

# Exploring the Similarity and Dissimilarity of User Opinions for Sentiment Analysis in Heterogeneous Networks

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**Abstract:** This paper presents our experimental work on a new kind of domain specific feature-based heuristic for aspect-level sentiment analysis of twitter reviews and ftp data. We have devised an aspect oriented scheme that analyses the textual reviews of a twitter and ftp and assign it a sentiment label on each aspect. The scores on each aspect from multiple reviews are then aggregated and a net sentiment profile of the twitter is generated on all parameters. We have used a association rule based scheme to assign a sentiment score.

**Keywords:** Sentiment score, twitter, ftp, positive, negative

## I. INTRODUCTION

Recently the rise of social media and social networks, such as blogs, forums, and Twitter, has fueled the online space with lots of reviews, ratings, and comments. For example, customers may give reviews for products, make ratings for movies, provide comments on services, present opinions on current events and politics, and so on. Over the years, sentiment has been a widely used measure of how customers view a company's products and services, and how people think about current events and politics. .Sentiment analysis states to the use of text analysis, natural language processing, and computational linguistics to classify and extract subjective information in source document. Sentiment analysis is widely useful for reviews and social media network for a wide range of applications and ranging from marketing to customer service. Sentiment analysis is the key evolving technologies to help people to direct the huge amount of user generated content available online.

## II. EXISTING SYSTEM

Sentiment analysis tries to identify the expressions of opinion and mood of writers. A simple sentiment analysis algorithm attempts to classify a document as positive or negative The social media is now a major part of the Web. A large amount of the data on the Web is unstructured text.The traditional algorithm assigns a sentiment score for a particular topic based on the positive and negative dictionary.

## III.METHODOLOGY

The methodology used here is as shown in Fig.1.

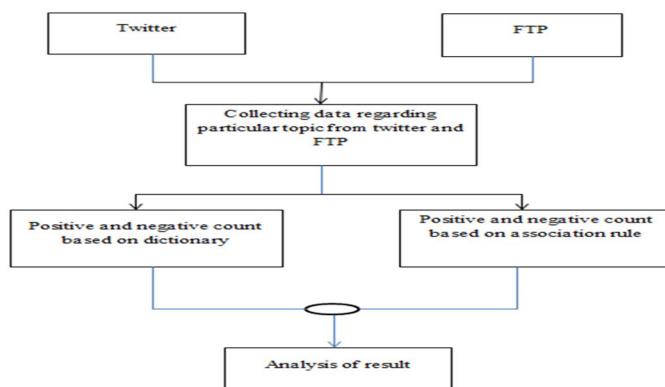


Fig.1 System Architecture

### A. Consolidation

In this module, The data for analysis is collected from the multiple networks i.e from Twitter and our own Ftp for our paper. Twitter is a popular social network where users can share short SMS like messages called tweets. The list of different ways to use Twitter could be really long, and with 500 millions of tweets per day, there's a lot of data to analyze. The File Transfer Protocol (FTP) is a standard system convention utilized for the exchange of PC records between a customer and server on a PC organize. FTP is based on a customer server display design and uses isolate control and information associations between the customer and the server. FTP clients may confirm themselves with a reasonable content sign-in convention, typically as a username and secret word, however can interface namelessly if the server is arranged to permit it .The Data from multiple network is collected in to one file for future sentiment. analysis.

### IV.ANALYSIS OF DATA

In this module, the data which is collected from multiple network is to be analyzed for sentiment score based on the dictionary words. The topic which needs for sentiment analysis is collected from twitter and ftp, once the data is collected in a file analysis is to be done based on the dictionary. Dictionary contains a positive and a negative words, if the topic contains a positive word positive count increases and if the topic contains a negative word negative count increases and the final sentiment score is assigned for a topic.

### V. ASSOCIATION RULE

In this module, applying a association rule for sentiment analysis ,the sentiment score obtained from the previous module sometimes may get wrong, when a sentence talking to a particular topic contains a two positive words in a same sentence then positive count is incremented by two count which misleads the total sentiment score similarly when sentence contains two negative words negative count is incremented by two count, similarly when single sentence contains a one positive word and one negative word the count will be incremented for both positive and negative but it is a neutral sentence. So when applied a association rule to obtain a sentiment score it takes only one count if the same sentence contain a multiple positive and negative words.

### VI.RESULTS

Proposed system overcomes the problem of traditional sentiment score obtained from the classifier based on dictionary words. In this paper the total sentiment score is based on the association rule where same sentence contains a multiple positive and a negative words are treated as a single count similarly when the same sentence contains both positive and negative words is considered as a neutral which gives a good sentiment score.

### VII. FUTURE WORK

The future work of this project is to considering a neutral sentence, neutral sentence are the one which contains both positive and negative words in single sentence and also the sentence contains a words which are not in the dictionary so now the work is to predict the neutral sentence based on the earlier tweets of the user.

### REFERENCES

- [1] Y. Sun, J. Han, X. Yan, P. S. Yu, and T. Wu, Pathsim: meta path-based top-k similarity search in heterogeneous information networks, PVLDB, 4(11) (2011), 992–1003.
- [2] Shoiab Ahmed, Ajit Danti, A Novel Approach for Sentimental Analysis and Opinion Mining based on SentiWordNet using Web Data, Proceedings of the 2015 IEEE 18th International Conference, 978-1-4673-6667-0.
- [3] Beiming Sun, Vincent TY Ng, Analyzing Sentimental Influence of Posts on Social Networks, Proceedings of the 2014 IEEE 18th International Conference, 978-1-4799-3776-9.
- [4] C. Tan, L. Lee, J. Tang, L. Jiang, M. Zhou, and P. Li, User-level sentiment analysis incorporating social networks, In Proceedings of KDD, San Diego, CA, USA, 2011, 1397–1405.