AN ANALYSIS OF TWEET SENTIMENT INCREASE IN BOROBUDUR TEMPLE TICKETS USING NAÏVE BAYES AND DECISION TREE

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ABSTRACT

The recent growth of social media is extremely influential and plays a significant role in various aspects of people's lives in the digital era. Twitter is a social media network that is widely used in Indonesia. Twitter users can engage in a variety of activities, such as communicating with individuals and groups, writing daily activities, promoting businesses, arguing, and expressing ideas about a topic of discussion. In the beginning of June 2022, the idea to raise the entrance charge for Borobudur Temple became one of the concerns that caused a lot of conversation in the real world as well as on other social media platforms, including Twitter. The plan to increase the price of entrance tickets to Borobudur Temple has drawn various pro and con reactions in the community. The purpose of this study is to analyse public sentiment towards the planned increase in ticket prices for Borobudur Temple. Sentiment analysis of Twitter data can be implemented using a classification algorithm. The classification algorithms that are widely used in sentiment analysis research are Nave Bayes (NB) and Decision Tree (DT). The reason for choosing Nave Bayes and Decision Tree is because this algorithm is the most popular algorithm used to process text data classification; the process is simple, efficient, and performs well. The source of the dataset in this study was taken from social media sites like Twitter. In comparison to the Decision Tree, which generates a test percentage of 61.07%, the accuracy of the Naive Bayes approach, based on the evaluation of the test results, produces the highest accuracy number. While the Decision Tree method's accuracy test yields a test accuracy value of 45.18%.

Keywords: *Sentiment Analysis, Naive Bayes, Decision Tree, Borobudur Temple Ticket, Social Media Twitter*

ANALISIS SENTIMEN TWEET KENAIKAN TIKET CANDI BOROBUDUR MENGGUNAKAN NAÏVE BAYES DAN DECISION TREE

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ABSTRAK

Perkembangan media sosial belakangan ini amat berpengaruh serta memberikan peran besar bagi beragam aspek kehidupan masyarakat di era digital. *Twitter* merupakan salah satu jejaring media sosial yang populer digunakan masyarakat di Indonesia. Melalui media sosial *Twitter*, pengguna dapat melakukan berbagai aktivitas, diantaranya adalah komunikasi antar individu maupun kelompok, menuliskan kegiatan keseharian, mempromosikan usaha, beradu argumen, hingga menyampaikan opini terkait suatu topik pembahasan. Pada awal Juni 2022 lalu, rencana kenaikan harga tiket masuk Candi Borobudur menjadi salah satu persoalan yang menuai banyak perbincangan di dunia nyata bahkan di berbagai media sosial diantaranya *Twitter*. Rencana kenaikan harga tiket masuk ke Candi Borobudur ini menuai berbagai reaksi pro dan kontra dalam masyarakat. Tujuan penelitian ini untuk menganalisis sentimen masyarakat terhadap rencana kenaikan harga tiket Candi Borobudur. Analisis sentimen pada data *Twitter* dapat diimplementasikan dengan menggunakan algoritma klasifikasi. Algoritma klasifikasi yang banyak digunakan dalam penelitian analisis sentimen yaitu *Naïve Bayes* (NB) dan *Decision Tree* (DT). Alasan dipilihnya *Naïve Bayes* dan *Decision Tree* karena algoritma ini merupakan algoritma yang paling populer digunakan untuk memproses klasifikasi data teks, prosesnya sederhana, efisien,dan berkinerja baik. Sumber *dataset* pada penelitian ini diambil dari media sosial *Twitter*. Hasil akurasi metode *Naive Bayes* berdasarkan evaluasi hasil pengujian menghasilkan nilai akurasi tertinggi dibandingkan dengan *Decision Tree* yaitu menghasilkan presentase pengujian 61.07%. Sedangkan hasil akurasi metode *Decision Tree* menghasilkan nilai akurasi pengujian 45.18%.

Kata kunci: *analisis sentimen, Naive Bayes, Decision Tree, tiket Candi Borobudur, media sosial Twitter*