ABSTRACT

In this era of globalization, Twitter is especially a means of communication. People easily get information on social media. Not only easy to get information, but Indonesian people especially can also give comments or opinions, exchange information, upload photos and videos available on Twitter. Twitter users have more opinions in Twitter's comments field.

In the study, this final task will be done by clustering data from the opinions or comments of Twitter users. Comments or opinions submitted by BPJS Kesehatan users on Twitter have been very much, ranging from negative, positive, and neutral comments. Make Twitter a container for criticism and suggestions related to services and programs provided by BPJS Kesehatan. With the emergence of a lot of data, Insurance and Social Security users who have Twitter accounts have difficulty seeing the quality of services or programs provided by BPJS Kesehatan.

To make it easier for users to see the quality of services or programs provided by BPJS Kesehatan, the research was created using the Agglomerative Hierarchical Average Linkage method for clustering from the comment data on BPJS Kesehatan official Twitter account. The data is grouped by positive, negative, and neutral opinions. The data used has been validated by the West Java Language Hall which amounts to 2117 data, with 700 data having negative label, 703 data having a neutral label, and 714 data having a positive label grouped by cluster and displayed on the website designed in this Final Task research. From the results of the study on this final task in clustering on Twitter users got a positive data silhouette coefficient result of 0.9912 on the number of clustering 10, negative data of 0.9953 on the number of clustering 8, and neutral data 0.9923 on the number of clustering 14.

Keywords: *Clustering, Twitter,* BPJS Kesehatan, *Agglomerative Hierarchical Average Linkage.*