Sentiment Analysis

# Abstract

VADER and TextBlob were used in this research to study the sentiment values across Singapore, United Kingdom (UK), and the United States of America (USA) over a period of 2 weeks. In general all 3 countries sentiment is slightly positive, with USA having periods of negative sentiments. The effects of covid-19 are impacting the world, with the world still adapting to the new normal.

# Within individual countries

## Singapore

According to VADER, it appeared that the spirits of Singapore remain very high even though covid-19 brings much uncertainty to the world. This was slightly supported by the polarity score from TextBlob. The polarity score provided a better assessment of what is happening in Singapore. While the overall sentiment is considered positive, it is a weak positive (ranges from 0.05 to 0.12). This score would make more sense considering covid-19 sparked an economic crisis worldwide and Singapore is no exception.

## United Kingdom

The positive sentiment in UK appeared to be on an upward trajectory before falling off by a bit by the end of the 2 week period. This is mostly supported by the polarity score, which there is fluctuation after the first entry. The polarity score ranges from 0.04 to 0.14, which suggested the people in UK are borderline contented and unhappy.

## United States of America

The sentiment in the US was negative at the beginning, went positive before dipping back into the negative zone at the end of the study. The polarity score somewhat echo the VADER score since it has similar trajectory as compared to VADER. This could suggest the dividedness of the citizens.

# Comparing the 3 countries over a specific period of time

Singapore is feeling more positive albeit not by much over the 2 weeks, while US and UK are fluctuating.

Positive text: Singapore is generally stable in this category, while US and UK has fluctuating values.

Negative text: Singapore is steadily decreasing, UK has a stable range while US fluctuates.

All 3 have high percentages for neutral text, which is unsurprising because news articles are generally informative. The subjectivity score can be used to indicate the significance of opinions within each article.