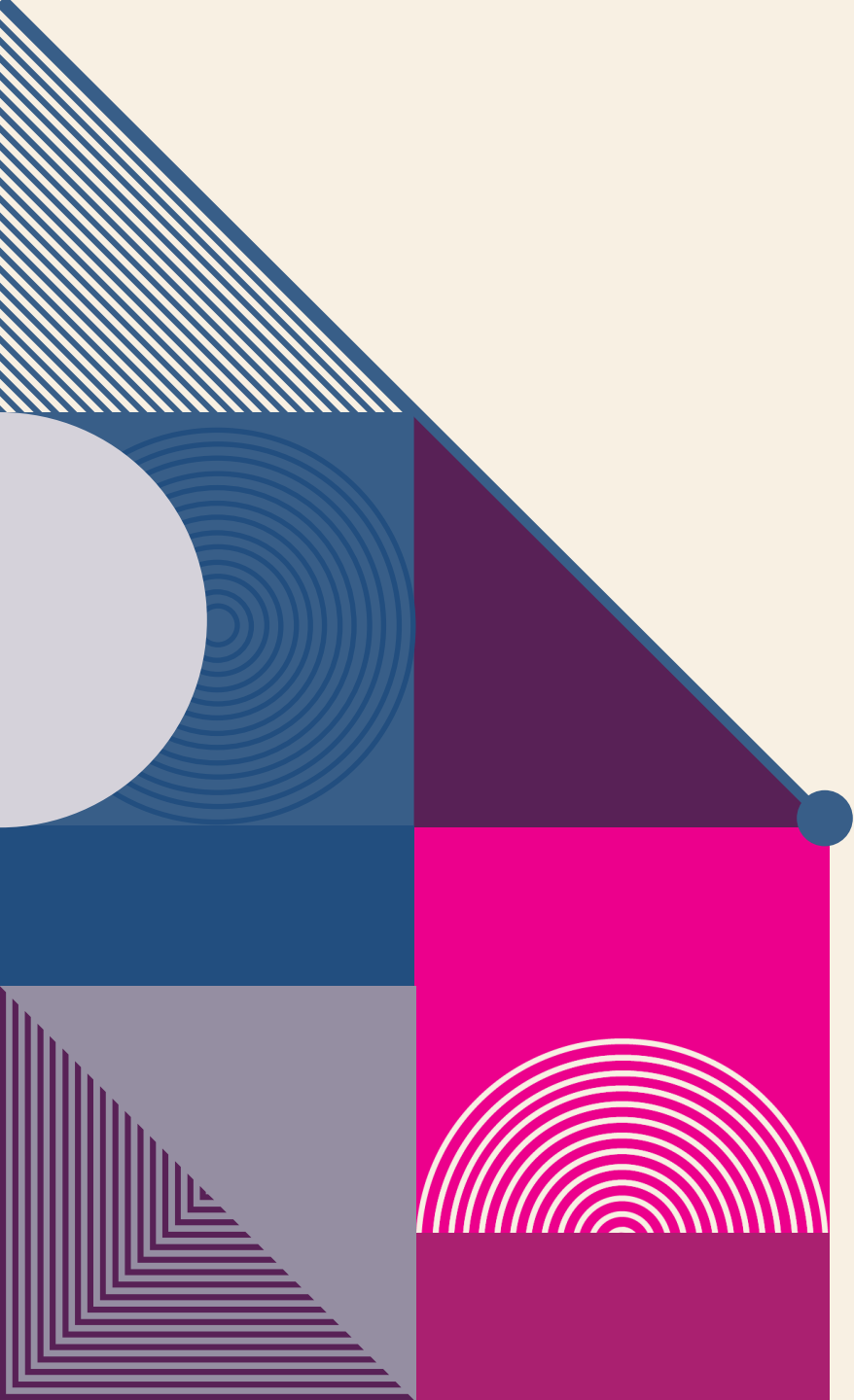




LENDING CLUB CASE STUDY

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AGENDA

Problem statement and approach

Analysis - Univariate & Bivariate

Conclusion & Recommendation

The left side of the slide features a vertical collage. At the top is a solid magenta rectangle. Below it is a dark blue rectangle containing a series of white concentric semi-circles. Further down is a magenta rectangle with thin white diagonal lines. The bottom portion of the collage is a long-exposure photograph of a highway interchange, showing light trails from cars in shades of blue and white. A white diagonal line runs from the top left towards the bottom right, ending in a white circle.

PROBLEM STATEMENT

Lending club case study:

Lending club specialized in the various types of loans offering to urban customers would like to assess the risk of loan defaulters in order to minimize credit losses to the company



APPROACH

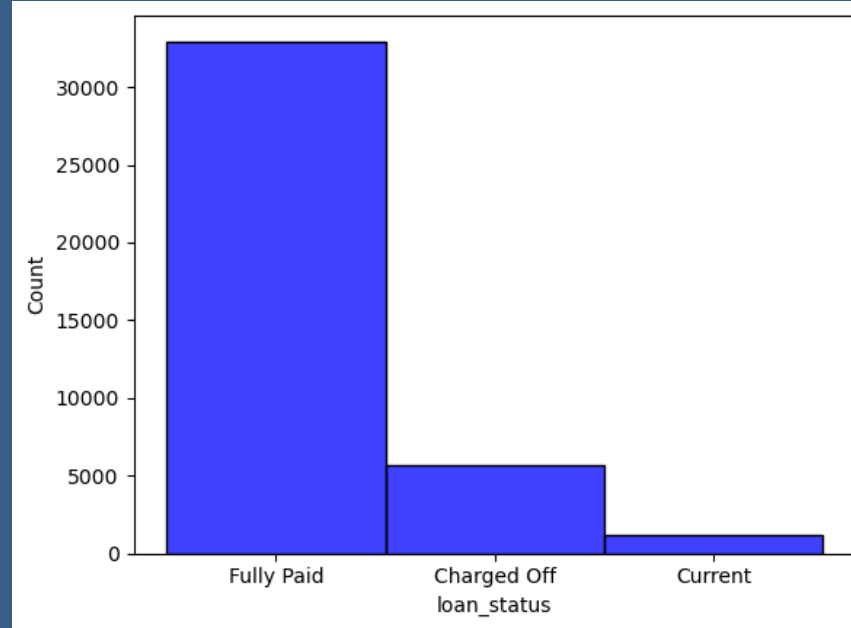
Data cleaning

- Dropped the columns with single unique value - 9 columns
- Dropped the columns which has only null values - 54 columns
- Understanding the data dictionary, unuseful columns for analysis is dropped - 17 columns
- Data cleaning is performed on total of 111 coulmsns to arrive at the required column count for further analysis on 31 columns.
- Outliers for Annual income column, term columns, loan amount, funded amount and interest rate are removed

APPROACH

Data Analysis - Univariate

- Analysis on loan status

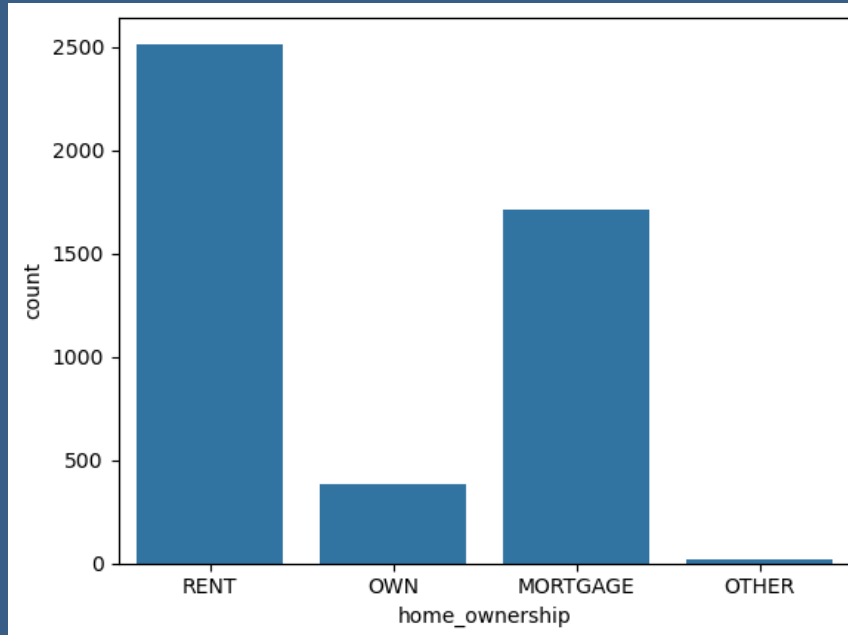


- 14.17% loans are charged off.
- 2.87 % loans are still running therefore those loan will not be participating in analysis

APPROACH

Data Analysis - Univariate

- Analysis on Home ownership

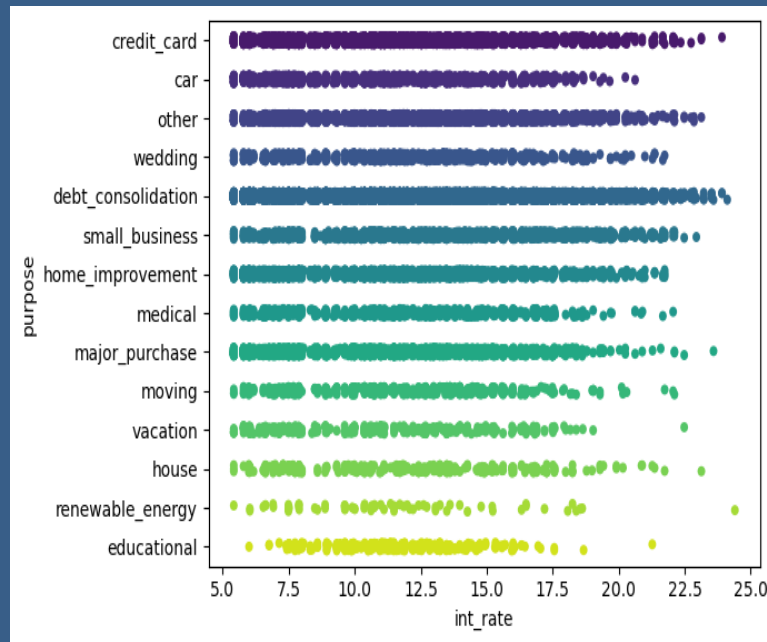


- Inference - most of the customers are living rented place.

APPROACH

Data Analysis - Bivariate

- Analysis on Purpose and Int rate

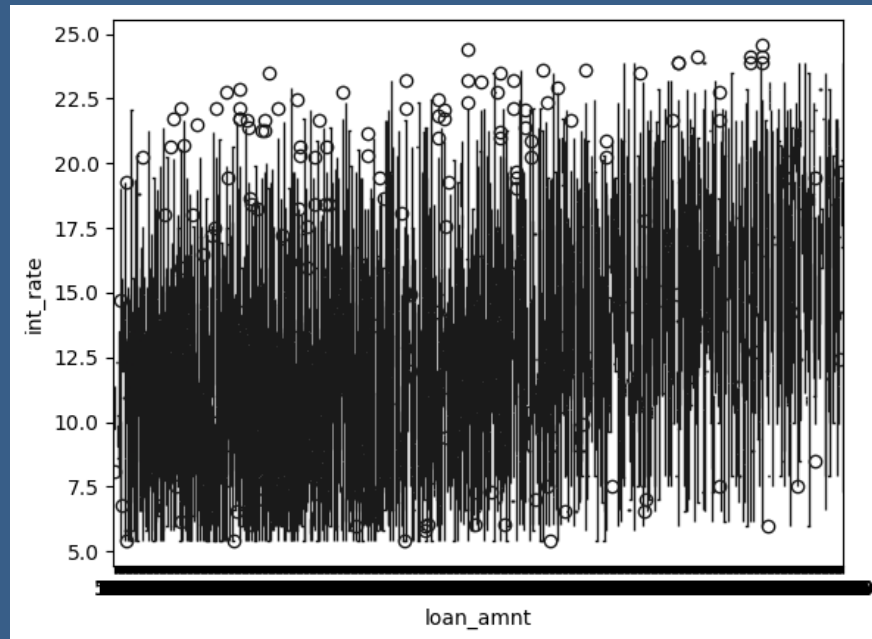


- Inference - most of the lending is on debt consolidation and the credit cards are highly likely to be charged-off

APPROACH

Data Analysis - Bivariate

- Analysis on Loan amount and Int rate



- Inference - most of the borrowers are on the interest range 7.5% to 15%

CONCLUSION

- Borrowers with high interest and 10+ years of employment length.
- Borrowers living on mortgage with loan amount greater than 12000.
- Loan for debt consolidation, credit card, small business with loan amount greater than 12000. For any loan amount provided with an average interest rate higher than 13%.
- Loan provided for house purpose with average interest greater than 15%.
- Installments between 800 - 12000 with average interest greater than 15%.
- Average interest rate of 17% with installment greater than 12000.

RECOMMENDATION

- Limit the loan amount to 12000 for applicants with ownership of mortgage. This also show financial status of a risky applicant.
- To encourage small business but also keep the investors less risked. The rate of interest for applicants for small business can be reduced around 2%
- Increase the rate of interest by 0.5% to the loan amount for applicants whose purpose is moving, as the loan amount is less and are more likely to repay.



THANK YOU

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