Perancangan model churn prediction pelanggan CDMA pascabayar menggunakan artificial neural network

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Abstrak

Penelitian ini bertujuan merancang sistem prediksi churn pelanggan yang memanfaatkan proses data mining. Sistem yang dihasilkan , memprediksi churn pelanggan dan menampilkan hasil prediksi dalam format laporan tertentu yang diperlukan. Identifikasi variabel-variabel prediksi churn dilakukan berdasarkan wawancara dan penelitian terdahulu yang antara lain mencakup informasi mengenai riwayat pelanggan, tagihan, dan data panggilan rinci, Teknik data mining yang dipilih adalah teknik klasifikasi dengan algoritma artificial neural networks. Artificial neural networks menghasilkan model yang merepresentasikan pola perilaku pelanggan yang churn dan tidak churn. Penelitian yang dilakukan menggunakan data pelanggan Flexi Classy daerah Jakarta menghasilkan tingkat akurasi model prediksi dengan error 6,88% untuk dataset validasi.

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The purpose of this research is to design a churn prediction model which based on data mining. The result of this research is a model that can predict whether customer is a churner or not and then show us the output of prediction in a certain report. Variables were determined by a discussion with an expert or taken from previous similar research. The variables were taken from customer profile database, billing record database, and call detail record database. Data mining technique that used in this research is artificial neural networks. Artificial neural networks create a model that can show the behaviour of churners and non churners. The research, which use customer data of Flexi Classy who live around Jakarta, created a churn prediction model which have 6,88% error rate (test dataset).