

MICRO FINANCE

Submitted by:

SHIVAM SINGH BAGRI

**ACKNOWLEDGMENT**

Flip robo provided the data on which i have to make a predictive model

I build my model with the help of my data trained notes.

**INTRODUCTION**

* Business Problem Framing

Micro finance institutions are becoming major economy supporters but due to defaulters there are becoming vulnerable to support the economy.

* Conceptual Background of the Domain Problem

As these institution are for providing mony for a short period as much as for 5 to 10 days thats why is mandatory for them to recover the money back for being able to finace more people .

* Review of Literature

To get away from the defaulter problem in micro finances it is required to predict the coustomer .wheather ,is a defaulter or not

For this purpose we make a model with 90% prediction accuracy.

* Motivation for the Problem Undertaken

Objective is to help MFI to predict defaulters.

**Analytical Problem Framing**

* Mathematical/ Analytical Modeling of the Problem

We used machine learning to make various model for defaulter prediction.

* Data Sources and their formats

Data is extracted by filp\_robo and given to us for prediction and was in csv fromet.

* Data Preprocessing Done

I come to know that data was having no null value by .isnull method.

Thani check for outliers by .describe method and also by ploting box. in my next approach i used zscore method to normalize the data .

I checked skewness, used PCA, used various graphical representations od data, used scaler technique etc.

* Data Inputs- Logic- Output Relationships

There was many attributes having not much relationship so i handle them by removing some unnecessary columns.

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* Hardware and Software Requirements and Tools Used

I used jupyter notebook present in python and put the data into pandas data frame than after EDA i split the data into X and Y variables .

I applied various classification models as Knn,DTC,logisticRegression,GausianNB,naive\_bayes and also used ensemble technique as RandomForest and AdaBoostalso GradientBoosting .

**CONCLUSION**

Finaly i found RandomForest is working more accurate than any other model .