NLP

SENTIMENT ANALYSIS: GOOGLE AND APPLE.

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Introduction:

Google and Apple are multinational technology companies well known for their products such as google sheets (from Google) and iPhone (from Apple).In order to improve customer satisfaction Google and Apple companies would like to analyse their customers' feedback from various sites such as Twitter(now X).

Problem statement:

Since Google and apple are multinational companies with multiple users,analysing the their customers' feedback using human labor can be very time consuming and costly. As a result, the companies would like to build a model that can rate the sentiment of a tweet (or text) based on its content.

Business understanding:

In order to improve customer satisfaction Google and Apple would like to analyse their customer feedback.To reduce the cost of analysing customer sentiment with human labor,the companies would like to build a model that can rate the sentiment of a tweet (or text) based on its content.

Data understanding:

The data that was used to build the model contains about 9000 tweets from various customers.Since both companies will focus mainly on tweets from Twitter (now X),the data proved to be the most efficient to build a model on.

Modelling:

Four models were developed in this project.The best model had an overall accuracy of 69% on the validation data.These results are considerably high since our model rates the tweets into three categories namely:

- Positive
- Negative
- Neutral.

Evaluation:

The RNN model which was the model with the highest accuracy had an accuracy of 67% on the test set.It can therefore be used for modelling since it has a relatively high accuracy.These results also proved that the model can generalize into unseen data

Conclusion:

From the results,the final (RNN) model can be used to rate the sentiment of various tweets in the real world.

Thanks!

Do you have any questions?

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