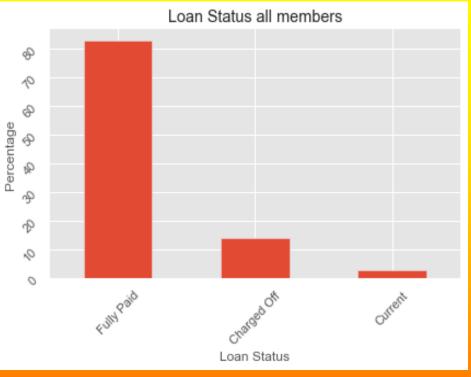
Lending Club — Case Study

By- Sushant Suman & Ayush Prakash

Loan Status and Recovered Amounts



Loan Status	Percentage count
Fully Paid	82.96
Charged Off	14.17
Current	2.87

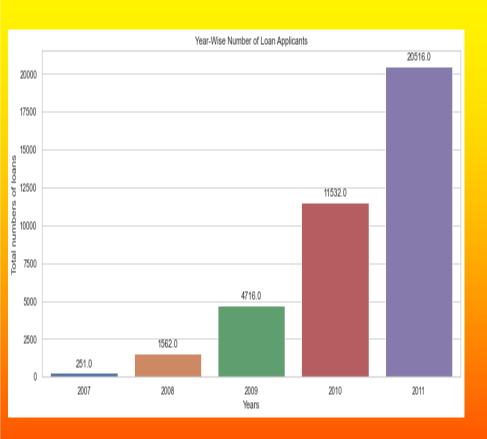


Lending Club could only recover around 57% of the loan amount when loans are defaulted.

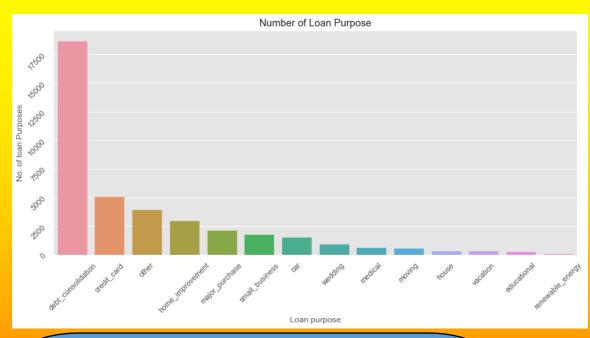
Otherwise they end up making a profit of 17%.

Current- loan status cannot be predicted as it is still going on .

Year wise trend of Loans and the number of Loan Purpose



We can see that there is marginal increase in loan from year 2007 to 2011.

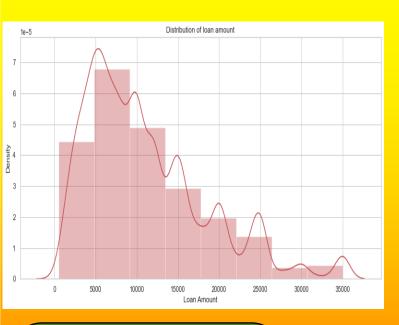


The five major purposes of Loan applications are –

- debt_consolidation
- credit_card
- other
- home_improvement
- major_purchase

debt_consolidation' is the highest in loan purpose

Distribution of Loan Amount w.r.t grades



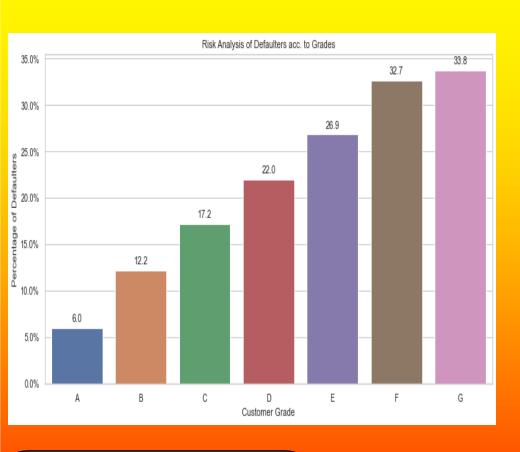
The distribution of loan amount i.e. the amount of loan applied can be visualized from the plot

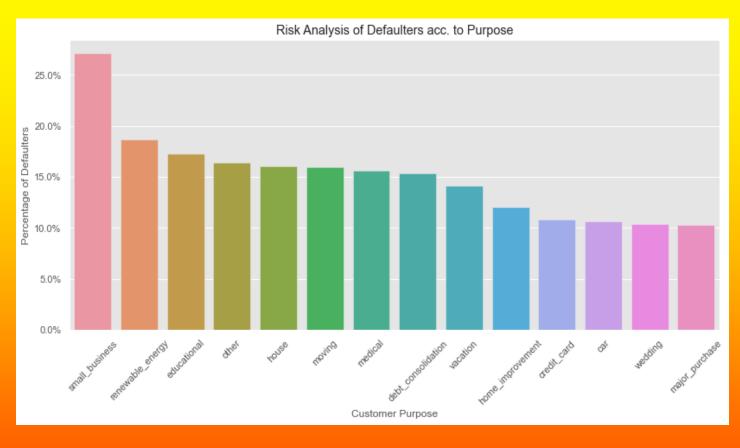
It has been observed that the maximum loan range amount is between 5000-10000.



Most of the loans have grade of A and B. Therefore stating most of the loans are high graded loans

Risk analysis of Defaulters acc. to grades and Purpose



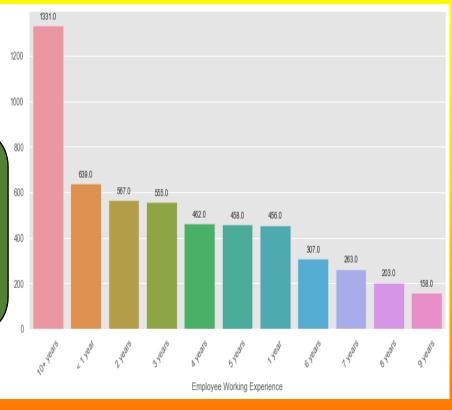


The percentage of Defaulters is the highest in Grade G group

It is observed that maximum defaulters are of small business

Risk analysis acc. to employee working experience

It is seen that
employees with
more than 10 years
experience are most
likely to be
defaulters whereas
experience of 9
years ae least.

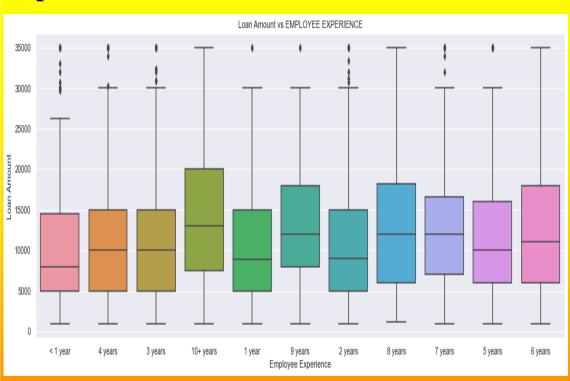


Debt to income vs employee exp.



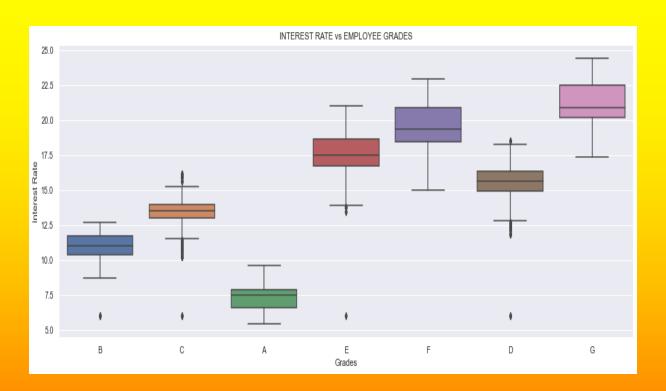
We find that people with more than 10 years of experience has debt to income in maximum range in comparison with others.

Loan Amount vs Employee Experience



It is observed that people with more than 10 years experience takes more amount of loan than 1 year of experience.

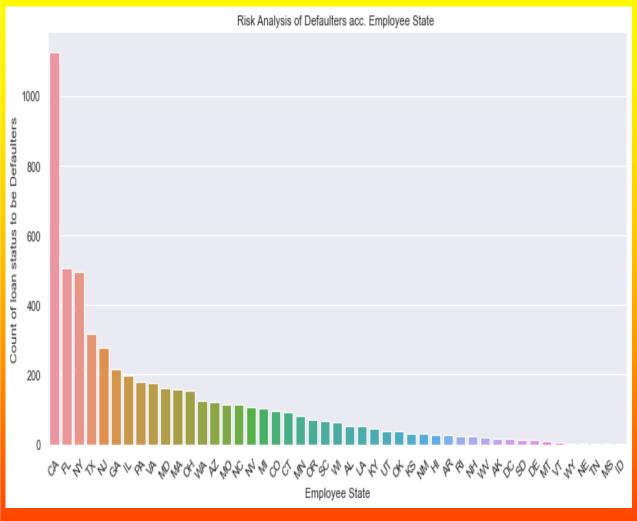
Interest rate vs Employee grades



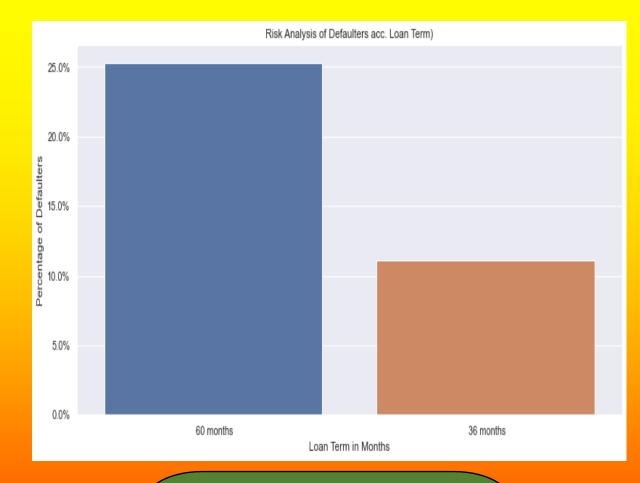
Interest rates for Grade A
loan is minimum whereas
for Grade G it's
maximum

Risk analysis of defaulters according to Employee state and Loan

Term



Applicants from the state CA are having high probability to be a defaultee



The percentage of Defaulters is found to be more in 60 months as compared to 36 months Loan Term

ALIENT.	1	0.3	0.27	0.059	0.88	0.85	0.062	0.11	- 1.0
Carl Jake	0.3	1	0.049	0.21	0.29	0.28	0.11	0.039	- 0.8
W. He	0.27	0.049	1	-0.041	0.26	0.25	-0.12	0.0086	- 0.6
Con Status Inc	0.059	0.21	-0.041	1	-0.24	-0.23	0.045	0.024	- 0.4
Car. String	0.88	0.29	0.26	-0.24	1	0.97	0.059	0.11	
Page X	0.85	0.28	0.25	-0.23	0.97	1	0.066	0.22	- 0.2
Paral Statement Wil	0.062	0.11	-0.12	0.045	0.059	0.066	1	0.093	- 0.0
-Rat	0.11	0.039	0.0086	0.024	0.11	0.22	0.093	1	0.2
	Call amin	A. S. A.	Milled The	Wall shalus	what Symmi	Jid Synni Ja	* **	-Est	

Inference

- > Annual_income is weakly related to loan_status
- > dti and year is strongly related

Inferences

- The trend of taking loans has increased year by year due to dearness and upliftment of living standards.
- Since everyone is not able to pay the debt at right time so in order to reduce or clear small loans they take a large amount of loan(debt consolidation) to pay off the debts.
- The loan with Grade A and B i.e. . Large amount is most common but most defaulters comes under Grade G i.e. small amount. This happens because higher grade has less interest rates while lower grade has high interest rates.
- Loan taken for small business has maximum defaulters as every business cannot flourish.

Conclusion

The business will increase if Lending Club considers these factors in future.