Entri Software Pvt Limited

Kakkanad Kerala

Customer Attrition Analysis

OVERVIEW

Verizonet, a telecommunications company based in California, has been operating for six years, providing phone and internet services to customers across more than a thousand cities and zip codes. Despite a highly skilled sales team successfully attracting new clients, the company faces a significant challenge: a high customer attrition rate. At the end of the last quarter, only 43% of newly acquired customers chose to continue their services, resulting in a decrease in the total customer base.

The company's leadership attributes the high attrition rate to competitors investing in new technologies and expanding their network coverage. To address this issue, Verizonet has formed a task force comprising members from various departments, and a newly established Data Science team.

The Data Science team's primary objectives are to analyze the dataset, identify factors driving customer turnover, develop an accurate Machine Learning model to predict potential departures, and recommend customized retention strategies. The company aims to save costs by retaining customers, as acquiring new clients is significantly more expensive. Verizonet's executives are optimistic that the insights and actions derived from this project will not only reduce attrition but also contribute to the company's growth and financial stability.

Goal

The objective of this exercise is to build a model to predict the customer who can depart, using historical data Focus on all steps of data science (EDA, data processing, model, evaluation, charts)

- 1. Highlight any trend in data, deep insight, novel steps that you take
- 2. Highlight next steps and improvements.
- 3. Apply classification machine learning algorithms and evaluate it

Here is the data: <u>Dataset</u>