

Group Project Report

Group details:

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Problem Description:

This project pertains to XYZ Credit Union, a financial institution in Latin America, which has been successful in selling various banking products like credit cards, deposit accounts, retirement accounts, and safe deposit boxes to its customers. However, there is a significant challenge with cross-selling—existing customers are not purchasing more than one product each. This indicates that the bank is struggling to promote its other offerings to its current customer base. To address this issue, the credit union has engaged ABC Analytics to find a solution that will increase cross-selling of their banking products.

Business Understanding:

XYZ Credit Union's primary concern is to boost cross-selling efforts effectively and efficiently. The core objective of this project is to analyze customer data and devise actionable insights that can help the bank promote additional products to its existing customer base. The goal is to enhance revenue streams and deepen customer relationships.

EDA Performance:

Initial Exploratory Data Analysis (EDA): We commenced our analysis by delving into the customer base across various product offerings. Notably, when assessing short-term deposits, mid-term deposits, and long-term deposits, it became apparent that the long-term deposit product boasted the highest number of users. Furthermore, a comprehensive evaluation of all accounts and bank services indicated that Direct Debit, e-account, and Payroll account held the distinction of having the largest user base. As a result, we identified these four products—long-term deposit, Direct Debit, e-account, and Payroll account—as candidates warranting more in-depth EDA.

Subsequent Exploratory Data Analysis (EDA): In the subsequent phase of our analysis, we undertook a thorough examination of the distribution of customers across the four selected products. This investigation encompassed a multitude of features, including gender, age, place of residence, nationality, primary customer status, customer segmentation, geographical distribution, employee spousal relationships, new customer status, time series data, and more.