

ABSTRACT

Searching for most popular user in social network, can be observed from inter-user relationships like *follow, mention, retweet, replies to*. *Social Network Analysis* on Twitter is social media analysis that is based on the user interaction relationships patterns. The relationships formed between Twitter are accounts represented in the matrix and described as a graph. Data is obtained through the process of crawling on Twitter using NodeXL, then the *clique partitioning* process divides a number of data from a connected graph into sub - sub complete graph. *Measurements* commonly used in calculating the *centrality* of a *node*. *Betweenness centrality* is method measures to the amount of relation of the *node* as well as considers is the value of the interest relations and indirect relationships from *node*. The test result analyzes the use of methods clique partitioning using *Bhasker's* algorithms, then integrated with *betweenness centrality* method to analyze the value and ranks of *node* or *user* interaction for each sub graph formed from a *clique partitioning*. Differences of the value averages *centrality* of test data on system without through a clique partitioning process with through a clique partitioning process as big as 0,102488. Differences of the value averages *centrality* of test data on system through a clique partitioning process with the results of web research as big as 575,6185125.

Keywords : *Betweenness centrality, Clique Partitioning, Social Network Analysis*