ABSTRACT

Time series clustering analysis to reveal the characteristics of PT Telkom Regional Banking Service customer segments, choose the best customer clustering technique for successful customer segmentation, and complete each cluster. This study aims to map and identify customer characteristics at PT Telekomunikasi Indonesia Segment Regional Banking Service with Clustering Time series analysis, determine the appropriate method for customer clustering so as to produce optimal customer segmentation, and recommend strategies for each cluster formed. This study uses a clustering analysis technique using the process of calculating object distances in time series data using Dynamic Time Warping (DTW). The preprocessing process for determining the proximity and configuration is done by multidimensional scaling. The process of determining clustering using the K-means clustering algorithm. The results showed the formation of five clusters of corporate customers in the Regional Banking Service segment. The first cluster contains 6 banks, the second cluster contains 1 banks, the third cluster contains 38 banks, the fourth cluster contains 4 banks, and the fifth cluster contains 12 bank. Grouping validation with the K-means method shows that the Dynamic Time Warping distance produces a clustering with a silhouette coefficient of 0.621 which is considered good.

Keywords: clustering. dynamic time warping, k-means, regional banking services