## ABSTRACT

In the era of social media, one of the media is to find out and share its information widely and quickly. Digital era where the development of industry 4.0, most information is scattered in social media can be opinion, suggestions and input as individual or individual to product or object as it calls sentiment. There are three kinds of sentiment right now: positive sentiment, negative sentiment, and neutral sentiment. These three sentiments are used in multiple stages like Twitter. The Internet is more developed in this era from every provider to use social media like First Media and IndiHome. These two providers, not least from Indonesia people, express their opinion about product and service in terms of connectivity, price, and customer service. From this fenomena sentiment analysis can be done to get value and specification from these two objects will be analyzed. However, in the application of sentiment analysis requires an algorithm who can do a classification opinion or people sentiment. From this case, previous research can be used as references which will be used in this analysis in terms of algorithm, sentiment analysis and classification. Algorithm CNN or convolutional neural network algorithm are deep learning algorithm who can utilize picture as input, text as input and set to another aspect and object in text in order to be able to distinguish one from another dan to get high accuracy, so in this research of sentiment analysis review product of IndiHome and First Media. This research have a goal to do product evaluation to both of provider using sentiment analysis method based on review from every tweet from customer has attach convolutional neural network algorithm and using open source web application is Jupyter Notebook, programming language is python who start with data coding process and data collection through web-scraping using tweepy to retrieve data via API\_Key that has been requested directly from Twitter, after that, using library matplotlib, pandas, numpy, Sastrawi, TensorFlow, sklearn, Keras, and searborn. Accuracy results obtained get the highest accuracy by 98% for IndiHome provider and 91% for provider First Media.

Keywords: Sentiment analysis, convolutional neural network, IndiHome, First Media.