ABSTRACT

Telkom University or known as Telkom University is a private university under the auspices of the Telkom Education Foundation (YPT). In carrying out all elements of the activity many parties involved such as students with the directorate, students with faculty, staff with faculty, and others. This was not immune to mistakes in the administration asking for various parties to support it. To discuss complaints and discuss them, we can use the features in iGracias, but that is still too complicated for ordinary users. In this research, an opinion mining system made using the Support Vector Machine (SVM) and using Support Vector Classifier (SVC) library weighting using Term Frequency – Inverse Document Frequency (TF – IDF) which can allocate complaints and suggestions it is directed to the right unit. In this study using multiclass SVM with RBF kernel. The highest results obtained in this study by testing the parameters C = 1 and Gamma (γ) = 0.5 get an accuracy = 80%, besides using the data split = 0.1 parameter obtained an accuracy of 80%, and using the confusion matrix test gets the highest results with precision = 81%, recall = 77%, f1-score = 77%, and accuracy = 78%.

Keywords: complaints, suggestion, opinion mining, Support Vector Machine (SVM), Term Frequency – Inverse Document Frequency (TF – IDF)