ANALYZING VARIETIES OF SOCIAL MEDIA BIG DATA OF FACEBOOK USING R PROGRAMMING

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Abstract: In this era of digital data, social media analytics is trending. There is an incredible volume of info in social media data. Before one or two-decade many organization was paying to marketplace investigation companies for polling customers and conduct focus groups to get the kind of information that nowadays converted into social media analytics. Many researchers, industrialists are focusing on social media data to identify the details of the user. Nowadays, most of the organization is concentrating on collecting and Evaluating data, so that they can extract the meaningful information and can take the better decision. Analysis of data is essential nowadays. Source of information is also not static; the source can be in diverse arrangement. It can be in structured or organized way like spreadsheets. It can be in a semi-structured manner like XML, JSON or markup language or it can be in an unstructured manner like webpage, document or text. Analysis of varieties of data is essential. In this research paper, we did the social media big data analytics using R programming. We did social media analytics of Facebook and we retrieve the list of likes of different pages by the user, we got the friend list of the user, extract the post from a specific page of Facebook, extracting comments from Facebook. In Twitter, we retrieve the details about the Twitter user, get the friends of the specified user, get the follower list of another user.

IndexTerms - ANALYTICS, BIG DATA, BIG DATA ANALYTICS, SOCIAL MEDIA DATA, R ANALYTICS, FACEBOOK ANALYTICS

I. INTRODUCTION
In this era of digital data, social media analytics is trending. There is an incredible volume of info in social media data. Before one or two-decade many organization was paying to marketplace investigation companies for polling customers and conduct focus groups to get the kind of information that nowadays converted into social media analytics. Many researchers, industrialists are focusing on social media data to identify the details of the user. Nowadays, most of the organization is concentrating on collecting and Evaluating data, so that they can extract the meaningful information and can take the better decision. Analysis of data is essential nowadays. Source of information is also not static, the source can be in diverse arrangement. It can be in structured or organized way like spreadsheets. It can be in a semi-structured manner like XML, JSON or markup language or it can be in an unstructured manner like webpage, document or text. Analysis of varieties of data is essential. In this research paper, we did the social media big data analytics using R programming. First, we introduced what is R? and why R Programming? And then We did social media analytics of Facebook and we retrieve the list of likes of different pages by the user, we got the friend list of the user, extract the post from a specific page of Facebook, extracting comments from Facebook.

II. WHAT IS R?
R is open source, a free software environment for Analyzing data and graphics. It is a programming language and tool to analyze data. It is having good provision for high excellence data conception. We can analyze structured, unstructured datasets. Many industries like healthcare, financial etc.

What is R?

- Open Soruce
- Programming Language
- Analysis Tool
- Data Exploration
- Use for Predictive Analytics, Sentiment Analytics etc.

Figure-1 What is R?

R support many kinds of analysis test, it supports predictive analysis, sentiment analysis standard tests, time series, cluster analysis etc. It is used by data scientists/ database analyst or software developers. It is recommended by many researchers. It is the best tool for analysis of data.
Why R?

- Perform complete data analytics
- Fulfill user demands for quality data analysis
- Standard Statistical Test
- Used by Data Analyst/Data Scientist/Software Developer

**Figure-2 Why R?**

**R as a Programming Language**

- User Defined Functions
- Inbuilt Function
- Expression
- Data Structures
  - Vector
  - List
- User Defined Class
- External Libraries

**Figure-3 R as a programming Language**

III. ANALYZING SOCIAL MEDIA DATA OF FACEBOOK

We can analyze Facebook data using so many ways. I am using here R platform to analyze Facebook data.
In above screenshot, I connect R with Facebook and getting the name of the user using `getUsers()` function.

Getting Likes on different pages by user

```
> me <- getUsers("me", token=my_oauth)
> me$name
[1] "Parag Shukla"
```

Figure-4 In above screenshot, I connect R with Facebook and getting the name of the user using `getUsers()` function.

Figure-5 This screen shows latest likes of the different Facebook page by user Parag Shukla
Figure-6 This screen shows information like name, gender, locale about the friends of the user
Extracting post from the facebook page

Figure-7 This screenshot shows latest 10 posts from the facebook page of Narendra Modi
Here, we can mention fbid in the first argument of the getPage function and the last argument of getPage() indicates n value means no of post that you want to extract from the Facebook.

Extracting comments from the facebook page

Figure-8 Retrieving comments from my fb post id 10205073210469381

IV. CONCLUSION
Finally, we conclude that in this era of digital data, social media analytics is trending. There is an incredible volume of info in social media data. Before one or two-decade many organization was paying to marketplace investigation companies for polling customers and conduct focus groups to get the kind of information that nowadays converted into social media analytics. We did social media analytics of
Facebook and we retrieve the list of likes of different pages by the user, we got the friend list of the user, extract the post from a specific page of Facebook, extracting comments from Facebook. Same thing we can do for Twitter and for LinkedIn. Analysis of data is essential nowadays. Source of information is also not static, the source can be in diverse arrangement. It can be in structured or organized way like spreadsheets. It can be in a semi-structured manner like XML, JSON or markup language or it can be in an unstructured manner like webpage, document or text. Analysis of varieties of data is essential.

V. ACKNOWLEDGMENT
We would like to thank online resources, Facebook for providing API and open source community. And all those who have helped us by fruitful discussions, technical advice and encouraging words at various stages in the successful completion of this research paper.

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