

Understanding and Predicting Credit Card Churn: An In-depth Analysis of Customer Attrition in the Credit Card Industry.

Team Members:

1. Abhradeep Das (G38747350)
2. Gouri Dumale (G49564205)
3. Smit Pancholi (G31443926)
4. Swathi KR (G48428717)

Description:

This dataset contains comprehensive data on 10,127 customers and their engagements with a financial organization. Credit card churn poses a significant financial challenge for credit card companies. To mitigate this issue and enhance their financial performance, companies can employ strategies such as customer segmentation and EDA. By leveraging these approaches, they can effectively identify customers at risk of churning and implement targeted incentives to encourage customer retention.

SMART Questions:

- 1) How do age, gender, marital status, and education level collectively influence the likelihood of customer churn within the financial institution?
- 2) Is there a correlation between clients' income categories and their attrition rate, and can we formulate retention strategies for clients in lower income categories?
- 3) Can we identify a measurable threshold of Average Utilization Ratio that significantly affects credit card churn?
- 4) Over a specified period (e.g., the last 12 months), how has the Total Amount Change from Q4 to Q1 changed in relation to credit card churn?
- 5) What is the relationship between a customers' credit limit and their transaction behavior, including total transaction amount, total transaction count, and average utilization ratio, and how do these factors influence the likelihood of churn attrition in a financial institution?

Source of dataset: <https://www.kaggle.com/datasets/anwarsan/credit-card-bank-churn/data>

GitHub Repo: https://github.com/smitpancholi313/Project_CreditCardChurn.git