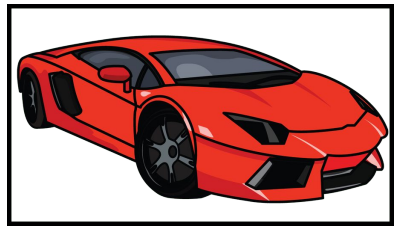
WSB Sentiment Analysis Project



Intro

Doug Mill

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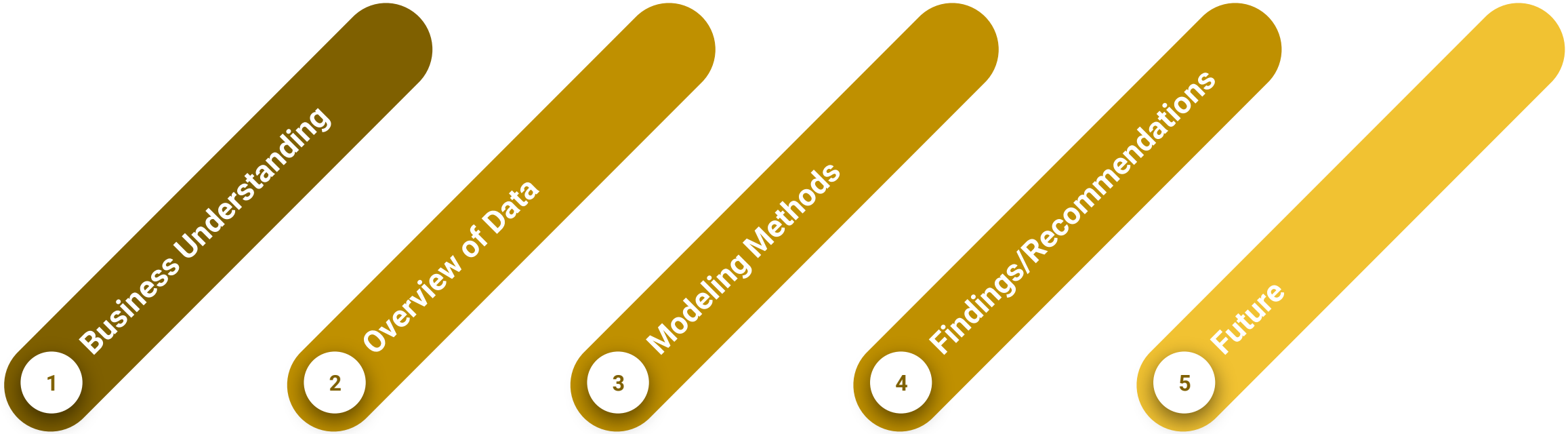
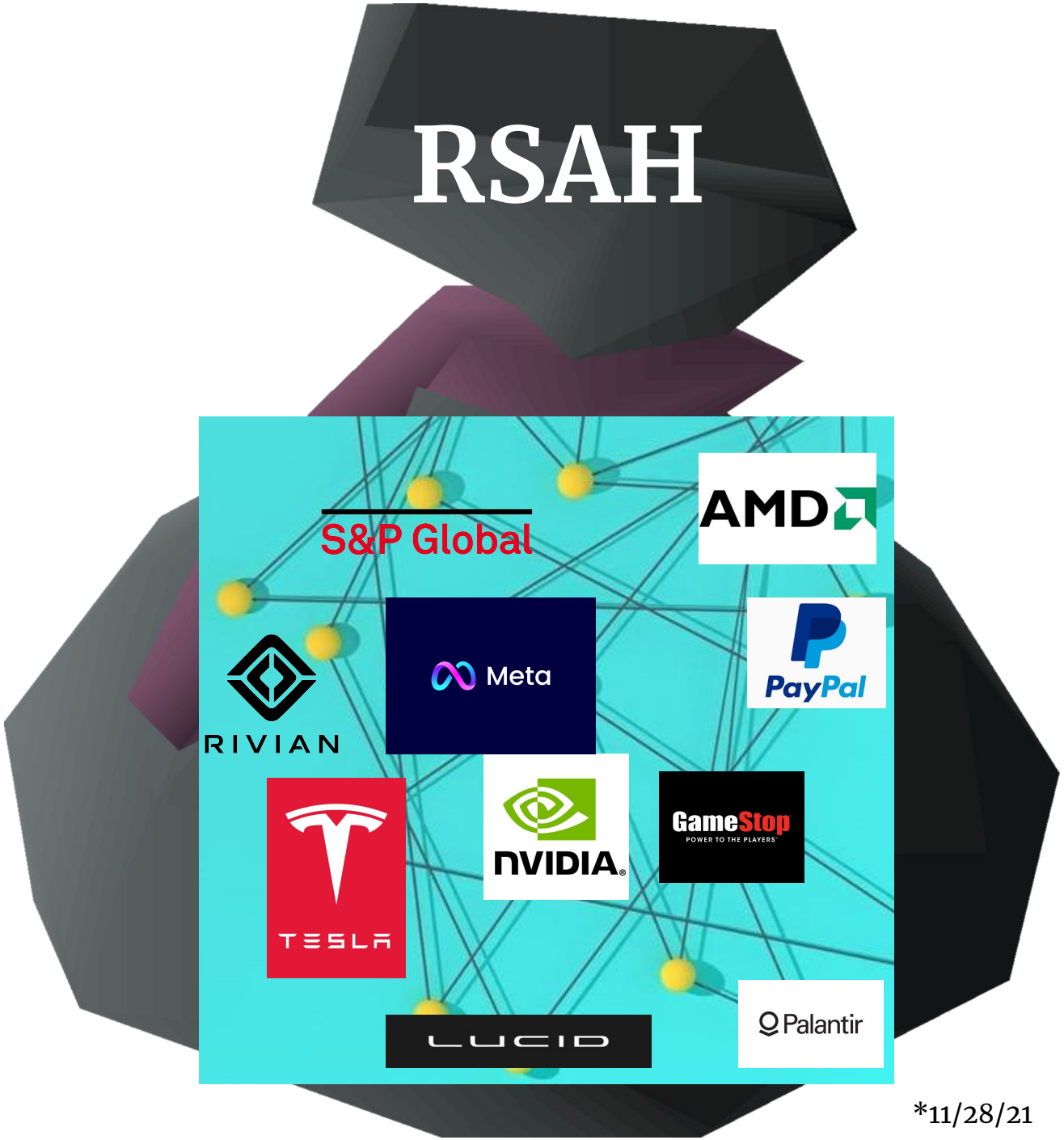
Agenda


1
Business Understanding
2
Overview of Data
3
Modeling Methods
4
Findings/Recommendations
5
Future

amc
GameStop
POWER TO THE PLAYERS

amc
GameStop
POWER TO THE PLAYERS

TOP
10
amc
GameStop
POWER TO THE PLAYERS



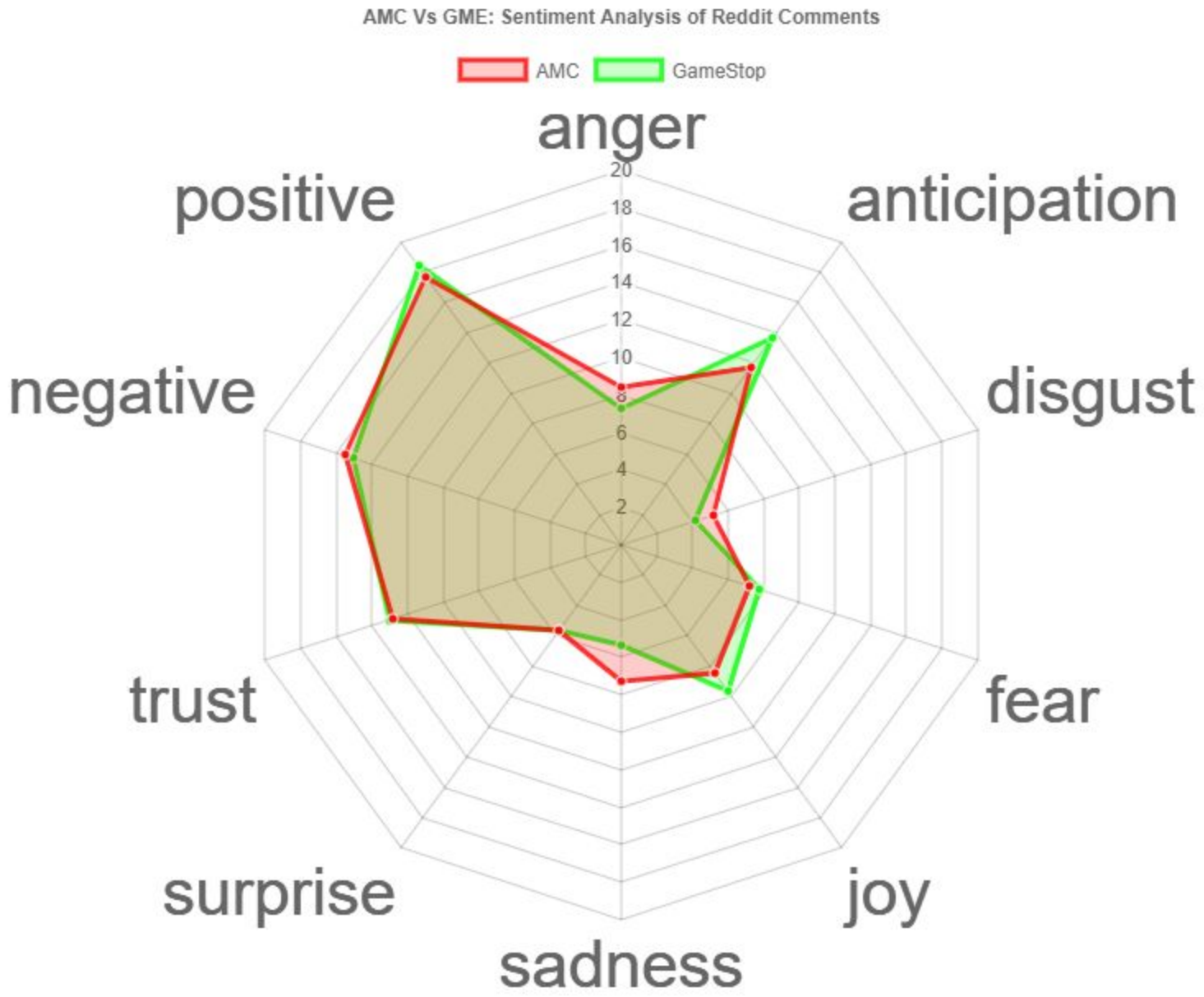
- **Reddit Sentiment Analysis Holdings**
- Top 10 most mentioned
- Rebalanced monthly

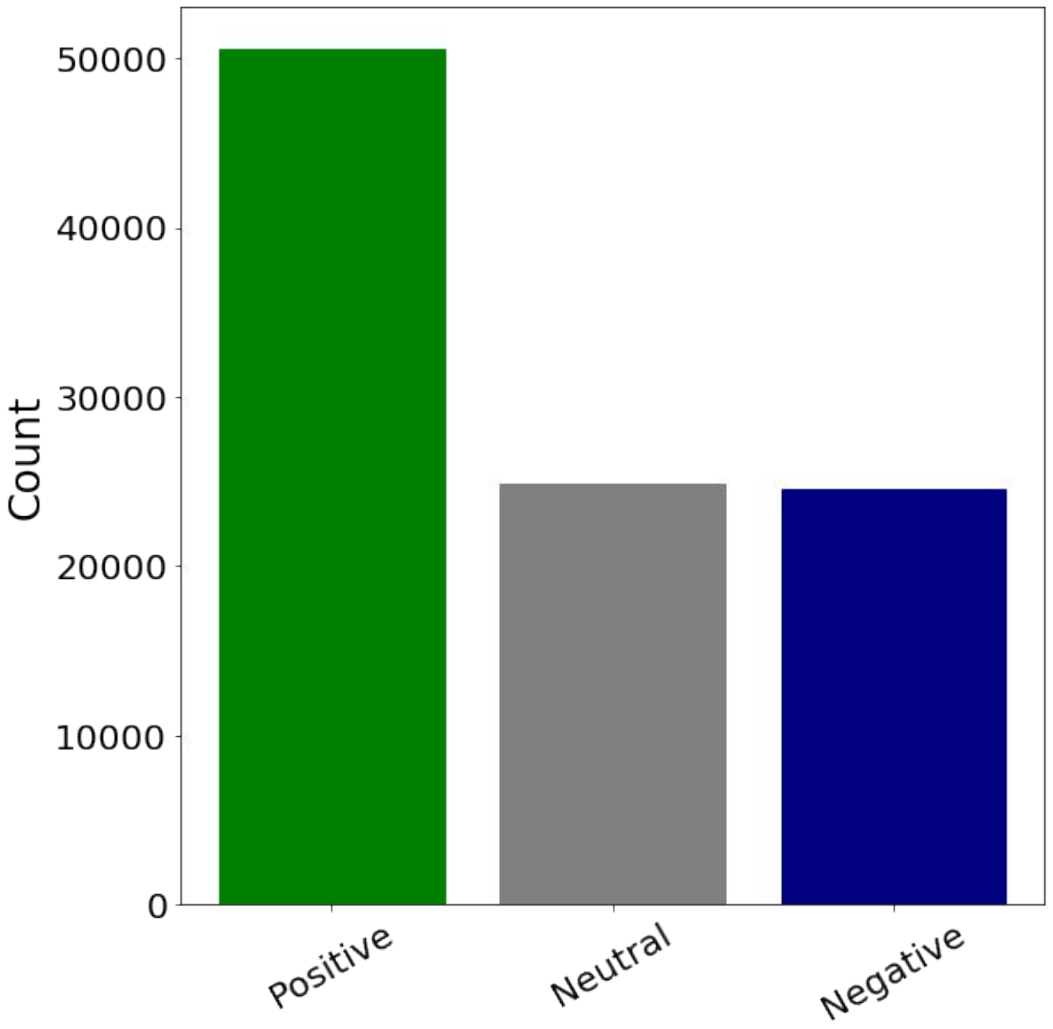
*11/28/21

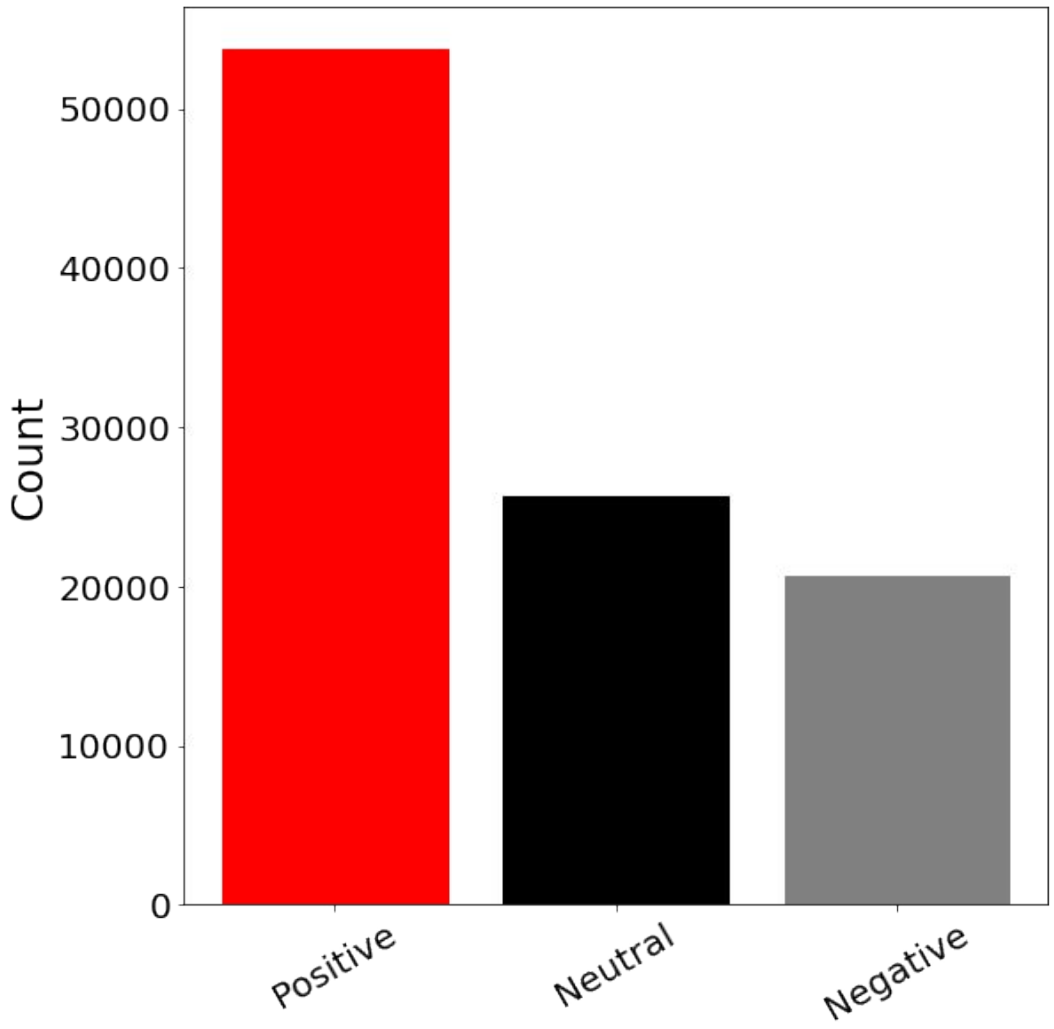
Data

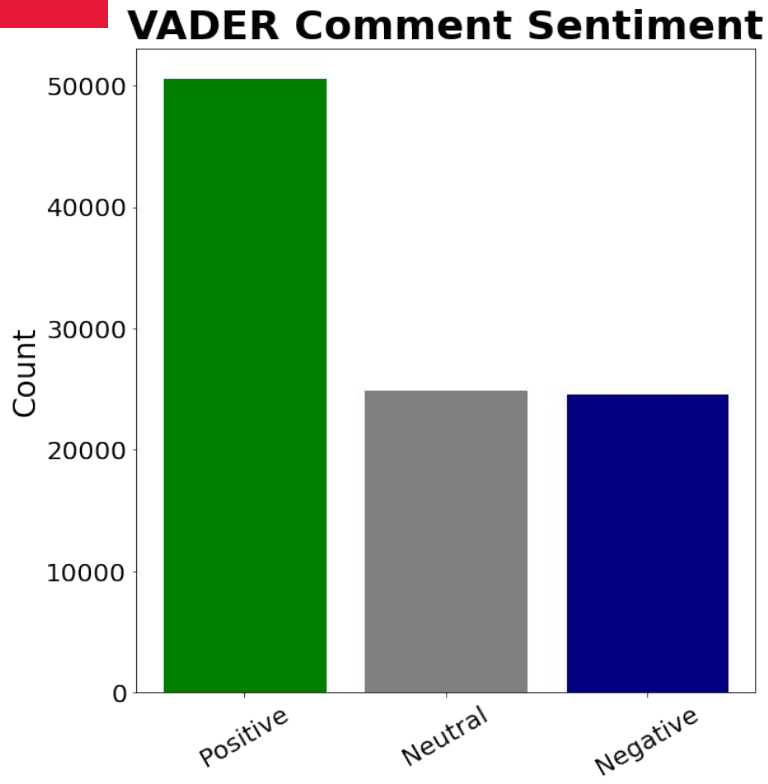
- 100k “AMC”, “GME” comments
- r/wallstreetbets; 1/1/21 - 11/20/21

What is Lexicon Sentiment Analysis?

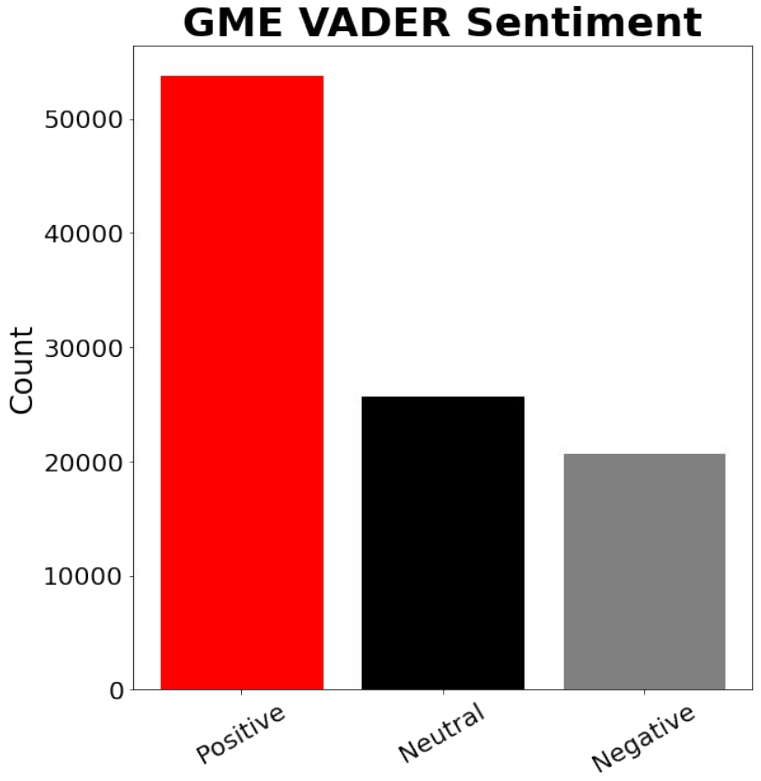



VADER Comment Sentiment
Count
50000
40000
30000
20000
10000
0
Positive
Neutral
Negative


GME VADER Sentiment
Count
50000
40000
30000
20000
10000
0
Positive
Neutral
Negative


VADER Comment Sentiment
Count
50000
40000
30000
20000
10000
0
Positive
Neutral
Negative

75%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Count
50000
40000
30000
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10000
0
Positive
Neutral
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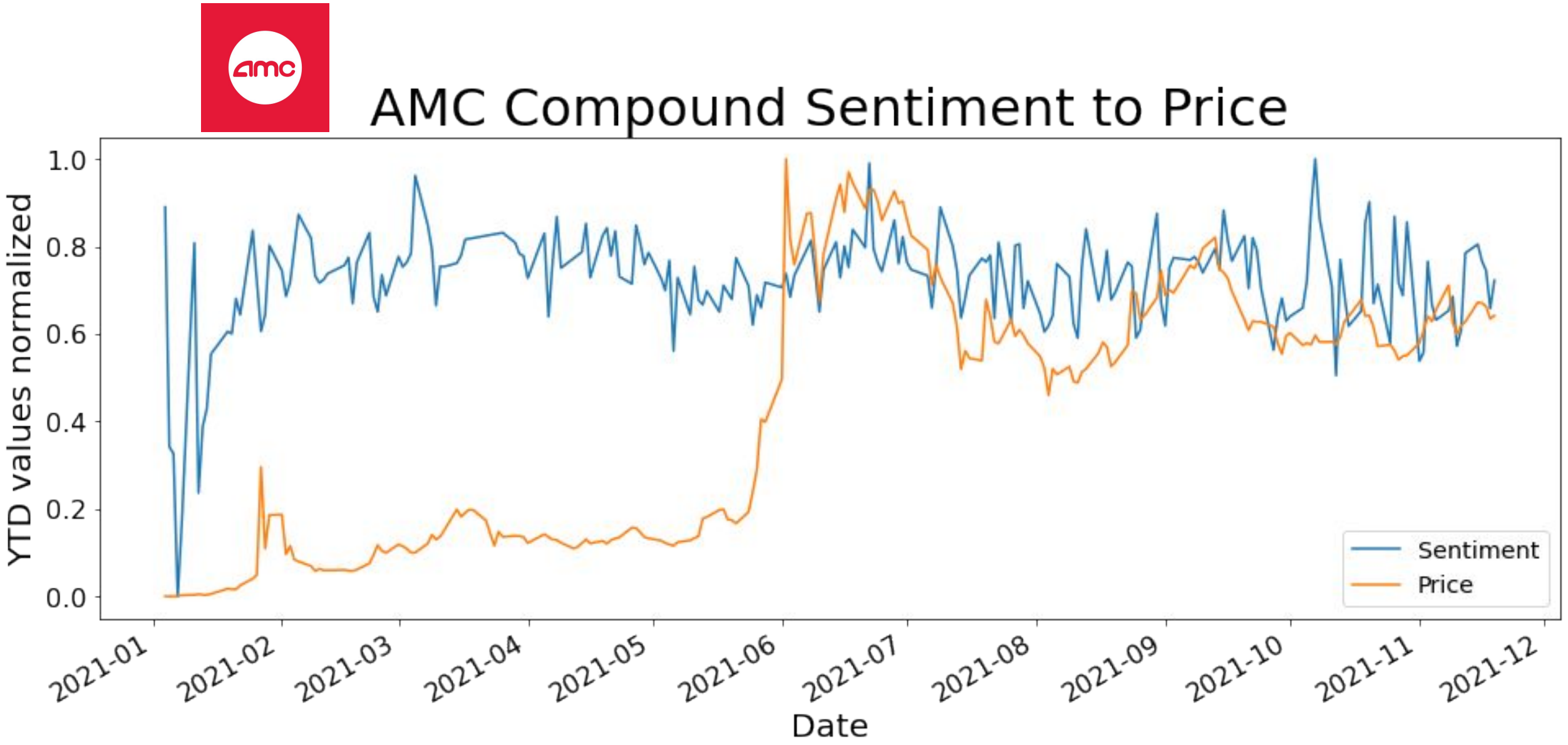
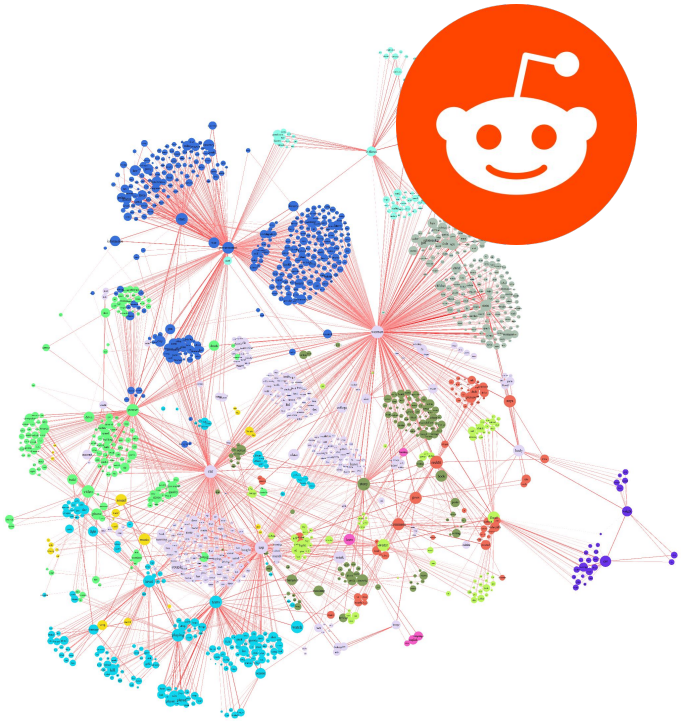

AMC Compound Sentiment to Price
YTD values normalized
1.0
0.8
0.6
0.4
0.2
0.0
2021-01
2021-02
2021-03
2021-04
2021-05
2021-06
2021-07
2021-08
2021-09
2021-10
2021-11
2021-12
Date
Sentiment
Price

Findings

- 75% classification accuracy
- RSAH
- Dashboard



Future

- Manually label comments & train model
- RSAH Rebalancing, Licensing
- Use with neural networks

Thank you! Questions?

Doug Mill

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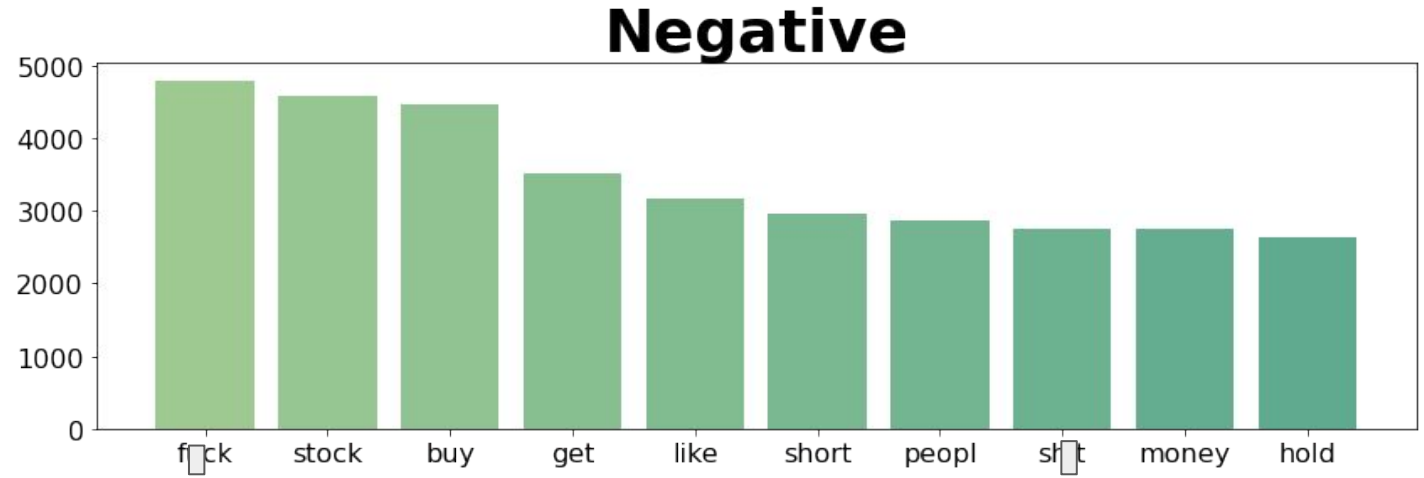
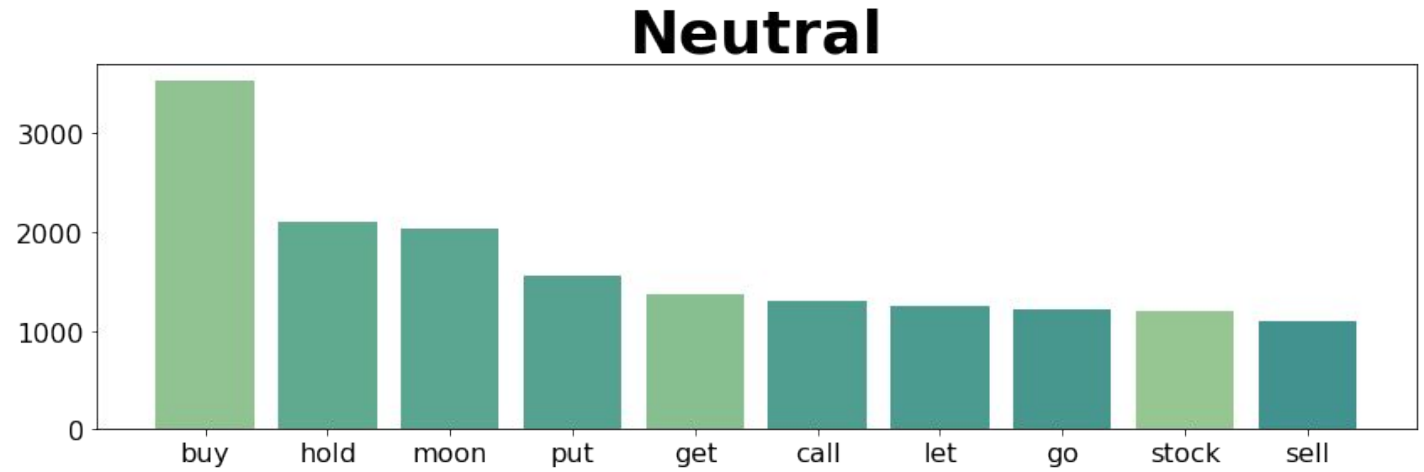
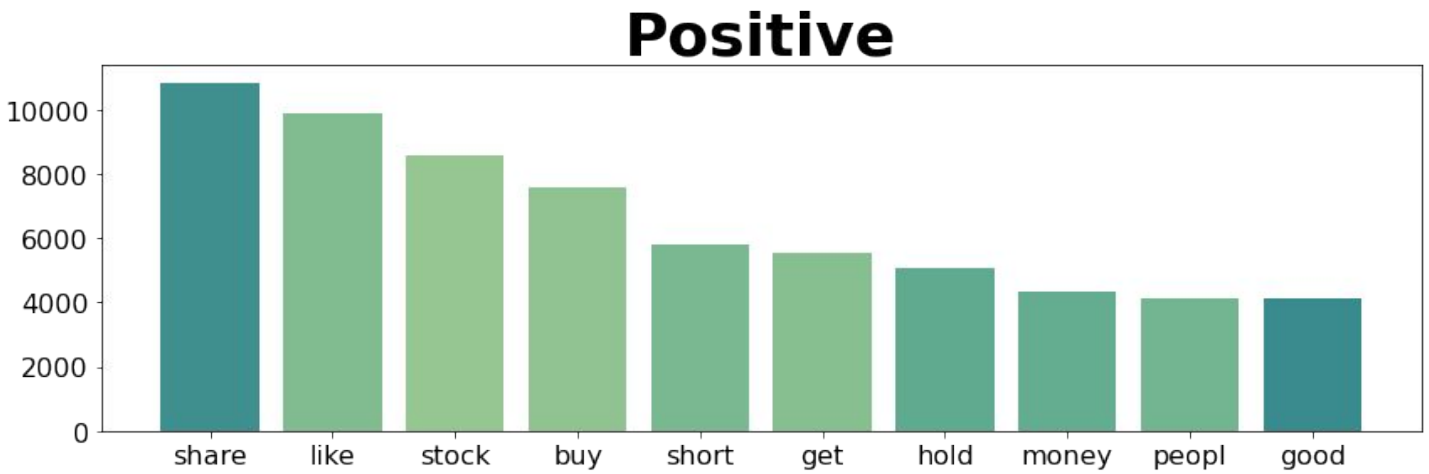
Appendix


Negative
5000
4000
3000
2000
1000
0
stock
buy
get
like
short
peopl
money
hold


Neutral
3000
2000
1000
0
buy
hold
moon
put
get
call
let
go
stock
sell


Positive
10000
8000
6000
4000
2000
0
share
like
stock
buy
short
get
hold
money
peopl
good

Yeah
least
PLTR
lmao
theater
short squeeze
done
sh[redacted]t
thing
right
know
never
goes
meme
much
debt
short
yolo
thought
earning
puts
gonna
year
hedge fund
better
understand
well
looking
move
went
trying
companies
people
start
around
someone
look
worth
bought
really
every
feel
love
game
make
probably
trade
something
wrong
want
sold
little
green
https
redd
movie
WISH
enough
Thank
real
lost
will
point
another
first
retard
tell
long term
many
number
good
buying
still
think
high
Monday
best
guys
long
lose
days
saying
Robinhood
volume
hard
nothing
everyone
already
week
call
meme stock
month
show
cash
anything
hope
open
might
alway
back
money
apes
market
tomorrow
squeeze
keep
seem
covid
cause
company
happen
position
wait
great
sure
hold
said
account
work
everything
stock
value
moon
share
gain
maybe
instead
less
option
give
actually
made
price
getting
mean
though
play
next
close
believe
either
sell
today
CLOV
time
take
next week
drop
holder
Friday
yesterday
talking
making
even
trading
f[redacted]cking
profit
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post
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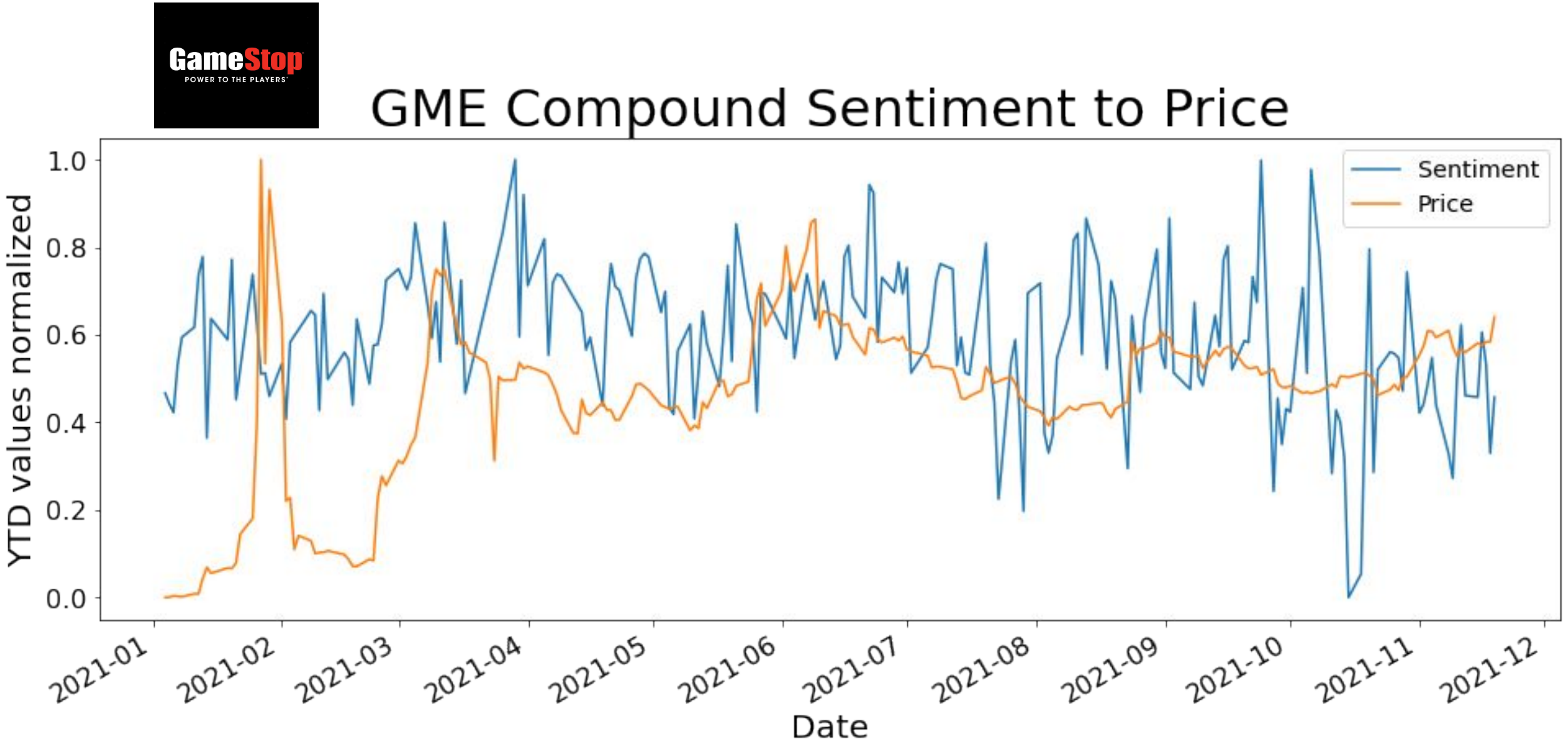
selling
soon
future
anyone
reason
come
GameStop
interest
tarded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Sentiment
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2021-10
2021-11
2021-12
Date