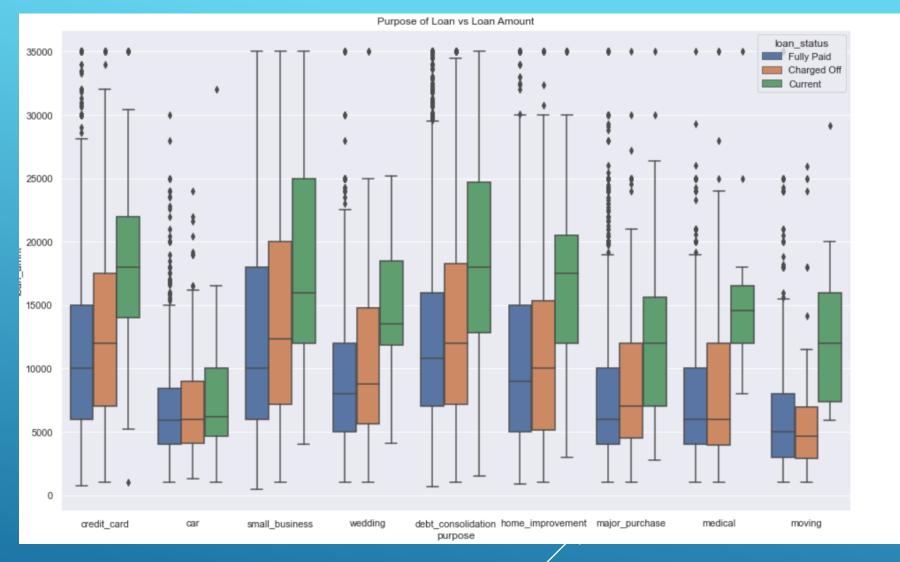
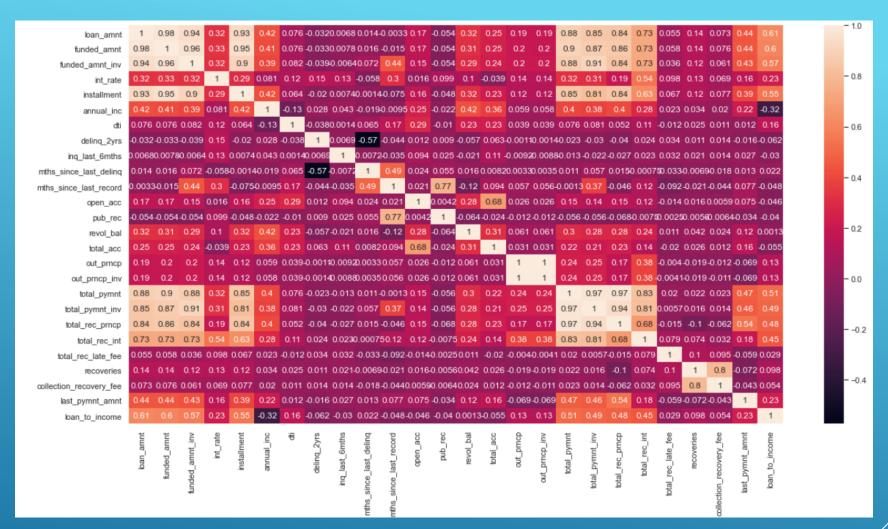
Lending club case study

By - Prahith N

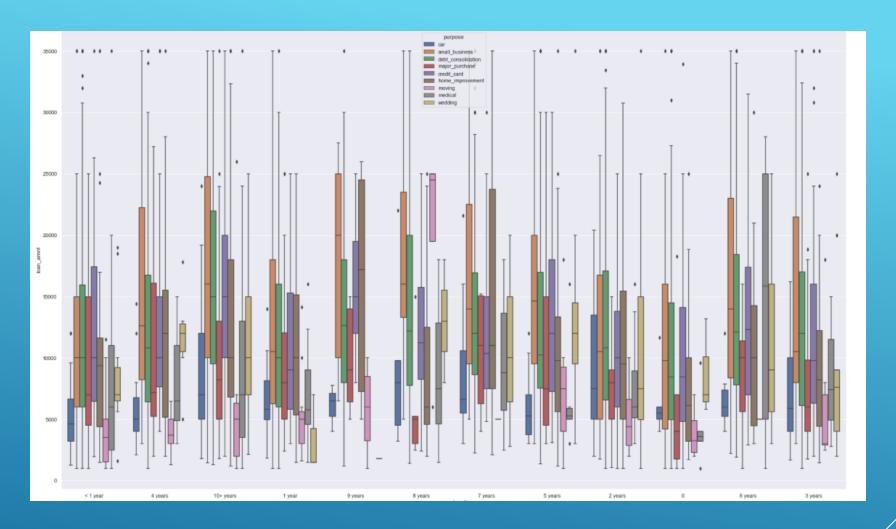


Following points gives us the insight on the purpose of loan to loan amount in relativity with the graph:

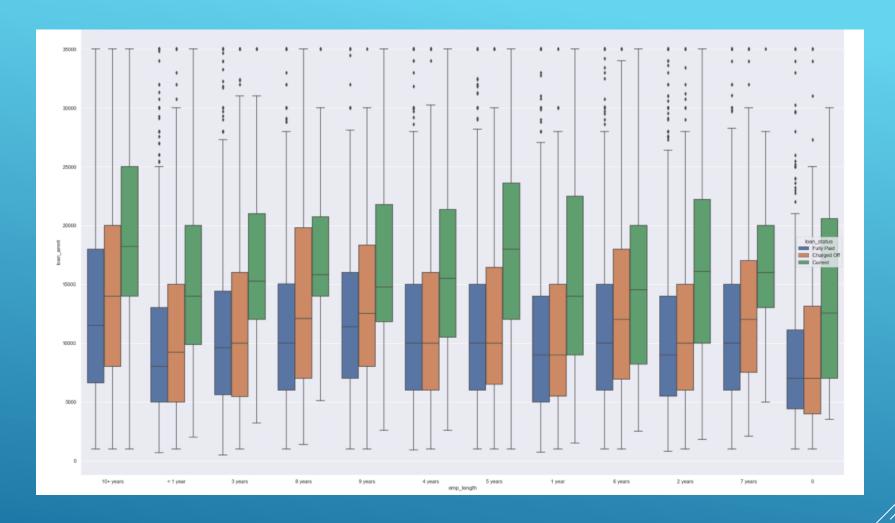
- (1) We can see that the median of car loan for charged off, "fully paid," current is almost same.
- (2) We can see currently paying is having high count across all types of loans.
- (3) We can see more number charged off amount is in small business loan.



It is clear from the Heatmap that how 'loan_amnt', 'funded_amnt' \(\mathbb{L} \) 'funded_amnt_inv' are closely interrelated and 'total_pymnt', 'total_pymnt_inv', 'total_rec_prncp' are also having corelation approximately equal to 1, So we can take any one column out of them for our analysis.



We can see most of the people with 6+ years of experience tend to take loan for small business, there are very less people who opt for moving loan and exception is only in the case of 8 years experienced people.

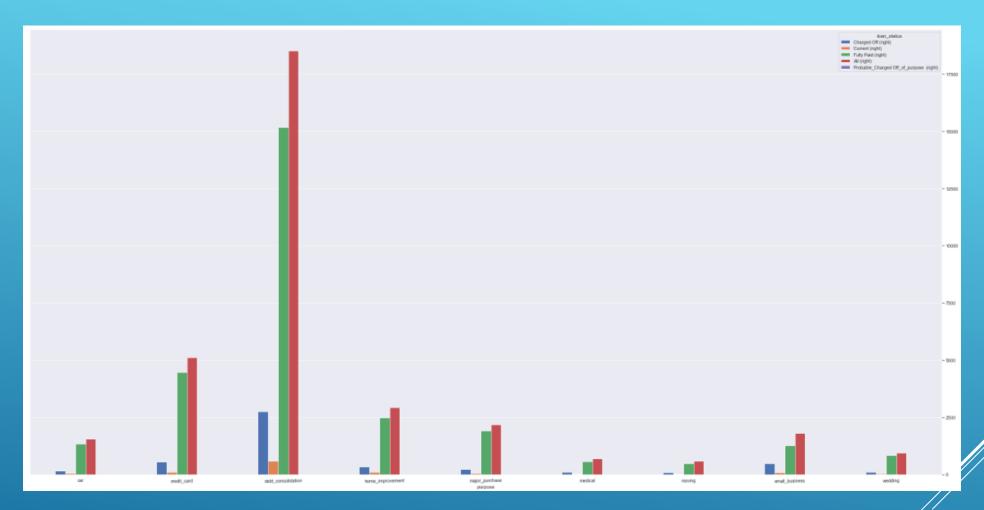


We can see that there is not much difference with people's experience and paying their loan amount.

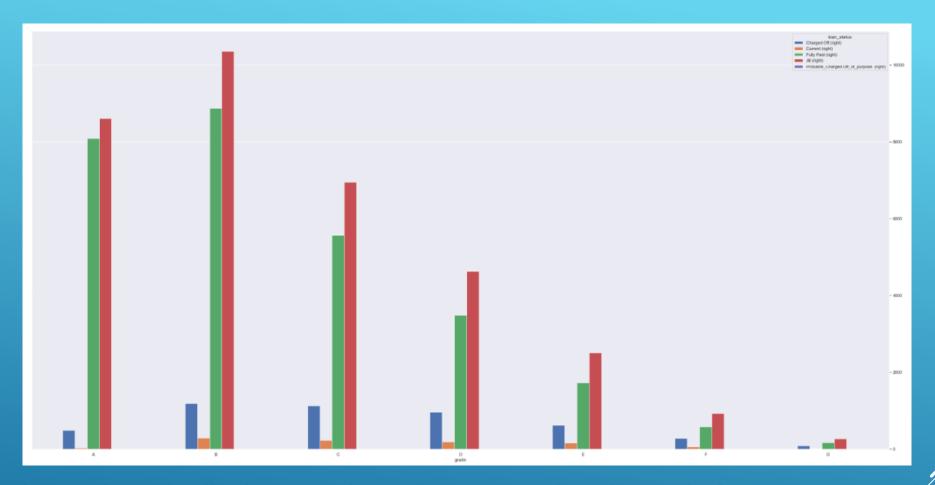


1)We can see that the State CA has most number of people opting for loan and there is really a high percentage of people even repaying the loan fully.

2)We can also see the charge off percentage remains the same across most of the states except FL that has high percentage of people charged off by not paying loan.

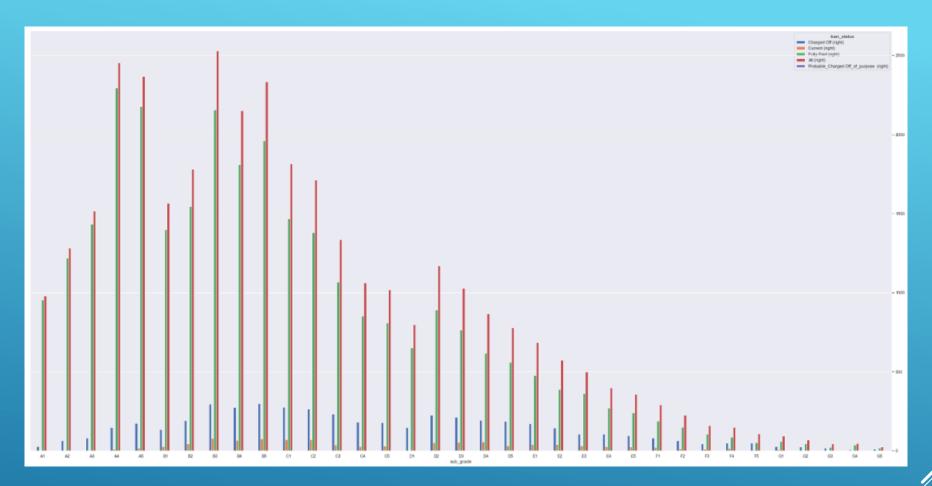


- 1) We can see that most people take loan for dept consolidation and least amount of loan is taken for moving purpose.
- 2) We can see that people taking loan for small business have approximately 35% been charged off.

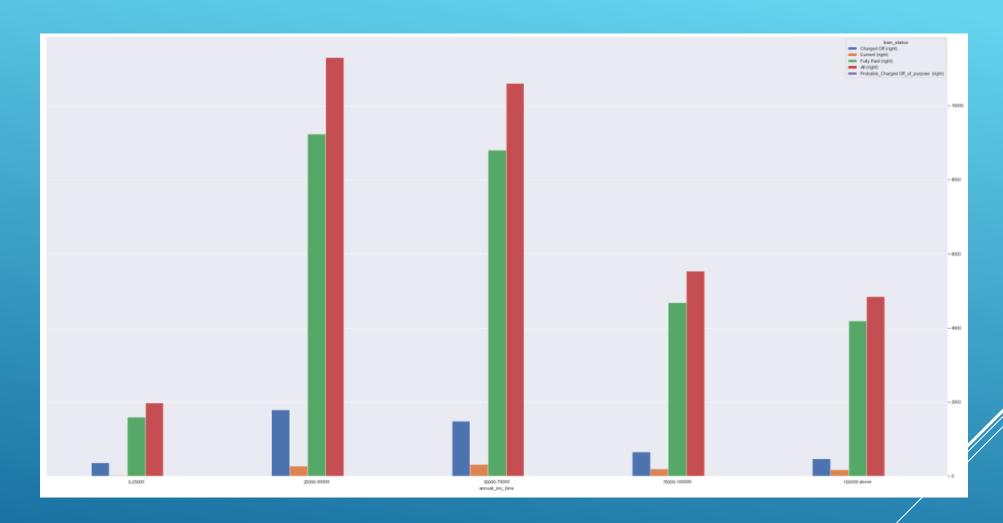


1) The graph gradually decreases from the group B that shows the loan option, opted by people reduces with their grade.

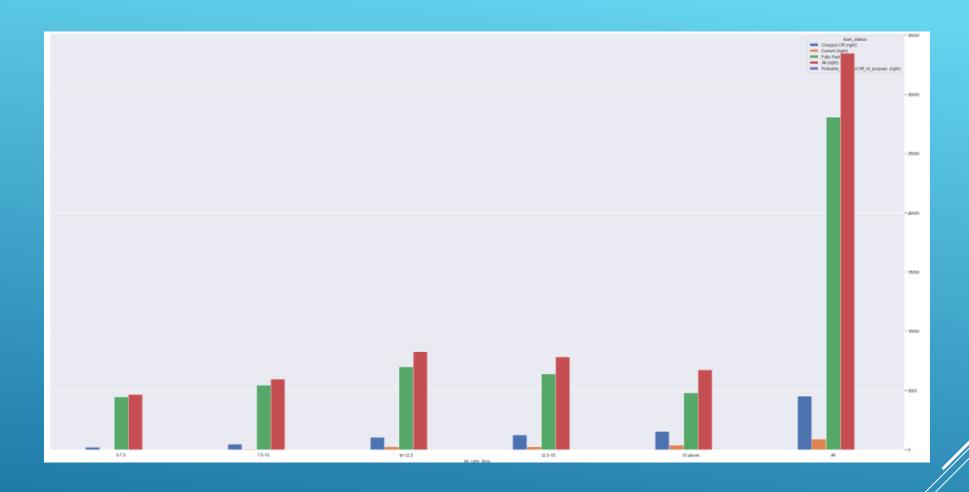
2) The charged off people across the graph remains the same but the of grade F approximately 50% have been charged off.



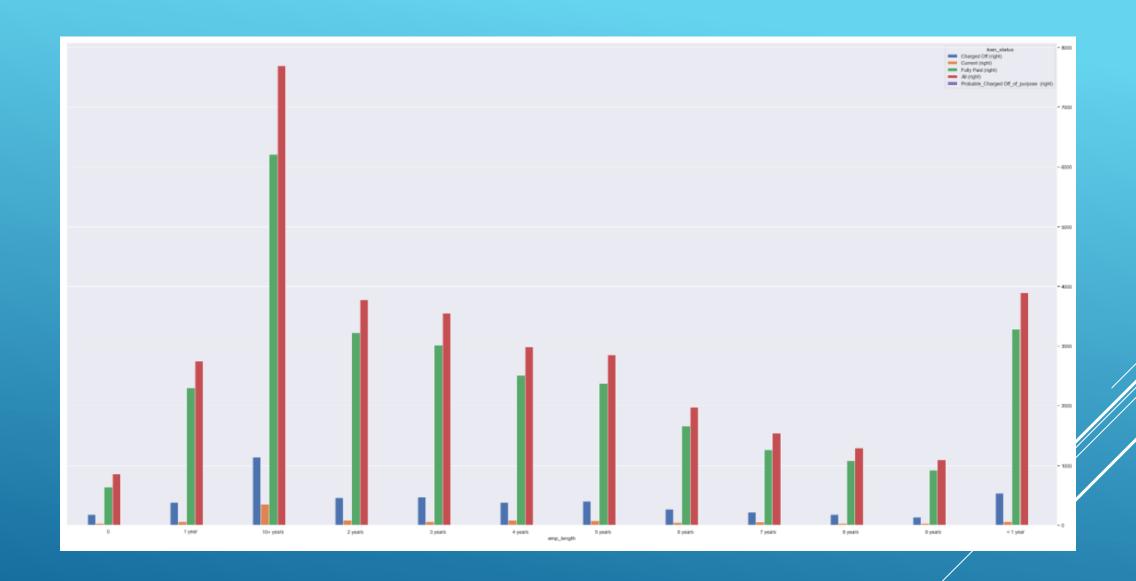
- 1) Even the sub-grade graph gradually decreases from the sub-group B3 that shows the loan option, opted by people reduces with their sub-grade.
- 2) The charged off of loan is higher at the end of the sub-group levels at $F \not\subset G$, the charged off is approximately equal to 50%.



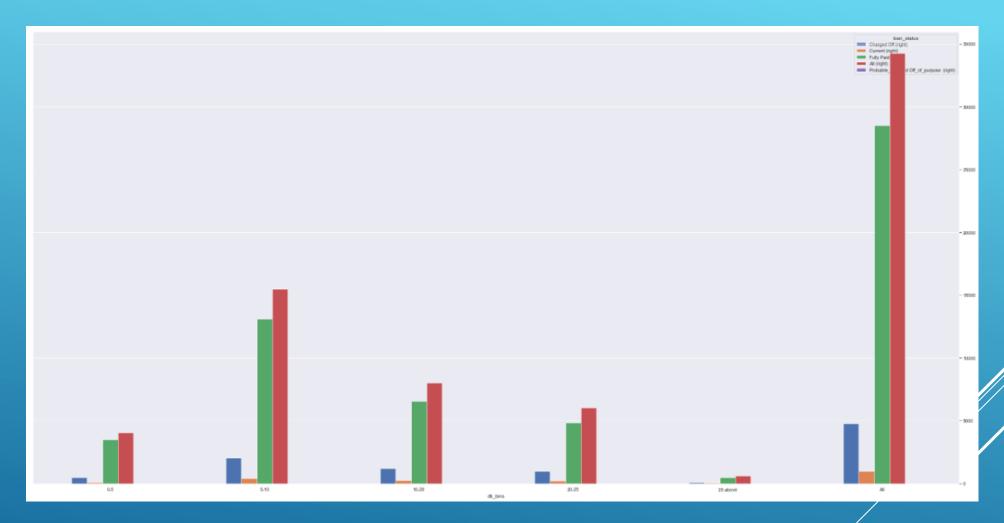
1)People with income range under 20,000-50,000 and 50,000-75,000 opt for loan options.



1) As the interest rate is increasing the probability of default or charged off is increasing across the graph.



Employees who have less than 1 year of experience are the most probable charged off.



Employees coming under the range of DTI 10-20 and 20-25 have the most charged off percentage.

Thank You