

Lending Club Case Study

GROUP MEMBERS -

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Background – Lending Club Case Study

Background

Lending club is the largest peer-to-peer marketplace connecting borrowers with lenders. Borrowers apply through an online platform where they are assigned an internal score. Lenders decide 1) whether to lend and 2) the terms of loan such as interest rate, monthly instalment, tenure etc.

Some popular products are credit card loans, debt consolidation loans, house loans, car loans etc.

Business Objective

To identify variables which are strong indicators of default and potentially use the insights in approval/rejection decision making.

The problem Statement

Company

Lending Club is the largest online loan marketplace, facilitating personal loans, business loans, and financing of medical procedures. Borrowers can easily access lower interest rate loans through a fast online interface.

Context

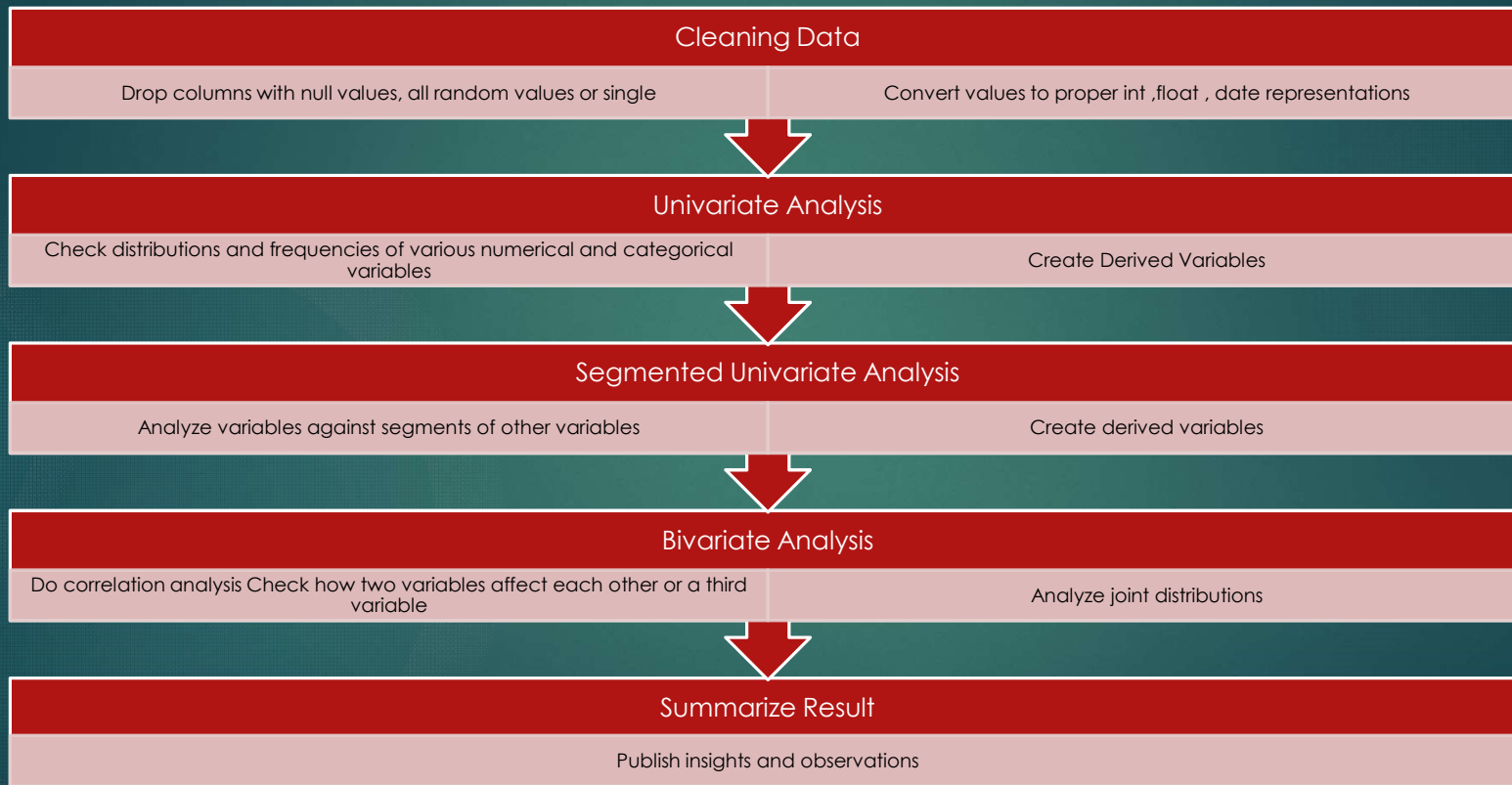
Lending Club wants to understand the driving factors behind loan default, i.e. the driver variables which are strong indicators of default.

The company can utilize this knowledge for its portfolio and risk assessment.

Problem Statement

As a data scientist working for Lending Club analyze the dataset containing information about past loan applicants using EDA to understand how consumer attributes and loan attributes influence the tendency of default

Analysis Approach



Data Understanding

Types of variables

- Customer (applicant) demographic
- Loan related information & characteristics
- Customer behavior (if the loan is granted)

Customer's Demographics
Employement Length
Employement title
Annual Income
Zip Code
Description

Loan Information & Characteristics
Loan Amount
Funded Amount
Funded Amount Investment
Interest Rate
Loan Status
Laon Grade

Customer Behaviour variables
Delinquency year -2
earliest credit line
Revolving balance
Recoveries
Application type
Loan purpose