THE AMEX CREDIT CONUNDRUM



A detailed insight into the database of one of America's largest private bank

Shaping up the defaulters

• Total number of people in the dataset = 45529



• Total number of defaulters = **3697**



• Something **common** in all the defaulters:



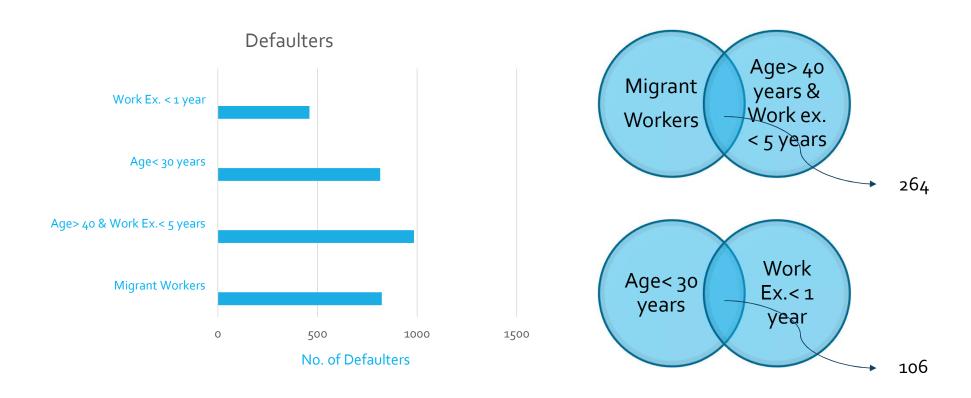


Motifs of the Amex data

Theme	No. of defaulters	Defaulter%
Migrant Workers	823	22.26
Age > 40 & Work Experience< 5 years	984	26.61
Age< 30	815	22.04
Work Experience< 1 year	460	12.44

Some patterns found in the 'defaulter' category!

Graphical representation of data



Insights

- Migrant workers constitute of a high proportion of the defaulters. Coming from other nations, they'll find it hard to bag high paying jobs and thus use money at there disposal to meet ends and find it hard to payback.
- People above 40 but with work experience less than 5 years imply that either they aren't very good at there jobs or just not skilled enough to bag one.
- Young people below the age of 30 are either studying, live on parent's money or are freshers at their respective jobs. With less stable income and lesser experience, they are a risky category.
- New recruits that have started learning to use and spend at the right places, there's always a tendency to overspend in them. With relatively lower wages, they are a liability.

Our recommendation

Future Defaulters

Credit score< 700 & credit limit used> 70% → 2065 Migrant worker+
Age< 40 years+
Work experience<
5years → 1866

These people do not yet have a default to there names but things can take a turn for the worse very soon. **Be careful!**

Future Scope

Occupation type	%default in said profession
Secretaries	4.02
Accountants	5.29
Core Staff	5.98

Some people the company should **sell more credit cards to** since it doesn't have a problem in acquiring new customers. They default less, have stable income, relatively higher income, well educated and if done, will increase the revenue of the company.

We also propose a 3 layered system for the company to adopt in the future.

People with credit score> 700 and the ones who pay their credit card bills on time

People with credit score> 700 and uses > 70% of credit limit

People with credit score < 700 and uses > 70% of credit limit

The defaulters!

The **yellow** region guys are the potential **green** zone guys. On the other hand, the **orange** zone people are potential future defaulters! Based on their credit score and bill payment they can switch zones. We have to minimize the orange zone and red zone guys and aim substantially increase the green and yellow zone fellas! Strict checks should be made on the orange zone guys from some time before the end of the month.

Remedy

STOPLOSS-

For people with credit card defaults, a system involving 'stoploss' should be adopted. Here, whenever the defaulter uses 70% of his or her credit card limit, he or she has to first come and pay up the amount used and then be allowed to use the rest 30%.

This is a two way solution-

- i) If the person still doesn't pay, we can restrict him or her at 70% which helps minimize the company's losses.
- ii) If he pays up the 70%, he or she will take it as a warning from the bank and think before spending the other 30. It will implore the person to only use the card further if he or she is sure! This will **increase the company's revenue**. Even if the person doesn't pay after that, we would have retrieved the major chunk of money used.

More data for future case study

- 1. **Debt payment breakdown** to know where his money goes and for what he's exactly paying.
- 2. **Investment strategy** Includes whether the person does investments or not. It can be a simple 'yes' or 'no' column but a portfolio insight would be ideal!

THANKYOU!