Project Problem Statement

Customer Churn Prediction:

A Bank wants to take care of customer retention for its product: savings accounts. The bank wants you to identify customers likely to churn balances below the minimum balance. You have the customers information such as age, gender, demographics along with their transactions with the bank.

Your task as a data scientist would be to predict the propensity to churn for each customer.

Data Dictionary

There are multiple variables in the dataset which can be cleanly divided into 3 categories:

- I. Demographic information about customers
 - **customer id** Customer id
 - **vintage** Vintage of the customer with the bank in a number of days
 - age Age of customer
 - **gender** Gender of customer
 - **dependents** Number of dependents
 - **occupation** Occupation of the customer
 - **city** City of the customer (anonymized)

II. Customer Bank Relationship

- **customer nw category** Net worth of customer (3: Low 2: Medium 1: High)
- **branch code** Branch Code for a customer account
- days since last transaction No of Days Since Last Credit in Last 1 year

III. Transactional Information

- **current balance** Balance as of today
- previous month end balance End of Month Balance of previous month
- average_monthly_balance_prevQ Average monthly balances (AMB) in Previous Quarter
- average_monthly_balance_prevQ2 Average monthly balances (AMB) in previous to the previous quarter
- current month credit Total Credit Amount current month
- **previous month credit** Total Credit Amount previous month

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- **current_month_debit** Total Debit Amount current month
- **previous_month_debit** Total Debit Amount previous month
- **current_month_balance** Average Balance of current month
- previous_month_balance Average Balance of previous month
- **churn** Average balance of customer falls below minimum balance in the next quarter (1/0)

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