

CaseOdyssey: An Epic Journey in Problem-Solving

CASE STUDY CONTEST OVERVIEW

Case Study Introduction

This case study focuses on one of the leading Indian private sector Bank's endeavors to enhance personal loan campaigns through **Data Exploration and Predictive Modeling**.

Market Context

In the dynamic landscape of the Indian banking sector, competition is fierce, and customer preferences constantly evolve. Personal loan market in India is a \$20+ billion industry with interest rates ranging from 10% to 20%, attracting primarily younger working professionals who often apply online, while lenders face competition, credit scoring challenges, and regulatory oversight.

With a network of 500+ branches, our client operates in a highly competitive market where customer acquisition, retention, and cross-selling have become critical for sustained growth. India's diverse economic and cultural landscape necessitates a flexible and data-driven marketing approach. Understanding and catering to the specific financial needs of a large and diverse customer base is essential for our client's continued success.

With a majority of customers being depositors, the bank's market presence is solidified as a trusted repository for savings. Yet, the bank faces a challenge in diversifying its services and engaging these depositors in lucrative products like personal loans, which require a different marketing strategy. Bank's market context includes a quest for innovative marketing techniques to target potential customers effectively.

Bank Background

Our client, a leading Indian bank is a prominent player in India's financial sector. With a reputation for safety and reliability, bank has established a significant foothold in the Indian banking industry.

- It operates with a strong presence, boasting over 300 branches nationwide.

- The bank's customer base surpasses 11.5 million individuals, primarily characterized as depositors.
- This customer composition underscores the bank's proficiency in accumulating and preserving deposits, serving as a financial custodian to millions.

The bank sees this as an opportunity to capitalize the trust and diversify its portfolio by offering personal loans to depositors. The bank's rich history, extensive reach, and solid foundation provide a solid backdrop for leveraging data-driven marketing strategies to explore new avenues and enhance customer engagement.

Business Challenge

The primary challenge faced by our client is to identify potential customers within its vast customer base who are likely to accept personal loan offers. This challenge involves understanding the factors that influence a customer's decision to take a personal loan and developing a data-driven strategy to target these potential customers effectively. The bank aims to increase the success rate of its marketing campaigns by refining its approach.

Objectives

The main objectives of this case study are:

EDA & Modelling

- Identify the key factors (columns) that affect a customer's decision to take a personal loan.

Scenario: Imagine you're deciding whether to go on a picnic with your friends, and you must consider various factors before making your choice.

1. Weather
2. Budget
3. Destination
4. Picnic Activities
5. Duration
6. Your Availability

In the same way some factors (columns) will affect the customer's decision to take a personal loan while some factors will not affect it as much. So, we must find such features (You must perform Feature Importance) in this case-study.

- Analyze the strength of the impact of these factors on personal loan acceptance.

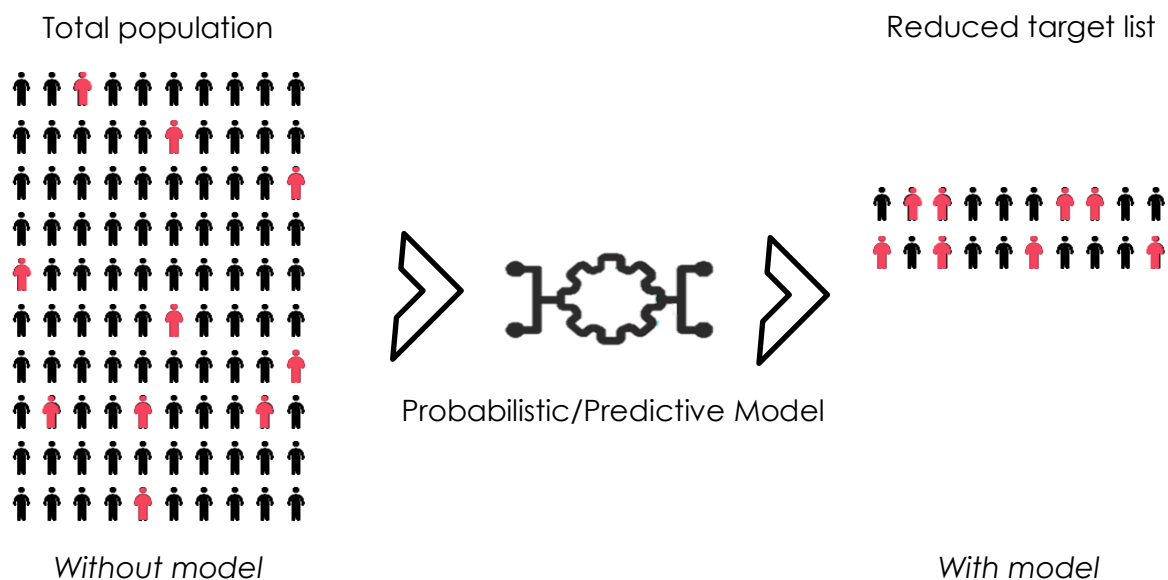
In this objective, we must find the impact (importance) of that features on the customer's decision making to take a personal loan. For example, a high credit score (good credit history) is typically a strong positive factor that significantly increases the likelihood of loan approval, while the weather or budget, as discussed in the previous analogy are the main factors for decision making.

- Develop a prediction model with high accuracy to target potential customers effectively in future marketing campaigns.

Dashboard

Create an insightful dashboard for data visualization. (For example, you can create a chart between the average experience and education type).

Illustration



Key Deliverables

The key deliverables of this case study are:

EDA & Modelling (Python)

- A comprehensive analysis of the data to identify the columns (variables) that significantly influence personal loan acceptance.
- Quantitative assessments of the strength of the impact of these columns.
- Development of a predictive model with good accuracy to predict which customers are likely to accept personal loan offers.

Dashboard (Tableau/ Power BI)

- Recommendations and insights for the Retail Marketing Department to optimize their future campaigns and improve conversion rates.

By achieving these objectives and deliverables, our client aims to enhance its marketing strategy, making it more data-driven and customer-centric, ultimately leading to increased campaign success and business growth.

You will be judged on

- Interpretation of Data
- EDA and modelling
- Presentation and Visual Appeal of your Dashboard
- Blog Writing Skills
- Creativity & Innovation