# DATA ANALYSIS OF SOCIAL MEDIA METRICS TO GAUGE RESTAURANTS' FOOT TRAFFIC

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# PROJECT OVERVIEW

- What are we doing?
  - Analyze social media metrics history to assess chain restaurants' ability to attract customers to their locations
- Why?
  - Predict stock performance / evaluate investment opportunity
- How?
  - Collect data and explore the descriptive statistics
  - Implement models to predict future change in social media metrics
  - Connect social media performance to business' financial health
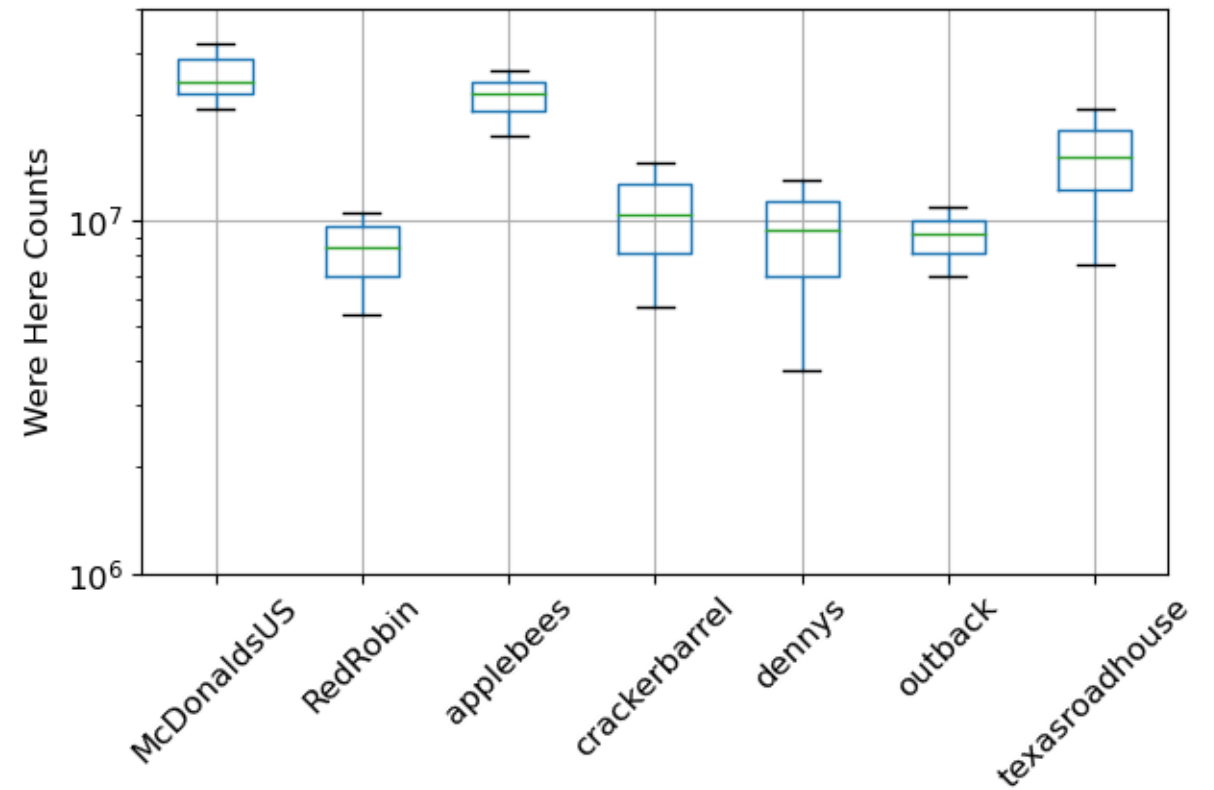
# DATASET OVERVIEW

- Provided by TDI

- Daily records of Facebook metrics from 2015 – 2018
  - Check-Ins
  - Were Here Counts
  - Likes
  - Talking About Counts

- Approximately 3,500 businesses across all industries
  - 15 most notable chain restaurant businesses were selected for analysis
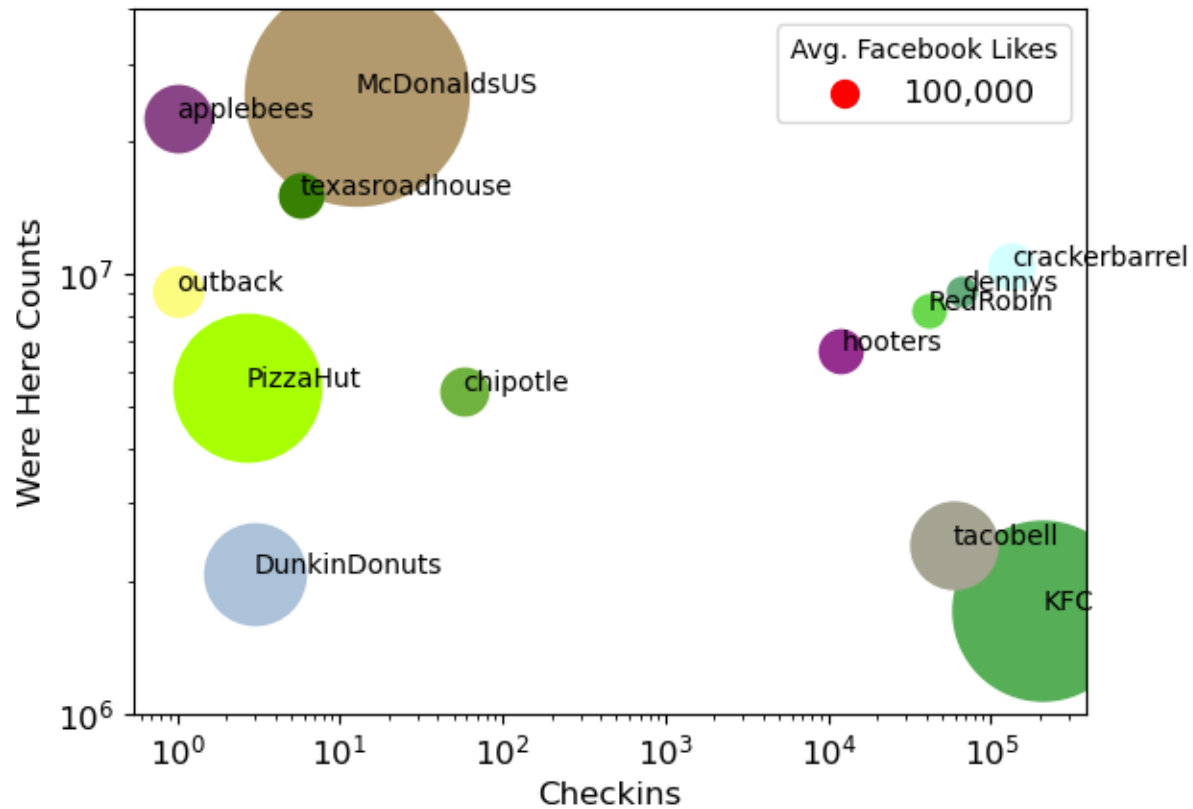
# DESCRIPTIVE STATISTICS

# PREDICTION MODELS (1)



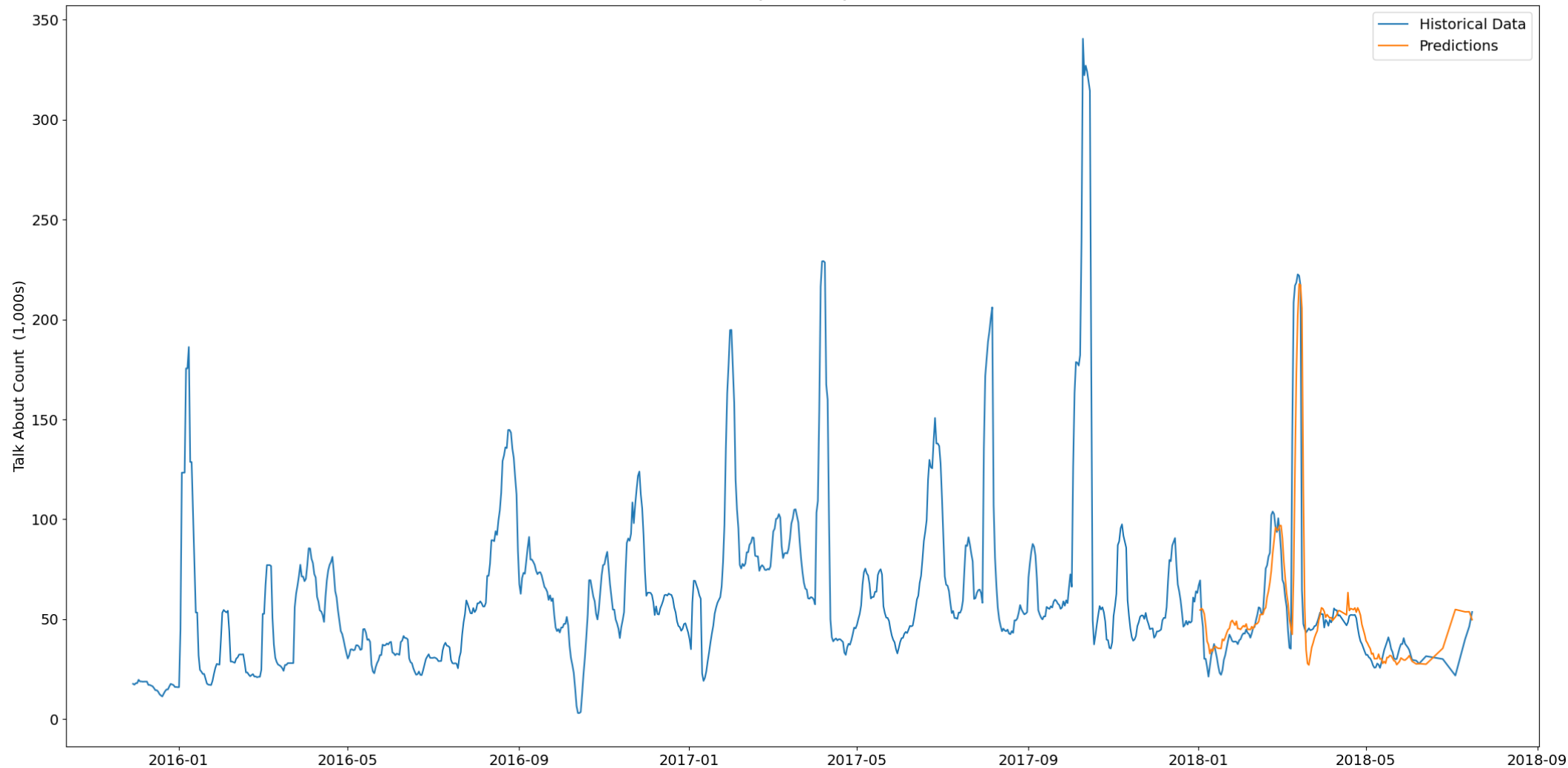**Application of Linear Regression to Predict Were Here Count (McDonald)**
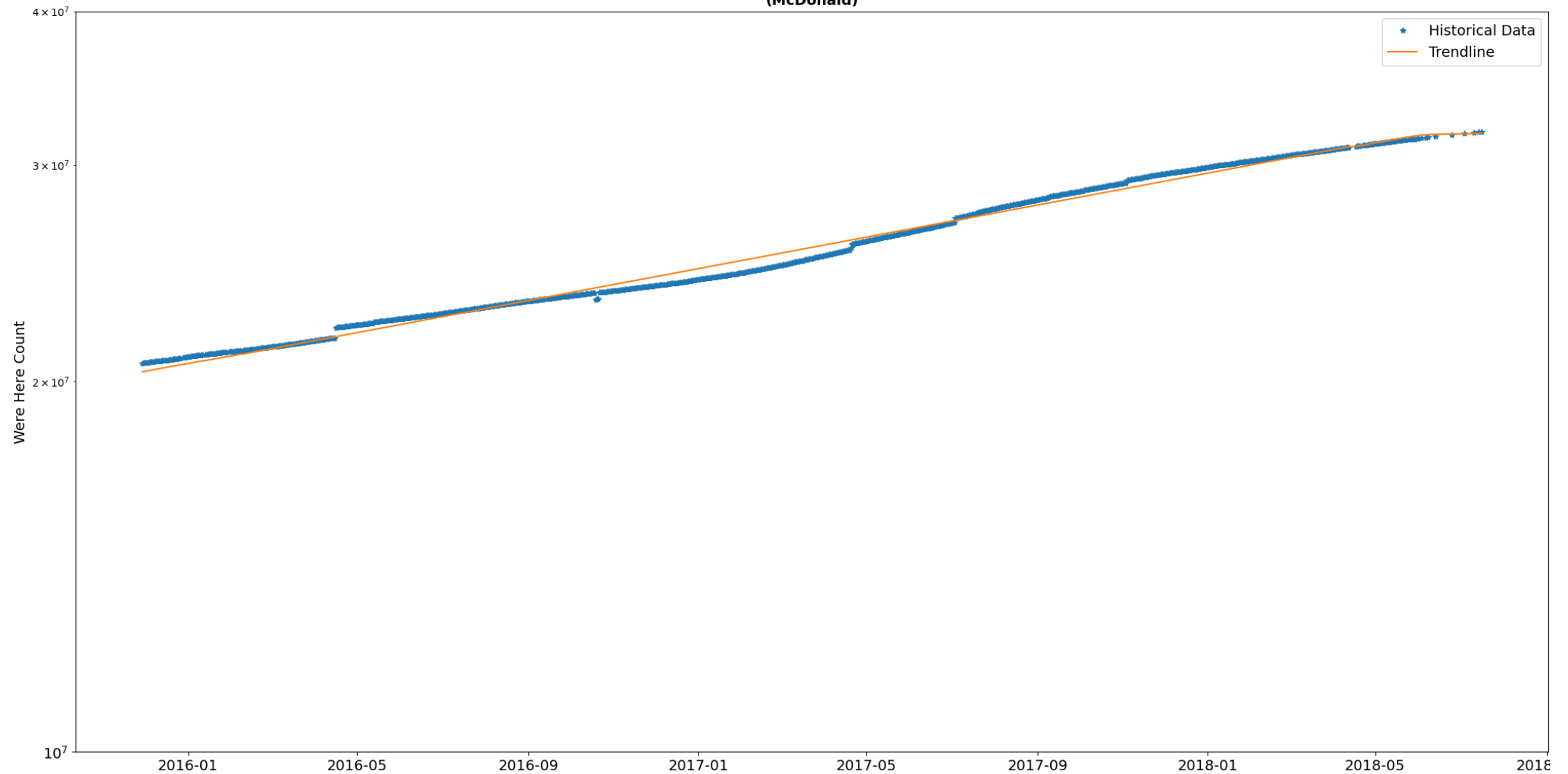
# PREDICTION MODELS (2)



Application of LSTM Model to Predict Talk About Count
(McDonald)

# FUTURE WORK

- Incorporate in more social media metrics that are indicative of restaurants' foot traffic.

- Aggregate descriptive statistics of all metrics for direct comparisons.

- Refine prediction models

- Connect social media performance to business' financial health