

Abstract

The extraordinary evolution of technology has resulted in smartphones becoming important devices in people's daily lives. As a result, today's smartphones impact many people's lives, with more and more people owning smartphones. One of the most popular smartphone products today is Xiaomi. This popularity cannot be separated from various opinions on Twitter. Twitter is a social media that makes it easy for people to express their opinions regarding Xiaomi products called sentiment. Sentiment analysis is needed to classify various opinions on Twitter into positive, neutral, and negative classes. This study aims to analyze the sentiment of public opinion on Xiaomi smartphone products on Twitter social media. The models used in this study were BERT and IndoBERT because they produced a good performance in previous studies. This study's stages of work consisted of collecting, preprocessing, separating training and test data, building models with BERT and IndoBERT to detect sentiment, and carrying out training and testing stages. Test results using IndoBERT get a very good accuracy value with an accuracy value above 90%. The sentiment classification results for Xiaomi smartphone products show that positive sentiment on batteries has a greater number, with a positive percentage of 78%. In comparison, neutral sentiment is 4%, and negative sentiment is 18%. Furthermore in the camera aspect, positive sentiment has a greater number, with a positive percentage of 68%, while neutral sentiment is 18% and negative sentiment is 14%. Moreover, on the screen, positive sentiment has more numbers, with a positive percentage of 67%, neutral sentiment is 10%, and negative sentiment is 23%. Last, in the ram aspect, positive sentiment has a greater number with a positive percentage of 76%, while neutral sentiment is 17% and negative sentiment is 7%. The highest number of positive sentiments is in the camera aspect, which has 1935 positive sentiments from 2830 data. The sentiment analysis results can be used as an evaluation along with insights for the Xiaomi company so that in the future, the company can maintain and even improve the quality of the aspects that smartphone users like about Xiaomi products, namely cameras.

Keywords: Xiaomi Smartphones; Sentiment Analysis; BERT; IndoBERT; Twitter