ABSTRACT

Every day the airports in Indonesia do flight routes both domestically and abroad where each airport has transportation traffic such as passenger, goods, and baggage traffic with a very large amount and changes every year. So it is necessary to use data by means of make a Data Mining system from the data that will be used for certain purposes, one of which is to do clustering or grouping using clustering method which is a method of analyzing data whose purpose is to group data with the same characteristics into the same area and with different characteristics to another area. Whereas the algorithm used is the K-Means algorithm which is one of the best and most popular algorithms in the Clustering method where K-Means searches for the optimal partition of data by minimizing the criteria for the number of squared errors with an optimal iteration procedure using several variables, namely the arrival of goods (unloading and departure of goods (loading) on a domestic and foreign flight in Indonesia. The final result of this research is in the form of a study using a web that shows the results of clustering on freight air traffic at airports that have a high amount of goods air traffic and low goods air traffic. Where the results of this study can be used to anticipate developments and plan for the development of sustainable facilities and infrastructure and human resources in the field of aviation.

Keyword: clustering, K-Means algorithm, classification, air freight traffic.