

## **Abstract**

Social Network Analysis (SNA) can be used to analyze the patterns which is form in a social network to determine user's ranking which influences in the dissemination of information using centrality measurement's method which can measure a vertex in flowing information and graph's center.

One of the centrality measurement that can be used is the Laplacian centrality which is not only calculating the local environment around the vertex but also the larger environment around neighbors. Based on the results of tests, showed that the Laplacian centrality's method can be used to determine user's ranking who influential in spread information on Twitter which the calculations are affected by weight.

**Keywords** : Social Network Analysis (SNA), centrality measurement, Laplacian centrality