

LENDING CLUB CASE STUDY

UNIVARIATE ANALYSES IN SIGHTS

i. CATEGORICAL VARIABLE ANALYSES

1. 13.36 % of loan applicants are Defaulted.
2. Short term applicants are more likely to become defaulted.
3. The applicants who lives in Rent homes more likely to become defaulted.
4. The B Grade applicants are more likely to become defaulted.
5. The applicants Loan purpose to clear debts, are more likely to become defaulted.
6. Not Verified applicants are more likely to become defaulted.
7. The applicants Employment length is 10 and above are more likely to become defaulted.

UNIVARIATE ANALYSES IN SIGHTS

ii. QUANTITATIVE VARIABLE ANALYSES

1. The loan amount 5k-10k applicants are more likely to become defaulted.
2. The interest rate between 6%-12% applicants are more likely to become defaulted.
3. The loan installments between 180-360 applicants are more likely to become defaulted.
4. The annual income between 30k-60k applicants are more likely to become defaulted.
5. The debt to income ratio between 12-18 applicants are more likely to become defaulted.

BIVARIATE ANALYSES IN SIGHTS

1. The sanctioned amount for defaulted applicants is slightly high compared with fully paid applicants.
2. The Interest Rate is more for the defaulted applicants.
3. Loan sanctioned amount is same for both applicants in longer term and slightly less in case of short term for the defaulted applicants.
4. The Interest rate is high for defaulted applicants in both terms.
5. The sanctioned amount is more in all grades except A grade for defaulted applicants and the sanctioned amount is in proportion to the Grade.
6. The variation in interest rates for both applicants is not significant with respect to Grade.
7. Loan sanctioned amounts are high for defaulted applicants in all ownerships and is Highest in ownership category 'OTHER' .
8. Interest rates are more than 12% for the defaulted applicants and less than 12% for fully paid applicants in all Ownerships .

BIVARIATE ANALYSES IN SIGHTS

9. Loan sanctioned amounts are slightly high for defaulters in proportion to verification status i.e high for verified and low for not verified.
10. Interest rates are more than 12 % for defaulted applicants and less than 12% for fully paid applicants irrespective of verification status.
11. No significant variation in sanctioned amounts for the both applicants except renewable energy and highest for the purpose debt consolidation.
12. Interest rates are more than 12 % for defaulted applicants and less than 12% for fully paid applicants for all Purposes except renewable_energy.
13. Loan sanctioned amounts are slightly more for defaulters in all employee lengths except 4 years.
14. Interest rates are more than 12 % for defaulted applicants and less than 12% for fully paid applicants for all employee lengths.

DERIVED METRICS

YEAR AND MONTH VARIABLE ANALYSES

1. The defaulted loans are in increasing trend and highest in 2011.
2. The loans issued in the year ending are more likely to become defaulted and is highest in December.

CORRELATION ANALYSIS

- Annual income and interest rates has negative correlation shows lending club offered less interest rates for more income people and more interest to less income people.