

# **LENDING CLUB CASE STUDY**

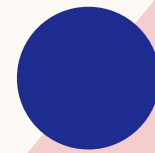
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# AGENDA

Introduction

Steps to proceed

Summary based on the analysis



# INTRODUCTION

By doing this case study, we tried to analyze the data on different formats.

Here we as individual are having approver portfolio, so we tried to do analysis based on different dimensions and factors which can influence approval decision.

# STEPS TO PROCEED



## DATA CLEANING

Cleaning redundant  
data and handling  
missing value



## HANDLING INCORRECT DATA TYPES

Converting OBJECT-  
data types to use for  
logical operations



## DERIVING COLUMNS

Deriving columns  
from indiscreet  
columns



## OUTLINER TREATMENT

Cleaning outliers to  
get refined data



## DATA ANALYSIS

Prescription based on  
Univariate/bi-  
multivariate analysis

# SUMMARY

Univariate, bi-variate and multi-variate analysis

❑ Based on univariate analysis, following assumptions can be prescribed:-

- ❖ Mostly customer has taken loan for debt\_consolidation, credit\_card and other purpose
- ❖ Around 82% of loans are fully paid ,however around 14% loans are defaulted
- ❖ More people are obtaining loan for shorter term.
- ❖ Mostly A,B,C grade people are obtaining for loans comparing to others.
- ❖ It is noticed further that people with subgrade A4,A5,B3 and B5 have mostly obtained for loan.
- ❖ Most loans are opted between 10-15% interest rate and 7-9% interest also.
- ❖ Loan is mostly issued in last quarter of the year(October, November and December month).
- ❖ Loan is mostly obtained by rented or mortgage house owners.
- ❖ Mostly applicants who obtained for loan have DTI(Debt-to-income) 13 to 16.

## ❑ Based on bivariate/Multivariate analysis, following assumptions can be prescribed:-

- ❖ 'debt\_consolidation' is having the most chances of defaulting/'Charged Off'.
- ❖ 'debt\_consolidation' has highest number of 'Fully Paid' but 'Credit Card' loan has the second highest fully paid. 'Credit Card' type could be considered to be one of the safe loan.
- ❖ '10%-16%' Interest rate loans are getting defaulting/'Charged Off' mostly.
- ❖ People with mortgaged house and higher income are mostly verified.
- ❖ Higher experience people have more annual income and they are mostly verified.
- ❖ Mostly people have annual income between 40-60K have DTI(Debt-to-income) between 13-16, have opted for loan.
- ❖ B5 and B3 subgrade people have around 14 DTI(Debt-to-income) and they have opted for loan with tenure of 60 months.
- ❖ Increase in interest rate increases the chances of 'Charged Off'.
- ❖ Interest rate is higher for the lower grades i.e. A grade employees offered lowest interest rate however for F&G grade employees offered highest.

# THANK YOU

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