ABSTRAK

Penanganan permasalahan *customer churn* merupakan salah satu fokus utama bagi perusahaan dalam menjalankan bisnisnya. Terjadinya *customer churn* tanpa penanganan yang tepat dapat menimbulkan dampak negatif terhadap keberlangsungan perusahaan. Permasalahan *customer churn* juga terjadi di dalam sektor perbankan akibat banyaknya bank digital di Indonesia yang terus bermunculan. Pelopor bank digital di Indonesia yaitu Bank Jenius, harus menghadapi tantangan dalam mempertahankan nasabahnya.

Penelitian ini dilakukan dengan menyebarkan kuesioner untuk mengumpulkan informasi terkait *customer related variable, customer satisfaction, service usage, referent network size, switching cost* pada *customer* Bank Jenius. Melalui data ini akan dibentuk model prediktif mengenai *customer churn* pada Bank Jenius dengan algoritma klasifikasi Regresi Logistik, *Decision Tree,* dan *Random Forest*.

Melalui tiga model tersebut akan dilakukan pengecekan terhadap performa model berdasarkan indikator akurasi, presisi, dan sensitivitas model. Berdasarkan hasil penelitian ini didapatkan model terbaik untuk memprediksi *customer churn* di Bank Jenius adalah model Regresi Logistik dengan menggunakan proporsi yakni 80% data *training* serta *20%* data *testing* menghasilkan akurasi 79%, presisi 78%, *recall* 71% dan *f1-score* 75%.

Kata kunci: Bank Jenius, bank digital, *customer churn*, prediksi

ABSTRACT

Customer churn management is the prime focus area for companies in running their business. The occurrence of customer churn without proper handling leads to negative impact on the sustainability of the company. The problem of customer churn also occurs in the banking sector due to the number of digital banks in Indonesia continuing to emerge. The pioneer of digital banking in Indonesia, Bank Jenius, must face challenges in retaining its customers.

This research was conducted by collecting information related to customer-related variables, customer satisfaction, service usage, referent network size, and switching costs of Bank Jenius customers using online questionnaires. Through this information, a predictive model of customer churn at Bank Jenius will be formed using the Logistics Regression, Decision Tree, and Random Forest classification algorithms.

Through these three models, the performance of the model will be examined based on indicators of model accuracy, precision, and sensitivity. The research shows that the best model for predicting customer churn in Bank Jenius is Logistic Regression model with proportion of 80% of training data and 20% of testing data which resulted in 79% accuracy, 78% precision, 71% recall, and 75% f1-score.

Keywords: Bank Jenius, digital bank, customer churn, prediction