What is the Super League?

Background

On April 18, 2021, twelve of the world's largest football clubs announced a plan to launch a new international football competition known as the Super League.

Motivation

The construction of the Super League would threaten the viability of the Champions League (the largest international club competition) and would decimate domestic leagues that depend heavily on the viewership and revenue driven by the largest and wealthiest clubs.

Initial Response

→ Intense negative reactions from fans and smaller clubs
→ UEFA threatens to ban participating clubs from all existing international competitions
→ The founding clubs all backed down 1 by 1
→ Super League plans ultimately thrown out

Driving Question: Does joining the Super League make financial sense for Europe's largest football clubs? Could we see something like it happen again?

Aske Bonde, Lionel Smoler Schatz, Bradley Berkman (FNCE 237 2021)

Construction & Design

Champions League Models

Calculates UEFA payouts based on performance, world rankings, and market pools, and other characteristics

Rule Based:
- 96% accuracy (vs historical payouts)
- Extrapolates well

Linear Regression:
- 98% accuracy (vs historical payouts)
- Does not extrapolate well (overfits)

Super League Model

Calculates Super League payouts

- Based on performance, world rankings, and market pools, and other characteristics
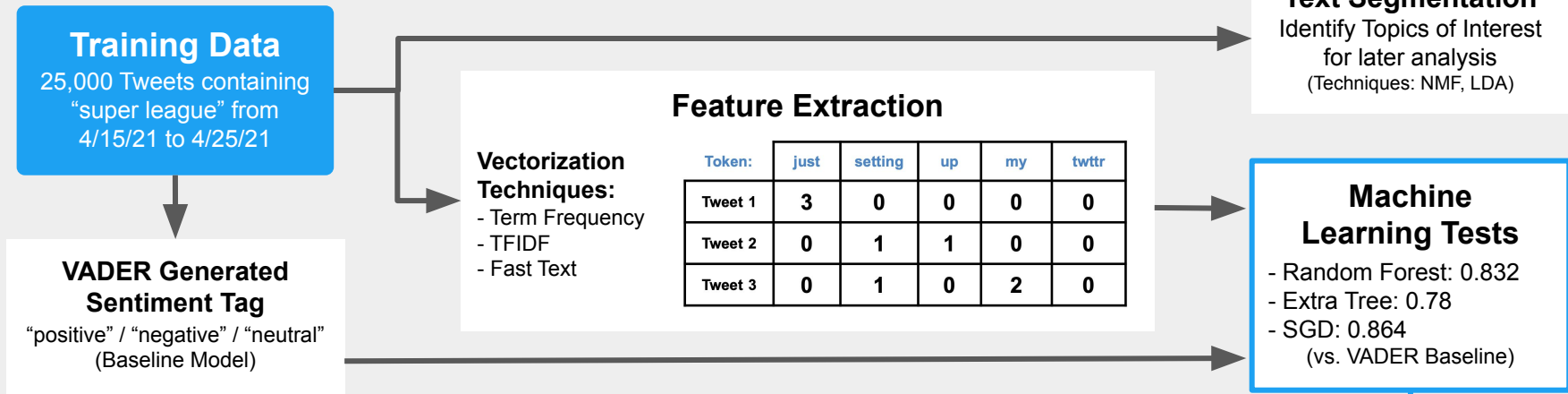- Rule Based

Sentiment Model

Tweet Collection and Analysis

- Analyzes sentiment of 1,000,000+ tweets
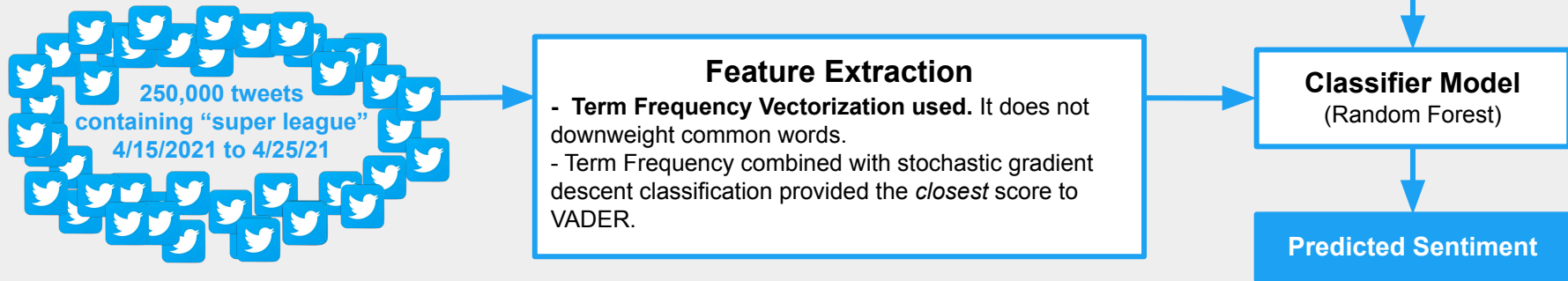- Containing "super league" keyword (April 15 - April 22)

Simulation Comparison Model

- Compares the outputs of the Super League and Champions League models
- Holds performance constant while simulating inputs not directly related to performances (e.g. UEFA ranking and domestic performance)
- By running this model many times, we get the expected payout for each league while factoring in the uncertainties that affect each payout scheme.
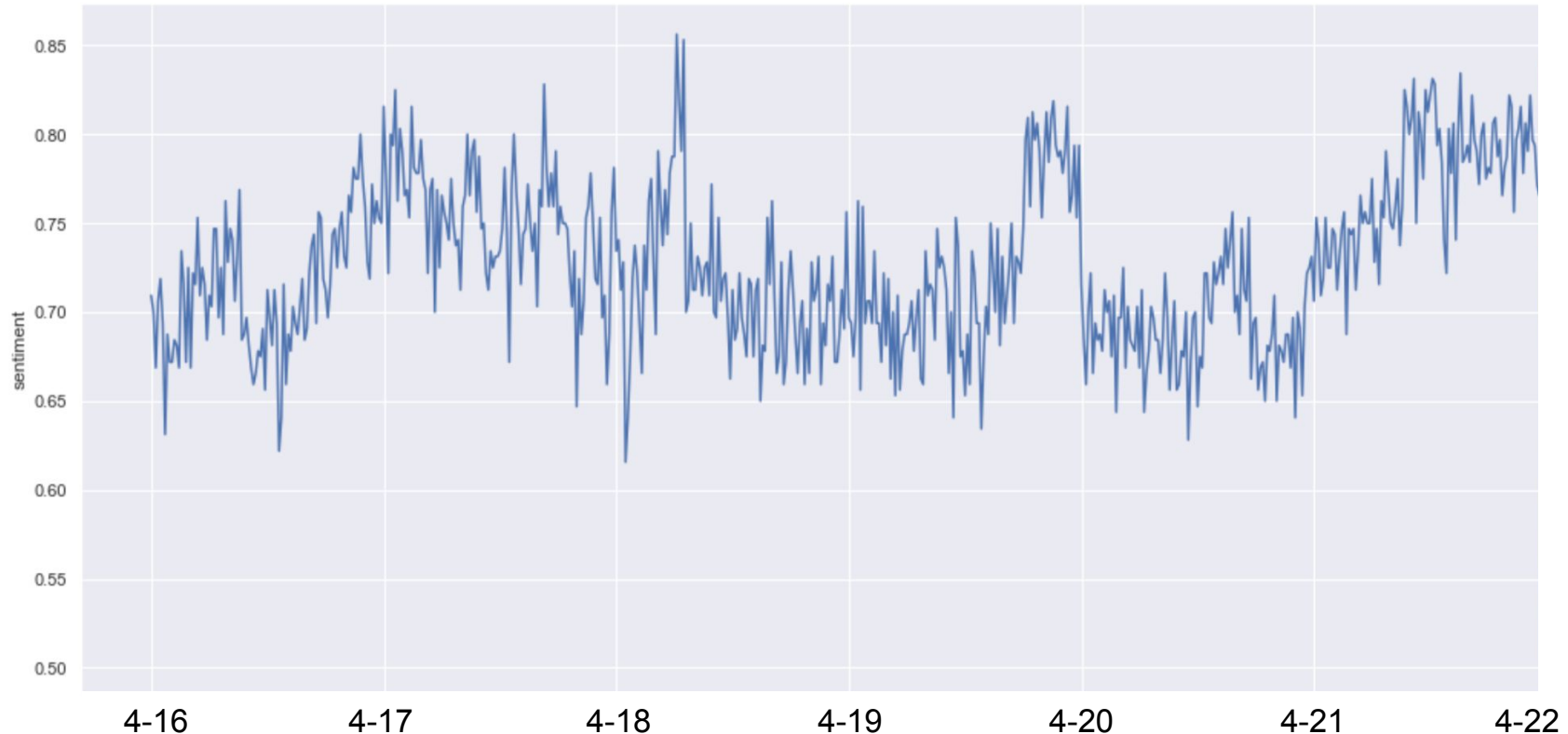
Training Super League Sentiment Analysis Model:

Training Data
25,000 Tweets containing "super league" from 4/15/21 to 4/25/21

Text Segmentation
Identify Topics of Interest for later analysis
(Techniques: NMF, LDA)

VADER Generated Sentiment Tag
"positive" / "negative" / "neutral"
(Baseline Model)

Feature Extraction

Vectorization Techniques:
- Term Frequency
- TFIDF
- Fast Text

Token:	just	setting	up	my	twttr
Tweet 1	3	0	0	0	0
Tweet 2	0	1	1	0	0
Tweet 3	0	1	0	2	0

Machine Learning Tests
- Random Forest: 0.832
- Extra Tree: 0.78
- SGD: 0.864
  (vs. VADER Baseline)

Predicting Super League Sentiment:

250,000 tweets containing "super league" 4/15/2021 to 4/25/21

Feature Extraction
- **Term Frequency Vectorization used.** It does not downweight common words.
- Term Frequency combined with stochastic gradient descent classification provided the *closest* score to VADER.
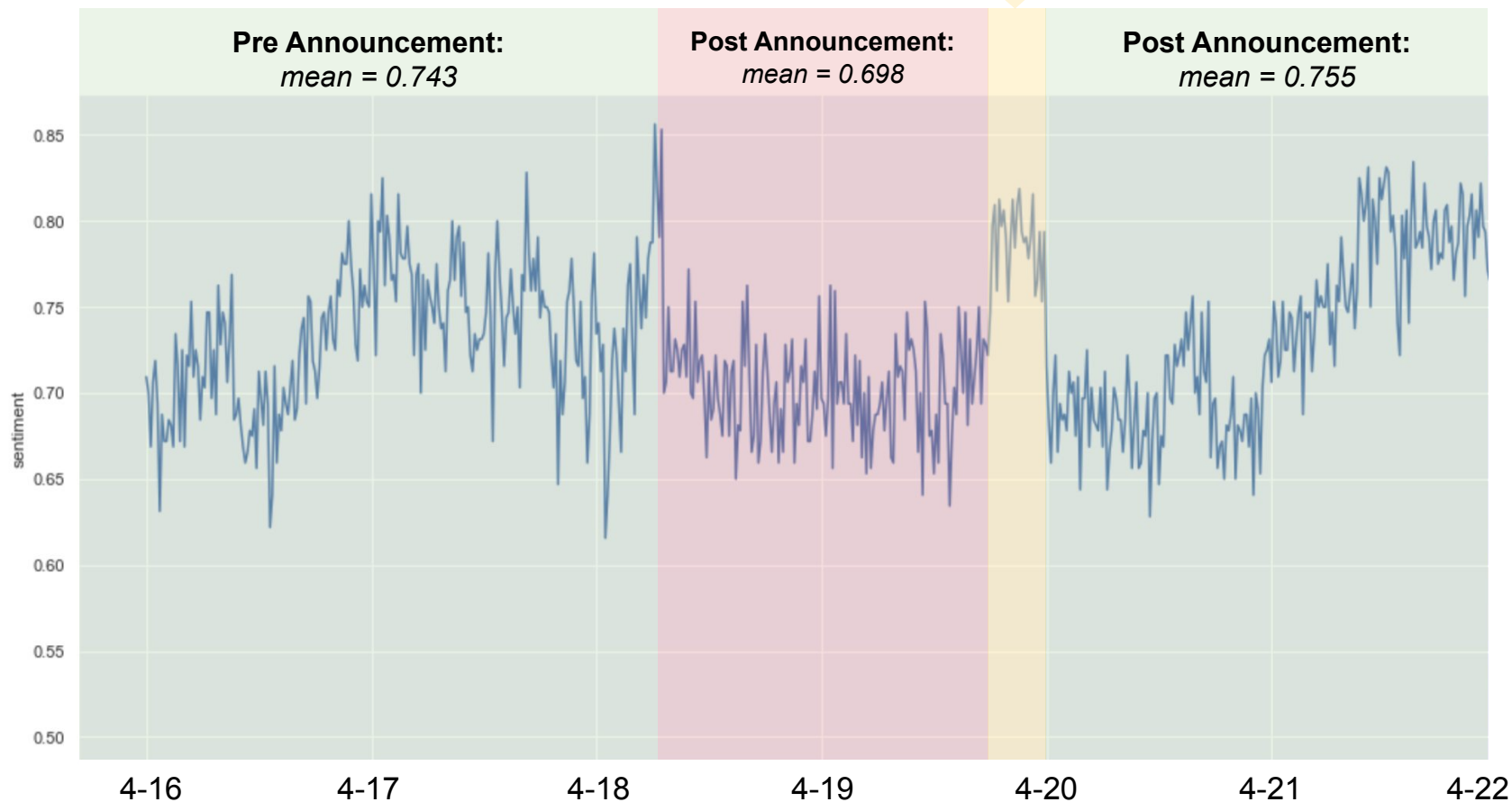
Classifier Model
(Random Forest)

Predicted Sentiment

Average Sentiment

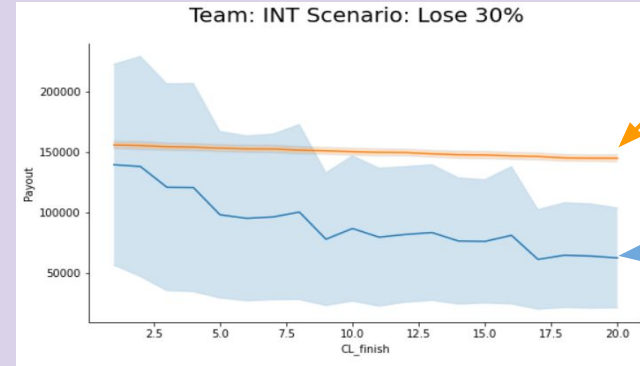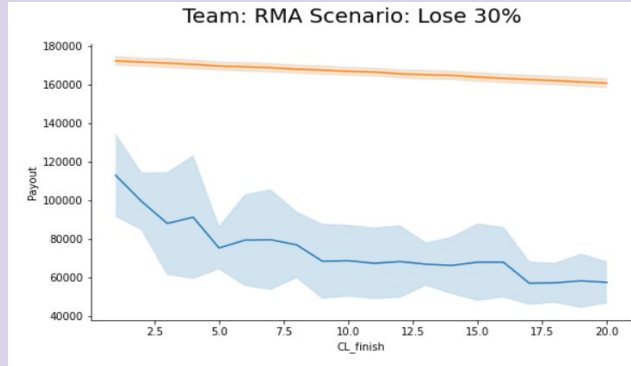- Predicted Sentiment for 250,000 tweets from 4/15-4/22
- higher scores represent more "positive" sentiment

Key Findings: Predicted Revenues & Losses vs. Finishing Position

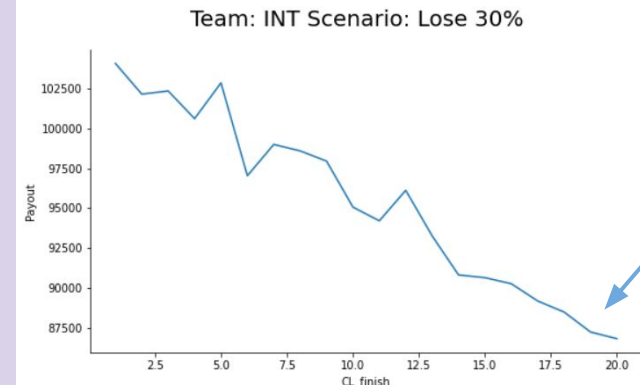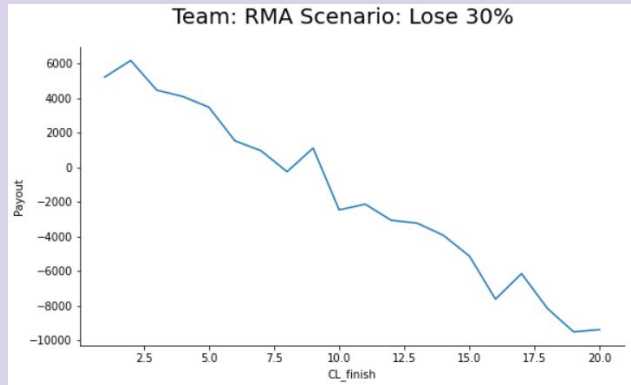(under a "worst-case" lose 30% of broadcasting revenue from sentiment case)

Scenario 1:
Only Lose Champions League Revenue

Scenario 2:
Lose Champions League and Domestic Revenues

Super League Revenue

Champions League Revenue

Net Payout (SL-CP+PL)

Conclusion & Further Direction

Expected SL Payouts - Status Quo Payout

	Scenario 1 No Lost Fans	Scenario 2 15% Fans Lost	Scenario 3 30% Fans Lost
Real Madrid	$ 3,118	$ (32,948)	$ (69,427)
Manchester United	$ 20,962	$ (16,268)	$ (51,111)
Inter Milan	$ 93,870	$ 61,924	$ 32,006

(Millions)

"Just rich guys trying to flex their muscles and get richer...We haven't heard the end of this"

David Abrams
Chief Investment Officer
HBSE (Owner of Crystal Palace)

Conclusion

- The real financial benefits of the Super League are absorbed by the 'worst' founding clubs. Champions league payouts can significantly vary - the stability provided by the Super League is always beneficial (even in worst case scenario)
- For the best clubs, there is significant sentiment exposure, the potential risk of upsetting their fan base is not made up by revenue stability

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