CASE STUDY – CREDIT CARD SEGMENTATION

DATA AVAILABLE:

➢ CC GENERAL.csv

BUSINESS CONTEXT:

This case requires trainees to develop a customer segmentation to define marketing strategy. The sample dataset summarizes the usage behavior of about 9000 active credit card holders during the last 6 months. The file is at a customer level with 18 behavioral variables.   Expectations from the Trainees:

EXPECTATIONS FROM THE TRAINEES:

✓ Advanced data preparation: Build an 'enriched' customer profile by deriving "intelligent" KPIs such as:
  • Monthly average purchase and cash advance amount
  • Purchases by type (one-off, installments)
  • Average amount per purchase and cash advance transaction,
  • Limit usage (balance to credit limit ratio),
  • Payments to minimum payments ratio etc.
✓ Advanced reporting: Use the derived KPIs to gain insight on the customer profiles.
✓ Identification of the relationships/ affinities between services.
✓ Clustering: Apply a data reduction technique factor analysis for variable reduction technique and a clustering algorithm to reveal the behavioural segments of credit card holders
✓ Identify cluster characterisitics of the cluster using detailed profiling.
✓ Provide the strategic insights and implementation of strategies for given set of cluster characteristics

DATA DICTIONARY:

CUST_ID: Credit card holder ID
BALANCE: Monthly average balance (based on daily balance averages)
BALANCE_FREQUENCY: Ratio of last 12 months with balance
PURCHASES: Total purchase amount spent during last 12 months
ONEOFF_PURCHASES: Total amount of one-off purchases
INSTALLMENTS_PURCHASES: Total amount of installment purchases
CASH_ADVANCE: Total cash-advance amount
PURCHASES_ FREQUENCY: Frequency of purchases (Percent of months with at least one purchase)
ONEOFF_PURCHASES_FREQUENCY: Frequency of one-off-purchases
PURCHASES_INSTALLMENTS_FREQUENCY: Frequency of installment purchases
CASH_ADVANCE_ FREQUENCY: Cash-Advance frequency
AVERAGE_PURCHASE_TRX: Average amount per purchase transaction
CASH_ADVANCE_TRX: Average amount per cash-advance transaction
PURCHASES_TRX: Average amount per purchase transaction
CREDIT_LIMIT: Credit limit
PAYMENTS: Total payments (due amount paid by the customer to decrease their statement balance) in the period
MINIMUM_PAYMENTS: Total minimum payments due in the period.
PRC_FULL_PAYMEN: Percentage of months with full payment of the due statement balance
TENURE: Number of months as a customer