Lending Club Case Study

Analysis By:-

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Project Description

- This is a case study to analyze lending company dataset and present insights on the driving factors (or driver variables) behind loan default, i.e. the variables which are strong indicators of default.

- The Lending companies can utilize this knowledge for its portfolio and risk assessment and try to reduce the risk of loosing money while lending loans to customers.

Conclusions :-

Univariate Analysis

- Number of loans have increased significantly from 2007 to 2011
- Employees with 10+ years take the most number of loans
- Maximum loans taken are of 36 months tenure
- Maximum loans are taken for 'debt_consolidation'

Bivariate Analysis

- Loans with interest rate < 11% (approximately) have a higher chance of **NOT** defaulting the loan
- Loans with term > 36 months have a higher chance of defaulting
- Employees with higher dti (loan/income ratio) have a higher chance of defaulting the loan
- Non-Verified applicants have higher chances of defaulting the loan
- Grade C & B loans have the most chances of defaulting the loan
- Applicants who have home_ownership as RENT or MORTGAGE have more chances of defaulting the loan
- Applicants with employment of 10+ years have more chances of defaulting the loan
- Applicants with purpose as 'debt_consolidation' have more chances of defaulting the loan

Technologies Used

1. Python 3.8.8
2. Jupyter Notebook 6.3.0
3. Git 2.33.1.windows.1