## ABSTRAK

Kemajuan teknologi digital telah mengubah pola konsumsi hiburan masyarakat, khususnya dengan meningkatnya penggunaan layanan streaming video seperti Netflix. Salah satu tantangan utama dalam industri ini adalah fenomena customer churn, yaitu kondisi ketika pelanggan memutuskan untuk berhenti berlangganan. Untuk mengatasi hal tersebut, penelitian ini menerapkan pendekatan machine learning dengan algoritma Support Vector Machine (SVM) guna memprediksi potensi pelanggan yang akan melakukan churn.

Data yang digunakan dalam penelitian ini diperoleh melalui kuesioner yang disebarkan kepada 100 responden di Komplek Bukit Bung Kopo, dengan pertanyaan yang mencakup berbagai faktor seperti durasi langganan, perangkat yang digunakan, preferensi konten, dan pengalaman pengguna. Proses penelitian mencakup tahap pengumpulan data, preprocessing, pemilihan fitur, pelatihan model, serta evaluasi performa model menggunakan metrik seperti akurasi, precision, recall, dan F1-score.

Hasil penelitian menunjukkan bahwa algoritma SVM mampu mengklasifikasikan pelanggan dengan tingkat akurasi sebesar 90% dalam membedakan pelanggan yang berpotensi churn dan yang tidak. Temuan ini diharapkan dapat membantu perusahaan seperti Netflix dalam mengembangkan strategi retensi pelanggan yang lebih efektif, serta memberikan kontribusi dalam penerapan teknologi machine learning di industri layanan berbasis langganan lainnya.



**Kata kunci:** Churn Pelanggan, Netflix, Support Vector Machine, Prediksi, Machine Learning.

## ABSTRACT

The advancement of digital technology has transformed the way people consume entertainment, particularly with the increasing use of video streaming services such as Netflix. One of the main challenges in this industry is the phenomenon of customer churn, which refers to the condition when subscribers decide to cancel their subscription. To address this issue, this study applies a machine learning approach using the Support Vector Machine (SVM) algorithm to predict potential customers who are likely to churn.

The data used in this study was collected through questionnaires distributed to 100 respondents in Komplek Bukit Bung Kopo, covering various factors such as subscription duration, devices used, content preferences, and user experience. The research process includes data collection, preprocessing, feature selection, model training, and model performance evaluation using metrics such as accuracy, precision, recall, and F1-score.

The results indicate that the SVM algorithm is capable of classifying customers with an accuracy rate of 90% in distinguishing between those who are likely to churn and those who are not. These findings are expected to assist companies like Netflix in developing more effective customer retention strategies, as well as contribute to the application of machine learning technology in other subscription-based service industries.



**Keywords**: Customer Churn, Netflix, Support Vector Machine, Prediction, Machine Learning.