MATH 513 Practical Presentation

10570155, 10696253, 10701983

10/12/2020

Introduction

- Samsung and Apple
- Flagship phones chosen
 - ▶ S20FE
 - ▶ iPhone12
 - ► S20

Tools Utilised

- Rstudio
- RTweet
- Twitter Developer API
- Github

Research

Chosing Twitter for Analysis

- !!! Why did we choose Twitter data ## Ref needed
 - Twitter data provides up to date information for companies to analyse for customer feedback
 - Data can provide useful information to guide product teams when analysed correctly

 $\label{lem:https://twitter.com/SamsungMobile - https://twitter.com/SamsungMobile - \\ @tim_cook - https://twitter.com/tim_cook$

!!! Pictures of the phones in colours that match graphs to associate?

Data Collected

Data Frame (Tweet Count)

!!!!! Need to push the above into a useable data frame with grouping by product (y axis) and feature (x axis)

74,000 Tweets

XXXX mentioned features

Total for features |Product | Sentiment Scores| |S20 | 3,480 sentiment scores| |S20FE | 6,302 sentiment scores| |iPhone12 | 2,470 sentiment scores|

Results - Time Series

Results - Sentiment Analysis

Overview of sentiment analysis

Choice of feature to analyse

Results - Sentiment Analysis

GRAPH HERE

Results - Sentiment Analysis

GRAPH HERE

Improvements & Further Study

Improvements

Google Maps API to have region filter

Look at mentions of apple in samsung and vice versa

Issues and overcoming them

- Extraction by date
- Duplication
- Time limits
- Foreign languages
- •

Conclusions

- Twitter data provides up to date information for companies to analyse for customer feedback
- Data can provide useful information to guide product teams when analysed correctly

References

- Twitter (2020) API Documentation Available at: https://developer.twitter.com/en/docs/twitter-api (Accessed: 10 October 2020)
- RStudio (2020) R Markdown Cheat Sheet Available at: https://www.rstudio.com/wp-content/uploads/2015/02/rmarkdown-cheatsheet.pdf (Accessed: 10 October 2020)
- RStudio (2014) R Markdown Reference Guide Available at: https://www.rstudio.com/wp-content/uploads/2015/03/rmarkdown-reference.pdf (Accessed: 10 October 2020)
- Dalla Valle, Luciana (2020) MATH513 Lecture and Tutorial Code Available at: https://dle.plymouth.ac.uk/course/view.php?id=49628 (Accessed: 2020)
- Fuchs, Matti (2018) Doing your first sentiment analysis in R with Sentimentr Available at: https://towardsdatascience.com/doing-yourfirst-sentiment-analysis-in-r-with-sentimentr-167855445132 (Accessed: 06 December 2020)
- Rinker, Tyler (2020) R Documentation sentiment_by Available at: