Predicting Risk for Loan Applicants

LHL_MINI_PORJECT_IV
By: Jesse Randolph

How DO Banks Make Money?

01

Loans

From Personal loans to mortgages, banks make money from the interest and service fees.

02

Credit Services

This includes credit cards and lines of credit. Banks Make money mostly from the recurring interest.

03

Accounts

Banks in the US are only required to Keep 10% of your account. They make money off the rest and charge fees.
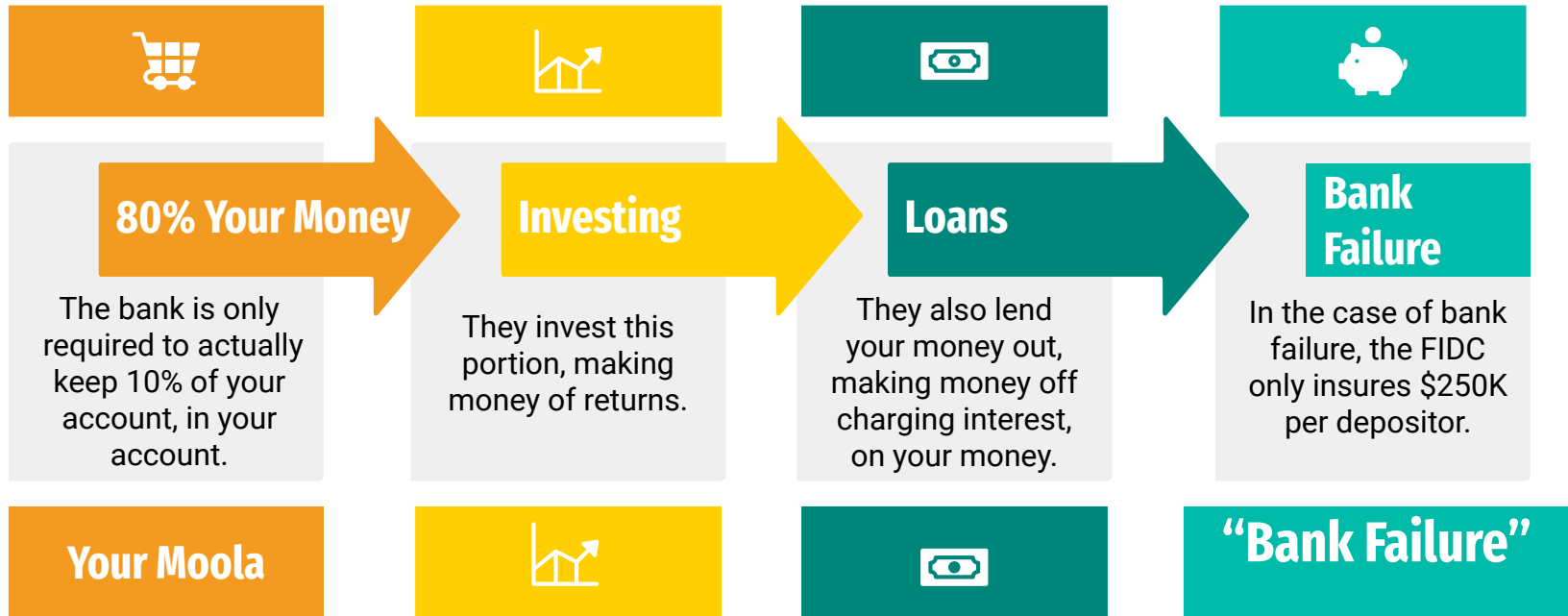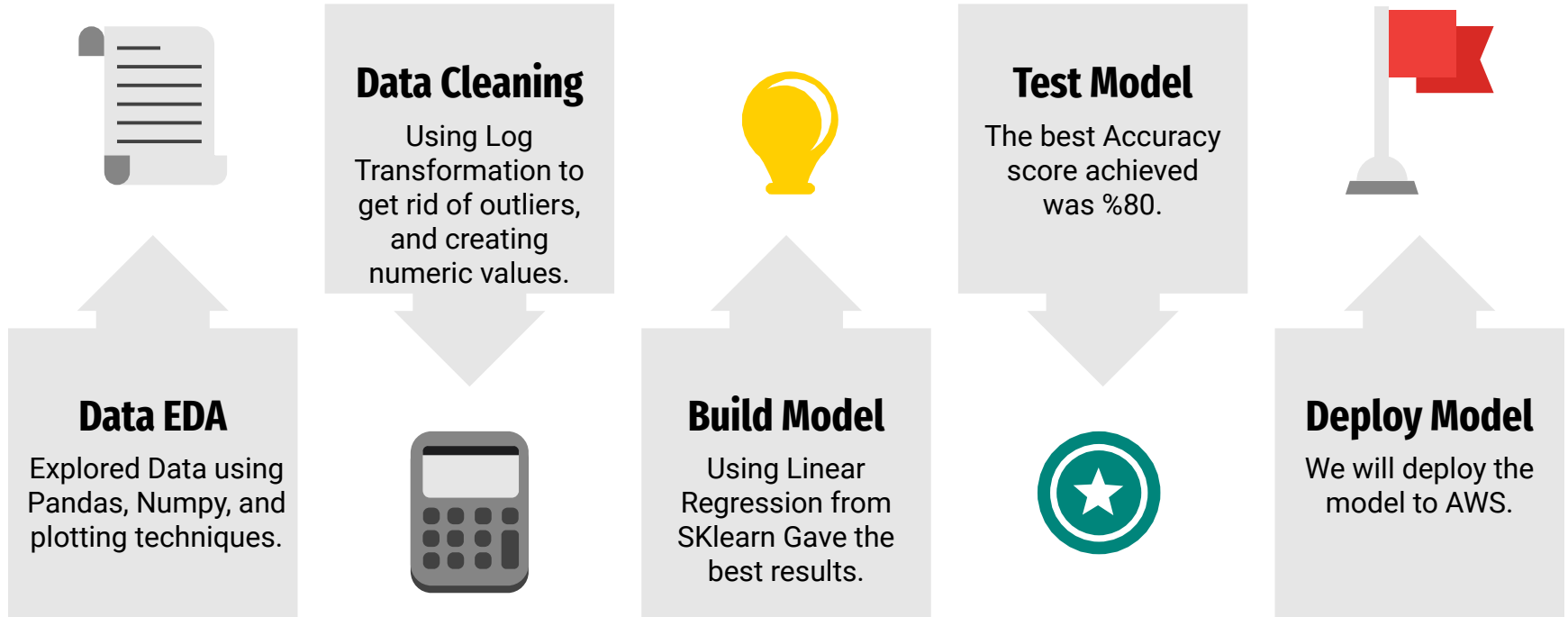
04

Investing

Banks make money from investing their own funds, as well as charging fees to invest yours
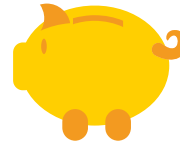
How a Bank Makes Money From Your Accounts

80% Your Money

The bank is only required to actually keep 10% of your account, in your account.

Your Moola

Investing

They invest this portion, making money of returns.

Loans

They also lend your money out, making money off charging interest, on your money.

Bank Failure

In the case of bank failure, the FIDC only insures $250K per depositor.

"Bank Failure"

Outline Of the Risk Analysis Project

Data Cleaning
Using Log Transformation to get rid of outliers, and creating numeric values.

Test Model
The best Accuracy score achieved was %80.

Data EDA
Explored Data using Pandas, Numpy, and plotting techniques.

Build Model
Using Linear Regression from SKlearn Gave the best results.

Deploy Model
We will deploy the model to AWS.

Overview of our Data

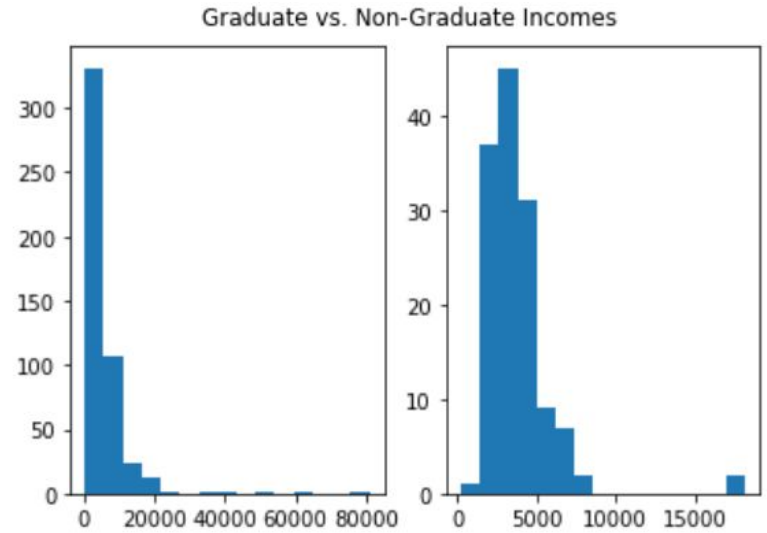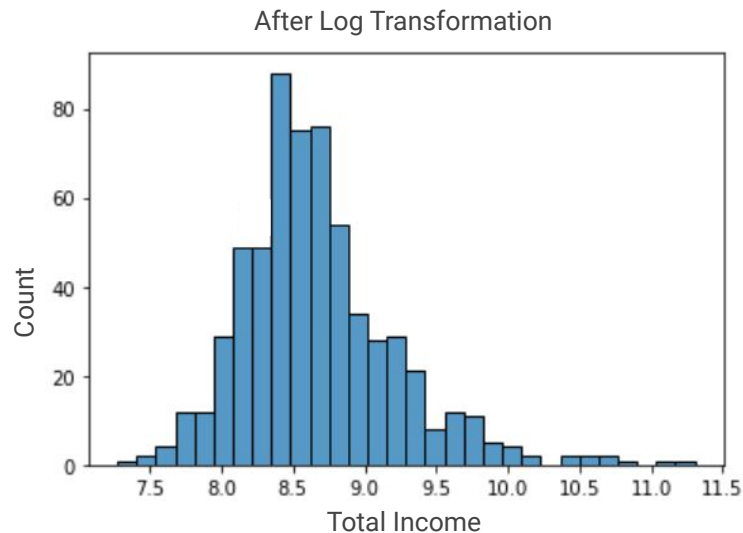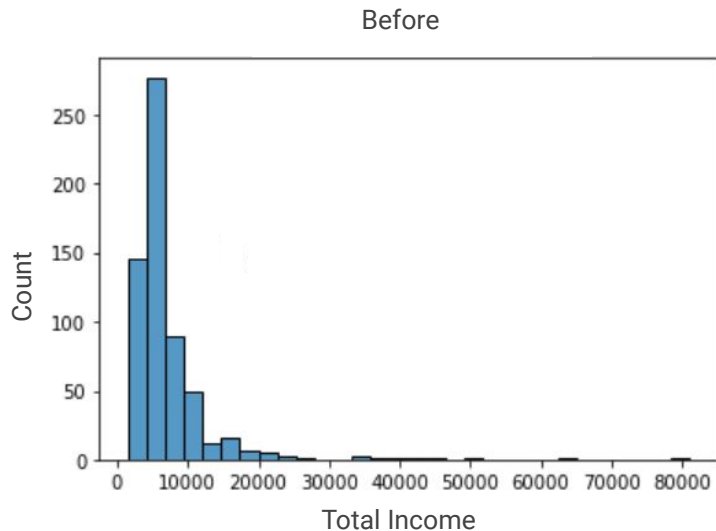| .shape	Columns	.isna	Extreme Values
The Data has 614 rows and 13 columns.	The columns have personal and demographic information on applicants	There are 5 columns with missing values.	Using Log Transformation we'll change our extreme values.
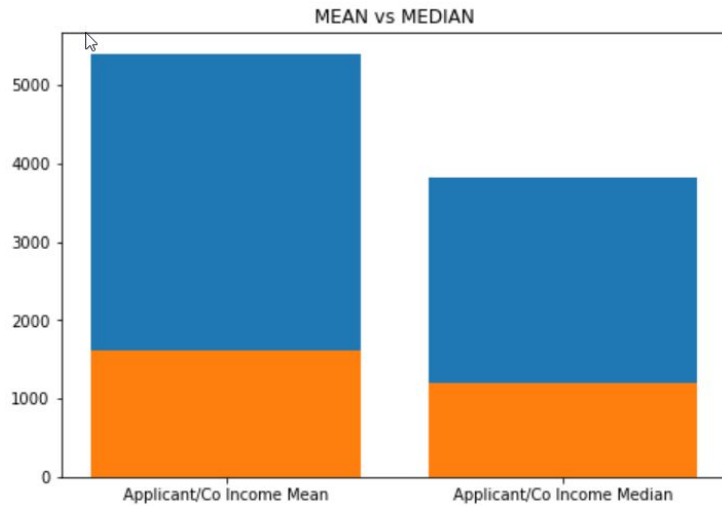
Distribution Before & After Log Transformation

Linear Predictive Model

%80 Accuracy

Well, actually %79 was achieved with our model.

Feature Importance

Credit History and Income were the top 2 most important features.

AWS Deployment

Currently Deploying this model to AWS.

Why is this *Important* to Banks?

Interest from borrowers is one of the top *3** money makers for banks.

They *WANT* you to borrow, even though there is a risk.

Thanks for Listening!

Any Questions?

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