

ABSTRAK

Sistem E-Tilang merupakan kebijakan pemerintah dalam rangka meningkatkan efektivitas, efisiensi, dan akuntabilitas pelayanan publik, khususnya di bidang penegakan hukum lalu lintas. Sistem ini hadir sebagai solusi untuk menertibkan pengendara yang sering melakukan pelanggaran lalu lintas serta meminimalisir praktik pungutan liar oleh oknum petugas. Meski demikian, penerapan sistem E-Tilang memunculkan beragam tanggapan dari masyarakat, baik yang mendukung maupun menolak, terutama yang terlihat melalui unggahan di media sosial microblogging X. Dalam penelitian ini, dilakukan analisis sentimen terhadap tanggapan masyarakat menggunakan dua metode clustering, yaitu algoritma K-Means dan DBSCAN. Evaluasi terhadap model dilakukan menggunakan metrik Silhouette Score dan SSE. Pada algoritma K-Means diperoleh 5 cluster, dengan nilai rata-rata Silhouette Score keseluruhan sebesar 0.49 dan nilai SSE sebesar 64.2%. Nilai Silhouette Score masing-masing cluster adalah: 0.49 cluster 1, 0.33 cluster 2, 0.35 cluster 3, 0.26 cluster 4, dan 0.29 cluster 5. Sementara itu, dengan menggunakan algoritma DBSCAN terbentuk 7 cluster. Evaluasi dengan Silhouette Score menghasilkan nilai: 0.38 cluster 1, 0.19 cluster 2, 0.13 cluster 3, 0.27 cluster 4, 0.76 cluster 5, 0.33 cluster 6, dan 0.83 cluster 7.

Kata Kunci : Analisis sentimen, Sistem E-tilang, K means, DBSCAN.

ABSTRACT

The E-Ticket system is a government policy in order to increase the effectiveness, efficiency and accountability of public services, especially in the field of traffic law enforcement. This system is here as a solution to curb drivers who frequently commit traffic violations and minimize the practice of illegal levies by unscrupulous officers. However, the implementation of the E-Tilang system gave rise to various responses from the public, both supporting and opposing, especially as seen through uploads on social media microblogging. Evaluation of the model was carried out using Silhouette Score and SSE metrics. In the K-Means algorithm, 5 clusters were obtained, with an overall average Silhouette Score value of 0.49 and an SSE value of 64.2%. The Silhouette Score values for each cluster are: 0.49 cluster 1, 0.33 cluster 2, 0.35 cluster 3, 0.26 cluster 4, and 0.29 cluster 5. Meanwhile, using the DBSCAN algorithm, 7 clusters were formed. Evaluation with Silhouette Score produces values: 0.38 cluster 1, 0.19 cluster 2, 0.13 cluster 3, 0.27 cluster 4, 0.76 cluster 5, 0.33 cluster 6, and 0.83 cluster 7.

Keywords: Sentiment analysis, E-ticket system, K means, DBSCAN.