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Problem Description

XYZ Credit Union in Latin America are selling business products such as Credit Cards, Deposit Accounts, and Retirement Accounts, but they are not performing well in cross selling: persuading customers to acquire more than one of their banking products. This is resulting in reduced customer satisfaction, loyalty, and opportunities for revenue growth.

Impact: Reduced revenue from business products, missed opportunities for enhanced client engagement, and potential loss of market share to competitors who offer more comprehensive solutions.

Objectives: To enhance the effectiveness of cross-selling business products, thereby increasing client uptake and revenue.

Business Understanding

Objective: Develop a thorough understanding of XYZ's business context related to the cross-selling issue.

Industry: Financial Services

Stakeholders:

- **Internal Stakeholders:** Sales teams, marketing teams, product managers, customer service representatives
- **External Stakeholders:** Business clients who use or could benefit from XYZ's business products

Business Objectives:

- **Revenue Growth:** Increase revenue from business products through improved cross-selling.
- **Client Satisfaction:** Enhance client satisfaction by offering products that meet their evolving needs.
- **Market Positioning:** Strengthen XYZ's position as a comprehensive financial solutions provider.

Project Lifecycle

Project Phases:

- **Initiation:** Set goals and define scope for enhancing cross-selling based
- **Analysis:** Perform Exploratory Data Analysis to better understand customer demographics and target regions.
- **Planning:** Develop a detailed plan with strategies, timelines, and resources.
- **Execution:** Implement strategies, including training and marketing efforts.
- **Monitoring and Control:** Track progress, measure performance, and make adjustments.
- **Closure:** Review outcomes, document lessons learned, and finalize the project.

Project Plan:

- **Scope:** Improve cross-selling of business products
- **Schedule:** Outline key milestones and deadlines.
- **Resources:** Allocate budget, assign team members, and utilize technology.
- **Risk Management:** Identify risks and develop mitigation strategies.
- **Communication:** Set up regular updates and feedback sessions with stakeholders.

Execute and Monitor:

- Implement the cross-selling strategies according to the plan.
- Continuously track key performance indicators such as sales conversion rates, client feedback, and product uptake.
- Make adjustments based on performance data and feedback from sales teams and clients.

Review and Close:

- Evaluate the effectiveness of the cross-selling efforts in terms of revenue growth and client satisfaction.
- Document successes, challenges, and lessons learned for future initiatives.

- Conduct a final review meeting with stakeholders to discuss outcomes and any follow-up actions required.

Post-Project Evaluation:

- Assess the overall impact on business product sales and client relationships.
- Gather feedback from stakeholders to refine future cross-selling strategies.
- Use insights gained to inform broader marketing and sales strategies.

Data Intake Report

Name: Cross Selling Banking Products
Report date: 08/17/24
Internship Batch: LISUM35
Version: 1.0
Data intake by: Griffin Palfrey
Data storage location: https://github.com/griffinpalfrey/Cross-Selling

Tabular data details:

File name	Train.csv
Total number of observations	13,647,310
Total number of features	48
Base format of the file	.csv
Size of the data	2.292 GB

File name	Test.csv
Total number of observations	929,616
Total number of features	24
Base format of the file	.csv
Size of the data	110.3 MB

Validation:
Deduplication is an important step in ensuring the accuracy, integrity, and quality of our data sets. The idea is to check for redundancy, removing anything that may skew our data in unrealistic ways. The deduplication validation was performed using Python's Modin library, where the following steps were taken:

    1. Exact Duplicate Identification: I identified records that were identical across all fields
    2. Partial Duplication Identification: I identified records that had matching values in key fields but differed in other fields.

Assumptions:
- The data is accurate, up-to-date, and consistent over time.
- The variables used for segmentation are relevant and significant for distinguishing customer segments.

- Customers within each segment exhibit similar characteristics or behavior.
- External factors (e.g., economic conditions, market trends) impact customer behavior and segmentation.
- Data used for segmentation is collected and handled in compliance with privacy laws and ethical standards.