# LENDING CLUB CASE Study

VIVEK SHARMA YASHWANT YADAV

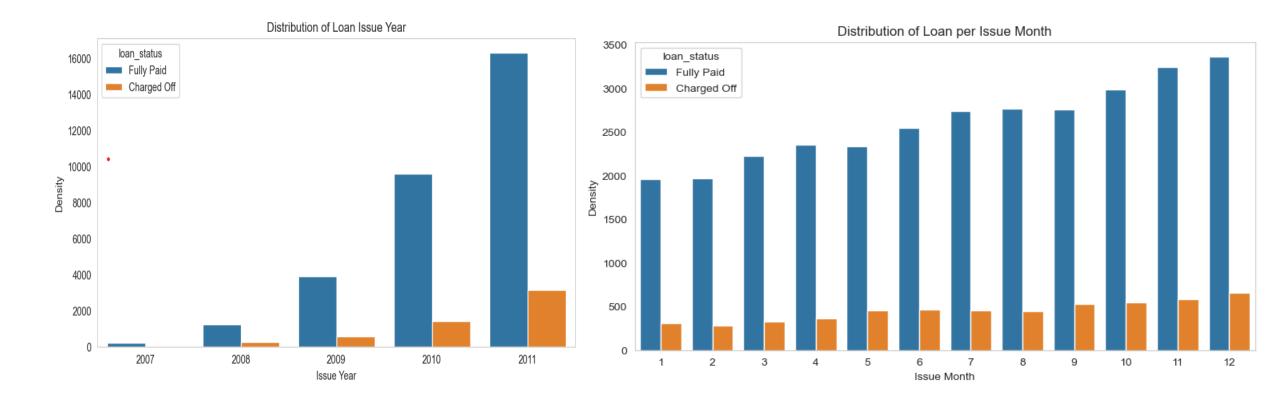
#### **Objective**

The objective of this case study is to analyze and find the indications/patterns about what could affect the loan getting defaulted.

This will help the company to make decisions like accepting or rejecting the loan application

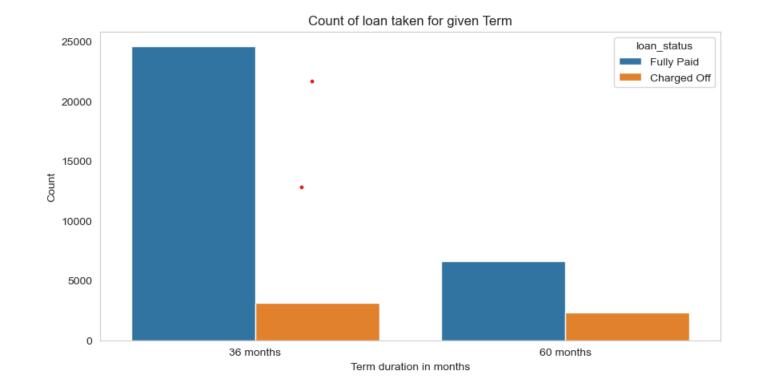
#### Loan Issued Year and Issue month

- For each year number of borrowers keeps on increasing
- Loans approved on Q4 are more likely to default.



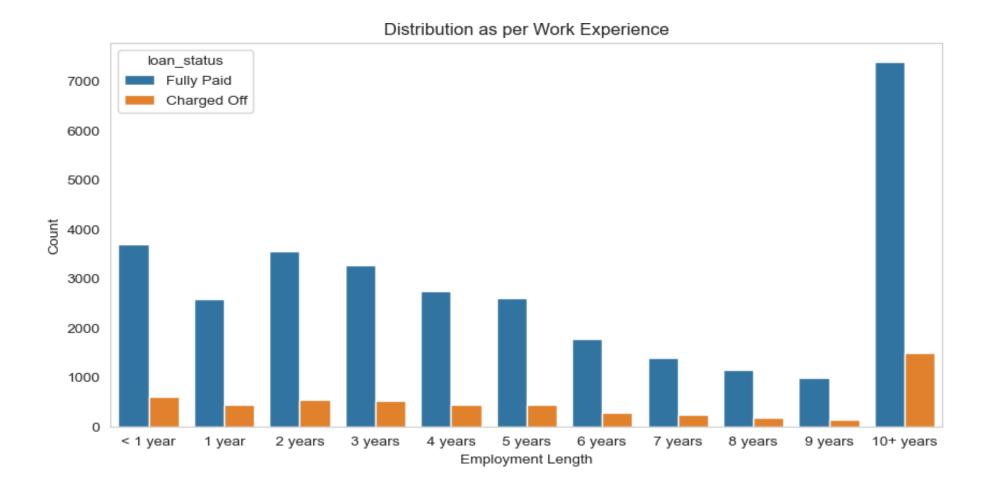
#### Loan Term

- With the increase in the number of borrowers, they opt for 36 months tenure.
- 11 % of loans with 36 months term are likely to charged off
- 26 % of loans with 60 months term are likely to charged off



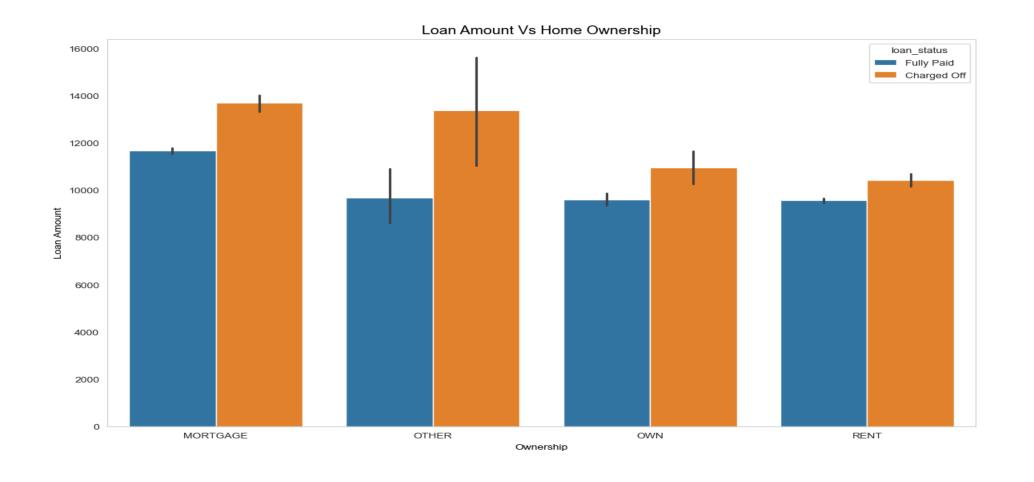
## Work Experience

Borrowers with 10+ years of employment length are more likely to charge off.



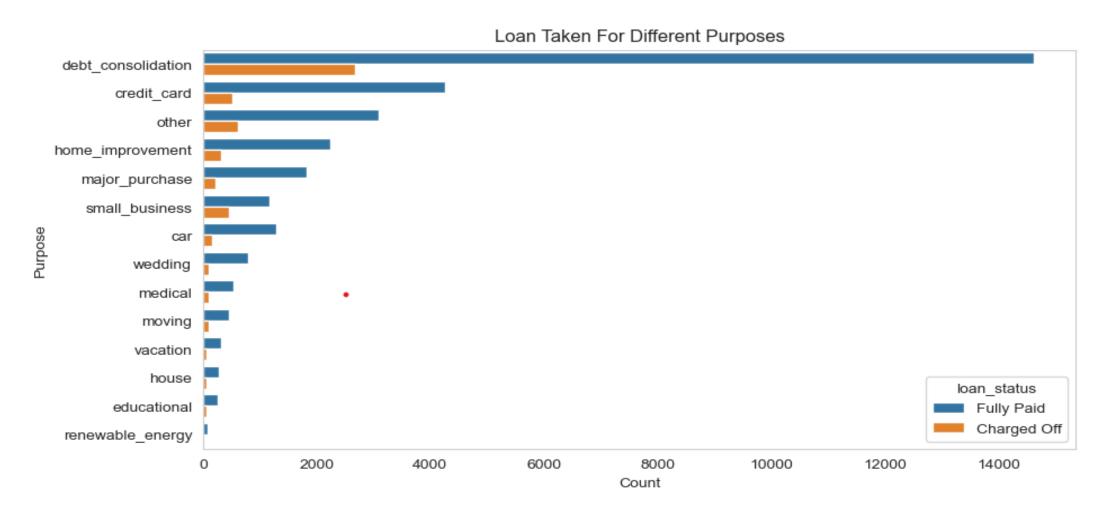
## Home Ownership

• Borrowers living on mortgage with loan amount greater than 12k are likely to charge off.

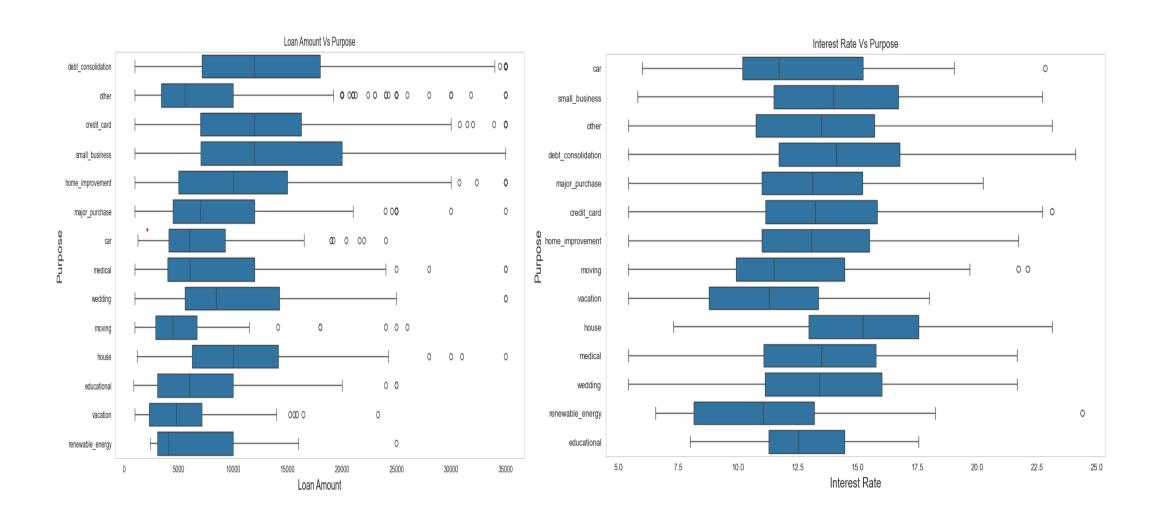


#### Loan Purpose

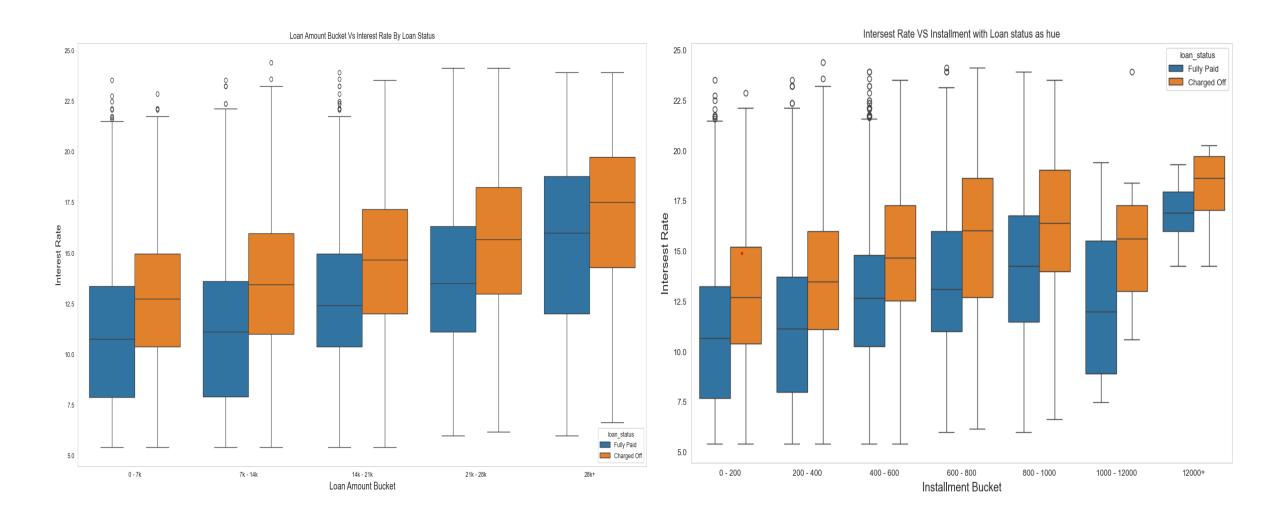
Most of the borrowings happens for debt consolidation and credit card bill payment.



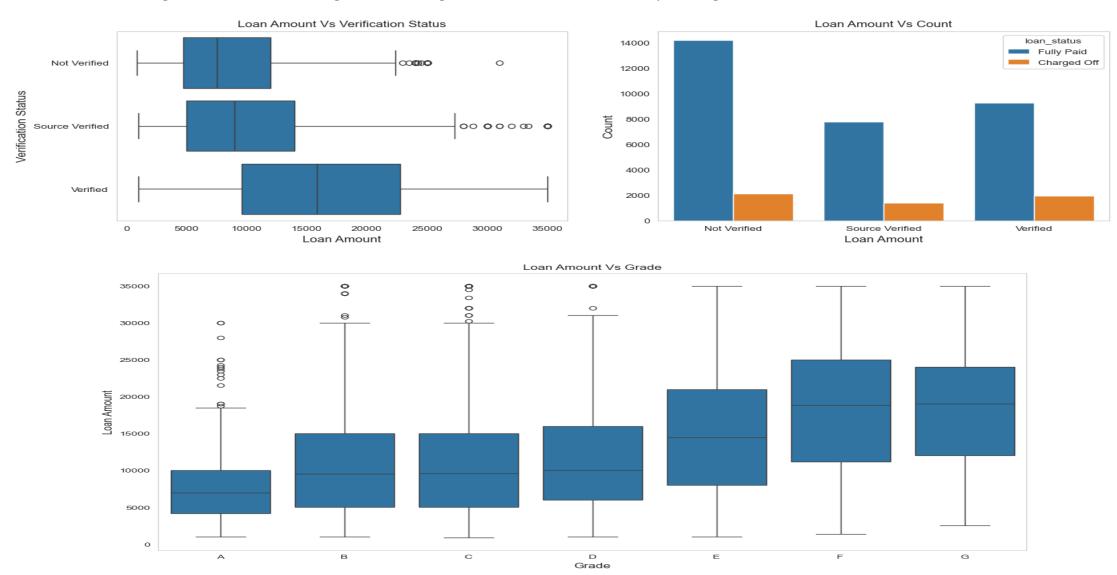
- Loan for debt consolidation, credit card, small business with average loan amount greater than 12000 are more likely to charged off.
- Loan provided for house, debt consolidation, small business with highest interest rate are more likely to charge off.



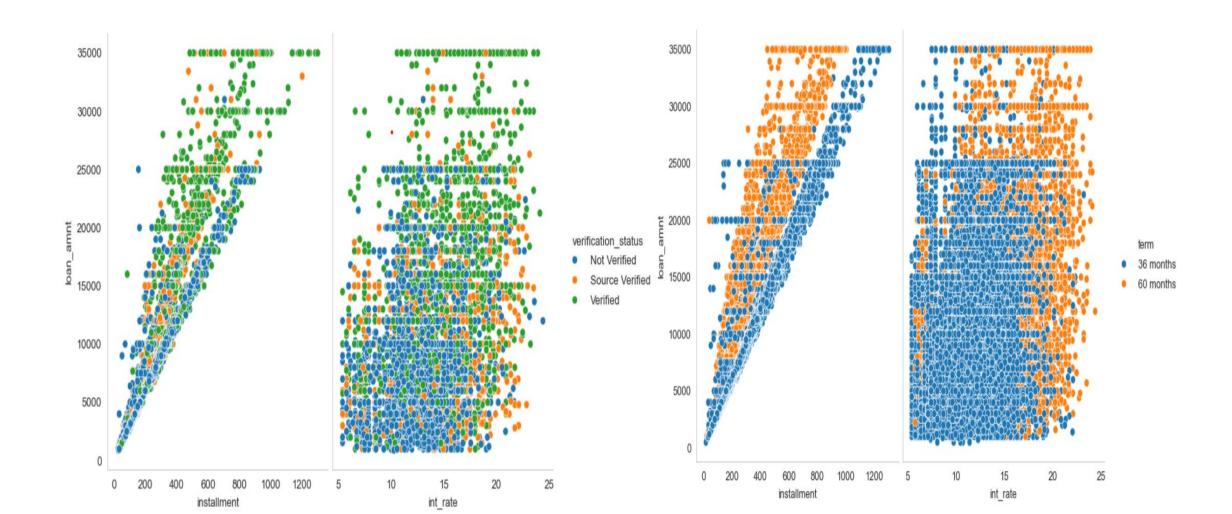
- Loan with highest interest rate in all buckets are more likely to charge off.
- As the number of installment increase the borrowers with high interest rate are more likely to charge off.



- Borrowers with verification status "not-verified" has loan amount with 5k to 12.5k are more likely to charge off.
- Borrowers with verification status "not-verified" and "verified" has an equal proportion in charge off.
- Borrower within grade E,F,G and with average loan amount greater than 15000 are more likely to charge off.



- When the loan amount increases, number of installment, int\_rate also increases.
- Borrowers with verification status "Not-Verified" are most likely to get loan less than 25k (Charge off).
- Borrowers with verification status "Verified" are most likely to get loan greater than 25k (Charge off).
- Borrowers with lower term has higher installments comparatively.



#### **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 grater than 15%.
- Loan provided with an average of 12.5% interest rate for 36 months of tenure.
- Loan provided with an average of 16.5% interest rate for 60 months of tenure.
- Average loan amount greater than 15000 with grade E, F, G.
- 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