

Group Project Report

Group details:

Group Name	< DH-CrossSelling >
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Country	<USA>
Specialization	<Data Analyst: Cross selling recommendation >

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.

Project Lifecycle:

Phase 1: Data Collection and Preparation [August 19, 2023]

In this phase, we will gather relevant data, including customer demographics, transaction history, and product information. Data will be cleaned, processed, and prepared for analysis.

Phase 2: Exploratory Data Analysis (EDA) [September 9, 2023]

EDA will involve exploring the data to understand customer behavior, identify patterns, and correlations. We will uncover insights that can inform cross-selling strategies.

Phase 3: Recommendation Development [September 16, 2023]

Based on the EDA findings, we will develop data-driven recommendations to increase cross-selling. These recommendations will not involve machine learning.

Phase 4: Dashboard Creation [September 23, 2023]

A business dashboard will be created to monitor and visualize customer segments, average age, and other key performance indicators (KPIs). This dashboard will provide actionable insights for decision-making.

Phase 5: Final Presentation [September 30, 2023]

A final presentation will be prepared to present the findings, recommendations, and insights to the stakeholders at XYZ Credit Union. This presentation will also include the EDA results and the business dashboard.

Data Intake Report

Name: <Data Analyst: Cross Selling Recommendation>

Report date: <August 19, 2023>

Internship Batch:<LISUM23:30>

Version:<1.0>

Data intake by:<Dingyun Hu>

Data intake reviewer:<Dingyun Hu>

Data storage location: <<https://drive.google.com/file/d/16-nzZR91-ijrfjUcI2PniTpOgrvFAykA/view?usp=sharing>>

Tabular data details:

Total number of observations	<13647309>
Total number of files	<1>
Total number of features	<48>
Base format of the file	<.csv>
Size of the data	<2.29 GB>

Total number of observations	<929615>
Total number of files	<1>
Total number of features	<24>
Base format of the file	<.csv>
Size of the data	<110.3 MB>

Note: Replicate same table with file name if you have more than one file.

Proposed Approach:

- Language: R
- Package: base, Data.table
- Function: fread, nrow, ncol