## **ABSTRACT**

Social media today is something that cannot be separated from each person, be it Instagram, twitter, facebook, path, line and many more. Everyone has at least 2 to 5 social media accounts on his smartphone. From this phenomenon makes social media as a source of data that can be used to seek public opinion instantly.

In this Final Project Proposal, sentiment analysis about public satisfaction in using data service of telecommunication operator in Indonesia, either at official account of each cellular operator or using the related keywords with cellular operator. The method used by the author is Support Vector Machine with TF-IDF weighting and utilization of POS Tagging and Negative Handling as improvement of accuracy before classification.

In this research, a system of sentiment analysis classification on the level of user satisfaction of operator data service. That is classification using support vector machine method. SVM with RBF kernel (Radial Basis Function). After preprocessing, POS Tagging is then TF-IDF. The results in this study showed an average f1-score rate of 95,43%, precision 92,45%, recall 93,90% and accuracy 99,01%.

Keywords: Sentiment Analysis, Support Vector Machine