## **Credit Card Lead Prediction**

**Problem Statement -**

1. Happy Customer Bank is a mid-sized private bank that deals in all kinds of banking products, like Savings accounts, Current accounts, investment products, credit products, among other offerings
2. The bank also cross-sells products to its existing customers and to do so they use different kinds of communication like tele-calling, e-mails, recommendations on net banking, mobile banking, etc.
3. In this case, the Happy Customer Bank wants to cross sell its credit cards to its existing customers. The bank has identified a set of customers that are eligible for taking these credit cards.

**Target Variable** - IS\_Lead

**Columns -** Column which i used for model training are -

1. Gender
2. Age
3. Occupation
4. Channel Code
5. Vintage
6. Credit Card Product
7. Avg\_account\_balance
8. Is\_Active

**Algo Used for Model Prediction -**

1. I have used LightGBM Algo for final model prediction because it gives better results than other algo.

**Steps Which I followed -**

1. First we load all the important libraries which are used in this model.
2. Load the train and test data set.
3. Checking the missing values in the dataset.
4. Remove the missing values from the data by using mode.
5. Doing the EDA to get the insights from the data.
6. Find the correlation.
7. Splitting the train data into Train and Cross Validation.use 10 percent data for CV.
8. Normalize the train and test data by using the Standard Scaling Method.
9. Train the model and then cross validate the model on CV data.
10. Then make predictions on the test data set.
11. And my roc-auc-score is 0.87233.