

Customer Attrition





Project Background

Credit card services is one of the major forms of payment in the retail industry today. In a competitive market and other forms payment on the rise, **customer attrition** is one of the problems banks are facing. In this project, we will analyze customer attrition using a dataset obtained from a hypothetical bank. **We aim to improve churn rate by predicting customers who are likely to churn from the existing ones.**



The Dataset



The dataset that will be used for this analysis project was obtained from <https://leaps.analyttica.com/home> through Kaggle.com. The **dataset** contains over 10,000 **customer demographics** such as age, salary, marital status, credit card limit, category, etc.



Project Goals

1. Analyze and find demographic trends from attrited customers.
2. Create a machine learning model that can predict who are likely to churn from existing customers.





Exploratory Data Analysis



Our group will perform exploratory data analysis using the parameters contained in the dataset. Specifically, we will use charts and graphs such as boxplot and pie charts to represent the distribution of customers using different parameters.

Analysis using Supervised Machine Learning

The analysis phase of this project will involve supervised machine learning. We will use two supervised machine learning models, Logistic Regression and synthetic minority oversampling technique (SMOTE), to predict churn rate and customers who are likely to churn.

