01. Customer Churn Prediction

Problem Statement:

Our bank wants to reduce customer churn. How would you predict which customers are likely to leave?

It use cases:

- Closing a savings account
- Paying off a loan and leaving
- Switching to a competitor bank

1. Data Collection and Preparation

a. Customer Details or Demographics

customer_id, age, martial_status, gender, income, signup_date

b. Account Details

account_id, credit_score, account_balance, loan_history(number of loans taken), active_products (bank products or services used)

c. Behavior Patterns

transaction_per_month, late_payments, customer_calls

d. Transactions

customer_id, transaction_id, transaction_date, amount

e. Target Dependent Variable

churn if **(1)** else **(0)**

2. Exploratory Data Analysis