

ABSTRACT

Labor competitiveness is one of the key focuses of Indonesia's development agenda. Currently, Indonesia's labor competitiveness is still below that of other countries, necessitating increased attention to enhancing labor quality to compete effectively. The achievement of labor competitiveness in Indonesia can be measured through various labor market indicators. The labor market is a meeting place between job seekers and job vacancies. This research aims to group provinces in Indonesia based on labor market indicators. The variables used in this research include the labor force participation rate, percentage of employed workers, percentage of workers with working hours of more than 49 hours, percentage of workers in the informal sector, unemployment rate, percentage of unemployed with higher education level, percentage of underemployed, percentage of labor force with low education, average wages and labor productivity. The data in this study contains *outliers*, so the *K-Medians Clustering* and *K-Medoids Clustering* methods are used which are robust against outliers. The main difference between these two methods is the cluster center, *K-Medians* use the median, while *K-Medoids* use the medoid. The measure of object similarity is calculated using *euclidean* distance. Determining the optimal cluster is carried out by validating the cluster using the *Dunn Index* which has the largest value. The research results show that the *K-Medoids* method produces the best clusters with the number of clusters $K = 4$.

Keywords: Labor Market Indicators, *K-Medians Clustering*, *K-Medoids Clustering*, *Dunn Index*