ABSTRACT

Community detection or clustering is the process of partitioning data into groups. Data within a group have similarity characteristics between each other and are different from other groups, as do similarities between individuals on social networks. In this research, community detection is done on Twitter social network based on the following interaction (follows, mentions, reply) between users by using DBSCAN algorithm and cluster quality calculation using modularity. DBSCAN algorithm has two important parameters, namely epsilon and minPts are random value. From the results of research conducted, the best results obtained from the data to-10 by forming 4 clusters that produce the value of modularity 0.61492 of epsilon value 0.3 and minPts 4. That is because the number of clusters formed from the existence of the linkage of epsilon and minPts value with the similarity and modularity values are due to the density of the relation and the great weight of similarity. So to get a good cluster results required the determination of the exact epsilon and minPts value.

Keywords : social network, DBSCAN algorithm, modularity, Twitter.