**DigiCard by ABC Payments Bank**

ABC Payments Bank is a mobile-only bank. Their primary business is to give out digital credit cards to eligible users with a credit limit ranging from $1000 to $8000 all over the world. These digital credit cards are issued within an hour after filling up a form in the Bank’s Mobile App called ​DigiCard.

This product provides a very good revenue to the banks, however, it’s a challenging task for them to decide who should they approve for the card and who to reject. You have to help this bank decide how can they confidently take this decision based on the experience they had in the past.

Using the attached dataset which contains historical data about bank’s old customers, the problem has two primary goals: 1. Whom to approve or reject for the credit card? 2. How much credit limit to give if approved? The attached CSV dataset has following columns:

* **user\_id**
* **gender**
* **date\_of\_birth**
* **workclass**
* **education\_level**
* **education\_num**: education\_level as a continuous variable. Eg, Masters(14) > Bachelors(13)
* **marital\_status**
* **occupation**
* **relationship**: current relationship status
* **capital\_gain**: capital gain made in the last financial year in USD through investments
* **capital\_loss**: capital loss in the last financial year in USD through investments
* **Hours\_per\_week**: Number of hours worked by the person per week.
* **approved**: Whether customer was approved for the Credit Card.
* **address**
* **Email**

Below data points are retrieved from a credit bureau (eg, CIBIL). A Bureau is a central party which has all the data related to credit history of a customer. Typically, a financial institution (eg, a bank) requests a report from bureau from credit history and score for purposes like a Loan, Credit Card etc.

* **Inquiry\_purpose\_code**: Purpose of enquiry from the bureau
* **Institute\_type**: Type of institute that requested the bureau
* **Account\_type**: Type of account of the customer for requesting from the bureau
* **Asset\_class\_cd**: Current state of the assets of the customer
* **Asset\_code**: Type of ownership of the customer
* **Portfolio\_type**: Type of portfolio

Below is the data dictionary for some of the variables.

**Inquiry\_purpose\_code:**

* 1 Agriculture Loan
* 2 Auto Loan
* 3 Business Loan
* 4 Commercial Vehicle Loans
* 5 Construction Euipment Loans
* 6 Consumer Search
* 7 Credit Card
* 8 Education Load
* 9 Leasing
* 10 Load Against Collateral
* 11 Microfinance
* 12 Non-funded credit facility
* 13 Personal Loan
* 14 Property Loan
* 15 Telecom
* 16 Two/Three wheeler loan
* 17 Working capital loan
* 18 Consumer loan
* 19 Credit Review
* 99 Others

**Institute\_type**: Code here is only meant to distinguish between institutes.

**Account\_type:**

* 999 Other
* 47 Instalment Loan, Automobile
* 58 Instalment Loan, Mortgage
* 195 Loan, Property
* 185 Loan Against Shares/Securities
* 123 Loan, Personal Cash
* 189 Loan, Consumer
* 191 Loan, Gold
* 130 Loan, Student
* 187 Loan to Professional
* 5 Credit Card
* 219 Leasing, Other
* 121 Banking, Overdraft
* 173 Instalment Loan, Two-Wheeler
* 181 Credit Facility, Non-Funded
* 184 Loan Against Bank Deposits
* 214 Credit Card, Fleet
* 172 Instalment Loan, Commercial Vehicle
* 217 Service, Telco - Wireless
* 215 Service, Telco - Broadband
* 216 Service, Telco - Landline
* 167 Microfinance, Business
* 168 Microfinance, Personal
* 170 Microfinance, Housing
* 176 Microfinance, Other
* 177 Business Loan - General
* 178 Business Loan - Priority Sector - Small Business
* 179 Business Loan - Priority Sector - Agriculture
* 197 Business Loan - Priority Sector - Others
* 198 Non-Funded Credit Facility, General
* 199 Non-Funded Credit Facility, Priority Sector - Small Business
* 200 Non-Funded Credit Facility, Priority Sector - Agriculture
* 175 Non-Funded Credit Facility, Priority Sector - Others
* 196 Business Loan Against Bank Deposits
* 220 Loan, Staff
* 221 Secured Credit Card
* 222 Used Car Loan
* 223 Construction Equipment Loan
* 213 Tractor Loan
* 224 Corporate Credit Card
* 225 Kisan Credit Card
* 226 Loan on Credit Card
* 227 Pradhan Mantri JDY (Over Draft)
* 228 Mudra Loan (Shishu/Kishor/Tarun)

**Asset\_class\_cd:**

* [blank]/-1 Default
* S Standard
* B Substandard
* D Doubtful
* L Loss
* M Special Account
* ? Unknown

**Asset\_code:**

* 1 Individual
* 2 Joint
* 19 Authorized User
* 4 Guarantor
* 20 Deceased

**Portfolio\_type:**

* B Banking
* F Microfinance
* I Installment Credit
* L Loans
* M Mortgage
* R Revolving Credit
* S Service Credit
* X Leasing