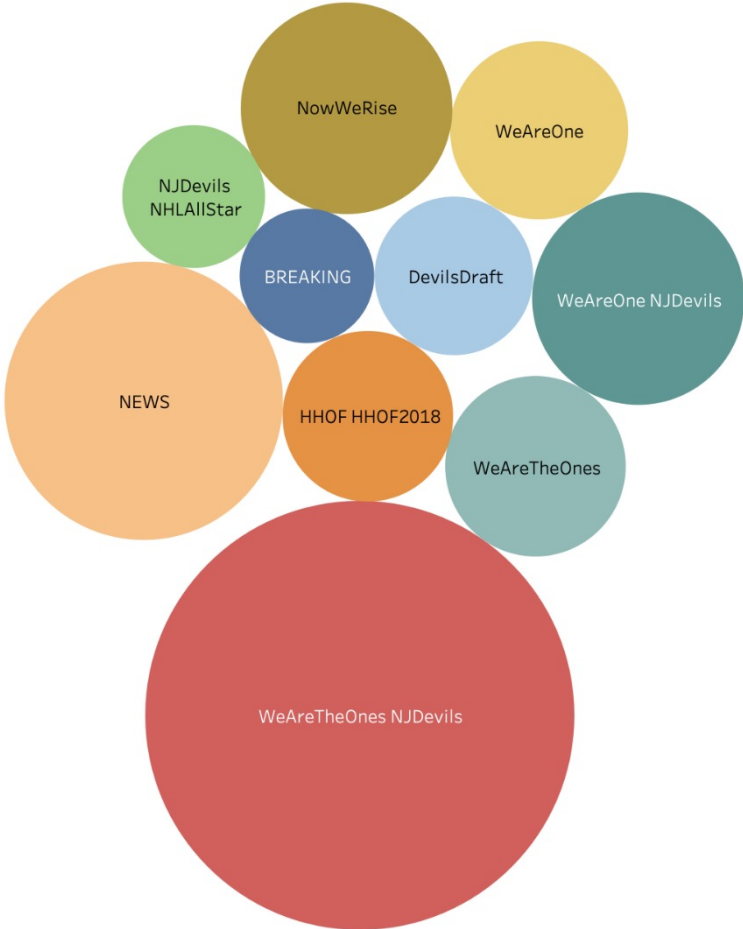
- ❑ Setting higher KPIs during tournament playoffs to maximize engagement.

# Sentiment of the tweets

- ❑ Overall, the sentiment of the fans in the tweets is positive over 3 years.
- ❑ Win/loss percentage is about 41:59 – meaning fans have strong support for the club despite inconsistent performance.



## Popular hashtags / word phrases

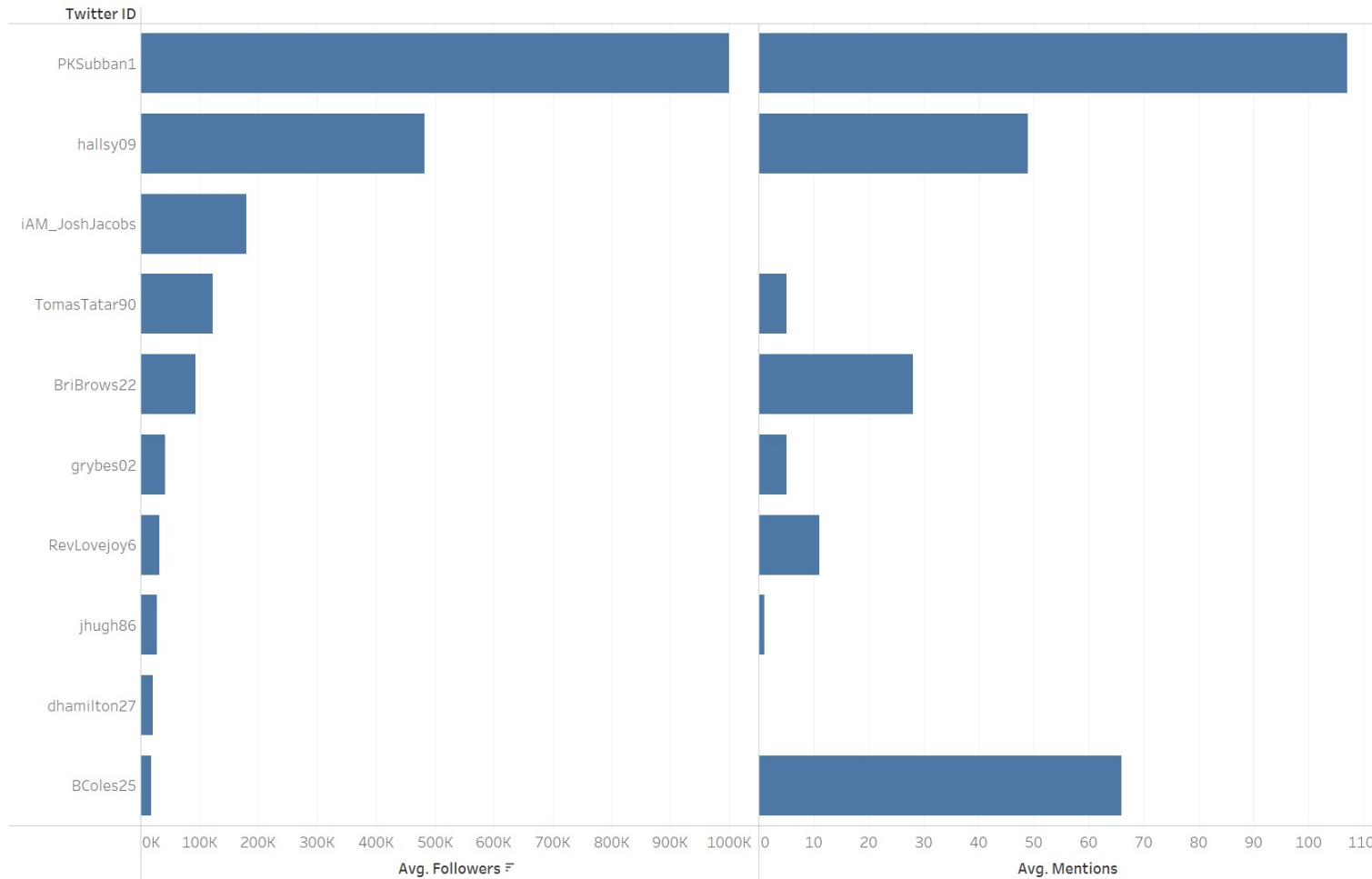


- ❑ Highest frequency hashtags are NJDevils, NowWeRise and WeAreTheOne.
- ❑ Advertising placements should contain these catch phrases as they are catching on and trendy.



# Player Popularity vs. Utilization

Players Popularity Vs Utilizations



- ❑ Some of the players are mentioned frequently in twitter, but their social media's presence is less.
- ❑ More active player would gain more social media attractions / advertisements / sponsorships.

THANK YOU