ABSTRACT

Today social media is getting attention for the world community, especially Indonesia. It can be used as a media to analyze the sentiments of a cellular card product. Many people assume someone's suggestion could be one factor in choosing the mobile card. Therefore analyzing one's opinion on a cellular card product can be a way out of it. The sentimental analysis itself is part of the Natural Language Processing (NLP) study, there are several methods for analyzing an erroneous sentiment using the Maximum Entropy method with the help of TF-IDF which is thought to be an accurate result.

The data used in this research is the tweet of someone's opinion, taken by crawling using R programming language, as many as 30,000 (thirty thousand) records with 15 attributes supporters. The keywords of searching tweet into three main categories namely telkomsel, xl axiata and also indosat ooredoo.

The best system combination which in this case, by using TF-IDF value to representation weight of each word and using selected feature-set adjective, adverb, verb, noun and conjuction, with this combination, model can reach 79.71% of accuracy and for the training process can reach 90.67%.

Keywords: Twitter, TF-IDF, ISP, NLP, *Maximum Entropy*, Bahasa.