ABSTRACT

Online transportation was born in the midst of Indonesia's increasing population density. The presence of online transportation is a breath of fresh air for the community, because people can use it as a solution to road congestion and also avoid the density of passengers if they want to take public transportation modes. Online transportation service providers are also now growing with the addition of many supporting features. However, the proliferation of online transportation service providers makes people confused about choosing whether to use an online transportation service provider that has the best service. In this study, the author tries to group data on positive and negative responses from the public to online transportation service providers Go-Jek Indonesia and Grab Indonesia through social media Instagram.

The grouping of data in this study uses the clustering method where the clustering method is used to group public opinion data about online transportation service providers which is carried out by the process of retrieving data from the Instagram social media comment column. The data then passes through the pre-processing, feature extraction, and clustering stages where in this study the Single Pass Clustering algorithm is proposed. After passing through these stages, the data output will be in the form of a cluster which will be displayed on the website. The cluster data that has been obtained is expected to be able to help the community in determining their choice of online transportation with the best service.

This data cluster is also expected to be able to help online transportation service providers Go-Jek Indonesia and Grab Indonesia in order to improve their services. After testing the clustering results by changing the threshold value from 0.1 to 0.9, it was found that the greater the threshold value, the faster the capture power of clustering and the fewer clusters. At the threshold of 0.1 in the positive dataset, the results obtained are 123 clusters with a clustering speed of 0.001196800s, while at the threshold of 0.9, the results are 66 clusters with a speed faster than the threshold 0.1, which is 0.000970668s. In a negative dataset with a threshold of 0.1, the results of clusters are 170 with a speed of 0.002018130s, while at a threshold of 0.9, the results of clusters are 79 with a speed of 0.001476580s. And on a neutral dataset with a threshold of 0.1, the results obtained are 151 clusters with a speed of 0.001530701s, while at a threshold of 0.9 the results are clusters of 78 with a speed of 0.001206288s.

Keywords : Online Transportation, Instagram Social Media, Clustering, Single Pass Clustering.