

Lending Club Case Study

LOAN DATASET

- In this module we will be doing data visualisation with the help of a case study. This will enable to understand how visualisation aids you in solving business problems.
- the company wants to understand the driving factors behind loan default, i.e. the variables which are strong indicators of default. The company can utilize this knowledge for its portfolio and risk assessment.
- Here I have shared observations based on the analysis I have done

Observations

- Defaulters are maximum whose year of experience is > 8 years but income is still $< 10K$

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monthly_income_category	AVERAGE < 40K	BETTER < 50K	GOOD LESS THAN 100K	LOW < 25K	VERY LOW < 10K	All
emp_length						
0	1	0	0	2	225	228
1 year	1	0	0	20	435	456
10+ years	4	2	3	94	1228	1331
2 years	1	0	0	29	536	566
3 years	2	0	0	27	526	555
4 years	1	1	2	25	433	462
5 years	0	0	1	30	427	458
6 years	1	0	1	17	288	307
7 years	1	0	0	17	245	263
8 years	0	0	0	18	185	203
9 years	0	0	0	13	145	158
< 1 year	0	1	0	32	606	639
All	12	4	7	324	5279	5626

Observations

- Defaulters are maximum whose rate of interest is >15%. Around 80% fall in this category

monthly_income_category	AVERAGE < 40K	BETTER < 50K	GOOD LESS THAN 100K	LOW < 25K	VERY LOW < 10K	All
interest_rate_range						
Interest Rate between 10-14	5	2	2	131	2597	2737
Interest Rate between 15-19	3	1	4	131	1655	1794
Interest Rate between 20-24	3	1	0	36	256	296
Interest Rate between 5-9	1	0	1	26	771	799
All	12	4	7	324	5279	5626

Observations

- Here observed that number of loans are more in September, October, November and December months that last 3-4 months of the year
- This is Year End months where employee needs to complete year target so may be approval, verification processes are ignored or not strict which has created the issue related to defaulters or charged off around 43% loans are passed in these 4 months only. (28% verified and 15% unverified defaulters) So Bank needs to check it in detail
- Loan needs be passed for verified clients. Verification process should be accurate

THANK YOU