LENDING CLUB CASE STUDY

Background

Lending Club is a prominent peer-to-peer lending platform that facilitates the connection between individuals seeking loans (borrowers) and individuals or institutional investors willing to provide the funds (lenders). Borrowers apply through online platform.

Business Objective:

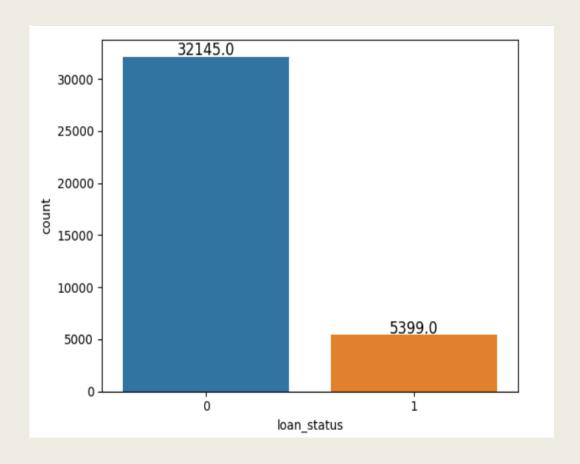
To identify the variables which are strong indicators of default and provide insights to make the decision

Data Understanding

Out of the total loans -

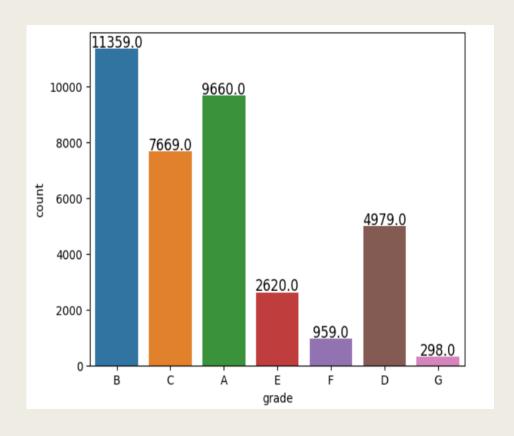
Fully Paid count = 32145

Charged off count = 5399



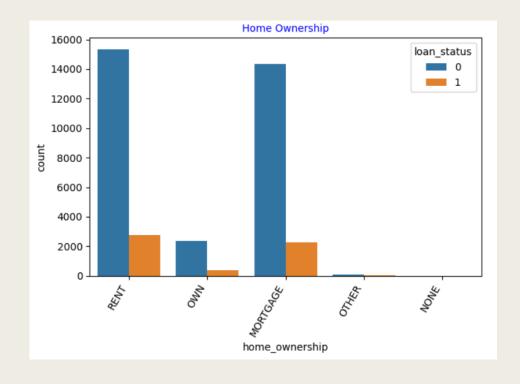
Loan Distribution Across Grades

Majority of the loans are given to grade B and then to grade A.



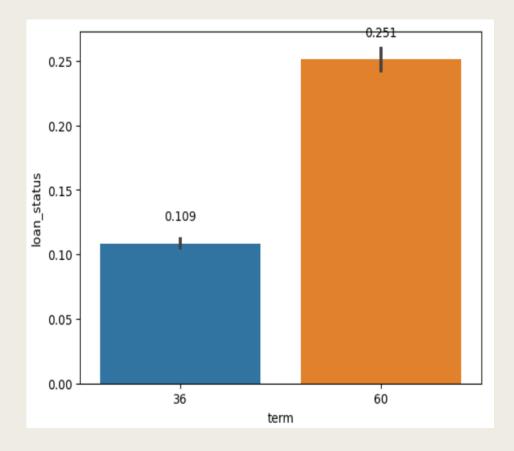
Loan Distribution – Home Ownership

- Majority of the loans in home ownership category are from people who are in Rent and Mortgage
- 2) Also, charged off loans are also high in these cases since there are more applicants



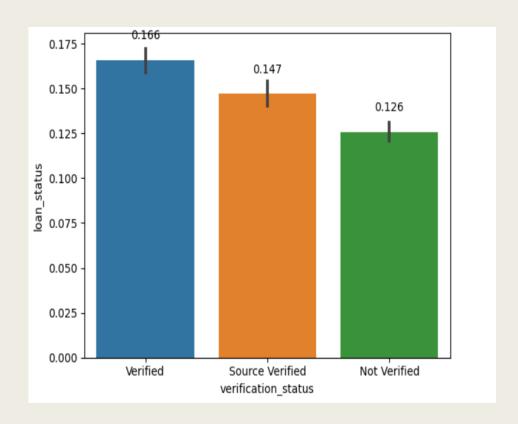
Term

For 60 month term have more default rate when compared to 36 month term



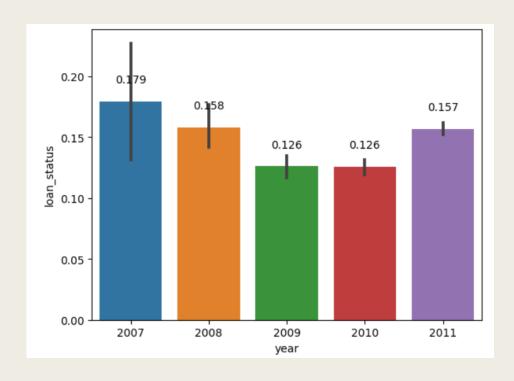
Verification status

As you see verified loans have more default rate



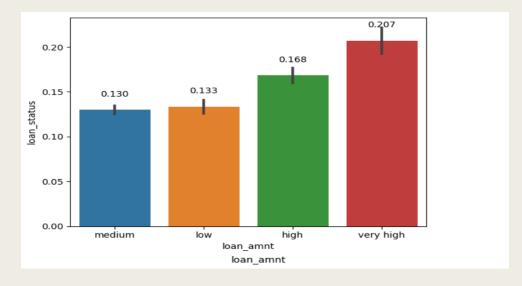
Yearly Distribution

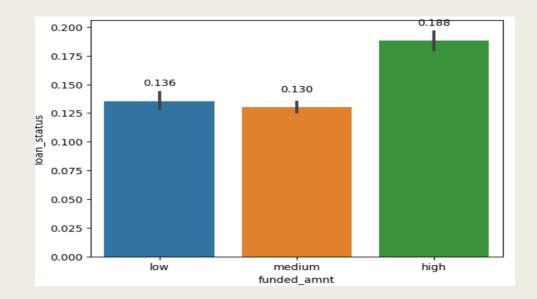
As you notice the default rate has increased in 2011 even though it decreased from 2008 to 2010.

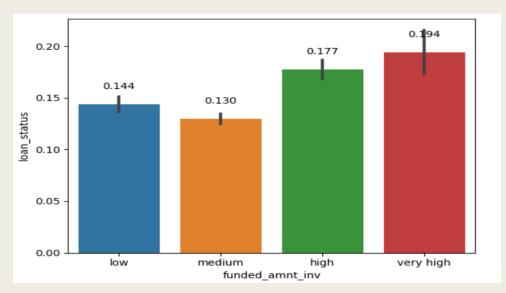


Default rate variation – Loan Amount

- 1) Higher the loan amount the default rate is increasing
- 2) Higher the fund amount invested higher the default rate
- 3) Higher the funded amount higher the default rate

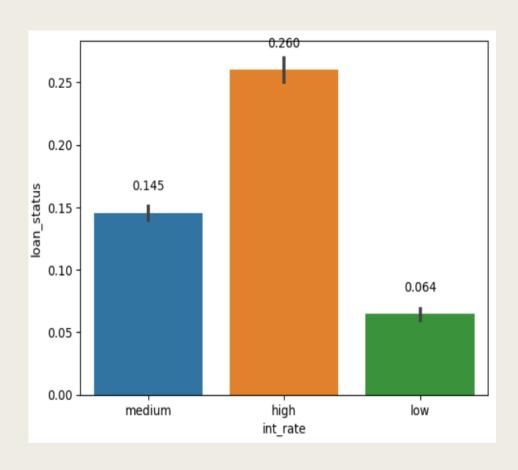






Default rate variation – Interest rate

As seen in the graph the more the interest rate the more is the default rate



Loan Purpose Distribution

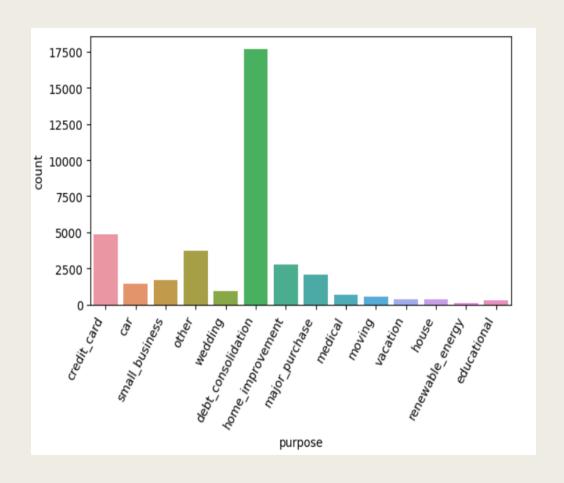
As seen the major reasons for taking loans are :-

Debt Consolidation

Credit card payments

Home Improvement

Major Purchase

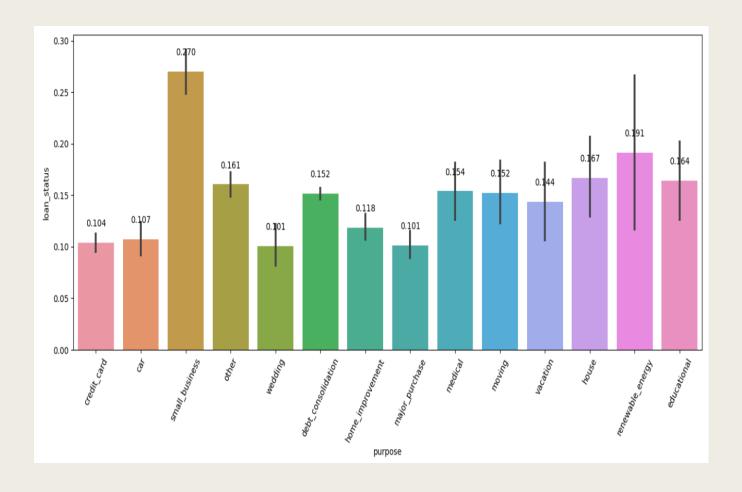


Default Rate Across Loan Purpose

Small business loans have high default rates.

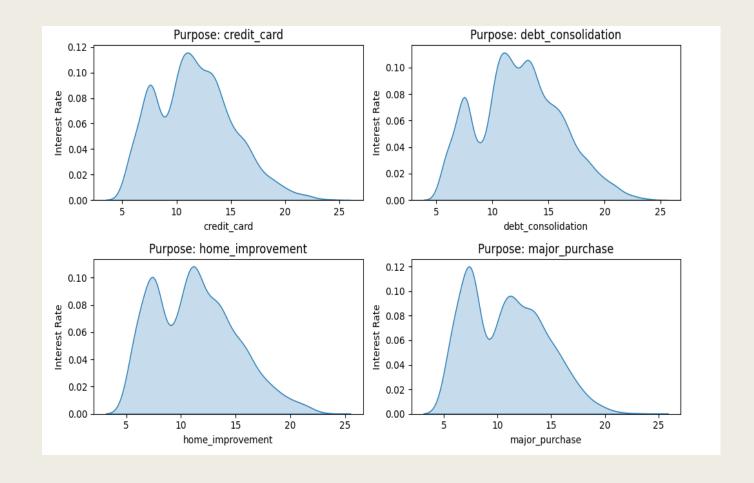
Then comes the renewable energy.

And then follows the educational loans etc.



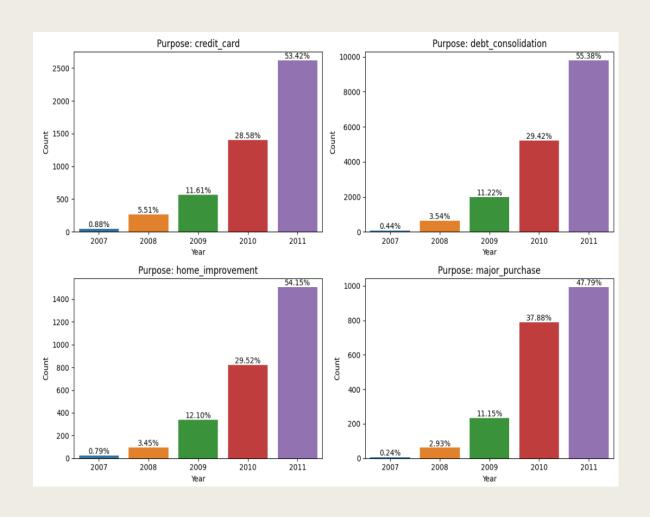
Interest variation over 4 Purposes

- Interest for credit card payments and major purchase is around 12
- 2) Interest for home improvements and debt consolidation is >10% and <12%



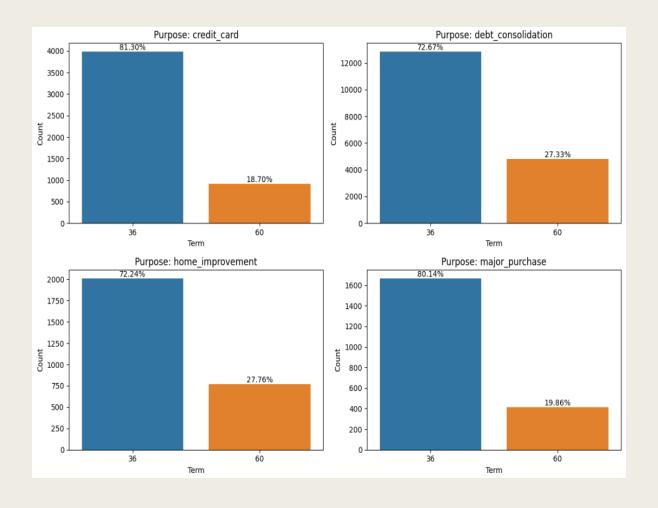
Four Purposes variation Over Time

Debt Consolidation Loans are given than any other in 2011.



Four Purposes variation Over Term

Across all purposes majorly 36 Month Term Loan Is given



Grade Distribution for 4 Purposes

