## **Business Background & Summary**

OurBank is an Australian retail bank that offers customers a range of products and services, including loans, credit cards, transaction and savings accounts. It has one of the largest branch and ATM networks, and prides itself on being a bank that consumers can trust.

OurBank offers four types of credit cards, ranging in the services provided with each product. These are ranked from their most basic Blue, to Silver, Gold and finally to their most expensive and high-touch Platinum product.

## **Problem Statement**

OurBank's consumer credit card business manager is concerned about their customer attrition: Customers keep moving to other banks and leaving OurBank in their dust. This is a big problem, because they know it costs a lot more money to get new customers than it does to retain existing customers.

They want to analyse the data to find out the reason behind this, predict future customers who might leave, and to determine whether or not there are strategies they can use to encourage existing customers to stay. They also want to know if they can improve the data they collect in any way.

## **Data and Access Details**

Data is provided in the form of a .CSV file here: OurBank Customer Data.csv

This data has the following columns, with about 10,000 rows:

CLIENTNUM	Unique identifier for the customer holding the account
Attrition_Flag	If the account is closed, Attrited Customer. If not, Existing Customer.
Customer_Age	Customer's Age in Years
Gender	M=Male, F=Female
Dependent_count	Number of dependents
Education_Level	Educational Qualification of the account holder
Marital_Status	Married, Single, Divorced, Unknown

Income_Category	Annual Income Category of the account holder (< \$40K, \$40K - 60K, \$60K - \$80K, \$80K-\$120K, >\$120K
Card_Category	Type of Card (Blue, Silver, Gold, Platinum)
Months_on_book	Period of relationship with bank
Total_Relationship_Count	Total no. of products held by the customer
Months_Inactive_12_mon	No. of months inactive in the last 12 months
Contacts_Count_12_mon	No. of Contacts in the last 12 months
Credit_Limit	Credit Limit on the Credit Card
Total_Revolving_Bal	Total Revolving Balance on the Credit Card
Avg_Open_To_Buy	Open to Buy Credit Line (Average of last 12 months)
Total_Amt_Chng_Q4_Q1	Change in Transaction Amount (Q4 over Q1)
Total_Trans_Amt	Total Transaction Amount (Last 12 months)
Total_Trans_Ct	Total Transaction Count (Last 12 months)
Total_Ct_Chng_Q4_Q1	Change in Transaction Count (Q4 over Q1)
Avg_Utilization_Ratio	Average Card Utilization Ratio (Amount Used/Credit Limit)