SAFARICOM TWITTER ANALYSIS

Introduction

This is a report of analysis performed on Twitter data containing the word "safaricom". The report is divided in 2 parts:

1. Analysis of Twitter data queried from inteli_onrewards database
2. Analysis of Twitter data downloaded from Twitter Api

Analysis of Twitter data queried from inteli_onrewards

This section explores Twitter data queried from TWPosts table in the inteli_onrewards database. The data is made up of all the Twitter data related to tweets containing the word "safaricom" and tweeted between Nov 7, 2016 and Nov 13, 2016. The number of data points analysed is 3798.

The following is a description of some variables in the analysed data:

- message: The verbatim texts of tweets.
- user_id: Unique numeric identification of Twitter users.
- user_handle: Twitter handle name of Twitter users in the data.
- user_followers_count: Number of followers of Twitter users in the data.

Analysis of tweets

This entails analysis of the verbatim text used in tweets. The aim of the analysis is to gain insight into Twitter conversations happening around the brand "Safaricom".

Most Frequent Words in the Tweets

3798 data points were analysed. The data points included tweets, retweets and replies. Data cleaning included: removal of urls, numbers, punctuation and blank spaces.

Figure1: Wordcloud

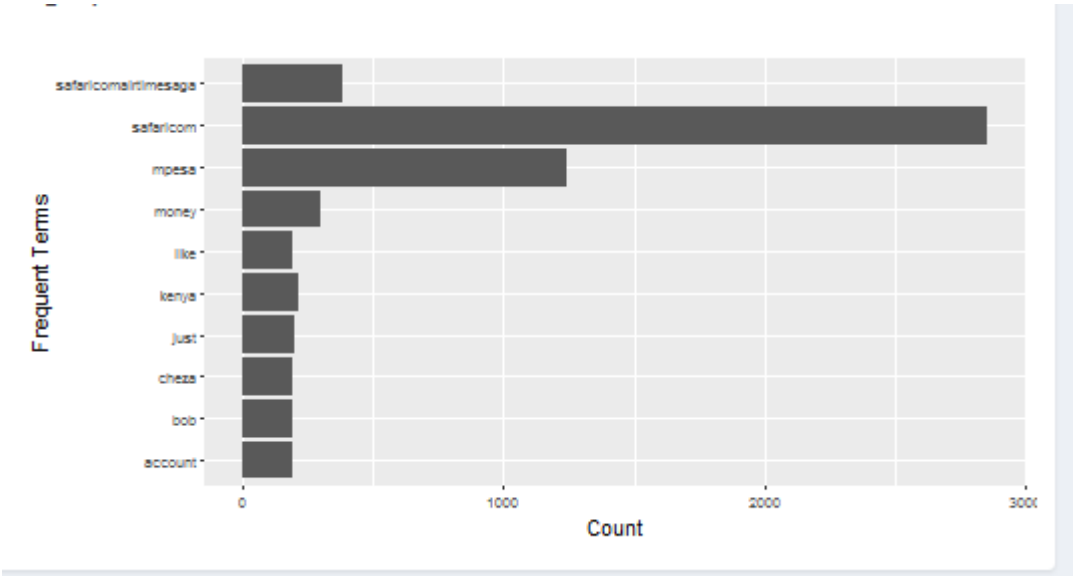

Figure 1: Graph of 10 most frequent words in the tweets

Most Used hashtags

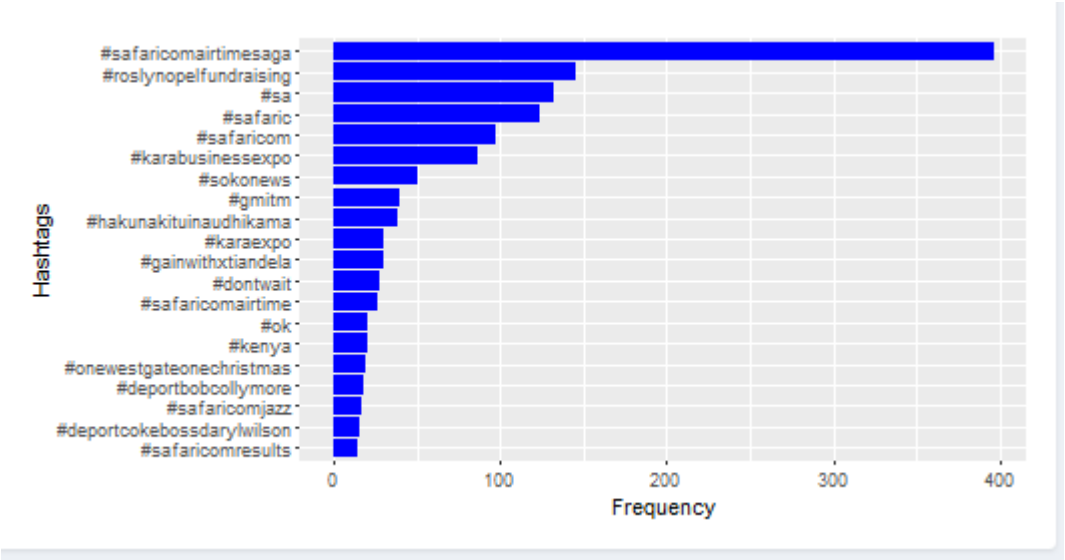

Figure 3: A graph of most used hashtags

Most retweeted tweet

Twitter users

Figure 2: Most retweeted tweet

Analysis of Twitter users

The analysis of Twitter users seeks to understand users who included the word "safaricom" in their tweets, retweets and replies. 2433 unique users, as identified using user_id, engaged with brand "safaricom". 1900 mentioned "safaricom" in only one conversation and 321 mentioned "safaricom" in two conversations.

Number of users' conversations containing the word "safaricom"

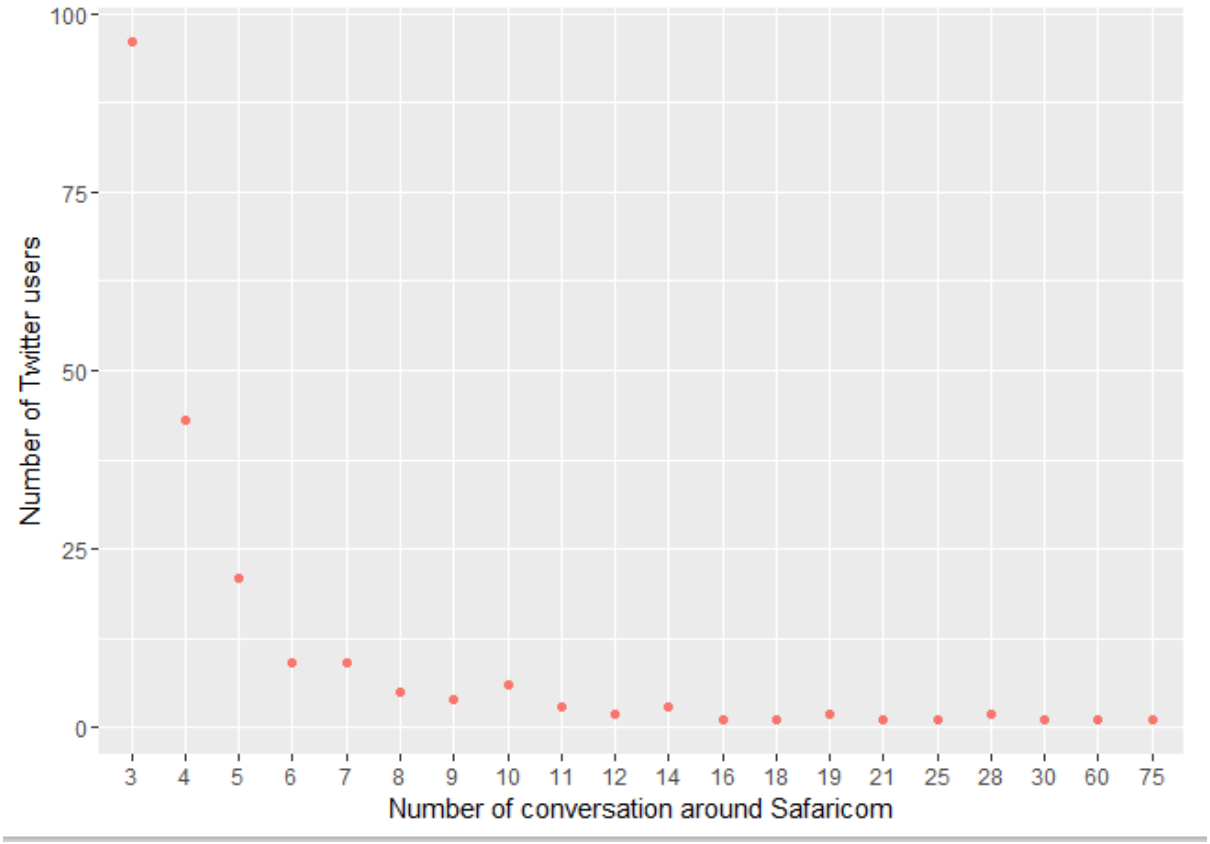

Figure 5: Number of conversations

Figure 5 shows the number of conversations that happened around "safaricom" excluding those who mentioned "safaricom" once or twice. The highest number of conversations around "safaricom" contributed by a single user is 75.

Twitter users with most tweets mentioning "safaricom"

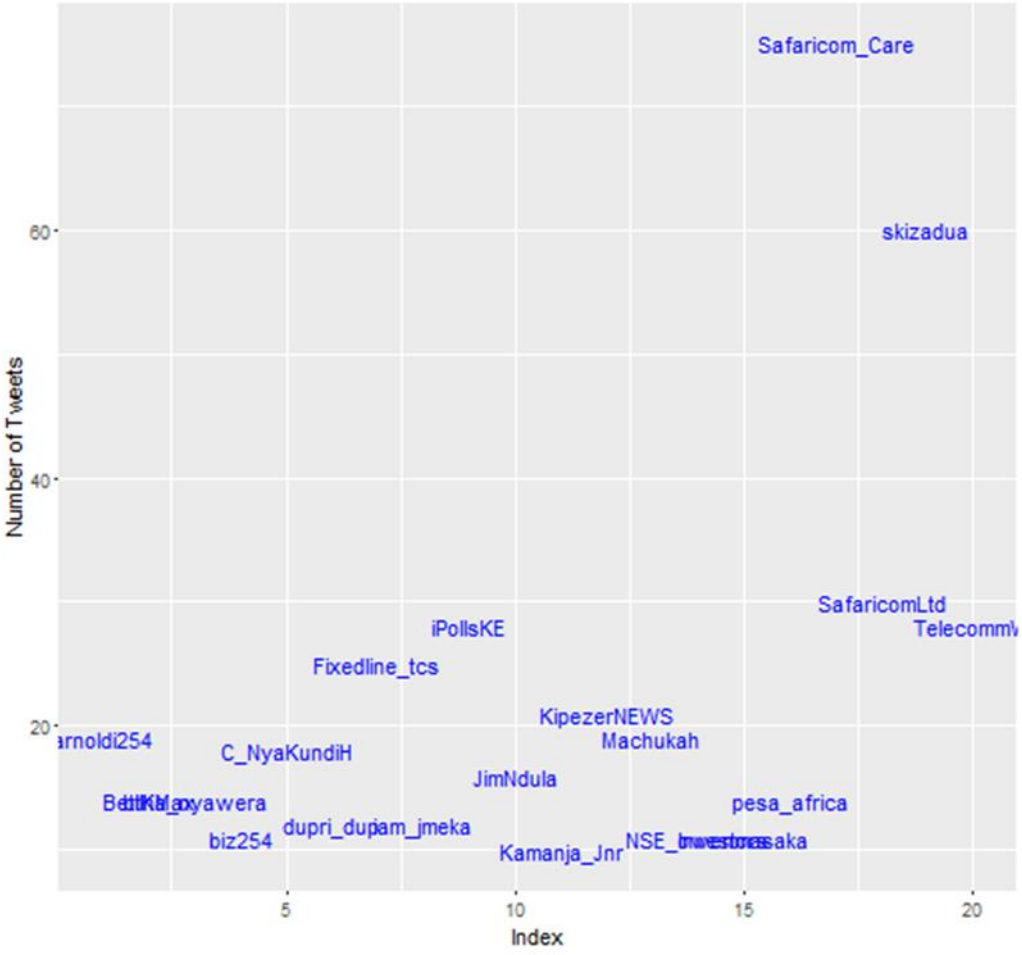

Figure 6: Twitter users with most tweets

From figure 6, we see that @Safaricom_Care was the greatest contributor of the conversations around "safaricom" followed by @skizadua and @SafaricomLtd.

Most followed users

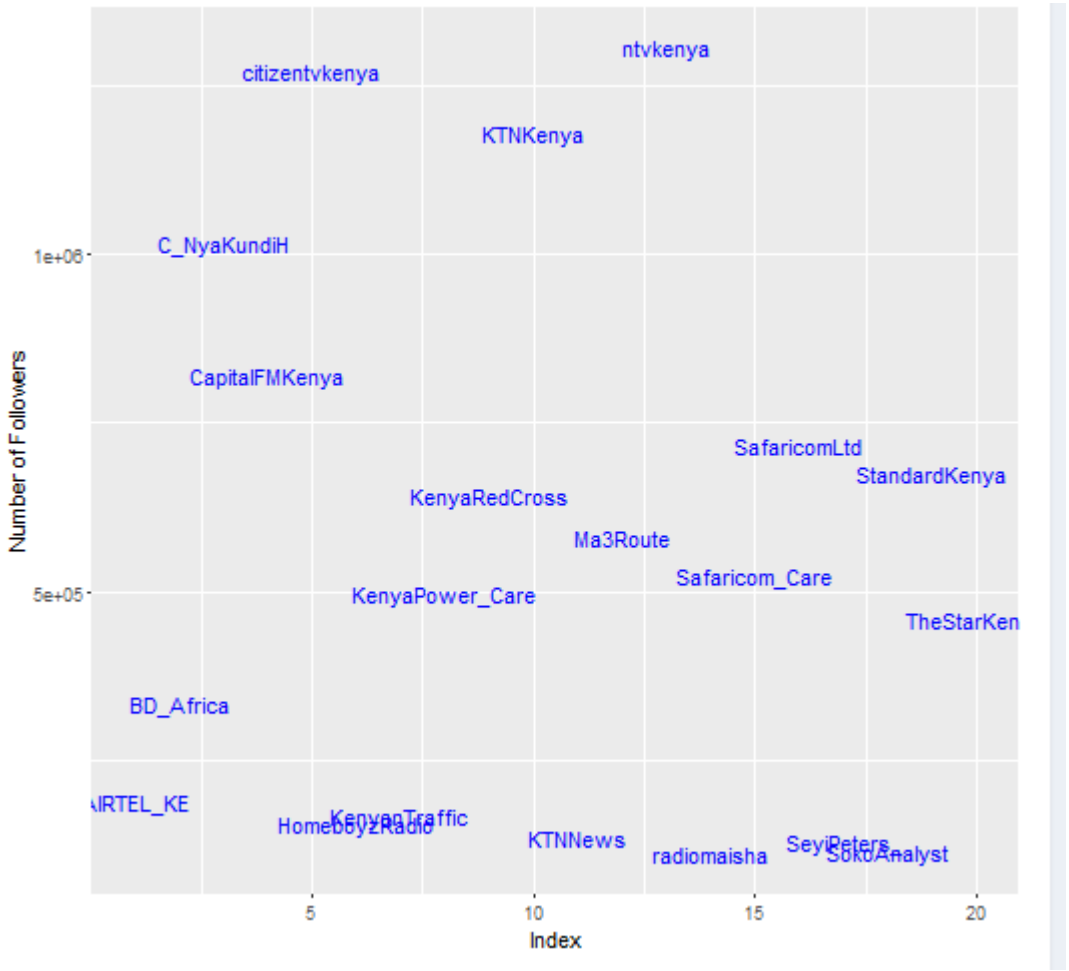

Figure 7: Most followed users

Figure 7 shows the most influential Twitter users, in terms of number of followers, who mentioned “safaricom” in their tweets.

Analysis of data downloaded from Twitter API

Twitter data used in this section is composed of 7000 data points related to tweets containing the word "safaricom" as downloaded on November 15, 2016 at 14:24:22. The variables used in analysis are described below:

- statusSource: Platform used by Twitter users to tweet.
- created: Contains the year, month, time, hour, minute and second when a tweet was posted.
- weekday: Day of the week on which a tweet was posted. It is derived from variable created.
- hour: Hour of the day in 24-hour format in which a tweet was posted. It is derived from variable newdate.
- isRetweet: A logical variable showing whether a data point was a retweet or not.
- retweetCount: Number of times a tweet was retweeted.
- tweetCount: Number of tweets. It is derived from variable isRetweet in a subset of Twitter data containing original tweets only.

Analysis of Twitter users

Platforms

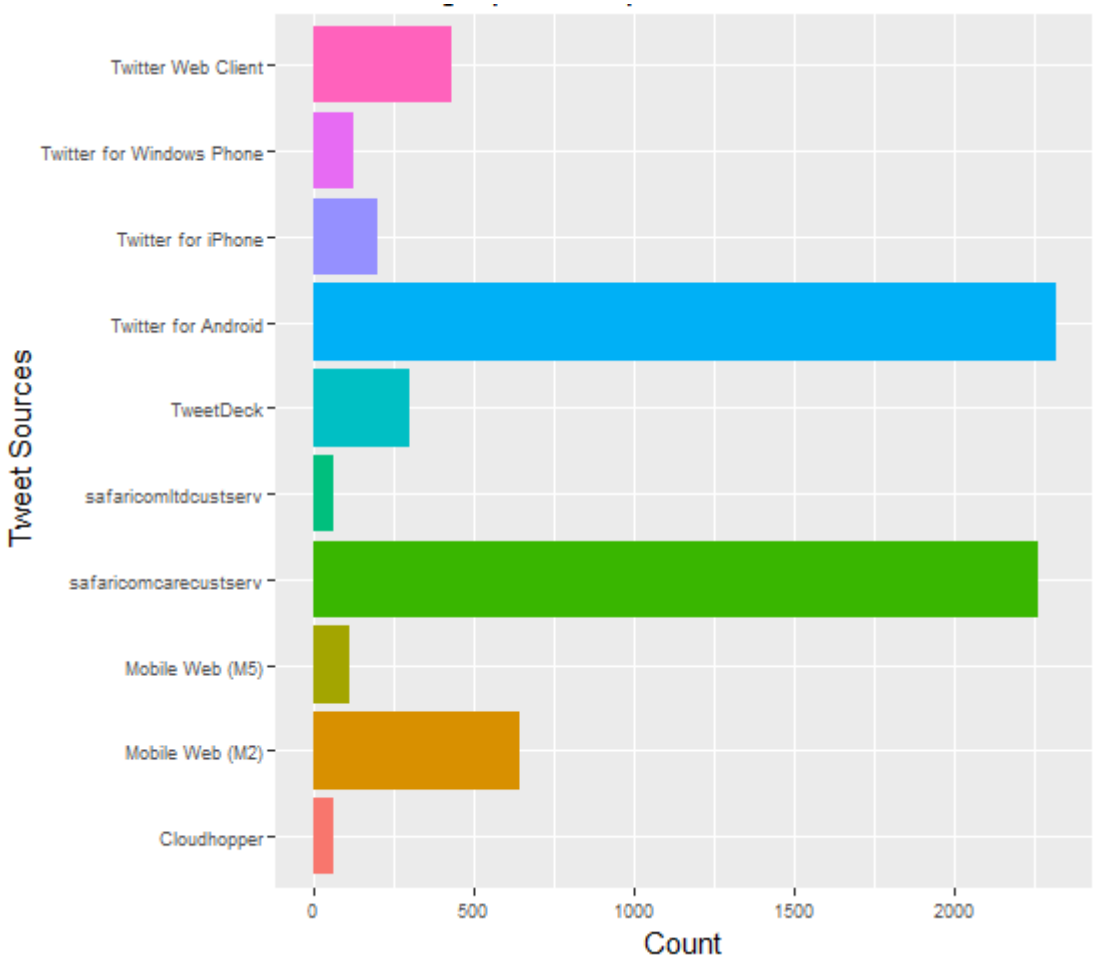

Figure 8

Analysis of activities

Tweets per day of the week

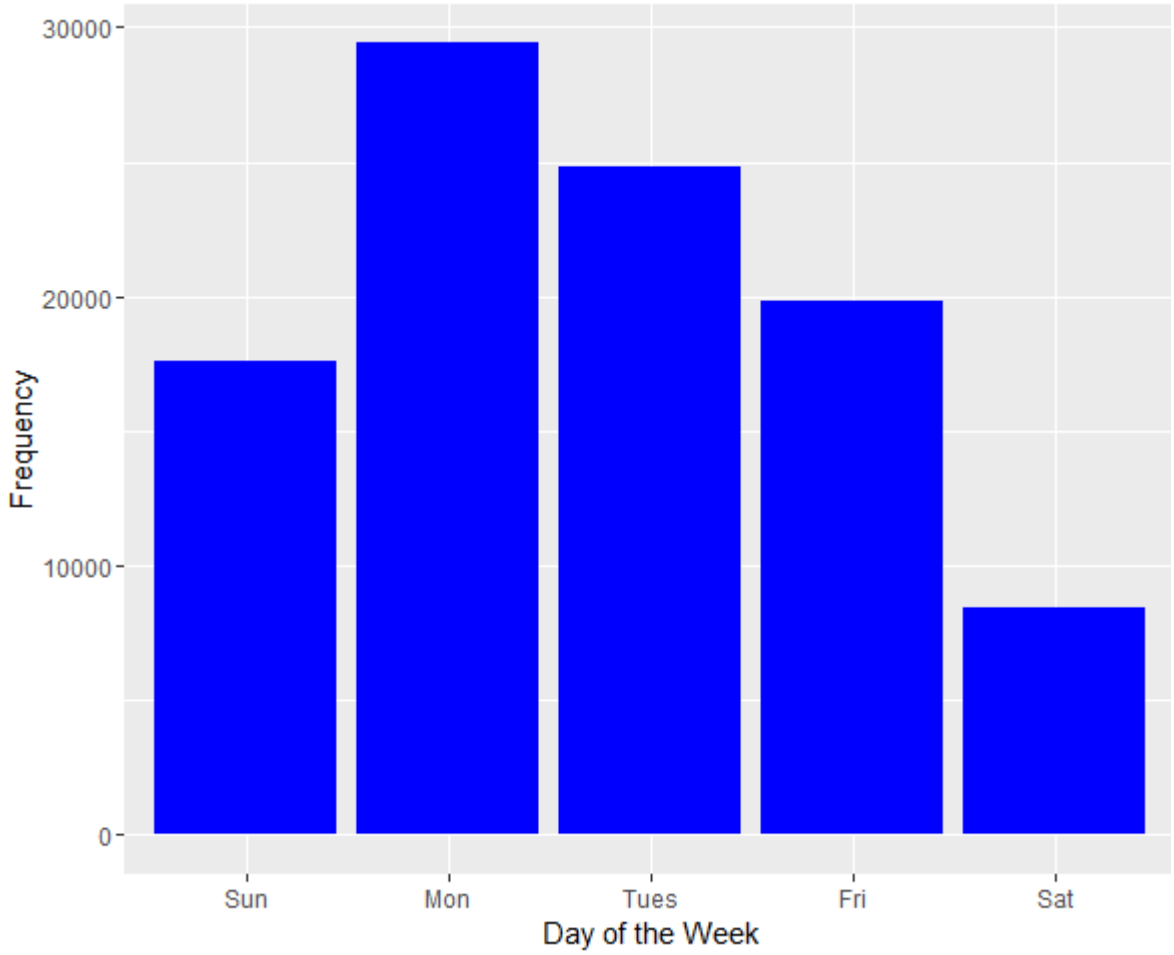

Figure 9: A graph of number of day of the week against number of tweets

Retweets per day

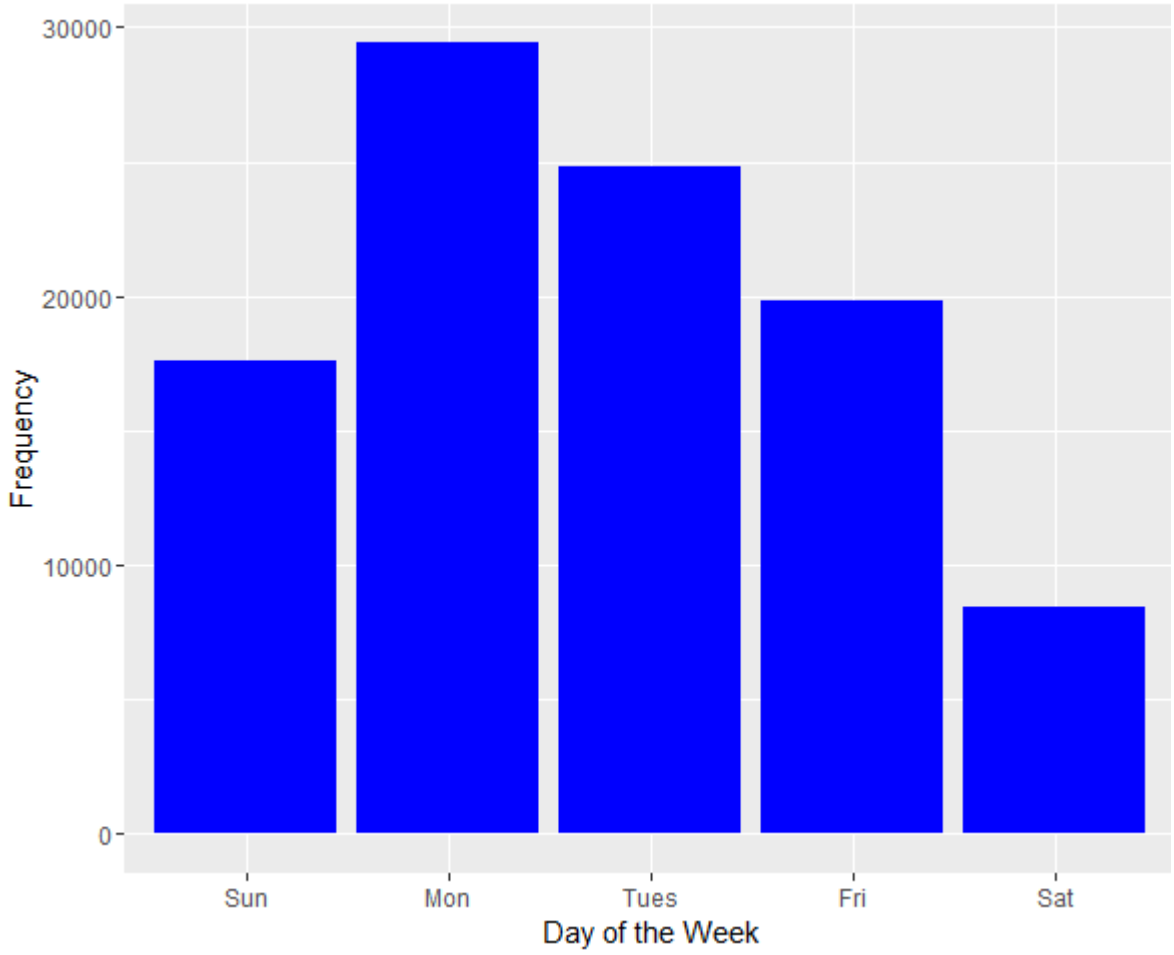

Figure 10: A graph of day of the week against number of retweets

Tweets per hour

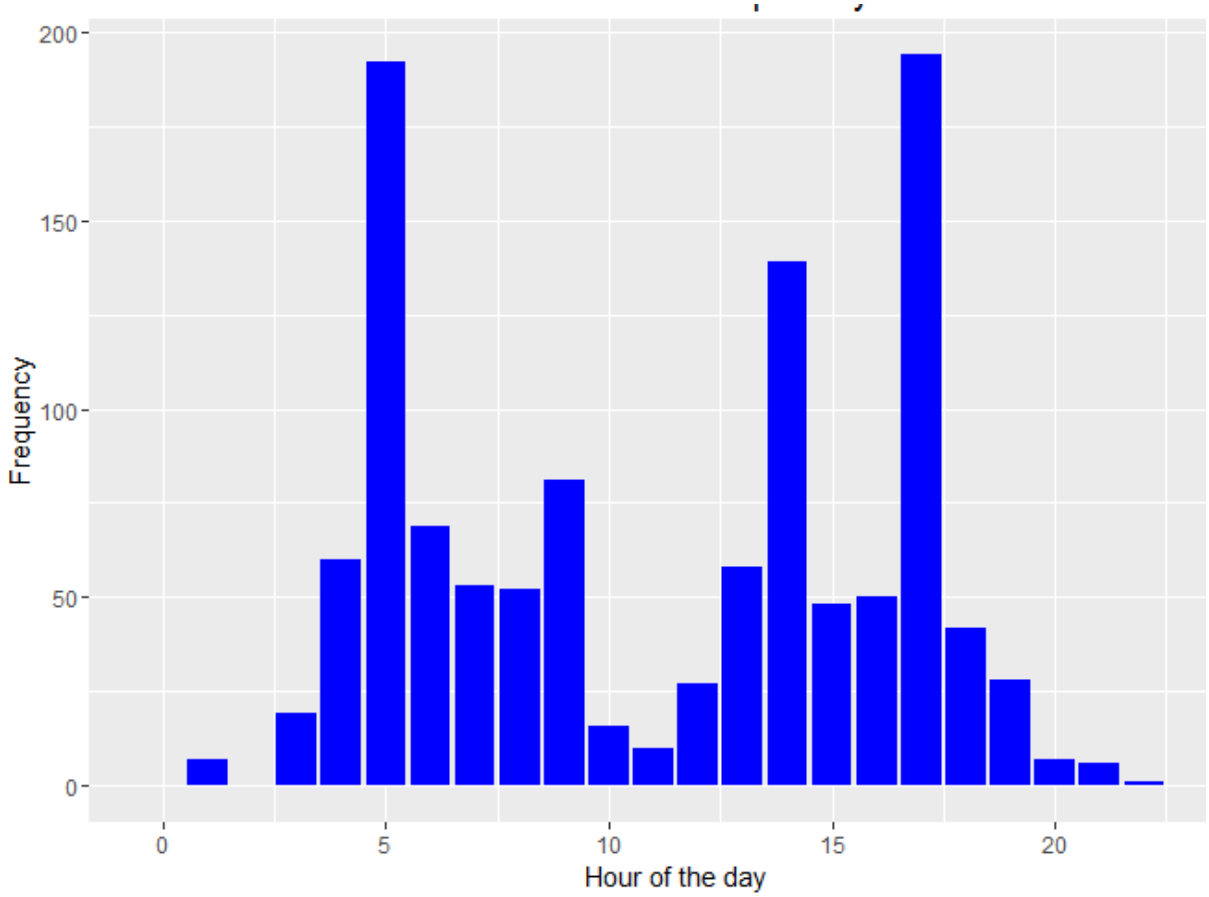

Figure 11: A graph of the hour of the day against number of tweets

Retweets per hour

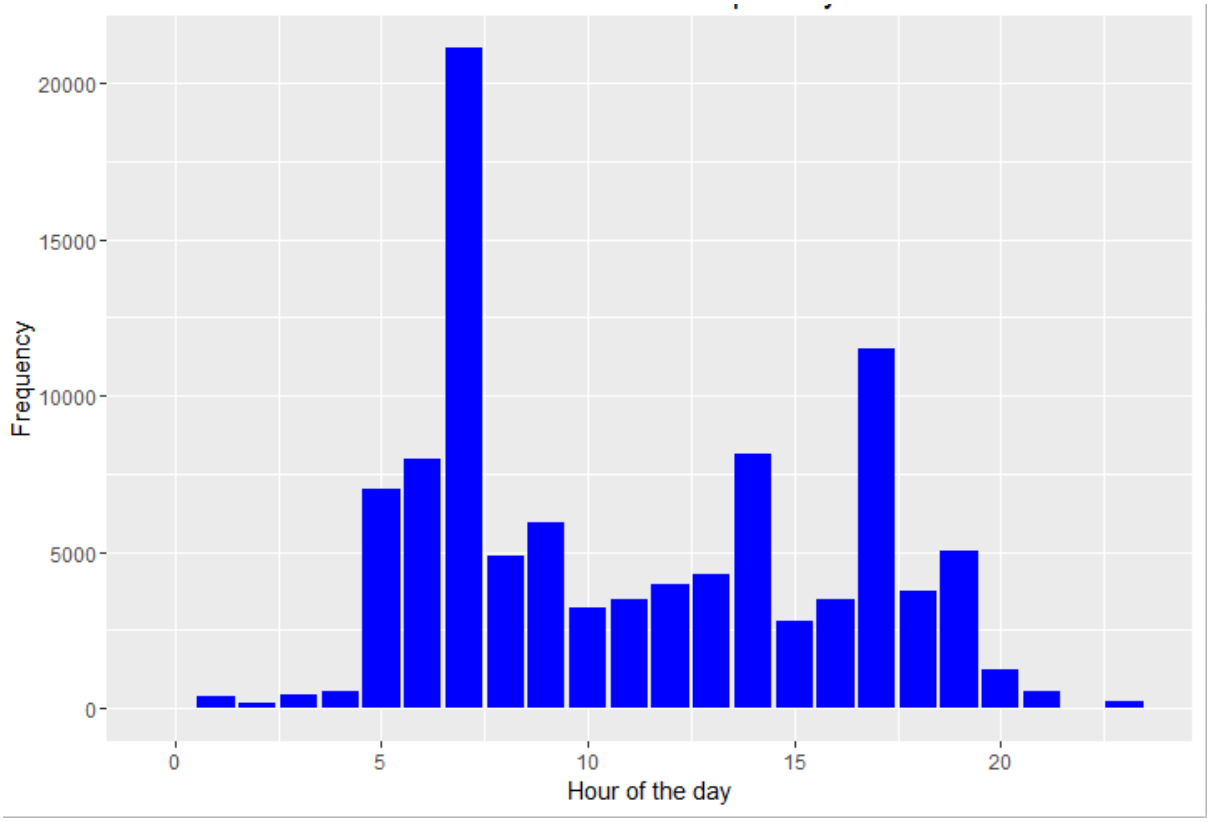

Figure 12:: A graph of the hour of the day against number of tweets