## Abstract

Social media is a place for interaction that is connected to the internet network, Twitter is one example of social media. In twitter sometimes someone does not want to be left behind information related to a particular topic, so it is necessary to follow the user related to the topic so that information can be obtained quickly. In this study, an analysis was carried out that applied the Hubs and Authorities Centrality method to determine user rankings and the Probabilistic Affinity Index method for weighting values. The results of authority centrality ranking can be used as a list of recommendations of a user who plays a role or has information about a particular topic and the results of centrality hub ranking can be used as a list of recommendations of a user who has an interest in a particular topic. From the testing in this study, changes in the number of other users that are related to the user have the largest average change in centrality value of 0.01188. While the change in the number of relations has the largest average change in the centrality value of 1.44087x10<sup>-9</sup>. Based on these tests, the number of other users that are related to the user has a large influence on the results of ranking compared to the number of relationships owned by the user.

Keywords: Social Media, Twitter, Hubs and Authorities Centrality, Probabilistic Affinity Index, authority centrality, hub centrality