

Project Proposal

**How has the sentiment of news
headlines evolved over time?**

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Purpose



Advancements in digital communication have influenced the way news headlines are shared and consumed



Socioeconomic events, such as the COVID-19 pandemic, have impacted the emotional tone of news headlines



Project aims to analyse sentiment trends to determine whether news headlines have become more negative

Data Source

Data source from
Kaggle and
compiled by Rohit
Kulkarni

Contains over a
million rows of
headlines from the
ABC from 2003 to
2021

Has two attributes:
publish date &
headline

Benefits & Challenges

Benefits

- Understanding public mood shifts
- Detecting media bias

Challenges

- Navigating subjectivity
- Handling large dataset

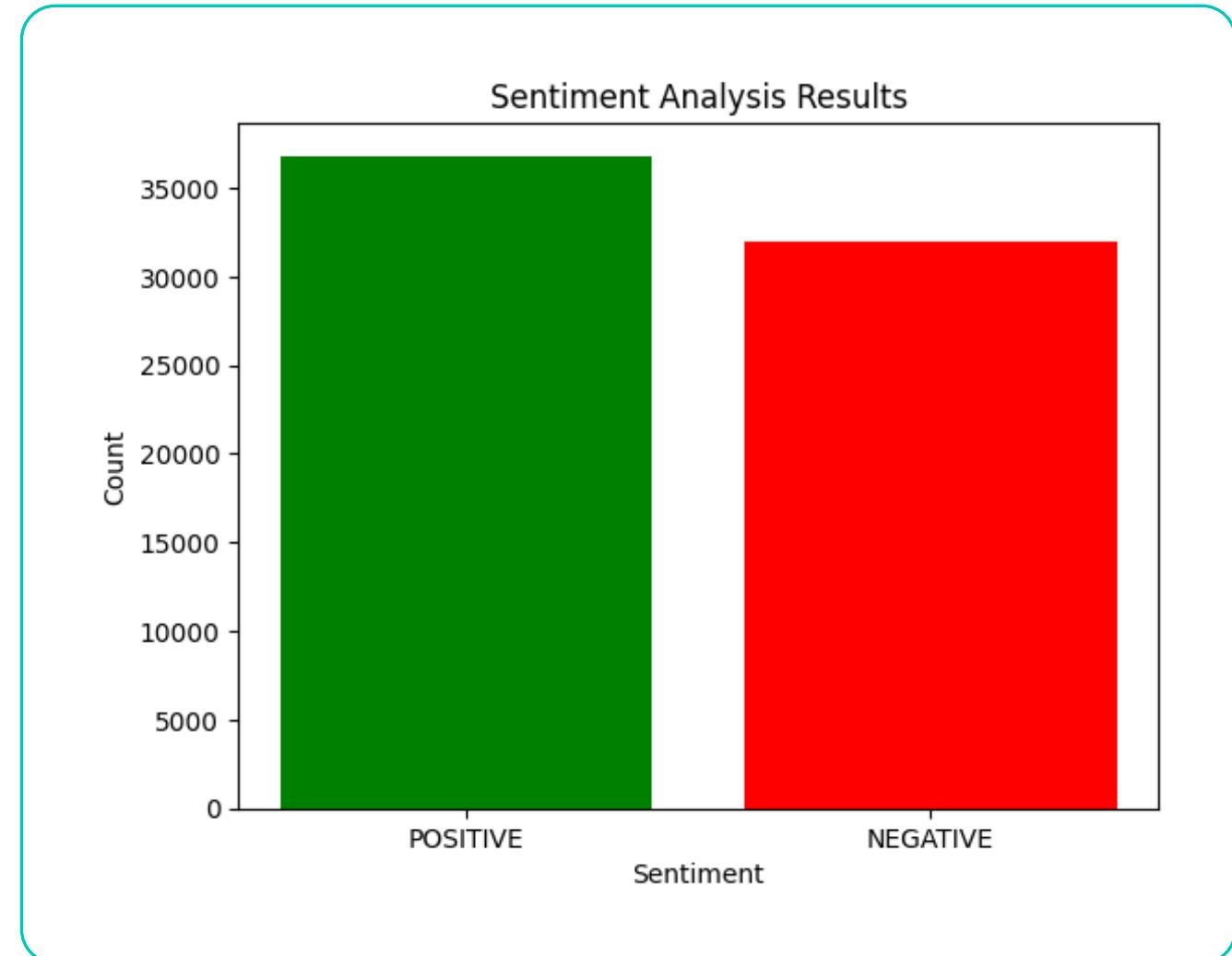
Methodology

- Python to make visualisations
- Pandas to read and manipulate data
- Matplotlib to make the visualisations
- Used Google Collab to run code
- Needed to filter data first

20120418,year of recovery for gilmore
20120419,abc business news and market analysis
20120419,abc entertainment
20120419,abc gears up for official brisbane hq opening
20120419,abc sport
20120419,abc sport news
20120419,abc weather
20120419,abc weather news
20120419,act most wasteful
20120419,act pokies trial talks stall
20120419,act property sector sentiment

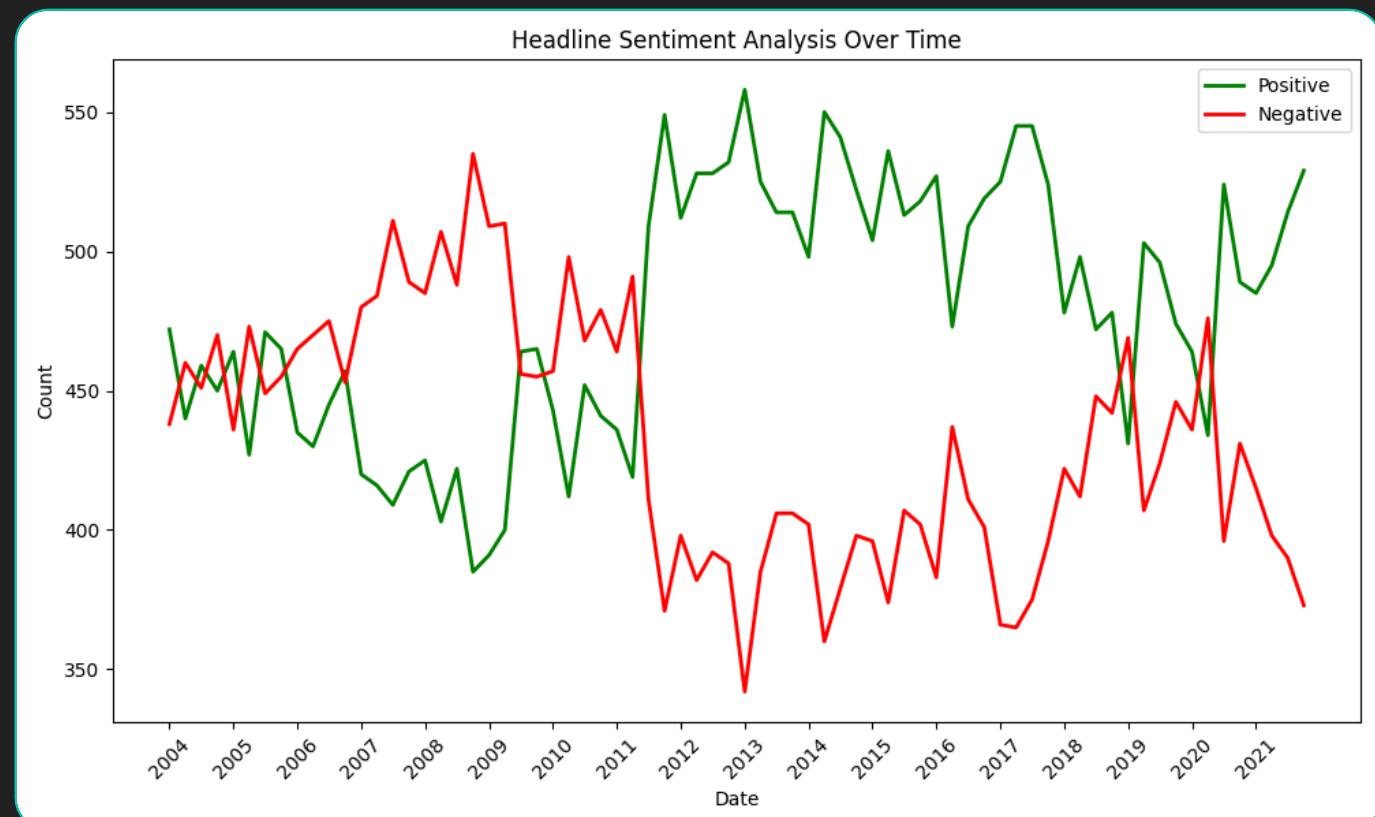
Preliminary Results

- Fairly balanced dataset
- Proves that the sentiment analysis model works
- How does the sentiment change over time?

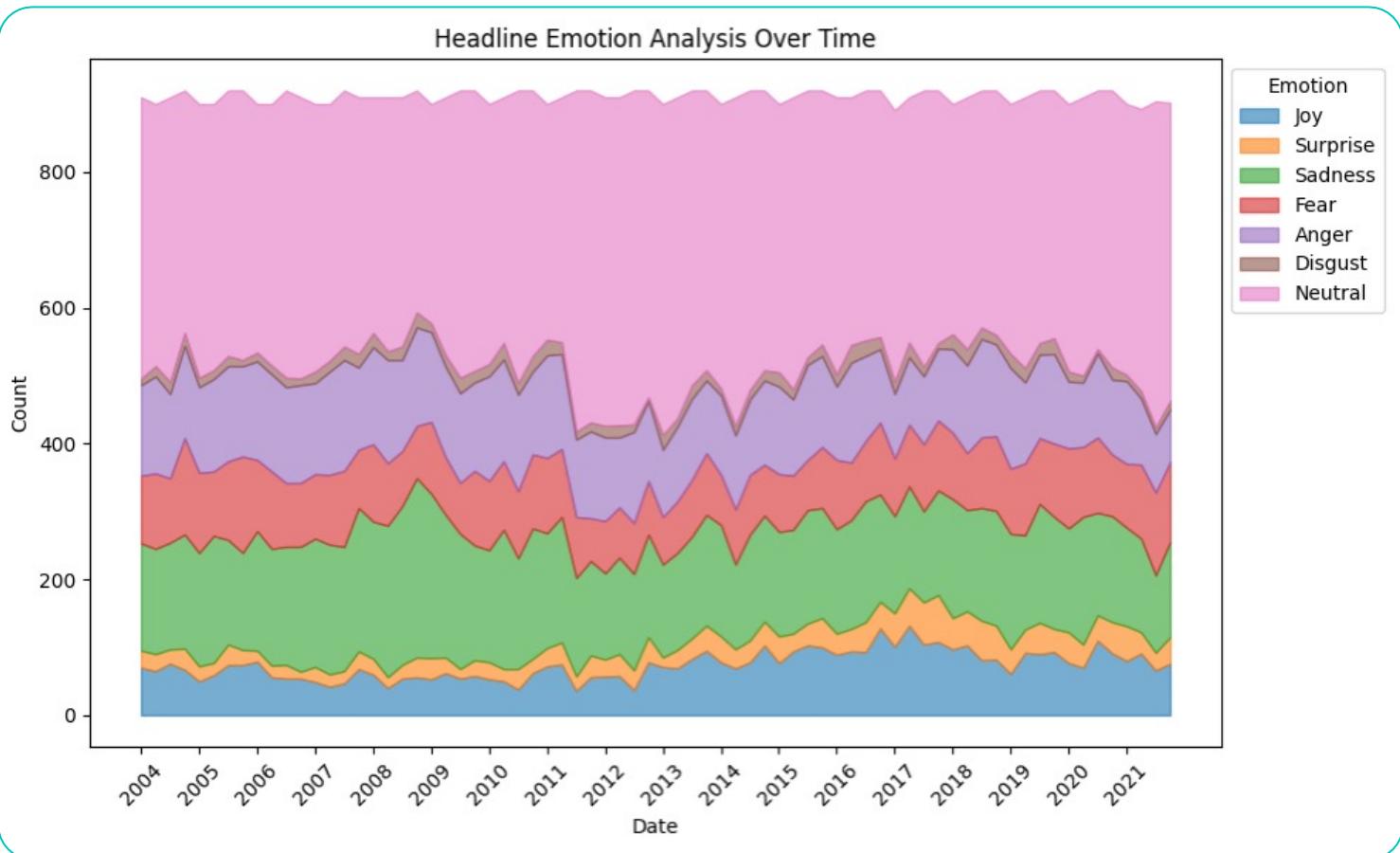


Preliminary Results

- Distinct periods of positivity and negativity
- Correlates to major events
- How about emotions?



Preliminary Results



- More sadness than happiness
- Correlates to previous graph
- What about the headlines affects its sentiment & emotion?

Future Visualisations



Keyword Word Cloud

Identify keywords and their related sentiment/emotion



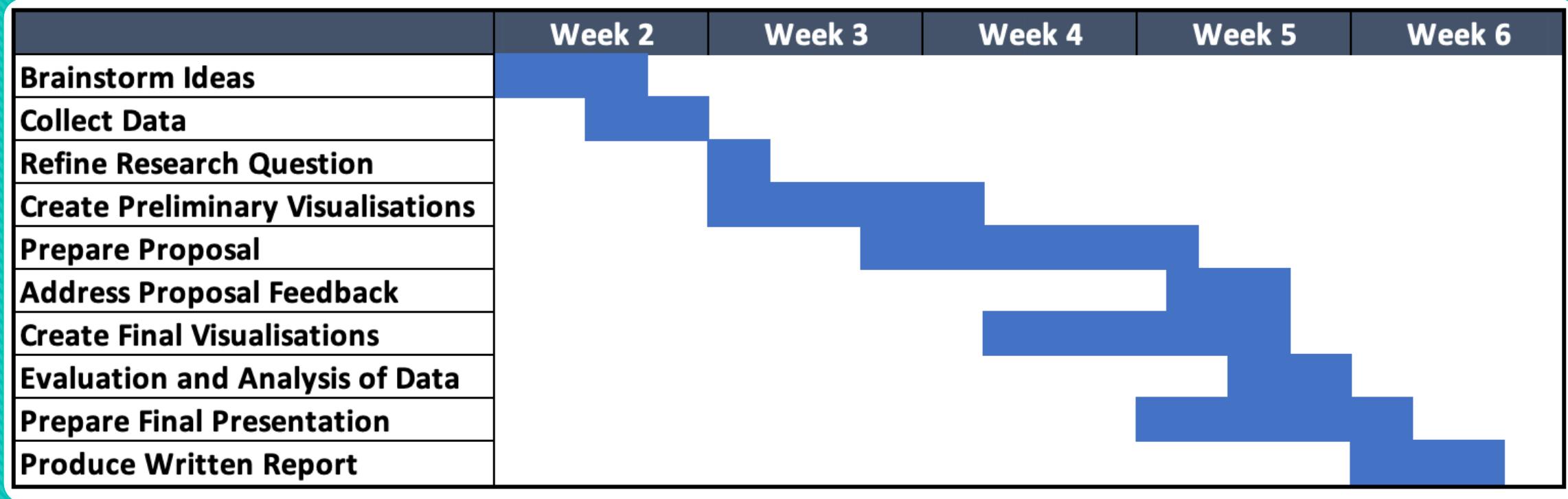
Topic Area Graph

Make connections between headline topic and sentiment/emotion



Emotion Sankey Diagram

Visualise connection between sentiment, emotion and topic



Timeline