

Ministry of Interior

Social Media Governance

Twitter account analyzing

Prepared by

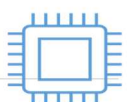
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Is Social Media Governance important ?

The official directives of all government agencies, both civil and military, continue to follow social media and interact with it quickly and as the number of Twitter users in the Kingdom of Saudi Arabia is rising in users (more than 25 million users) among the population of 35 million people ⁽¹⁾. This social media application is so important because it would be a link between the citizens or the residents and other governmental authorities. as our contemporary reality witnesses technical developments in the fields of interaction through social media networks, which opened up diverse fields of interaction and open up opportunities for individuals to raise their voices. Therefore, those in charge give more attention to the influential role of these networks, given their access to all members of Saudi society. Through it, opinions and experiences are exchanged on many axes that primarily concern the citizen and the resident, and its various societal channels. Given received by the platform Twitter of significant interactions because Saudi Arabia is the fourth largest community of Twitter user platform worldwide for the population. public opinion trends based on the analysis of communication networks, data and interpretation of the reality of social interactions through digital significance and statistics assessment objective so all result would be based on scientific foundations and methods for web studies by conducting a study of social networks, targeting any government agency and analyzing all data contained in that accounts on the Twitter platform to ensure direct interaction between government agencies, citizens and residents are going so smooth and give the BEST services .

The goal of the project :

Studying the analytical data of government agencies in order to ensure a quick response to inquiries and reduce the time and effort expended for that through the use of statistical functions that ensure, God willing, sorting out what is received on the authority's account on the Twitter platform and providing computer technical suggestions and determining the handling of those tweets quickly and analyse all data regarding to that agencies.



The importance of the project:

The importance of this project is related to the large increase in Twitter users in the Kingdom of Saudi Arabia and what this requires is the importance of interacting with that increase through the use of technology in sorting and classifying all tweets and identifying the important ones to deal with it quickly. The importance of the project can be summarized in the points the following :

1. Enhancing distinguished communicative posts through positive tweets that appear from the excavation surveys and their indicators that have a positive impact on society.
2. Providing decision makers in government agencies with realistic analytical results of the impact of social interactions with any tweet, positive or negative, to guide them when building strategic and operational plans for government agencies
3. Defining evaluation criteria and indicators for interactions through social networks, especially the Twitter platform, to inform the tweeters of the evaluation effects of their tweets, to investigate the positive ones and deal with the negative ones in an effective manner that ensures the well-being of the citizen and the resident
4. Applied contribution to improving the development efforts of man powers and place in the Kingdom of Saudi Arabia and give best evaluation to make sure that results would be perfect or near perfect of the impact of those interactions on social networks

Tools used :

1. Jupyter notebook.
2. Twitter API .
3. Tweepy
4. Some extenal data gathring and private frameworks.

Privacy :

There are no misuse of the services of any LAW breaking at any stage.

Procedures taken so far :

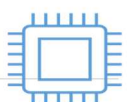
1. Grap some data from twitter account using their API to collect data of MOI tweets and related to it (for demonstration purpose only).
2. Save that data into CSV file .
3. Import CSV file to Jupyter notebook.
4. Analyse data and arrange it
5. Visualize that data
6. Catogriz data by date

what I want to achive :

1. Visulaize twitter data related to any account .
2. Catogriz it by date or number of tweets or possitive or nignative
3. Search for link between all tweets to make visulaize report that can connect users to each other.
4. THIS IS NOT BOT .

Library that I imports :

- import numpy as np (V1.20.1)
- import pandas as pd (V1.2.4)
- from pandas import DataFrame
- from pandas import Series
- import matplotlib
- import calendar
- import matplotlib.pyplot as plt
- import matplotlib as mpl (V3.3.4)
- import seaborn as sns (V0.11.1)

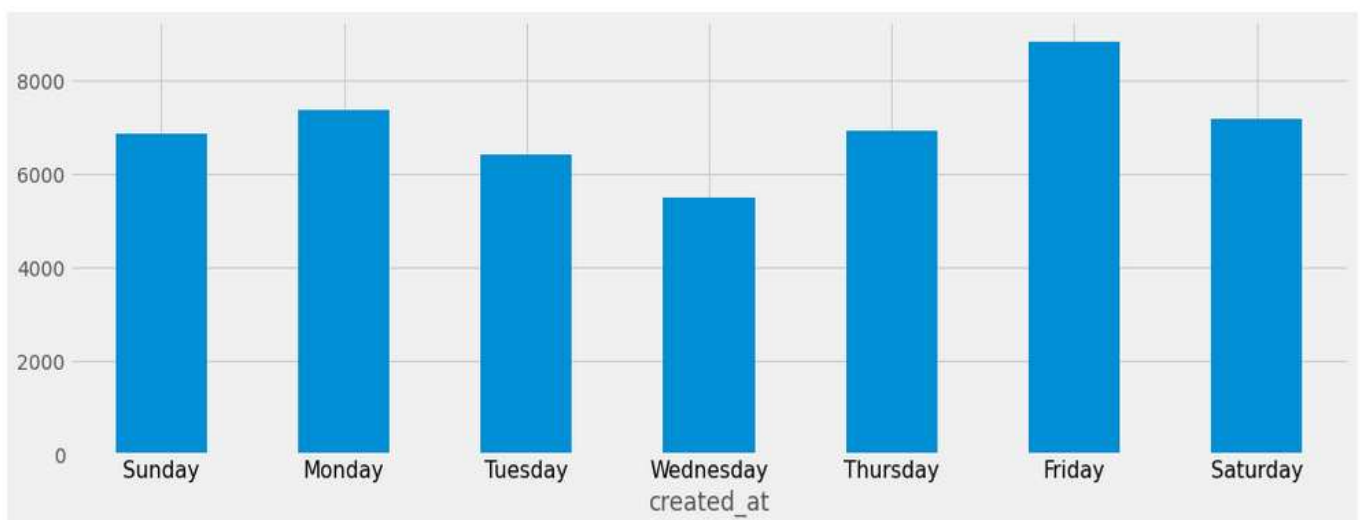


List all the columns in the Data Frame

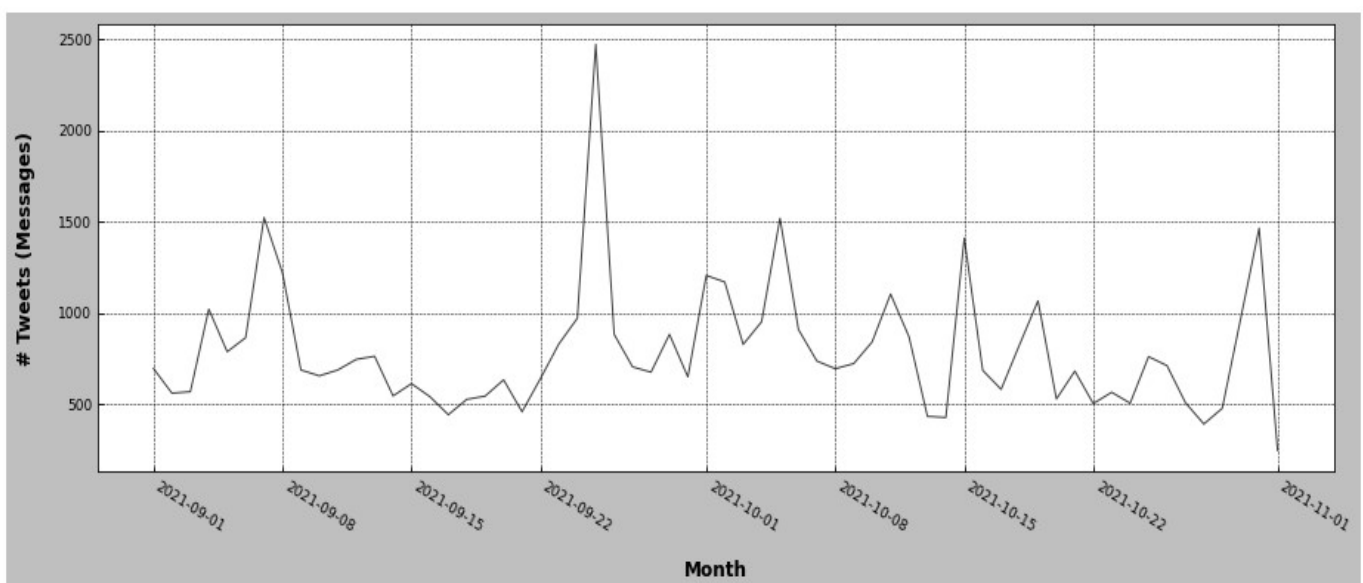
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df.columns
```

```
Index(['Unnamed: 0', 'id_str', 'retweet_count', 'favorite_count', 'replyCount',  
      'quoteCount', 'user.screen_name', 'datenew', 'created_at',  
      'datecreatetweetold', 'text', 'datecreateuserold', 'user.created_at',  
      'engagments', 'day', 'month', 'year', 'url'],  
      dtype='object')
```

Catogriz data by days :



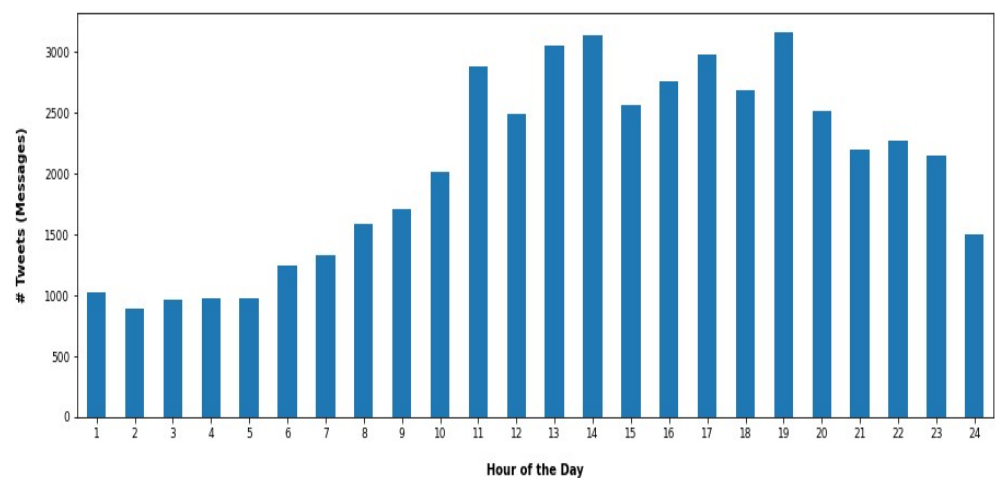
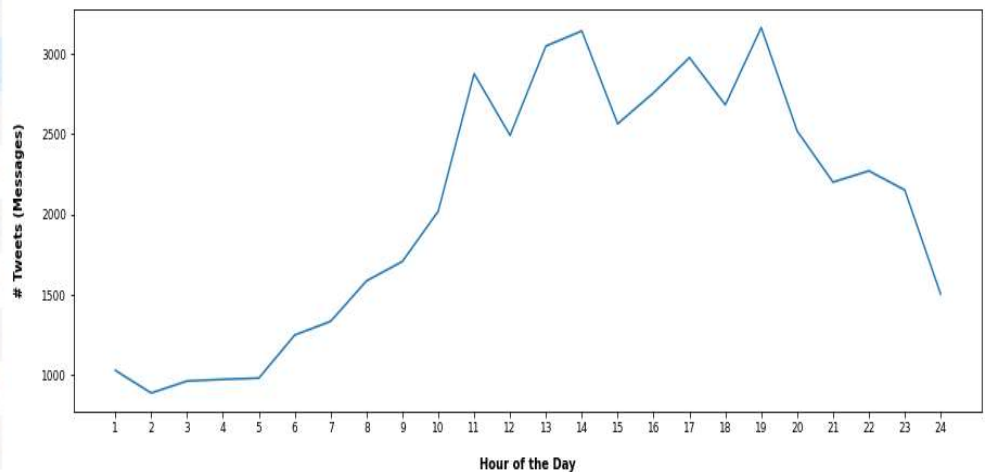
Analyzing data by days will show activity of particular day to expect events and motions and guess crowd management and control.



Catogrizze data by hours :

created_at

0	1028
1	887
2	962
3	972
4	980
5	1248
6	1333
7	1585
8	1706
9	2019
10	2875
11	2491
12	3047
13	3141
14	2563
15	2756
16	2975
17	2681
18	3162
19	2519
20	2200
21	2270
22	2151
23	1503



How we can use this graphs :

For this charts we can visualize tweets by hour to determine activity and more focus with analyzing eye to what was the reason of that huge number of tweets between 10:00 am to 20:00pm so it will take further research on it .

I hope this will demonstrate what I want to do with that data .

THANK YOU FOR YOUR TIME AND EFFORT

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