**ABSTRACT**

Sentiment analysis is concerned with the automatic extraction of sentiment information from naturallanguage text. With the sharp increase in the number of users in social media sites, sentiment analysis has become anemerging research area. With the assistance of sentiment analysis systems, unstructured data can be automaticallyremodeled into structured information. Opinions are collected from users regarding the product, services, brands, politics, or any topic. This feedback is incredibly helpful for business applications like selling analysis, publicrelations, product reviews, web promoter grading, product feedback, and client reviews. People are generallyinterested to search for positive and negative opinions including likes, dislikes of product, upvotes and downvotes ofreviews shared by users for features of particular product or service or movie. For that reason, product features oraspects have got a major role in sentiment analysis. In this work, various features are extracted and categorized likemorphological features, sentiment scores, semantic features, syntactic features, word embedding, and wordweighting. The main aim of this work is to handle neutrality sentences by comparing two different lexicons based approaches and reviews are classified using stacking ensemble techniques based on features. In the traditionalensemble technique, there are multiple classifiers to suit to a training set to approximate the target function. Sinceevery classifier has its own output, therefore we need a hybrid mechanism to boost accuracy. This can be possible viaMax voting, weighted, and averaging. This is the standard approach of ensemble learning. In Stacking the combinedmechanism is used, which contains two layers. In the first layer, several classifiers were conducted and generatedifferent classification results. These results become the input features for a classifier in the next layer, which canautomatically learn and predict the most appropriate results.Naive Bayes and K-nearest neighbor, Logistic Regressionand Random Forest classifiers are used for the ensemble model. The experiments show that the stacking methodperforming well in sentiment classification by using both Meta learners as logistic regression. The proposed methodyields 65%-85% of accuracy for seven different experiments based on features.