Abstract

Determination quadrant development has an important role in order to determine the achievement of the development of a district, in terms of the sector’s gross regional domestic product (GDP). The process of determining the quadrant development typically uses Klassen rules based on its sector GDP. This study aims to provide a new approach in the conduct of regional development quadrant clustering using cluster techniques. Clustering is performed based on the average value of the growth and development of a district contribution compared with the average value and contribution of the development of the province based on data in comparison with a year of data to be compared. Testing models of clustering, performed on a dataset of two provinces, namely Banten (as a data testing) and Central Java (as the training data), to see the accuracy of the classification model proposed. The proposed model consists of two learning methods in it, namely unsupervised (Self Organizing Map / SOM-NN) method and supervised (Naive Bayess). SOM-NN method is used as a learning engine to generate training data for the target Class that will be used in the machine learning Naive Bayess. The results showed the clustering accuracy rate of the model was 98.1%, while the clustering accuracy rate of the model results compared to manual analysis shows the accuracy of the typology Klassen smaller, ie 29.63%. On one side, clustering results of the proposed model is influenced by the number and keagaraman data sets used.


Koua, E. L., 2003, Using Self-Organizing Maps For Information Visualization And
Knowledge Discovery In Complex Geospatial Datasets, Proceedings of the 21st International Cartographic Conference (ICC) &apos;Cartographic Renaissance&apos;:

**Index Terms**

Computer Science
Artificial Intelligence

**Keywords**

GDP, naive bayess, self organizing map, Klassen tipology, classification.