

## **Abstract**

The development of Internet media currently affecting the dissemination of information via the Internet using variety of media or device. One form of the development of information media at this time is there are many digital news that spreading online. Since a lot of digital news distribution, it required a method to grouping news by topic and specific linkages by applying the graph model to map relationships between news.

Model graph chosen because it can model the relationship between objects and provide a visualization that is easily understood. News can be represented as nodes and can be connected with another node that has a relationship using edge. Node formed should be grouped into a number of cluster using the star clustering algorithm.

Star clustering algorithm is one of graph clustering method to become subgraph/cluster with particular relationship. Star clustering algorithm known as algorithms are easy to use, and has a pretty good degree of accuracy. In this thesis obtained the results of testing the application of clustering algorithms on digital news star with 80.98% accuracy rate for comparison with clustering expert and produce 62.87129% of good clusters which is clusters that have a greater intercluster value than its intercluster value.

**Keywords :** Graph, Graph Clustering, Star Clustering, Subgraph