



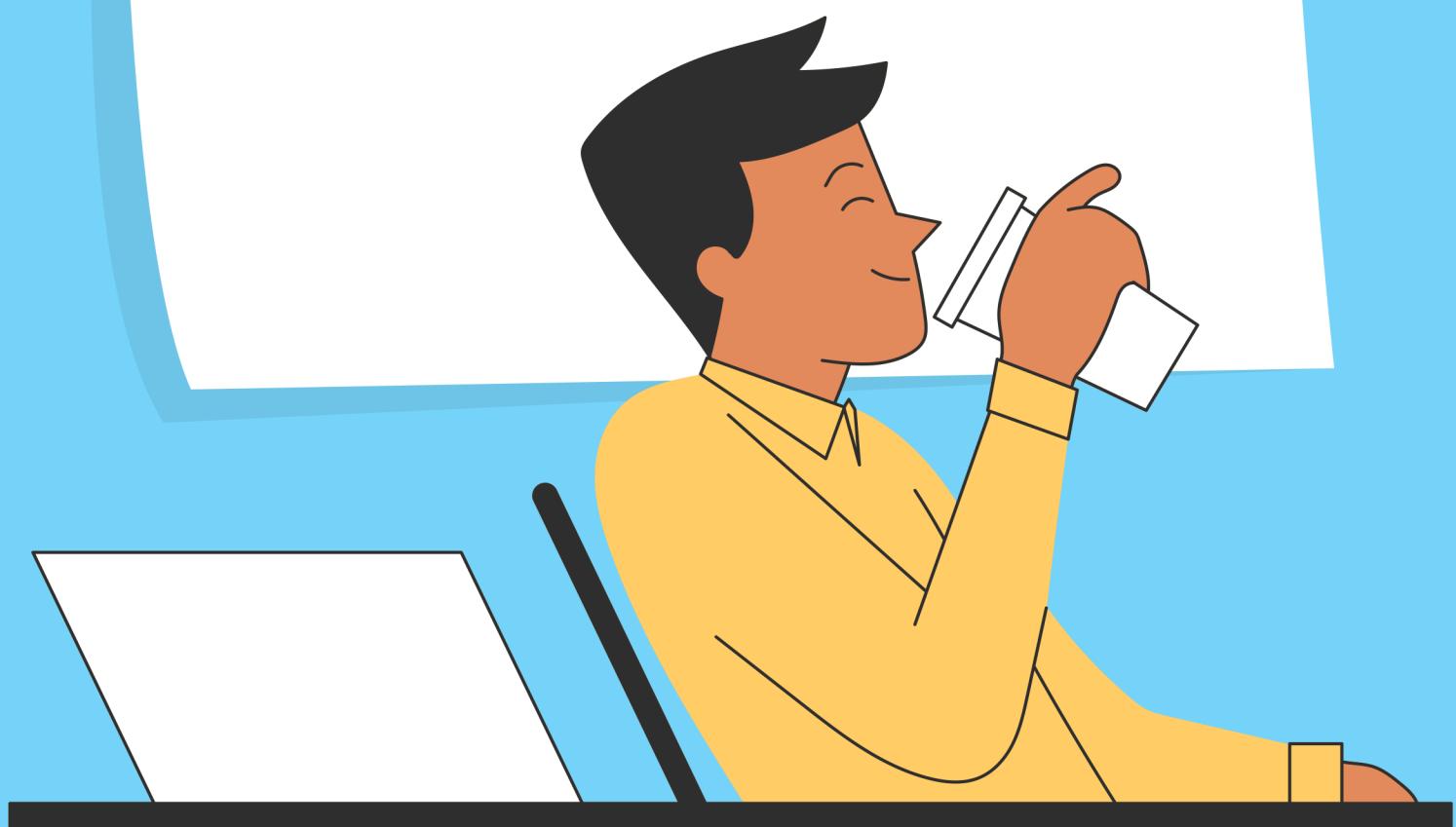
# TWITTER SENTIMENTS

Max Ross  
JD Mentz



Understanding  
what people  
mean when  
they speak.

# TODAY'S AGENDA



1 Project Goals

2 Data Used

3 Model Performance

4 Conclusions

5 Next Steps

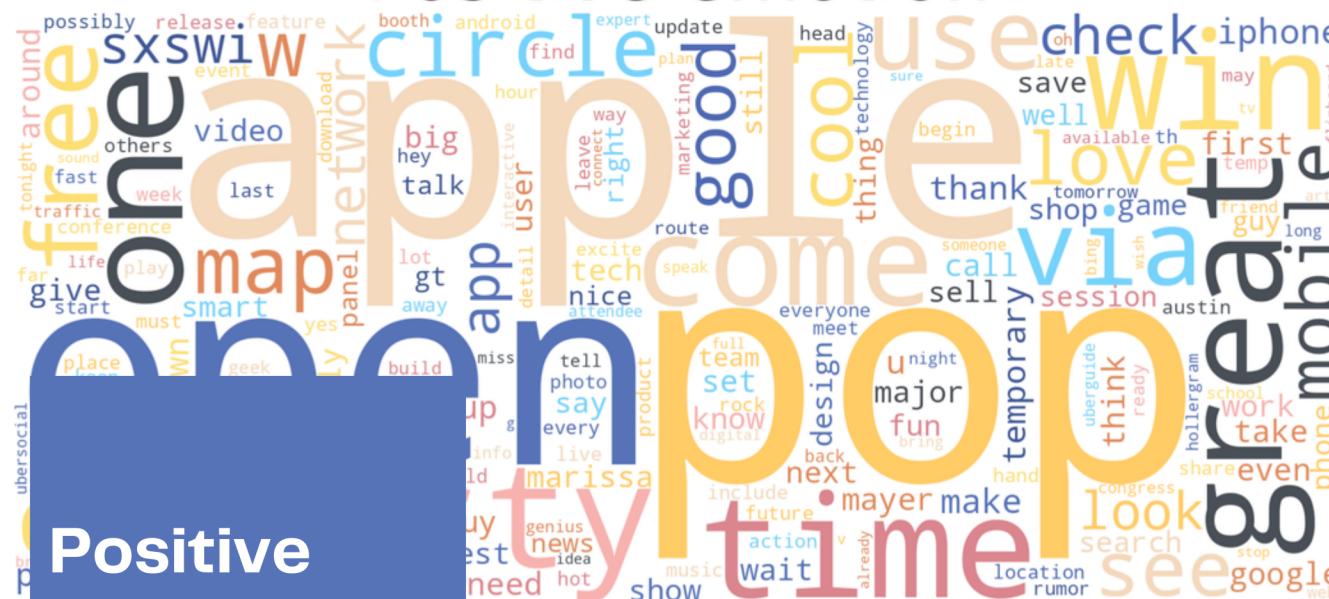
# PROJECT GOALS

Create a model that can classify tweet sentiment in order to identify product concerns.

- 1 Categorize
  - 2 Understand
  - 3 Predict

# How do we determine sentiment?

# Positive sentiment?



# Negative sentiment?



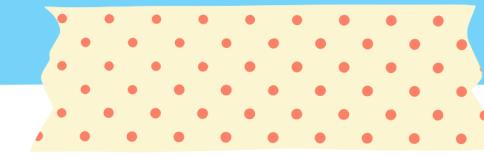
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# DATA OVERVIEW

Provided by Flatiron School

Originally Collected by Appen

<https://data.world/crowdflower/brands-and-product-emotions>



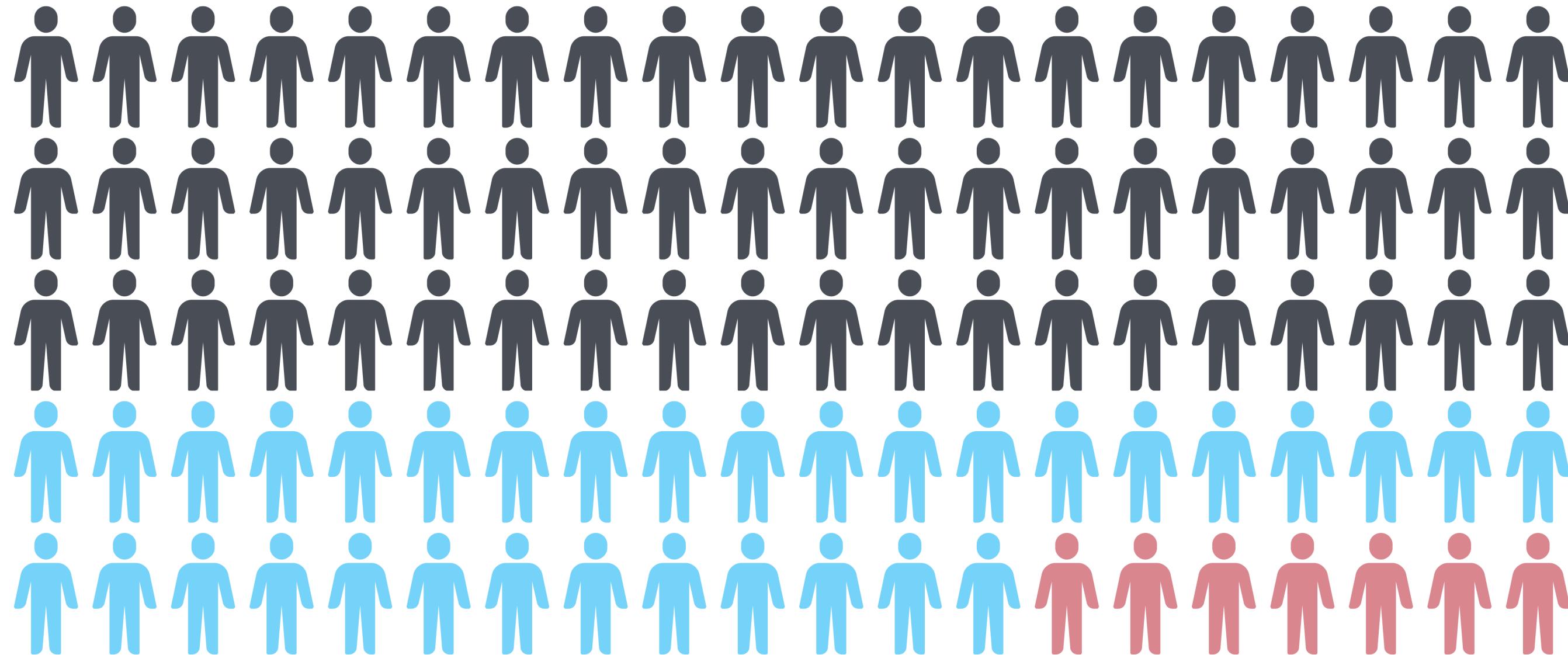
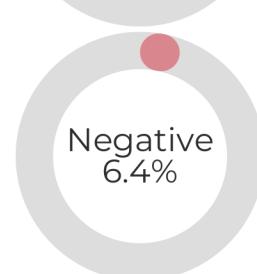
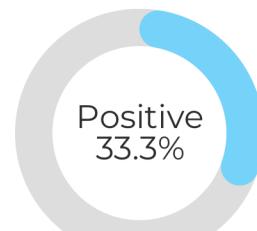
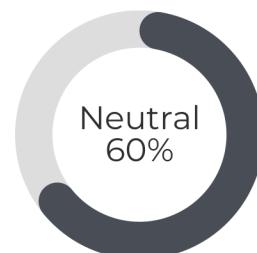
## Twitter Brand and Sentiment Data

Text of ~9100 Tweets

Human-Analyzed Tweet  
Sentiments

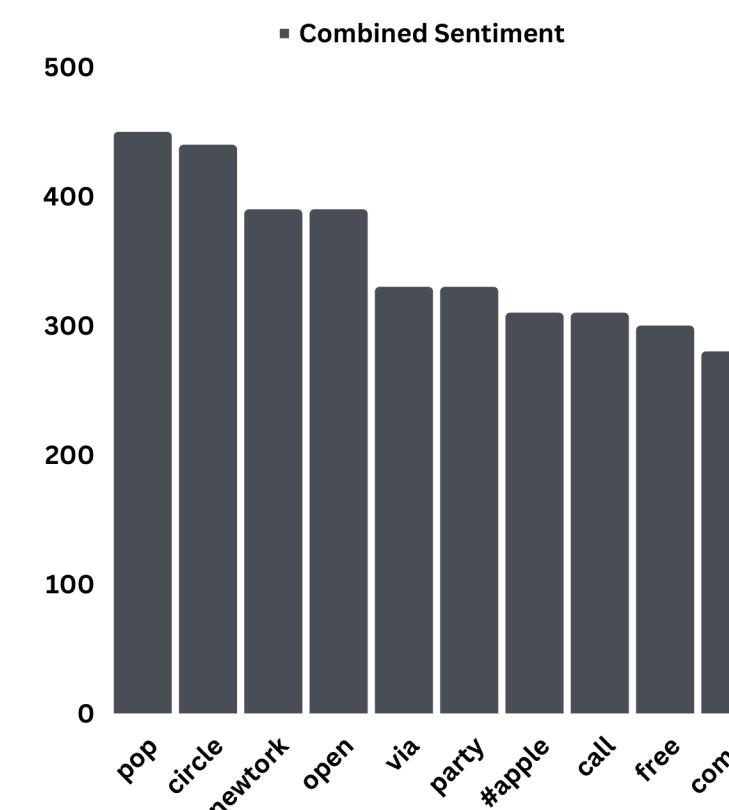
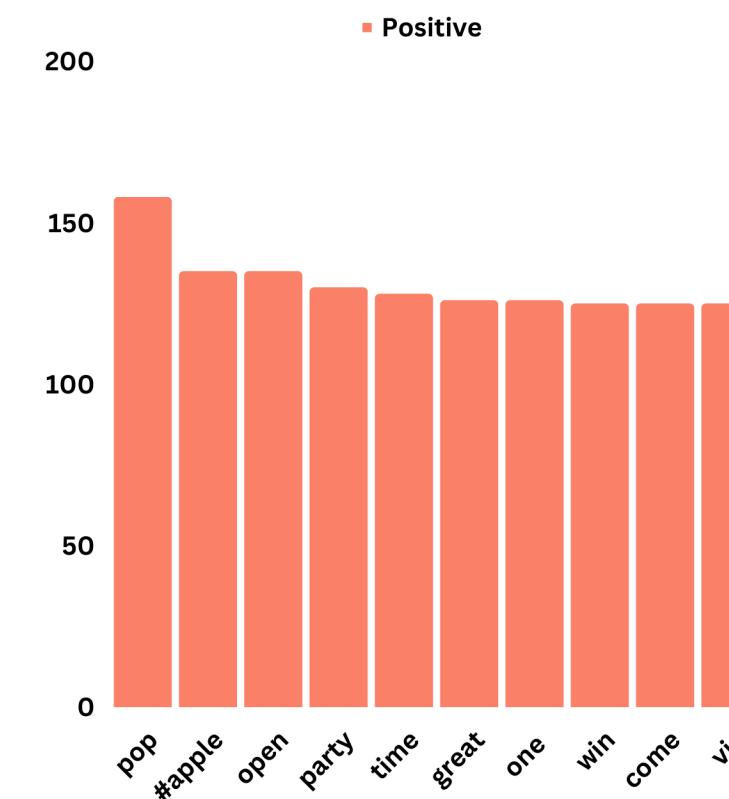
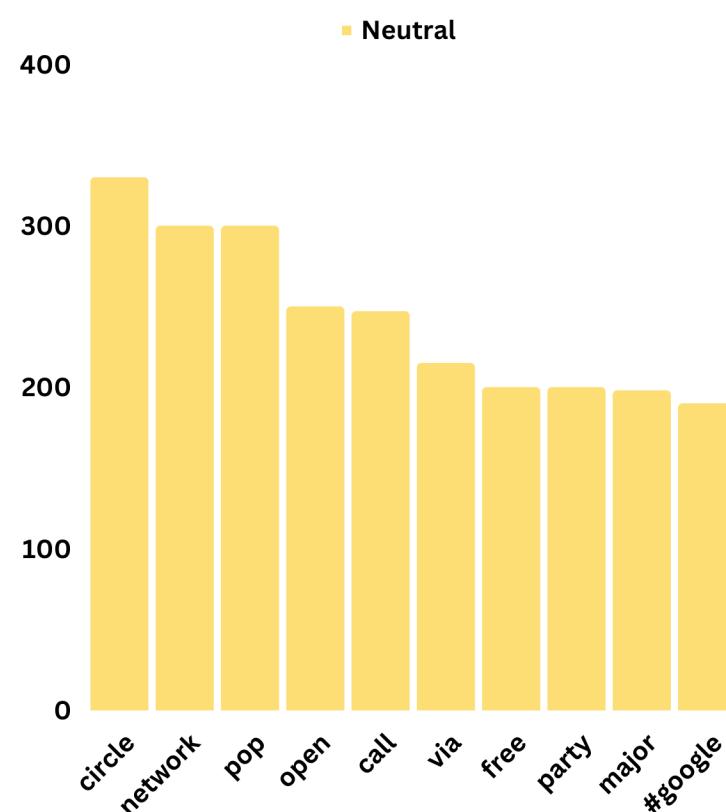
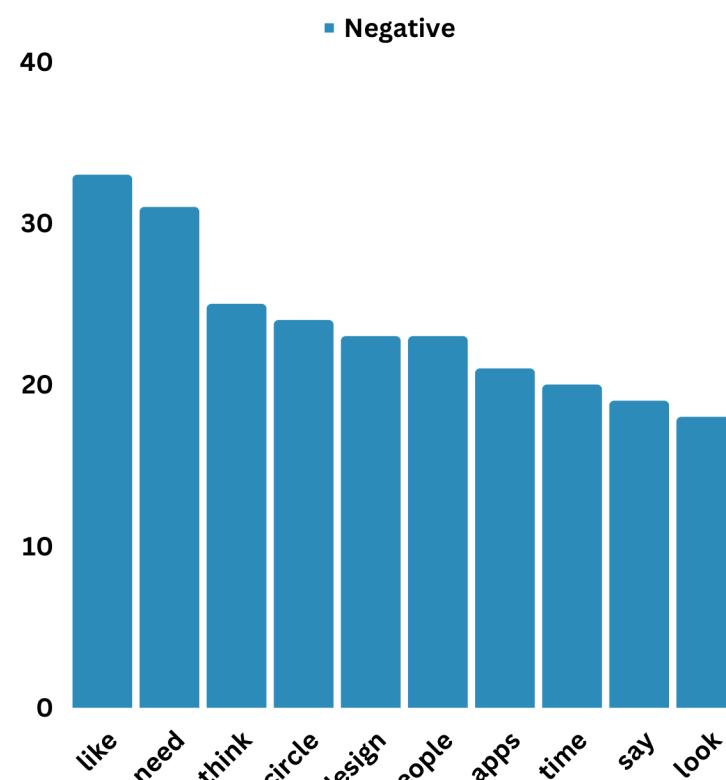
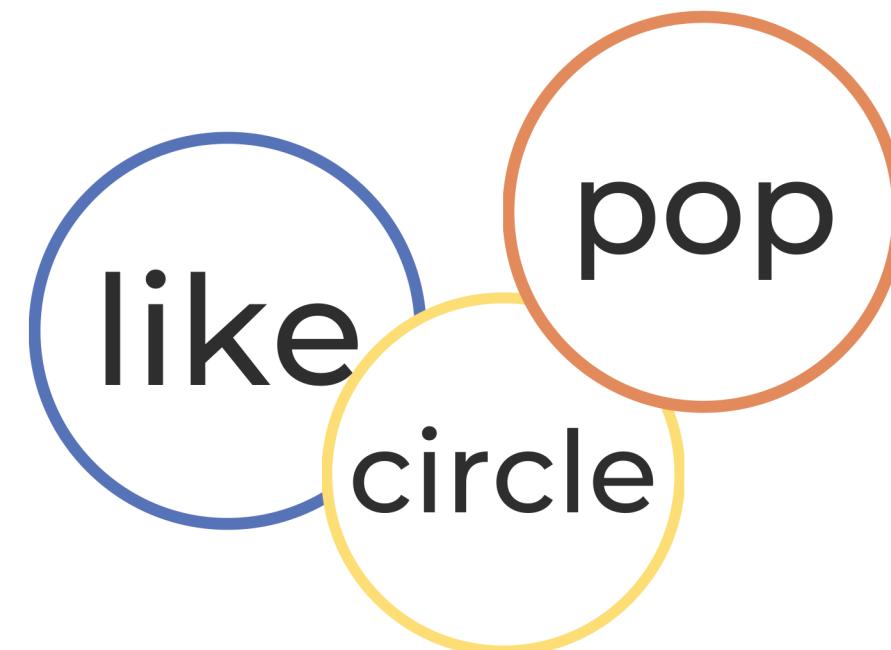
Human-Analyzed Brand  
Targets

# GENERAL SENTIMENTS



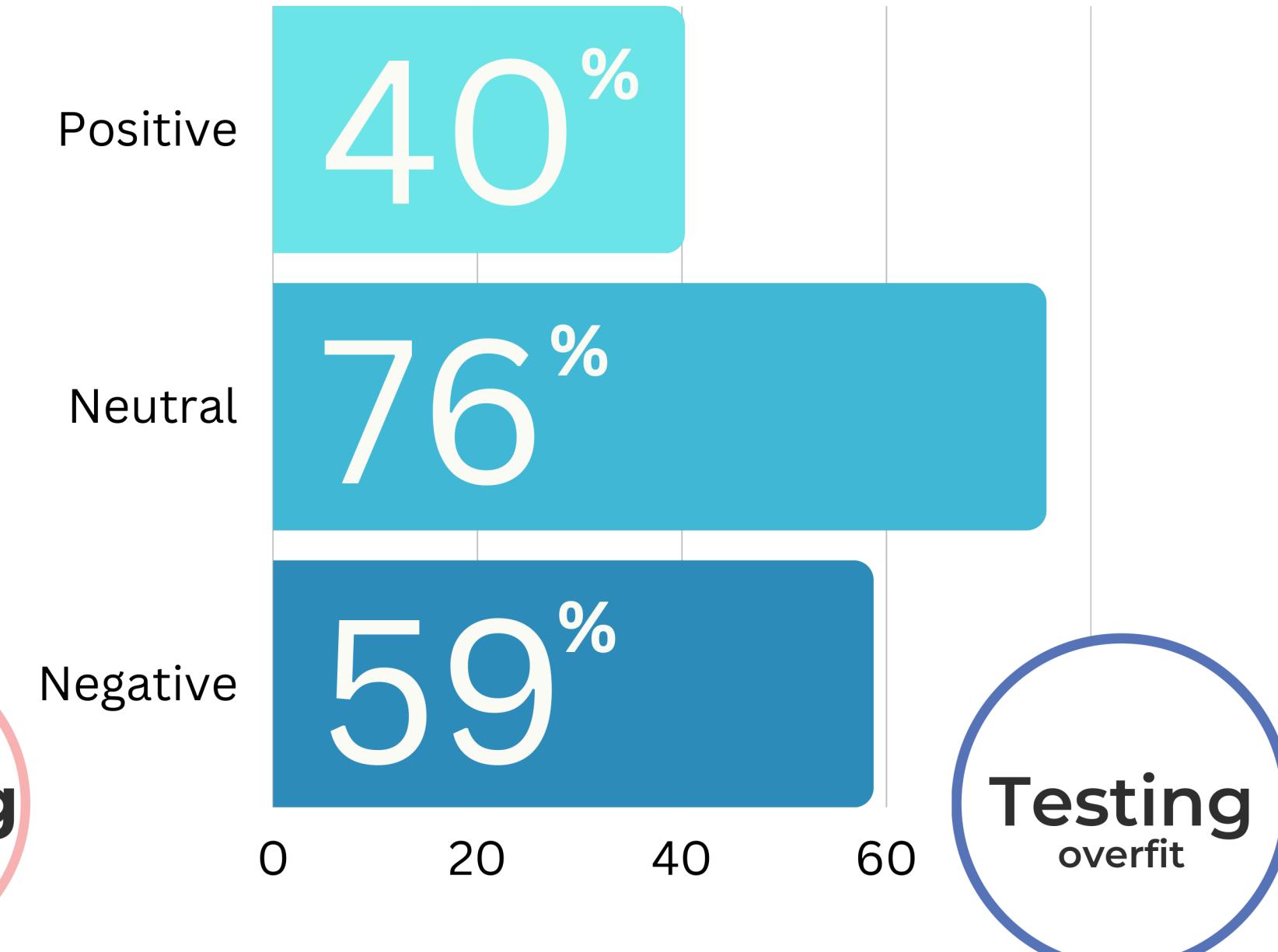
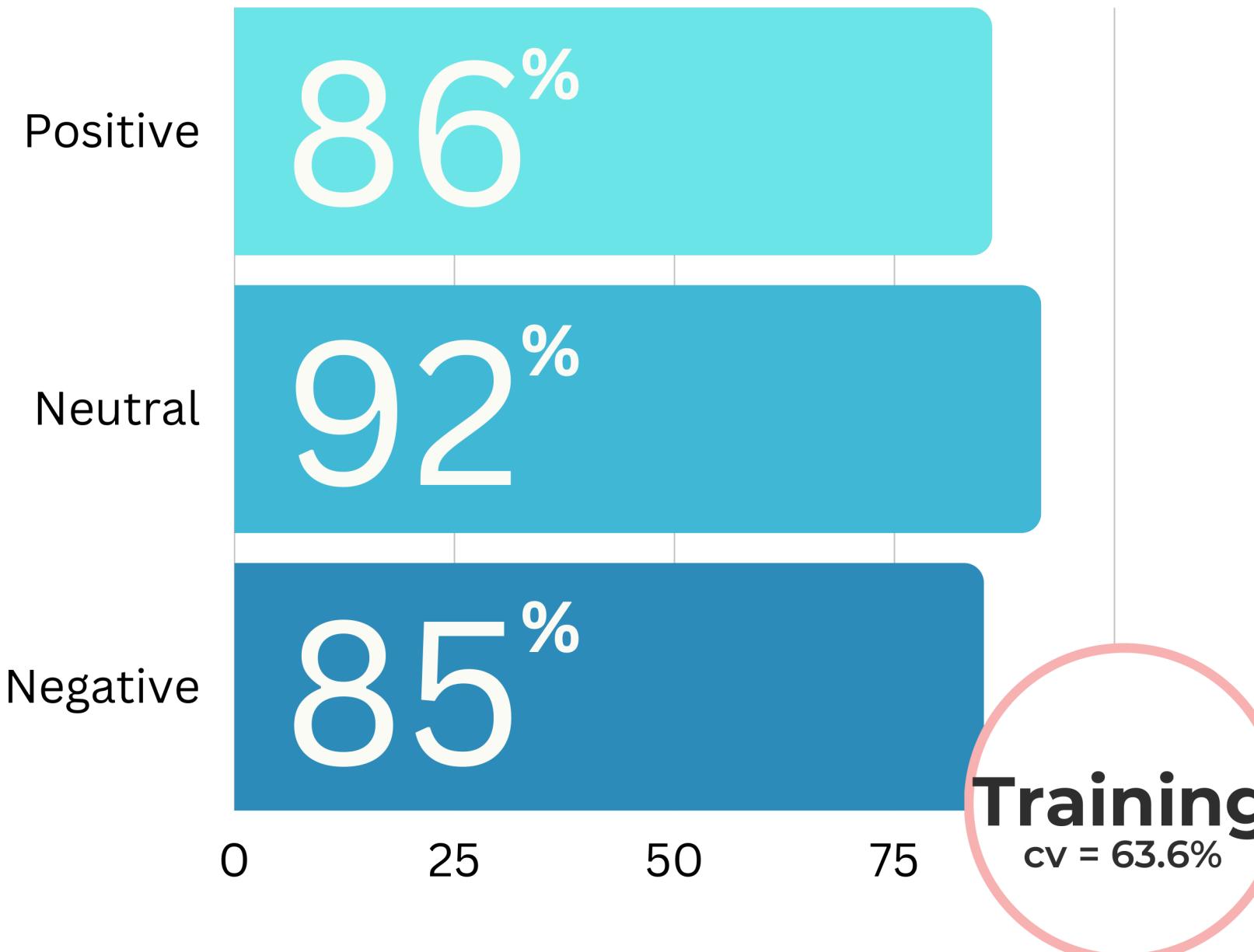
# MOST FREQUENT WORDS

# TOP 10 WORDS INDIVIDUAL & TOTAL



# FINAL MODEL PERFORMANCE

## f1-scores



# RECLASSIFICATION

Randomly Selected predictions of items originally classified as "I can't tell"



## POSITIVE

"Do you know what Apple is really good at?  
Making you feel bad about your Xmas present!"  
- Seth Meyers on iPad2 #sxsw  
#doyoureallyneedthat?

Comprando mi iPad 2 en el #SXSW (@mention  
Apple Store, SXSW w/ 62 others) [\[link\]](#)

Catch 22 Ú\_ I mean iPad 2 at #SXSW : [\[link\]](#)



## NEUTRAL

RT @mention Has spontaniety in life been  
replaced by technology? When your iPhone  
battery dies you go home. Great ? At #busy  
#sxsw

Liveblog from #SXSW: Can indie #iPhone game  
development survive? [\[link\]](#) #games

I can now say that Google got me drunk #sxsw  
#h4ckers



## NEGATIVE

The iPad 2 is the also a cartoonishly large digital  
camera. #SXSW #CStajas [\[link\]](#)

I really think that most of the iPad 2 stock went  
down to #SXSW.

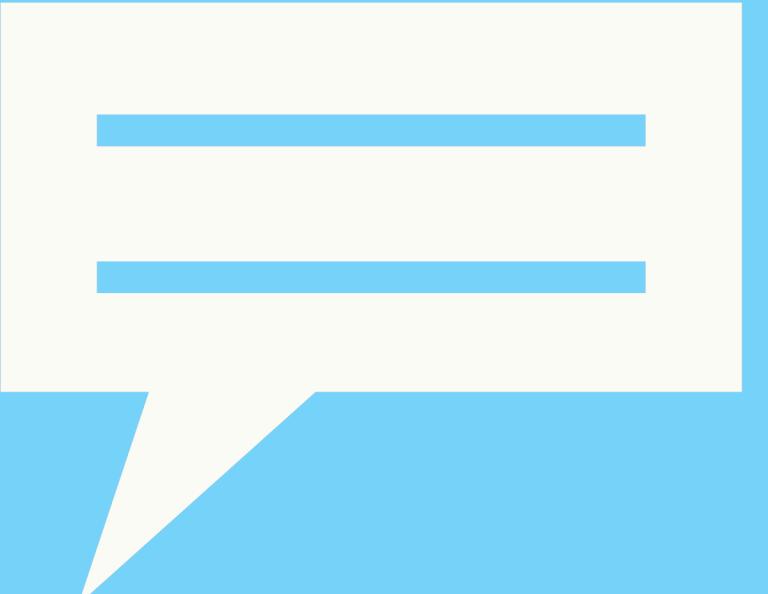
I think google circles was an effect of crop circle  
#SXSW #randomly

# CONCLUSIONS

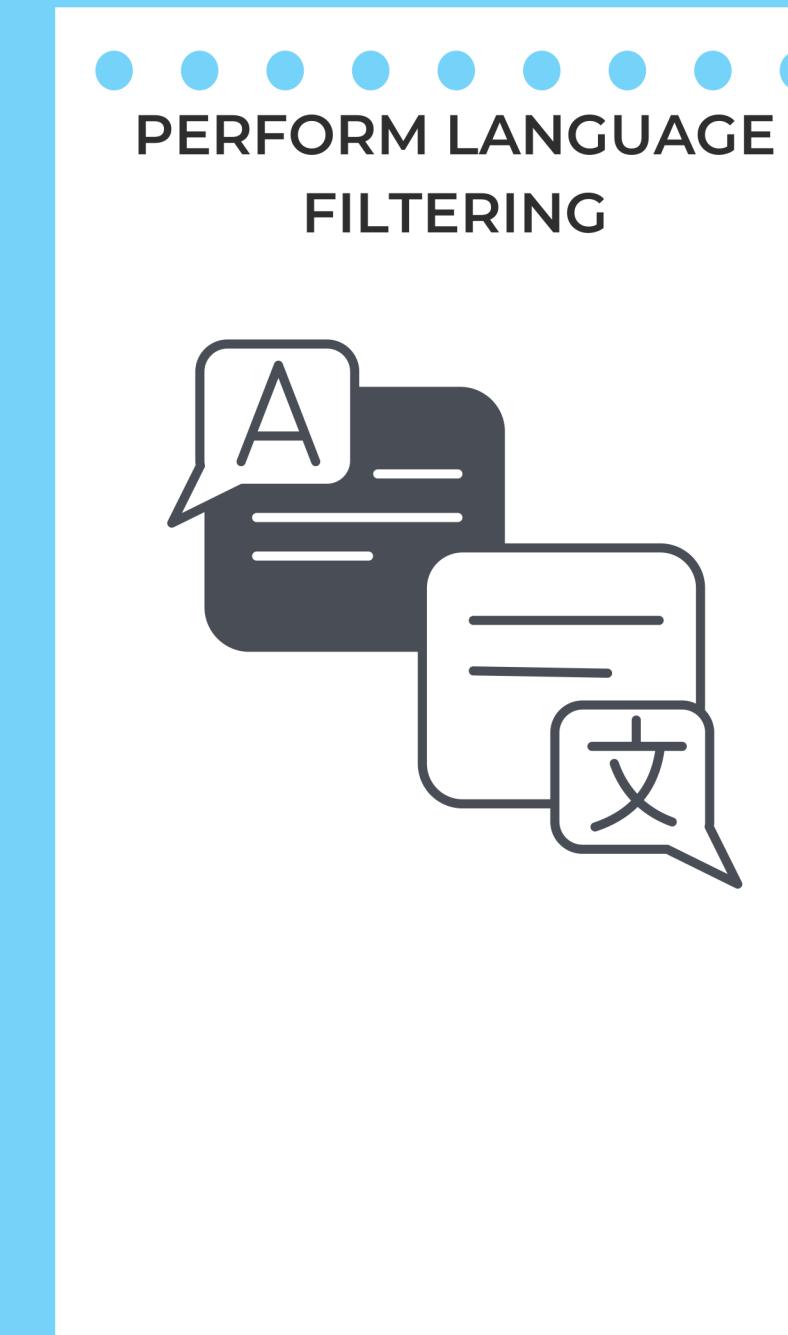
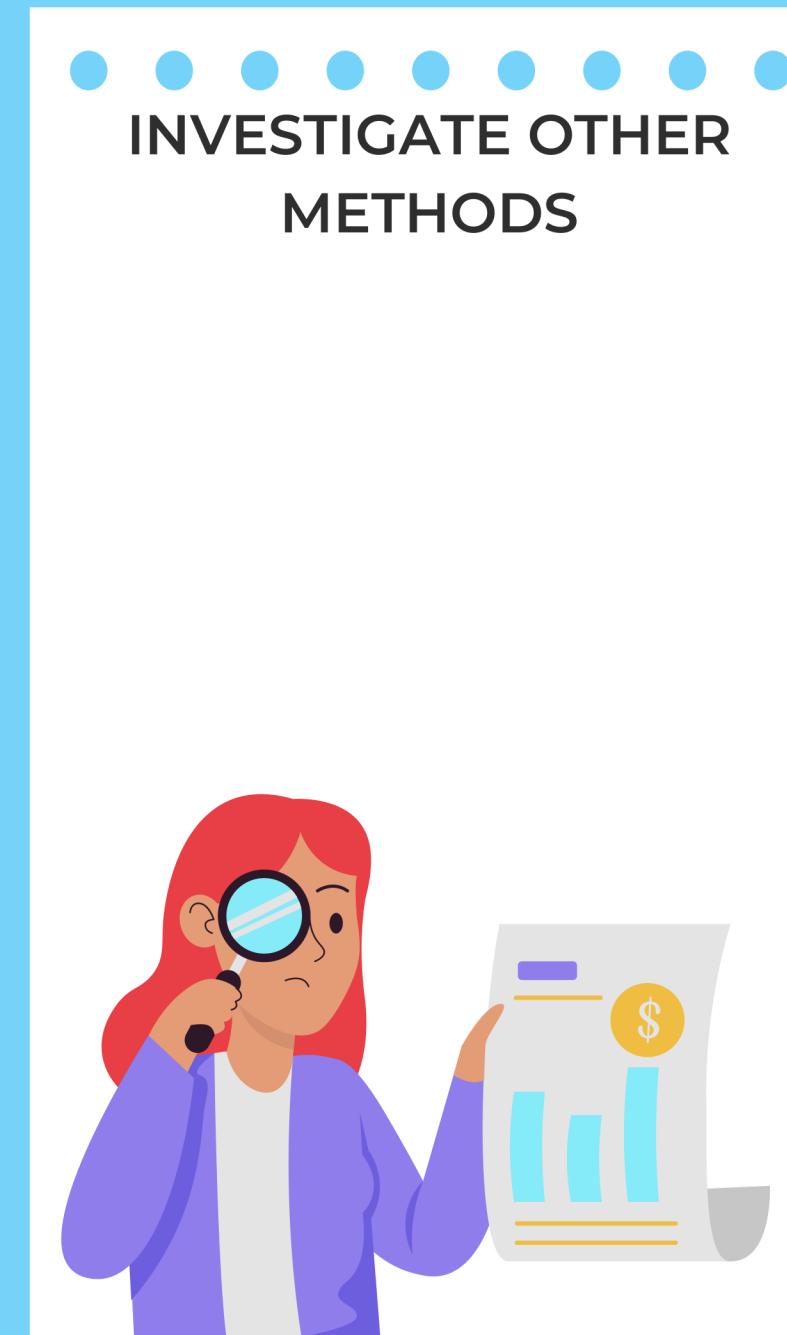
Sentiment is:

- Important
- Sometimes ambiguous
- Difficult to extract

More work must be done!



# NEXT STEPS





# THANK YOU!

Have a  
great day  
ahead.

