

# Introduction

**OBJECTIVE :** Applicants capable of repaying the loan are not rejected

- Insights from Data Analysis
  - Driver variables behind loan default
  - Driver variables – applicable conditions for approval

# Insights from Data Analysis

- Driver variables behind loan default
- Driver variables – applicable conditions for approval

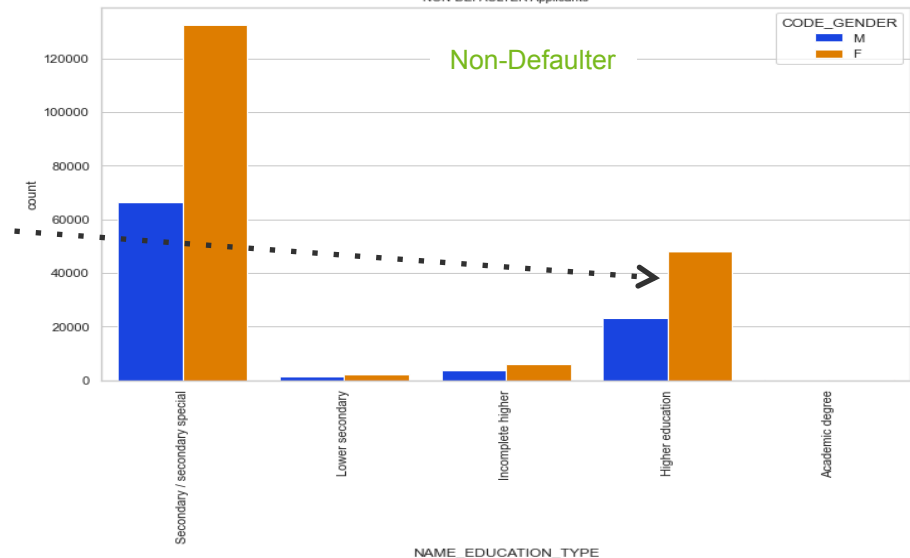
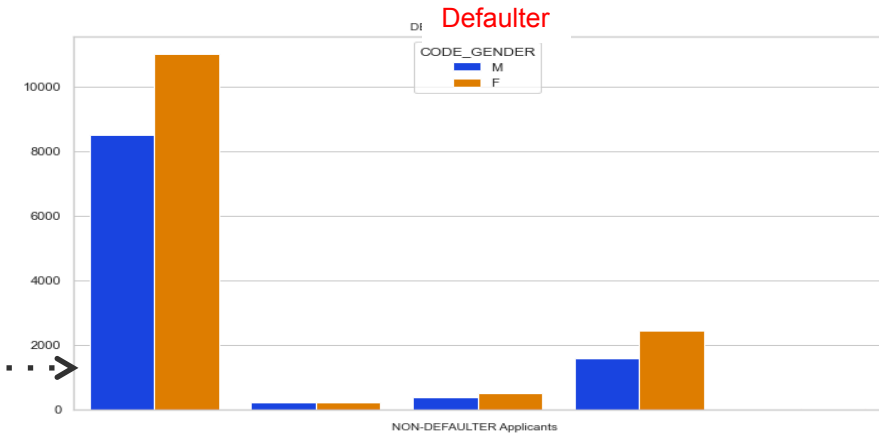
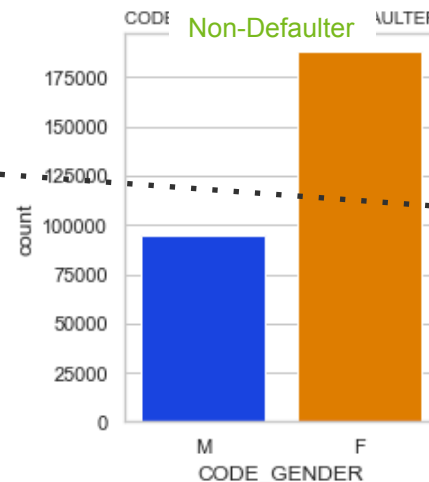
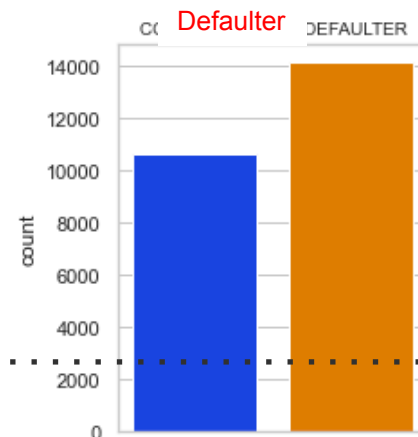
## CODE\_GENDER

### Defaulter Applicant

- Male have higher probability of defaulting
- Male with Secondary/ Secondary special education are more likely to default

### Non-Defaulter Applicant

- Female with Higher education are more likely to not default
- Male with Academic degree has higher probability of non default



# Insights from Data Analysis

- Driver variables behind loan default
- Driver variables – applicable conditions for approval

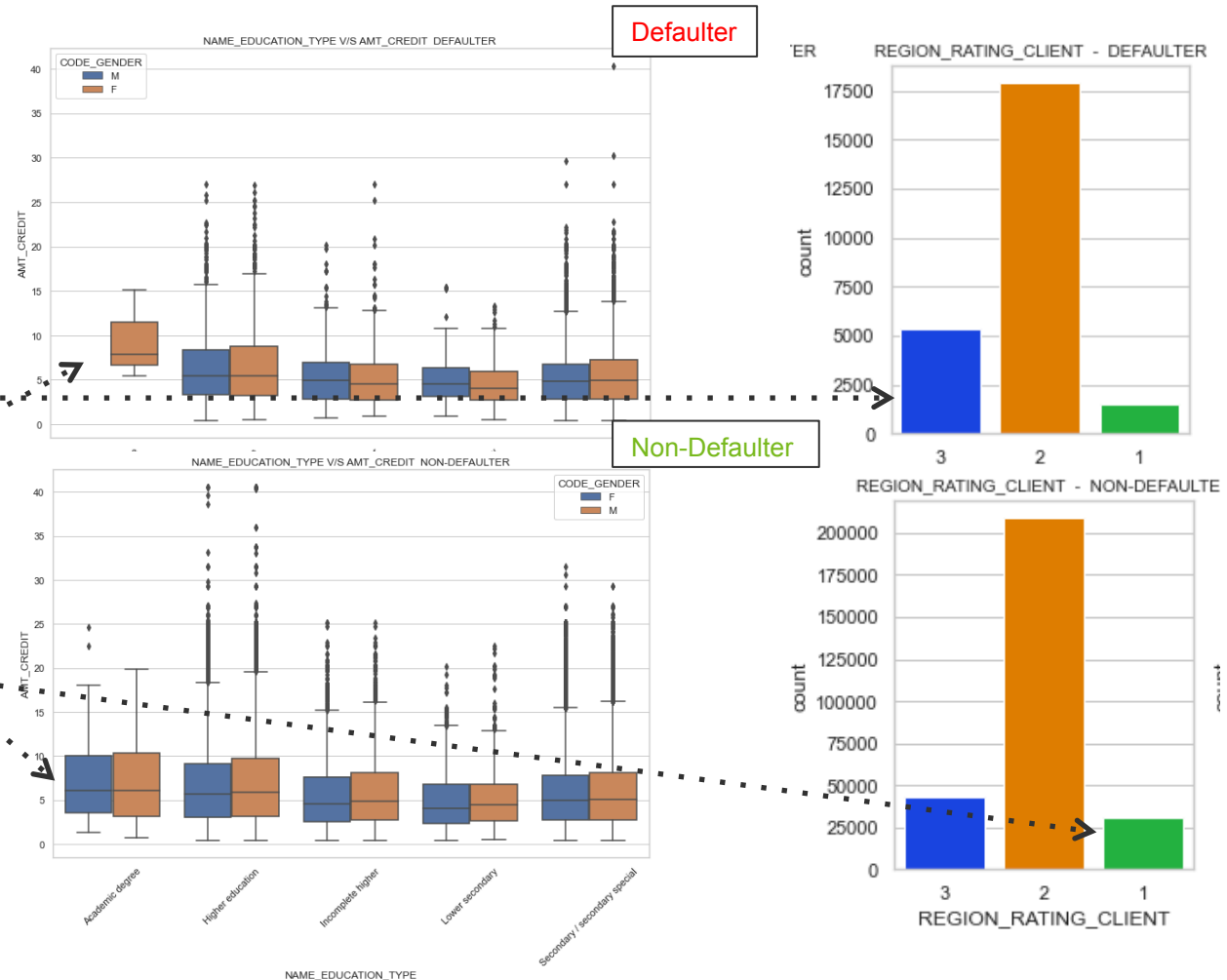
## CODE\_GENDER & REGION\_RATING\_CLIENT

### Defaulter Applicant

- Region 3 applicants have high default rate

### Non-Defaulter Applicant

- Male with Academic degree has higher probability of non default
- Region 1 has lower probability of default



## Insights from Data Analysis

- Driver variables behind loan default
- Driver variables – applicable conditions for approval

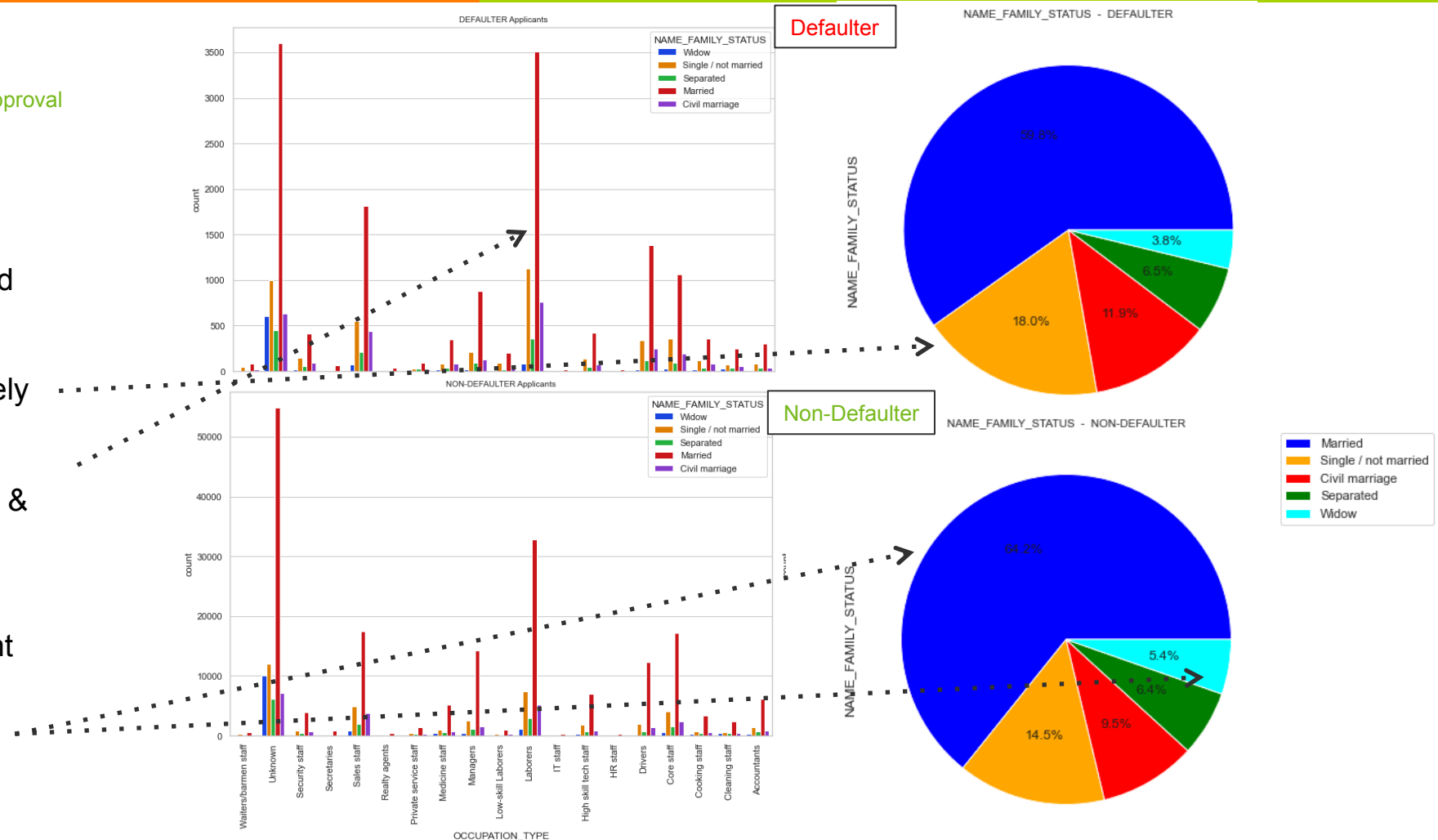
## NAME\_FAMILY\_STATUS

## Defaulter Applicant

- Applicant living with Parents and rented apartments have high probability of default
- Single/not Married are more likely to default
- Laborer are high on default (particularly Single(not married) & married)

## Non-Defaulter Applicant

- People living in Office apartment has lower probability of default
- b. Married/ Widow are comparatively non-defaulter



# Insights from Data Analysis

- Driver variables behind loan default
- Driver variables – applicable conditions for approval

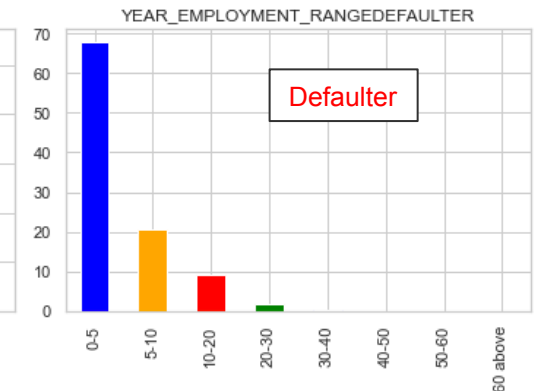
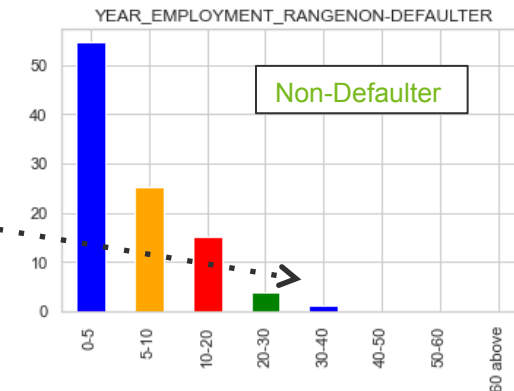
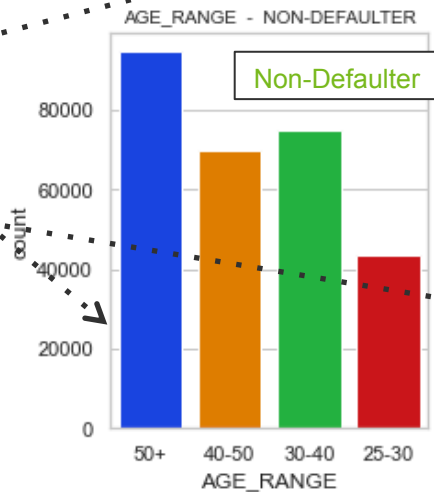
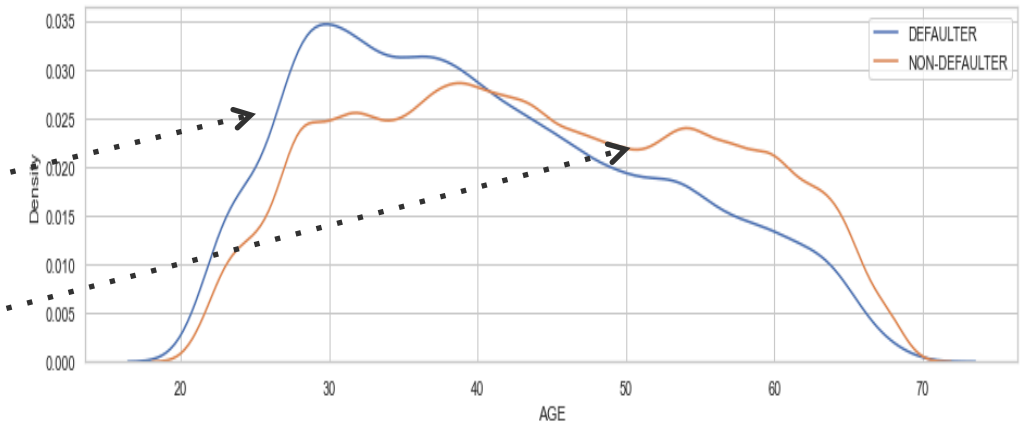
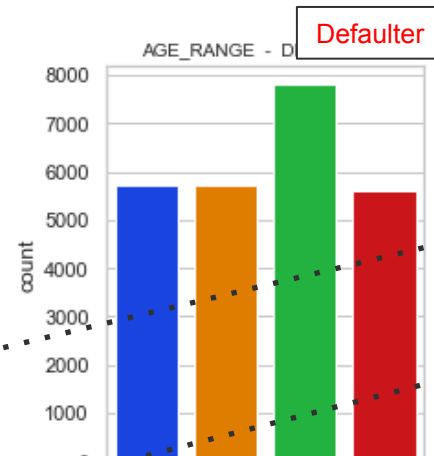
## AGE\_RANGE & YEARS\_EMPLOYMENT\_RANGE

### Defaulter Applicant

- Applicants from 25-40 age group are likely to default

### Non-Defaulter Applicant

- Applicants with age 50 years and above are less likely to default
- Applicants with 30 years and above years of employment are less likely to default



# Insights from Data Analysis

- Driver variables behind loan default
- Driver variables – applicable conditions for approval

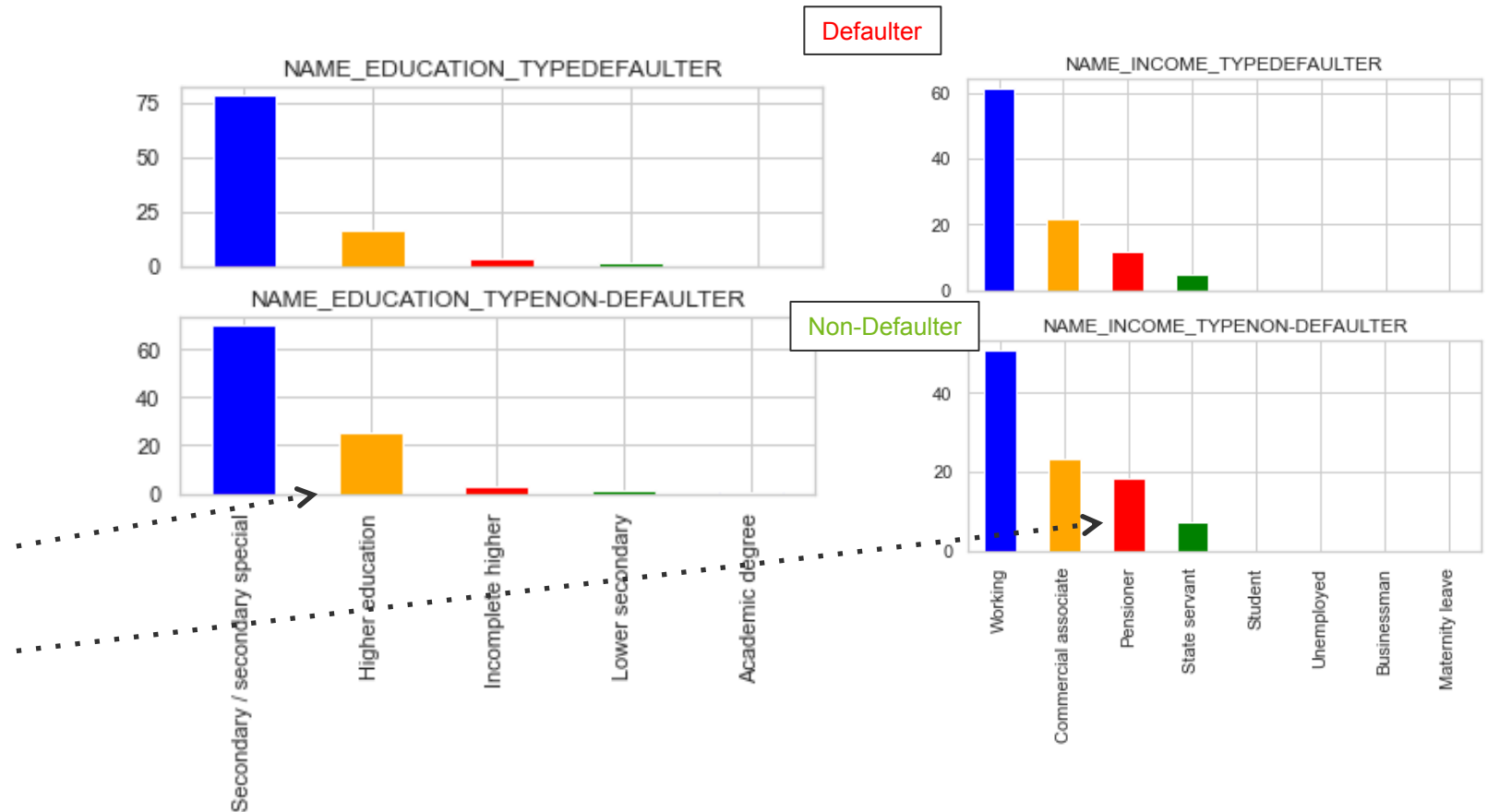
## NAME\_EDUCATION\_TYPE & NAME\_INCOME\_TYPE

### Defaulter Applicant

- Lower secondary higher chance of default (particularly if they are Married/ Widow)

### Non-Defaulter Applicant

- Applicants with Higher education are likely non-defaulter (particularly married)
- Pensioner are less likely to default



# Insights from Data Analysis

- Driver variables behind loan default
- Driver variables – applicable conditions for approval

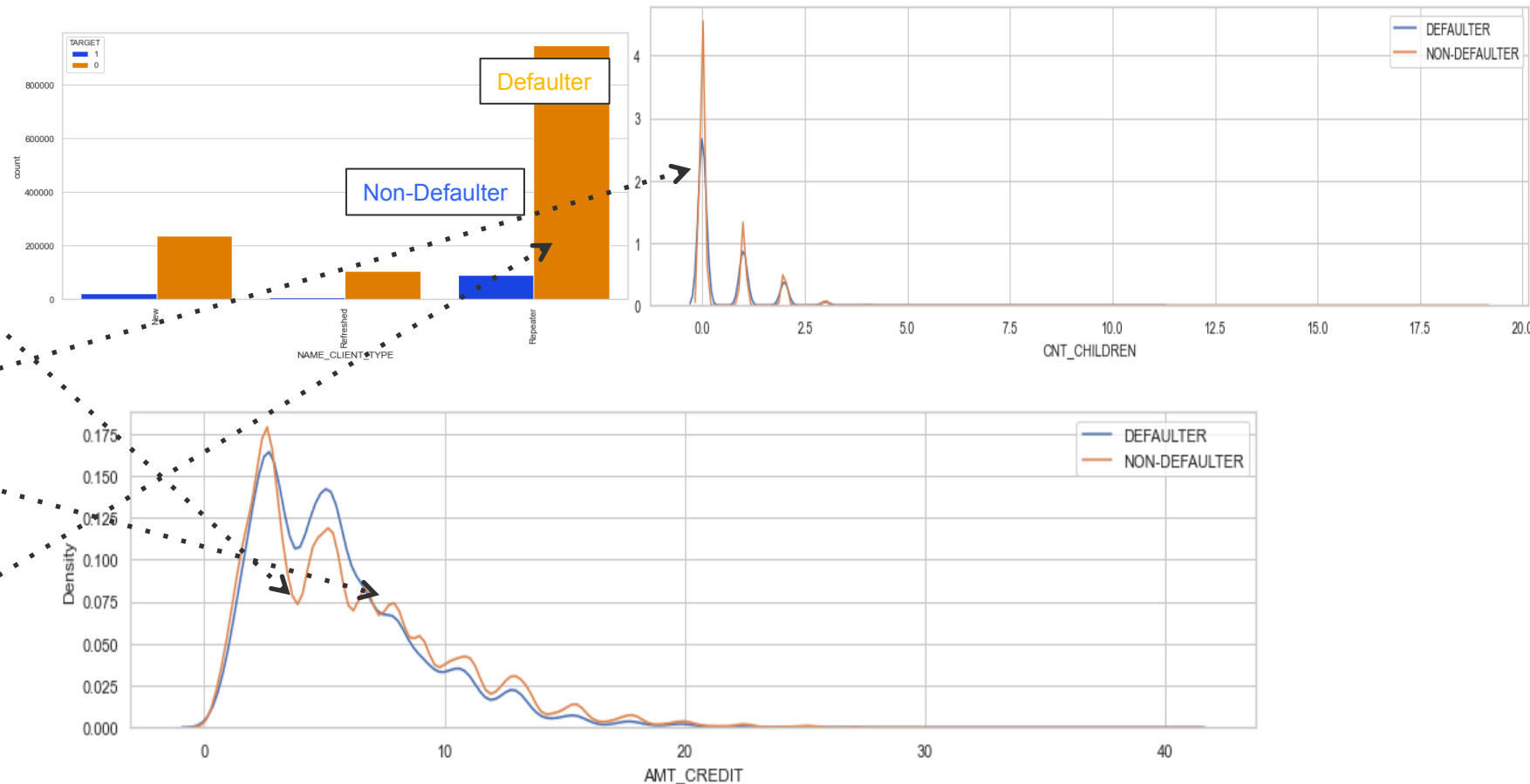
## AMT\_CREDIT & CNT\_CHILDREN

### Defaulter Applicant

- Applicants with AMT\_CREDIT between 2.5 & 6.5 lakhs are likely to default

### Non-Defaulter Applicant

- Applicants with no child, have low default rate
- Applicants with AMT\_CREDIT greater than 7 lakhs are less likely to default
- Repeater applicants are less likely to default



# Insights - Summary

## 1] CODE\_GENDER

Defaulter Applicant

- a. Male have higher probability of defaulting
- b. Particularly avoid unemployed males
- c. Male with Secondary/ Secondary special education are more likely to default

Non-Defaulter Applicant

- a. Male with Academic degree has higher probability of non default
- b. Female with Higher education are more likely to not default

## 2] NAME\_FAMILY\_STATUS

Defaulter Applicant

- a. Applicant living with Parents and rented apartments have high probability of default
- b. Single/not Married are more likely to default

Non-Defaulter Applicant

- a. People living in Office apartment has lower probability of default
- b. Married/ Widow are comparatively non-defaulter

## 3] NAME\_EDUCATION\_TYPE

Defaulter Applicant

- a. Lower secondary higher chance of default (particularly if they are Married/ Widow)

Non-Defaulter Applicant

- a. Applicants with Higher education are likely non-defaulter (particularly married)

## 4] NAME\_INCOME\_TYPE

Non-Defaulter Applicant

- a. Pensioner are less likely to default

## 5] REGION\_RATING\_CLIENT

Defaulter Applicant

- a. Region 3 applicants have high default rate

Non-Defaulter Applicant

- a. Region 1 has low probability of default

## 6] OCCUPATION\_TYPE

Defaulter Applicant

- a. Labourer are high on default (particularly Single(not married) & married)

Non-Defaulter Applicant

- a. Accountants(Married) have high probability of non-defaulter

## 7] AGE\_RANGE

Defaulter Applicant

- a. Applicants from 25-40 age group are likely to default

Non-Defaulter Applicant

- a. Applicants with age 50 years and above are less likely to default

## 8] YEARS\_EMPLOYMENT\_RANGE

Defaulter Applicant

- a. Applicants with 0-5 years of employment have high probability of default

Non-Defaulter Applicant

- a. Applicants with 30years and above years of employment are less likely to default

## 9] AMT\_INCOME\_RANGE

Defaulter Applicant

- a. Applicants with income less than 300,000 have high probability of default

Non-Defaulter Applicant

- a. Applicants with more than 700,000 of income are less likely to default



# Insights - Summary

## 10] AMT\_CREDIT

Defaulter Applicant

a. Applicants with AMT\_CREDIT between 2.5 & 6.5 lakhs are likely to default

Non-Defaulter Applicant

a. Applicants with AMT\_CREDIT greater than 7 lakhs are less likely to default

## 11] AMT\_GOODS\_PRICE

Defaulter Applicant

a. Applicants with AMT\_GOODS\_PRICE between ~2.5 & ~5.5 have more default rate

## 12] CNT\_CHILDREN

Non-Defaulter Applicant

a. Applicants with no child ,have low default rate

## 13] ORGANISATION\_TYPE

Defaulter Applicant <

a. Self employed and don't own a car have high defaulting probability

## 14] CASH\_LOAN\_PURPOSE

Defaulter Applicant

a. Loan default percentage for Repairs is high

Non-Defaulter Applicant

a. Loan applicant for buying a Garage is less likely to default

15] Repeater applicants are less likely to default

16] Refusal of loan for New Car and Repairs are high. Bank can increase the rate of interest/ reduce the loan credit to increase Approval of the same