

ABSTRAK

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PENERAPAN *SUPPORT VECTOR MACHINE* DAN *MACHINE LEARNING* DALAM ANALISIS SENTIMEN PENGGUNA MEDIA SOSIAL X TERHADAP *TELEMEDICINE* DI INDONESIA

Telemedicine di Indonesia telah berkembang sejak diperkenalkan pada tahun 2012, namun masih menghadapi tantangan terkait pemahaman teknologi dan keterbatasan akses di daerah terpencil. Mengingat pentingnya *telemedicine* dalam meningkatkan akses layanan kesehatan, pemahaman terhadap persepsi publik menjadi krusial untuk mengevaluasi penerimaan dan kendala yang dihadapi. Analisis sentimen dapat membantu mengidentifikasi opini masyarakat terhadap layanan ini, baik dari segi manfaat maupun hambatan yang dialami. Penelitian ini bertujuan untuk menganalisis sentimen publik terhadap layanan *telemedicine* menggunakan data dari media sosial X. Data dikumpulkan melalui teknik scraping dengan kata kunci "*Telemedicine*" dan dianalisis menggunakan algoritma *Support Vector Machine* (SVM). Hasil penelitian menunjukkan bahwa dari 525 *tweet* yang dianalisis, 468 *tweet* memiliki sentimen positif, 48 *tweet* negatif, dan 9 *tweet* netral. Model SVM menunjukkan tingkat akurasi sebesar 84%, dengan precision 28%, recall 33%, dan F1-score 30%. Meskipun akurasi model cukup tinggi, tantangan tetap ada dalam membedakan sentimen negatif dan netral secara akurat. Analisis sentimen mengungkapkan bahwa kata-kata yang sering muncul dalam sentimen positif adalah "layanan", "telemedicine", dan "sehat", sementara kata-kata negatif yang dominan adalah "pasien", "covid", dan "sakit", dan untuk sentimen netral terdapat kata "aplikasi", "online", "konsultasi".

Kata Kunci: Media sosial X, Sentimen, *Support Vector Machine*, *Telemedicine*, *Text Mining*

ABSTRACT

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Application of Support Vector Machine and Machine Learning in Analysis of Social Media Users' X Sentiment Towards Telemedicine in Indonesia

Telemedicine in Indonesia has grown since its introduction in 2012, but it still faces challenges related to technological understanding and limited access in remote areas. Given the importance of telemedicine in improving access to health services, understanding public perception is crucial to evaluating acceptance and the obstacles faced. Sentiment analysis can help identify public opinion about this service, both in terms of benefits and obstacles experienced. This study aims to analyze public sentiment towards telemedicine services using data from social media X. Data was collected through scraping techniques with the keyword “Telemedicine” and analyzed using the Support Vector Machine (SVM) algorithm. The results showed that of the 525 tweets analyzed, 468 had positive sentiment, 48 were negative, and 9 were neutral. The SVM model showed an accuracy rate of 84%, with a precision of 28%, recall of 33%, and F1-score of 30%. Although the accuracy of the model is quite high, the challenge remains in accurately distinguishing negative and neutral sentiments. Sentiment analysis reveals that the words that often appear in positive sentiment are “service”, “telemedicine”, and “healthy”, while the dominant negative words are “patient”, “covid”, and “sick”, and for neutral sentiment, there are the words “application”, “online”, “consultation”.

Keywords: *Social media X, Sentiment, Support Vector Machine, Telemedicine, Text Mining*