ABSTRACT

Along with the development of the era, the use of technology is increasingly rapid in human civilization. The use of technology coexists with human daily activities. The internet has been embedded in human life, where from the internet humans get information. Cellular data is one of the options for accessing the internet. This internet requires a cellular network for data communication to run. One of the operators is Indosat with 60.3 million subscribers per semester I-2021, so the company must prepare a strategy to increase the number of subscribers in order to remain competitive in the industrial world. Companies must find out how the characteristics of customers for the sake of the products offered. One method is segmentation, where this segmentation aims to determine the customer class according to customer behavior. This customer segmentation can be done by clustering one of the algorithms is Fuzzy C-Means. Development using this algorithm is based on the RFM (Recency, Frequency, and Monetary) model. To get the optimal cluster value, the Elbow method is used, where from the implementation there are 3 segmentations. Segmentation 3 70% where this segmentation is a dormant customer with a total of 70 lines. Segmentation 1 with a proportion of 70% where this segmentation is a promising with a total of 70 lines. Segmentation 2 with a proportion of 66% is a potential customer where the number of rows is 658 data. Segmentation 3 with a proportion of 27% which are champions customers where the number of rows is 272 data.

Keywords: Customer segmentation, clustering, RFM, Fuzzy C-Means algorithm