**Literature review**

**Sentimental analysis on social media data using R programming**

The paper focused on the present trends of cryptocurrency by means of Text Mining and comparative study of different algorithms as follows; 1 capturing of data,2 Data Processing ,3 Sentiment Classification, 4 Sentiment Polarity, 5 Visualization by different Techniques. With help of application interfaces (API), in this paper they used the social media data of Facebook and twitter data using API’s and procedure to capture the data from social media site.

The paper discusses about Sentimental Analysis procedure for Present trends of Cryptocurrency and Comparative study of different algorithms such as Naïve Bayes, SVM. It also includes Classification methods for Sentimental analysis such as Machine Learning Based method, Lexicon Based method, Hybrid Based method and the features of sentiment classification methods. Its research background includes, 1 comparative study of different approaches in sentiment analysis by means of comparing the different approaches and methods of sentimental analysis such as machine learning approach, N-gram Sentimental Analysis ,Ruled and Lexical approaches, Maximum Entropy Classifier, support vector machine and Naives Bayes Method…etc. and they concluded that the machine learning methods such as Support vector machine, Maximum Entropy and Naives Bayes Methods are more efficient and semantic analysis of text makes process easier while doing sentimental analysis of social media, 2 survey of sentimental analysis and opinion mining with respect to needs and requirements of organization and customer respectively, compared the techniques of data mining and machine learning in sentimental analysis and concluded that opinion mining and sentiment analysis is an emerging research field of data mining and natural language processing, 3 work on text pre-processing in twitter sentiment analysis with help of text normalization and n-gram to find and filter the different slangs and tags respectively, they used Support Vector Machine (SVM) for evaluation and measurement of the impact of their proposed scheme on the sentimental classification task as classifier and concluded that their proposed scheme allows to classify sentimental data from noises easier, 4 Studied on sentimental analysis with Twitter Data using Rby means of capturing the social media data from database with help of Application Interface .Analyzed and Visualized the data by means of R language with help of graphs and concluded that opinion mining makes the public attitudes to generalize the prevailing trends of the market.[1]

**The Power of Social Media Analytics: Text Analytics Based on Sentiment**

**Analysis and Word Clouds on R**

In this paper, they analyze one such prevalent microblog or social media called twitter and build R models for characterizing "tweets" into positive, negative and unbiased sentiment and also create word cloud to find out the most frequently used term. For twitter sentiment, they assemble models for twitter authentication, and then pull the data from twitter to generate word cloud, they first use R model to authenticate twitter. Then pull twitter data of a famous phone company. A political figure to analyze sentiment what type of words are being used by him in everyday life to figure out actually what is happening in his mind is used. R models are basically to create a graph of positive, negative and neutral words used by the twitter user. The challenges mentioned include, there are dozens of destinations with no less than one hundred thousand enlisted clients, and numerous more special guests, Real time analysis through social media is a serious challenge.[2]

Despite all these challenges, new analytics tools with enough time can bring out meaningful comments and analysis across various social media sites that can classfy the reactions as positive, negative and neutral.

**Sentiment Analysis for Indian Code-Mixed Social Media Texts**

This paper reports about work in the NLP Tool Contest, shared task on Sentiment Analysis for Indian Languages (SAIL) (code mixed). To implement the system, they used a machine learning algo-rithm called Multinomial Naïve Bayes trained using n-gram and SentiWordnet features. they used a small SentiWordnet for Eng-lish and a small SentiWordnet for Bengali. But they never used any SentiWordnet for Hindi language. The system was tested on Hindi-English and Bengali-English code-mixed social media data sets released for the contest.

The data used included Bengali-English code-mixed social media texts which are basically tweets and containing Hindi-English code mixed social media texts of similar kind. The training tweets were labeled with three labels- positive, negative and neutral.[3]