

Predicting Customer Churn Using Intelligent Adaptive Learning Approach

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Customer retention is one of the most pressing issues for businesses. Ideally, obtaining a new customer is costly, and thus, many firms concentrate on retaining their existing loyal customers in order to optimize profit and revenue while preventing customer churn. Consequently, conventional machine learning approaches are applied in many cases to boost customer retention. These approaches face significant hurdles in terms of accuracy as indicated by many research articles as a result of which this study sought to present a cutting-edge framework for improving client retention that utilizes convolutional neural networks. The study has used the case of customer retention in telecommunication companies. The experiment is performed on a telecom dataset obtained from Telco and subjected to a customer churn model based on convolutional neural network. The testing tools use is python based Keras library. The experiment helped in generating more accurate findings, particularly in predicting customer loss and enhancing customer retention. Furthermore, the performance of the model was modest, achieving 88%.