

# **PROJECT PROPOSAL**

## **Introduction**

By tailoring services to individual clients depending on their behavior, you may improve the customer experience. We can better comprehend a customer's connection with the bank by analyzing their behavior and considering specific criteria. Additionally, segmentation enables us to categorize and identify consumers to make additional marketing offers to them, encouraging them to connect and remain customers of the same bank, lowering the churn rate, and improving relationship management with the bank.

## **Dataset selected**

The dataset acquired from “Kaggle” contains the usage behavior of active credit card holders during the last 6 months. The file is at a customer level with 18 behavioral variables. A few of the common attributes of the dataset are Customer ID, Tenure, Payments, and Purchases and in total the dataset has 18 features and around 16K observations.

Dataset source - [Credit Card Dataset](#)

## **Motivation and Insights**

The goal and driving force behind this project are to apply a few customers segmentation approaches to find the most devoted customers among the 16K credit card users, rate them, and then market to them with additional offers based on their ranking.

The development of techniques to identify which clients are the most dependable consumers and are known to receive the greatest offers relative to those who are trying to switch banks was unheard of in the past. The most important lesson we will work on in this project is to discover the best and most devoted consumers through a few further segmentations, check to see whether the top-rated customers are happy with the offers, and market them with more offers.

## **Problem statement and Proposal**

Even though customers have had a long relationship with the bank, the majority of customers leave the service or bank because they are dissatisfied with the offers, they offer. We are focusing on these types of customers and targeting them with understandable offers to satisfy them to remain in the same bank which also helps in reducing the churn rate.

With the dataset, we will conduct a descriptive analysis, run through the data, apply EDA, perform preprocessing, create customer segments using one of the techniques, and produce visuals to identify the best customers, those we are most likely to lose, and those who are most likely to churn to make offers to them accordingly using few of the machine learning clustering techniques.

# PROJECT PROPOSAL

## Project Execution plan

Analyze the data → EDA → Pre-processing → Insights → Clustering techniques using Machine Learning → Visualization

## Analysis questions

- Who are the best customers?
- Which customers are likely to churn?
- Which customers we are going to loose?
- Who are the loyal customers?

## Outcome

Banks can offer more specialized products and services by using customer segmentation solutions to group consumers based on behavior. Additionally, marketers can increase cross-selling and up-selling chances and entice customers to investigate complementary services by better understanding client preferences. Concentrating on the loyal customer providing additional offers increases their satisfaction as well as strengthens the relationship and at the same time reducing the churn rate by maintaining all of the customers is an important asset for the retail banks.