

## ABSTRACT

In this era, the industrial revolution has progressed to version 4.0. Digital usage is increasing in our era compared to the previous one. The existence of social media, which is one of the mediums to provide information broadly and swiftly, is one of the digital phenomena at this time. Most of the information spread on social media can be in the form of opinions, input, and also suggestions for a particular product or object called sentiment. There are three kinds of sentiment namely positive, negative, and neutral sentiment, this study aims to identify IndiHome consumer sentiment towards the products and services provided by IndiHome through Twitter.

This study employs one of deep learning's development challenges, IndoBERT, to undertake sentiment analysis. IndoBERT is a Transformers architecture that comprises of BERT or Bidirectional Encoder, which is a Transformers representation. The stages of work in this research consist of data collecting, data pre-processing, and then modelling with IndoBERT to detect sentiment and training and testing stages are carried out. The test results utilizing IndoBERT show that negative sentiment for IndiHome has a larger average value than positive and neutral sentiment, with an accuracy value of above 80%. Following the sentiment analysis, Topic Modeling utilizing the approach Latent Dirichlet Allocation (LDA) is used to determine which topics are frequently discussed with IndiHome.

According to this study, negative sentiment towards IndiHome in terms of services and products given is rather significant, indicating that IndiHome customers are unsatisfied with the company's services and products. So that the company may use this information to improve the quality of services and goods offered, thereby increasing consumer satisfaction.

*Keywords : Customer Satisfaction, IndoBERT, Text Mining, Topic Modelling*