ABSTRACT

This study aims to explore the influence of electronic money usage on consumer behavior, especially among students of the Faculty of Applied Sciences, Telkom University. The development of information technology, especially in terms of digital payments, has had a significant impact on everyday life, including among students. In this context, electronic money has facilitated the purchase of goods and services more easily, quickly, and safely. Through a qualitative approach, this study will explore the extent to which the use of electronic money influences students' consumer behavior. A qualitative approach will also be used to understand students' perceptions and experiences in using electronic money in their daily transactions. This study uses qualitative data published through a questionnaire and obtained 40 respondents from Telkom Students, especially the Faculty of Applied Sciences. Then grouped using clustering with the Density-based Spatial Clustering With Noise (DBSCAN) method. The clustering method considers the density of the data sample points, and also compares the results using the Silhoutte Index (SI), Davies Bouldin, Calinski Harabasz Index, and Dunn Index to measure the validation of the cluster values being tested. The results of Density-based Spatial Clustering With Noise show that the optimal hyperparameter eps value for the DBSCAN algorithm is at eps=1, and for Calinski it is at eps 0.8, while the Dunn Index is at eps 0.9.

Keywords: Digital Payment, DANA Application, Student, Density-based Spatial Clustering With Noise (DBSCAN)