# **AnalytixLabs**

# Balance Prediction Model Linear Regression Business Case

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#### **Business Case Overview:**

Acquisition team of leading credit card issuer Bank wants to develop analytical strategies for their upcoming marketing campaigns to target profitable prospects. They are contemplating on developing life time value models. Balance model is part of LTV model. Business wants to solicit those prospects that maintain higher balances after they are enrolled.

Business decided that they would want to predict average monthly balance considering the balance in the first 6 months after enrollment. These models are important as they run nearly 4 campaigns a year soliciting nearly 250,000 prospects every quarter.

They ran a campaign in June'14 and the respective random sample solicitations' data is given in the tab 'Data' and variable description is in the tab 'Variable Description'.

This case requires trainees to develop a model for predicting average monthly balance by each customer

#### **Expectations from the Trainees:**

- 1. Data cleaning including missing values, outliers and multi-collinierity. Describe your predictive churn model. How did you select variables to be included in the model?
- 2. Demonstrate the performance of the model.
- 3. What are the key factors that driving higher balances? Do these factors make sense?
- 4. Model validation and diagnostics