Sound Credit Union — Churn/No Churn

Challenges & Opportunities
- Identify significant variables that indicate a potential member who may churn.
- Build predictive model that identifies potential churn members via previous patterns.

Introduction

Sound Credit Union (SCU) is one of the largest credit unions in Washington State. SCU serves 140,000 members at 29 full-service branches and online. As a credit union, any earnings that SCU makes are passed on to its members. As a result, credit unions face high rates of churn (the rate of attrition or members leaving). This is due to several factors including but not limited to the number of competitors, members’ ability to substitute products, membership restrictions, etc.

Descriptive & Diagnostic Analysis
- During the Descriptive Analytics phase our goal was to explore the data, detect outliers and identify associations between variables using R.
- Using survey data for SCU, we mapped Net Promoter Score data to primary dataset.
- Determining the most significant variables for churn prediction, solution is carried into 2 models for loan account holders and savings accounts holders.

Predictive & Prescriptive Analytics
- Modeling was carried out using Python and deployed via Azure ML services.
- Final models were having 93% accuracy and 84% precision which are the success measure metrics for the churn analysis. Hyper-tuning was performed to enhance model performance.

Solutions & Recommendations
Based on model predictions, SCU can retain potential churners by taking actions like providing best offer recommendations to improve CLV i.e., Member/Customer Lifetime Value, performing RFM analysis and increasing member satisfaction validating SCU’s mission ‘Standing with you through all waves of life’.

Tools, Methods & Platforms Used

Check us out on LinkedIn to know more about us and connect with us scanning the barcode!

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