

**IMPLEMENTASI CHURN PREDICTION DI INDUSTRI
TELEKOMUNIKASI DENGAN METODE *LOGISTIC REGRESSION* DAN
*CORRELATION-BASED FEATURE SELECTION***

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Abstrak

Industri telekomunikasi menjadi salah satu industri yang semakin kompetitif dan telah menumbuhkan ketertarikan akan prediksi churn untuk pelanggan. Prediksi churn tentang bagaimana mendeteksi pelanggan yang memiliki kecenderungan untuk meninggalkan layanan. Prediksi ini merupakan salah satu upaya perusahaan untuk mempertahankan pelanggan didalam *Customer Relationship Management (CRM)*. Beberapa penulis mengemukakan bahwa metode *logistic regression* memiliki pemodelan dan hasil performa yang bagus untuk diaplikasikan untuk data prediktif. Dataset diambil dari salah satu perusahaan telekomunikasi di Amerika bernama Orange yang tersedia di situs Kaggle yang kemudian diolah untuk menganalisis performa prediksi churn menggunakan *data mining* dengan teknik pemilihan *correlation-based feature selection forward selection* serta algoritma machine learning *logistic regression*.

Kata Kunci : Prediksi *churn*, *customer relationship management (CRM)*, *logistic regression*, *data mining*, *correlation-based feature selection*, *forward selection*, machine learning

**CHURN PREDICTION IMPLEMENTATION IN TELECOMMUNICATION
INDUSTRY WITH *LOGISTIC REGRESSION AND CORRELATION-BASED
FEATURE SELECTION***

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ABSTRACT

Telecommunication industry became one of the industry that is becoming more competitive and is growing interest in churn prediction for customer. Churn prediction is about how to detect customer who have tendency to leave the service. This prediction is one of the company's effort to retain customers in Customer Relationship Management (CRM). Several authors suggest that *logistic regression* method has good modelling and performance results to be applied to predictive data. Dataset is taken from one of the United States' telecommunication company named Orange which available on Kaggle website then proceed to analyze the performance of churn prediction using data mining with *correlation-based feature selection forward selection* and machine learning *logistic regression* algorithm.

Keywords : *churn prediction, customer relationship management (CRM), logistic regression, data mining, correlation-based feature selection, forward selection, machine learning*