International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
Volume: 08 Issue: 10 | Oct 2021 www.irjet.net p-ISSN: 2395-0072

Social Media Analysis using Sentiment Analysis

Diksha Jasuja[1], Mrs. Aman Paul[2]

[1]M.Tech, CSE, Jannayak Chaudhary Devilal Memorial College of Engineering
[2]Asst Professor (CSE), Jannayak Chaudhary Devilal Memorial College of Engineering

---

Abstract - The *worldwide presence of the internet attracts the wide range of users. Because of it a range of social Media network has come into the existence. There are various social media tools like blogs, twitter, face book which are very popular and also very effective. A massive amount of data generated by their users is difficult to handle all the data manually. Thus to make this task easy an automatic approach is used to analyze and categories the data for the social network. For this data mining technique is used*

Key Words: Social media, Data Mining, Social Media Analysis, Data Mining Techniques, Social Network.

1. INTRODUCTION

Social media acquires online communications channels dedicated to community-based input, interaction, content-sharing, and collaboration. Facebook, Twitter, Pinterest, Google+, etc are a few type of Social Media Communication which is among the highly recommendable in today's era. People are becoming more interested in and relying on the social media i.e. blogs, wikis, news, online forums, for information, news, and opinion of other users on diverse subject matters.

1.1 Data Mining

Simply, data mining is outlined as a process of extracting usable information from a bigger set of any raw data and analyzing hidden patterns of data according to different perspectives for categorization into helpful information, which is collected and assembled in common areas, like information warehouses, for efficient analysis, data processing algorithms, facilitating business decision-making and alternative data needs to ultimately cut prices and increase revenue. It has applications in multiple fields, like science and research.

1.2 Integration of Social Media with Data Mining

Data mining methods for social media is relatively new as compared to other areas of study related to social network analytics. However, applications that apply data mining techniques developed by industry and academia are already being used commercially. Data mining techniques can be applied to social media to understand the data better and to make use of that data for research and business purposes. Representative areas include community or *group detection, information diffusion, topic detection and monitoring, individual behavior analysis, group behavior analysis, and marketing research for businesses.

1.3 Social Media Analysis

Data mining provides a wide range of techniques for detection useful data from huge datasets. These techniques use data analysis, data pre-processing, and data interpretation processes within the course of data analysis. The voluminous nature of social media datasets needs automated information processing for analyzing it at an affordable time. Interestingly, data processing techniques additionally need vast knowledge sets to mine remarkable patterns from data; social network sites seem to be excellent sites to mine with data processing tools.

1.4 Appling data mining methods to social media

Data mining provides a wide range of techniques for detection useful data from huge datasets. These techniques use data analysis, data pre-processing, and data interpretation processes within the course of data analysis. The voluminous nature of social media datasets needs automated information processing for analyzing it at an affordable time. Interestingly, data processing techniques additionally need vast knowledge sets to mine remarkable patterns from data; social network sites seem to be excellent sites to mine with data processing tools.

1.5 A Real Example Of Explanation

Data mining provides a wide range of techniques for detection useful data from huge datasets. These techniques use data analysis, data pre-processing, and data interpretation processes within the course of data analysis. The voluminous nature of social media datasets needs automated information processing for analyzing it at an affordable time. Interestingly, data processing techniques additionally need vast knowledge sets to mine remarkable patterns from data; social network sites seem to be excellent sites to mine with data processing tools.

2. LITERATURE REVIEW

[1]Subhanshu Mishra, "Analysis of Social Media Data to determine Positive and Negative Influential Nodes in the Network" Year- 2012

Social media is turning into a really vital a part of communication for individuals and it's vital that author tend to develop our systems to utilize this mode of communication for higher learning and nice worth for the individuals. Promoting is growing at a fast pace and word of mouth still remains the foremost trusty mode of promoting. Therefore through this project, author got tried to spot the opportunities for individuals to utilize the social media activity of their shoppers and relevant people and utilize them to administer them higher service and additionally improve their own processes. The project has helped in developing AN influence calculation algorithm and a ranking algorithm to search out who the foremost influential positive and negative influential nodes are in a very given network. The concept includes a wide space of applications in promoting and human resource business and politics. With a lot of social media channels coming back and mode numerous quantity of information obtaining shared there's an enormous chance to faucet into the information of individuals and develop higher systems which are able to predict and confirm human behaviors in a very higher manner in future.

[2] Puteri N. E. Nohuddin, "Predictive Trend Mining for Social Network Analysis" Year: 2012
Trend mining is a type of temporal data mining that provides observation into how information changes over time. In the context of the work described here, the focus is on how information contained in social networks changes with time. The work described proposes a number of data mining based techniques directed at mechanisms to not only detect change, but also support the analysis of change, with respect to social network data. To this end a trend mining framework is proposed to act as a vehicle for evaluating the ideas presented in this thesis. The framework is called the Predictive Trend Mining Framework (PTMF). It is designed to support "end-to-end" social network trend mining and analysis. The work described in this thesis is divided into two elements: Frequent Pattern Trend Analysis (FPTA) and Prediction Modeling (PM).

3. PROBLEM FORMULATION

In social media analysis, data abstraction and mining is core concern to analyze the reviews. There is need of huge efforts to analysis the various comments and emotions of users. The efficiency is the main concern for feature selection and multiple algorithms proposed for solve the accuracy problems. In the past researches, there were few limitations or were less effective.

The prime objective of it is to overcome those points and to enhance the quality of analysied data by using Sentiment Analysis popularly known as SA.

3.2 Problem Analysis

While clustering techniques are used where basis of data is established but data pattern is unknown, classification techniques are supervised learning techniques used where the data organization is already identified. It is worthy of mention that understanding the problem to be solved and opting for the right data mining tool is very essential when using data mining techniques to solve social network issues.

4. OBJECTIVES

In research of Social media analysis, there are issues in mining data from such a huge datasets of social media. Our main goal is to analysis data.

a. Improve Accuracy of Sentiment Analysis Technique using Parameters like combination of WORDS and EMOTICONS (Emojis)

b. Implement Proposed Algorithm with Parameters to check efficiency in MATLAB.

c. Evaluate Results using enhanced Sentiment Analysis Technique and compare with existing

5. RESEARCH METHOD

Data mining provides a wide range of techniques for detecting useful knowledge from massive datasets like trends, patterns and rules. Data mining techniques are used for information retrieval, statistical modeling and machine learning.

These techniques employ data pre-processing, data analysis, and data interpretation processes in the course of data analysis.

The different steps need to consider for analysis social media databases. This section provides the steps to implement the proposed work. The different steps need to follow for improve the efficiency with the algorithm.

a. Study existing techniques of data mining and analysis.

b. Research on these Techniques for identification of issues and problems.

c. Flow Development of new proposed technique.

d. Implementation in MATLAB for simulation of algorithm.

e. Generate Results.

REFERENCES

[1]Subhanshu Mishra, "Analysis of Social Media Data to determine Positive and Negative Influential Nodes in the Network" Year- 2012.

[2] Puteri N. E. Nohuddin, "Predictive Trend Mining for Social Network Analysis" Year:2012.

[3] R D RAGHAVAN, "A DATA MINING STUDY OF RANKING WITHIN SOCIAL NETWORKS" Year: 2014

[4]Mariam Adedoyin-Olowe, Mohamed Medhat Gaber and Frederic Stahl, "A Survey of Data Mining Techniques for Social Network Analysis", Publication Year: 2014

[5] M. Vedanayaki, "A Study of Data Mining and Social Network Analysis" Publication Year: 2014

[6] Zafarani R, Abbasi MA, Liu H. "Social Media Mining an Introduction. Cambridge University" Year- 2014.

[7] Dennis Kergl "Enhancing Network Security by Software Vulnerability Detection Using Social Media Analysis Extended Abstract" 2015 IEEE International Conference on Data Mining Workshop (ICDMW) Year: 2015 Pages: 1532 - 1533