

# **Project - In the news**

## **ACT-Right**

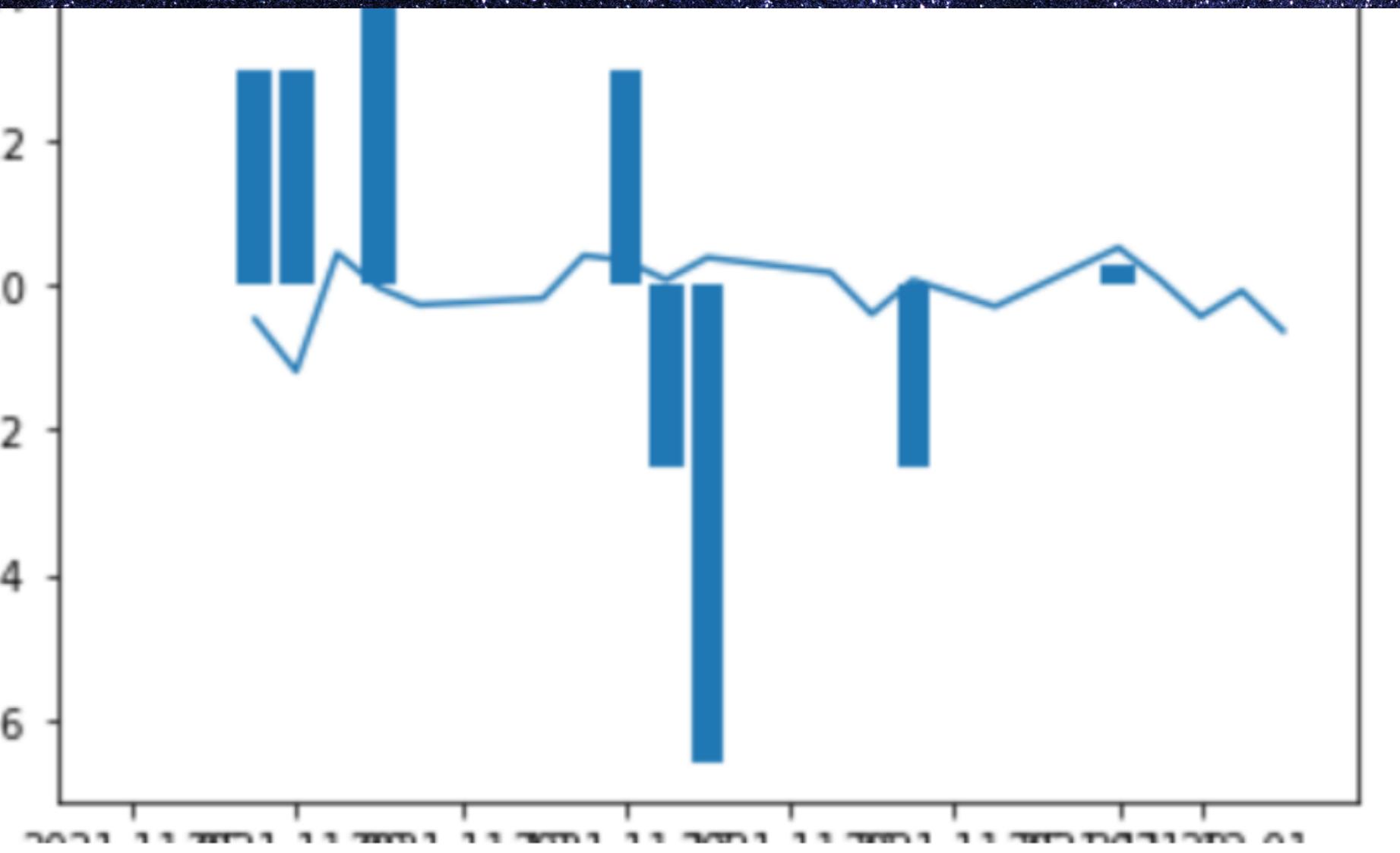
Aelrid, Chapman, Thien and Renu

# Objective

***Understand impact on stock price of a stock "in the news"***

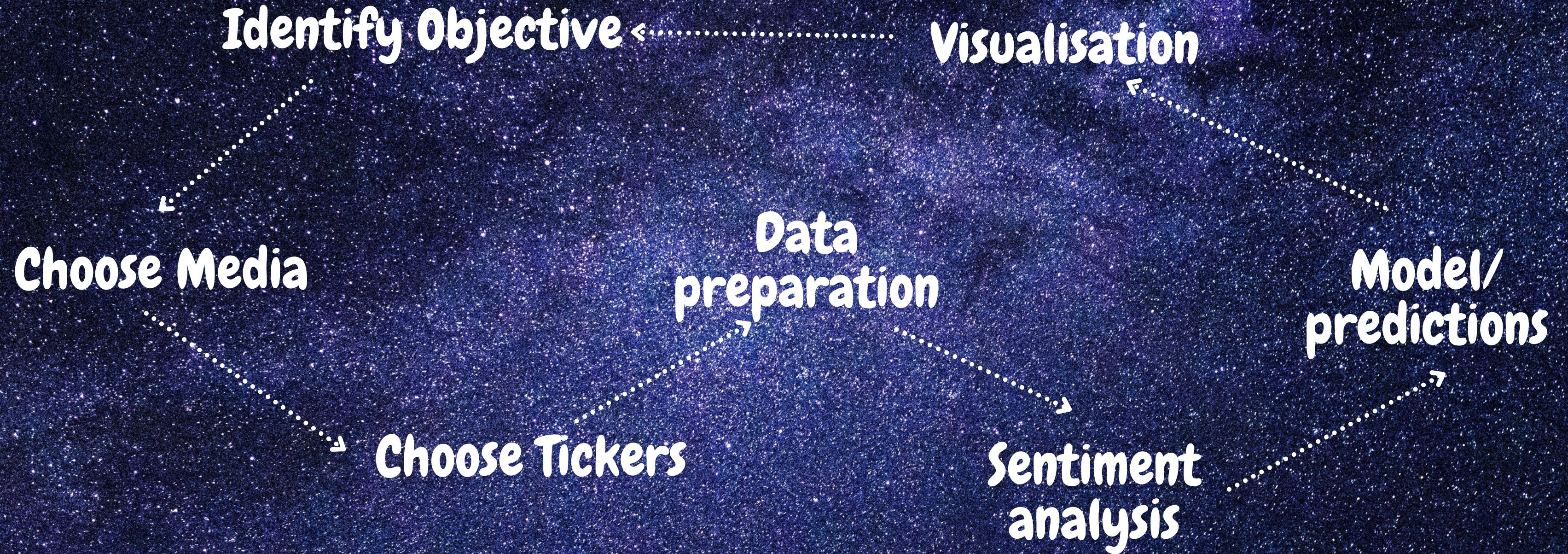
- Can sentiment for a stock be determined by it being in the news?
- Is there any relationship between stock price and its sentiment?
- Can sentiment be used to predict price of a stock?
- Should ACT- Right use the developed model?

# Model Summary & Key Findings



- Identify Model to train/test data
- Determine split of data
- Predict the sentiment

# Methodology



# Data Pre-processing

- Identify data sources, APIs and keys
- Identify the ticker most in the news (Tesla)
- Fetch data for time period based on maximum permitted
- Cleanse and load data into a dataframe
- Calculate the sentiment scores per media
- Calculate percent change for ticker

# Model Training

- Identify Model to train/test data
- Identify the target (percent change closing price)
- identify the features (Sentiment scores for each media)
- Determine split of data – train and test
- Predict the percent change
- Run iterations to determine best parameters

# Model Evaluation/ visualisation

- Visualise predictions with actuals
- Visualise share prices to sentiment prediction
- Confirm validity of model

# Project Challenges

- Budget constraints
- Used only text files
- Social media messages restricted to per day
- Time constraint- APIs, Sagemaker

The END

Questions and Answers

