

Bank Churners ~~ since last 12 months

Stanley Austin S

Table of contents

01.

Background

03. **Exploratory Data Analysis**

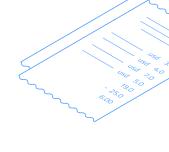
02.

X

Root Cause Analysis

04.

Recommendations





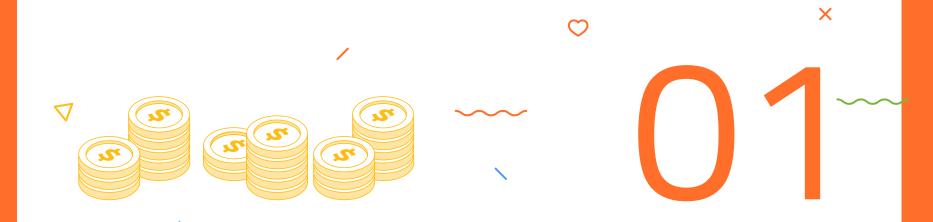








Background



Executive Summary



X



Problem Statement

The bank has more than ten thousand customers, however, 16.07% of them are leaving of using credit card and its services.



Objective

The project objective is to find who is the bank churners and what is the factor that contribute the most of the customer churn rate.



Conclusion

- The bank can focus on female churners who are 31 years old and older and its income is less than \$40 K per year on the short term.
- On the long term, the bank give bonus points for those existing and attrited customers that uses credit card for each transaction.



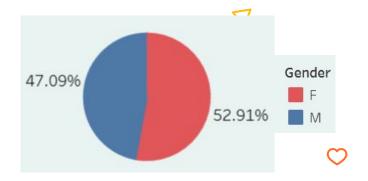
Background

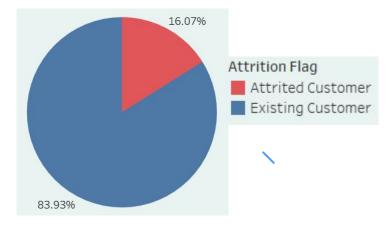
The bank has more than ten thousand customers which consists of **52.9% of females** and the remaining of males.

However, since last 12 months, **16.07% of them** are **leaving of using credit card** and its services.

X





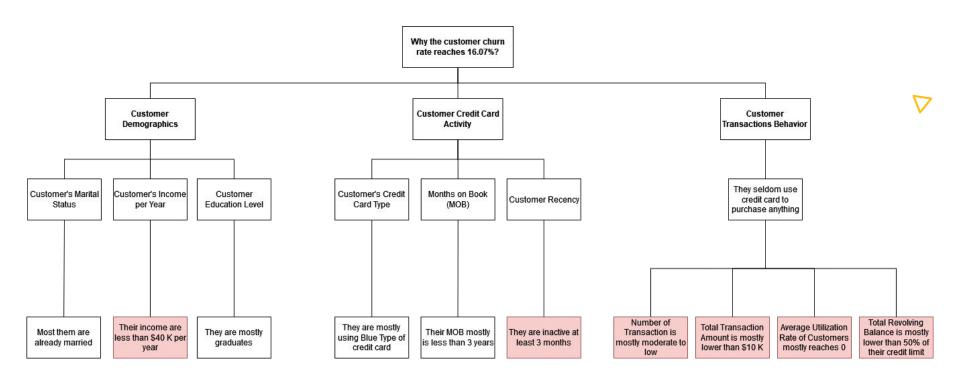


Root Cause Analysis



Root Cause Analysis

X



Problem Definition

X

The contributing factors of the customer churn rate are as follows

- the customer income which is mostly less than \$40 K per year;
- the customers are inactive since last 3 months or longer;
- the number of transactions is mostly less than 100 transactions since last 12 months and their total transactions amount are mostly less than \$10 K; and
- about 55% of bank churners have average utilization rate of
 0%.

Exploratory Data Analysis Churners Characteristics



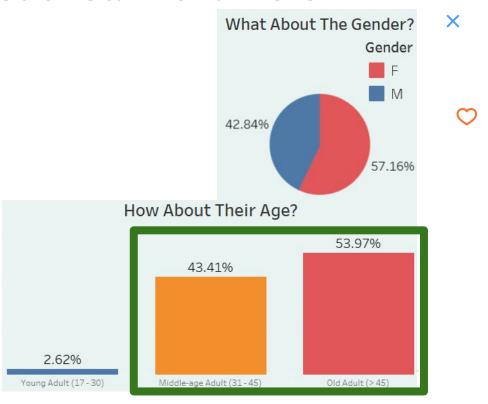




Who are the most of bank churners?

Let us take a look at the **demographics** of bank churners.

- 57.16% of all attrited customers are females/women.
- Almost attrited customers are over
 31 years old (97.3%).



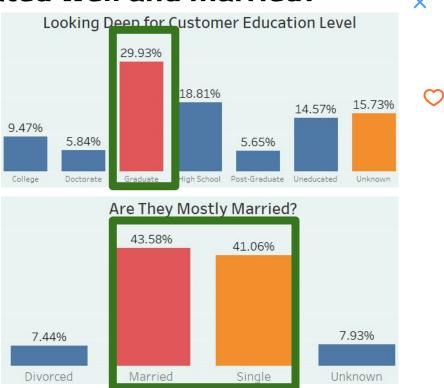
How about Customer Income of them?

Of all attrited customers, **37.6%** of them has **income less than \$40K per year**.



Are they mostly educated well and married?

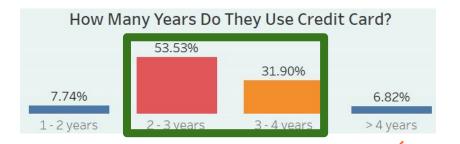
- 29.9% of all attrited customers are graduates.
- The attrited customers are mostly married (43.6%) and single (41.1%).



Looking to the their credit card activity

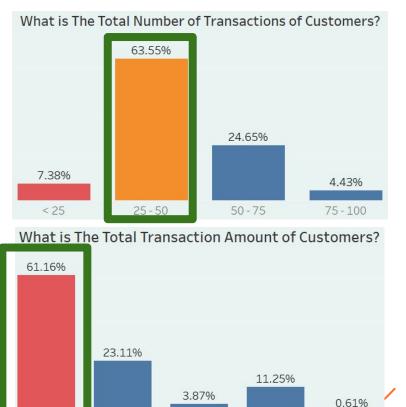
- Of all attrited customers, 61.9%
 of them are inactive of using
 credit card since 3 months or
 more ago.
- 53.5% of attrited customers
 have used credit card between
 2 to 3 years.





They mostly do less transactions!

- All attrited customers do less than 100 transactions. To be exact, 63.6% of attrited customers have 25 - 50 transactions using credit card.
- Almost all attrited customers have its total transaction amount less than \$10 K.
 Furthermore, 61.2% of them have the total transaction amount less than \$ 2.5 K.



X

> 10000

They mostly seldom use credit card! No wonder!

- About 86% of all attrited customers have an average utilization rate less than 50%. The lower rate, the higher chance of customer to leave using credit card.
- To make it worse, 55% of all attrited customers have an average utilization rate of 0% which means that they are mostly leaving the credit card.



Exploratory Data Analysis Male Vs. Female Churners

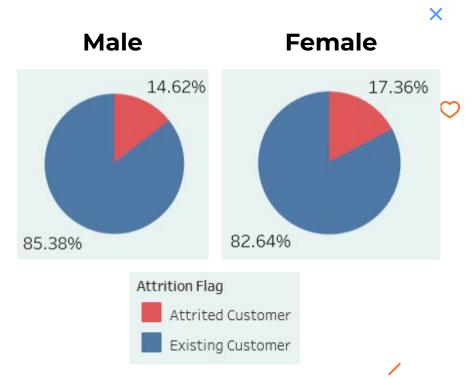






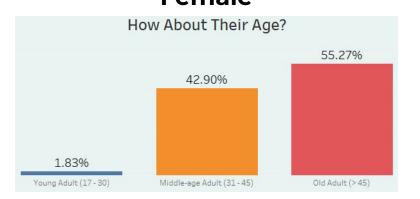
How many male and female churners?

- 14.62% of male customers are churners while 17.36% of female customers are leaving credit card services.
- This is a prove that females are the most of bank churners.



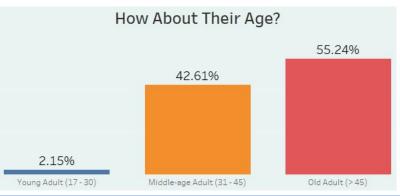
How old male and female churners are?

- Based on two bar charts given, we can say that customer churners are middle-age and old adult.
- We can also say that there is no significant difference of age between female and male churners.



X





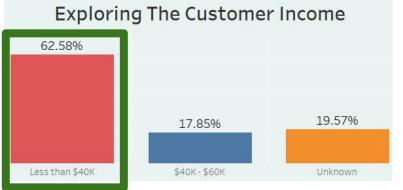
What about their customer income?

There is a significant difference of customer income per year between female and male churners.

This is logical since males mostly work for a company rather than females.

Female

X



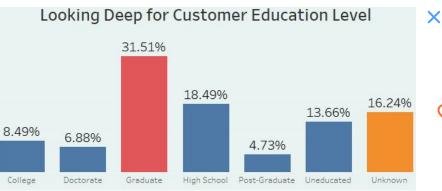
Male



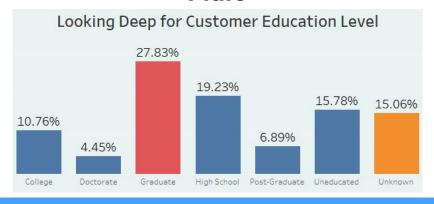
Are they mostly educated well?

Female

There is **no significant difference** of **education level**between **female** and **male churners**. They
are mostly **graduates**!

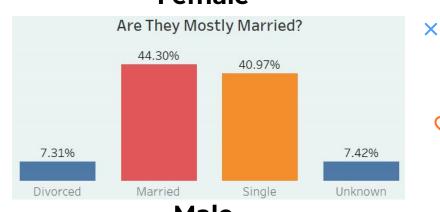


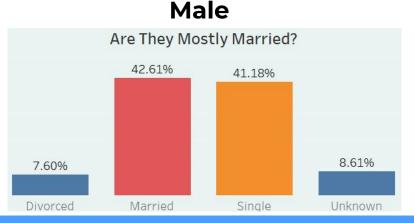
Male



∇ Are they mostly married? Female

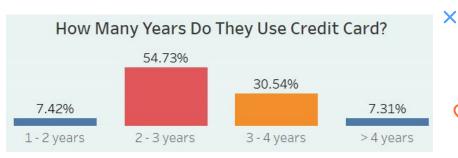
There is **no significant** difference of marital status between female and male churners. They are mostly married and single!



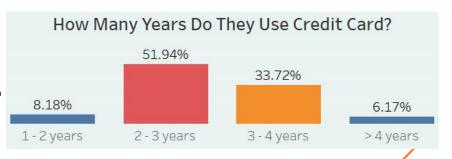


Looking to their credit card activity (1)_O

If we take a look at their credit card activity, there is **no** significant difference between **female** and male churners. They are mostly active for 2 to 3 years.

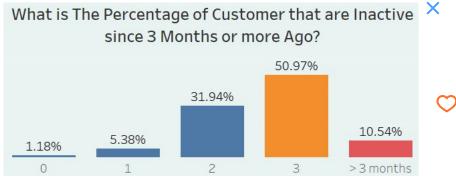


Male



Looking to their credit card activity (2)

They (male and female churners) are both actually inactive of using credit card since 3 months or more ago!

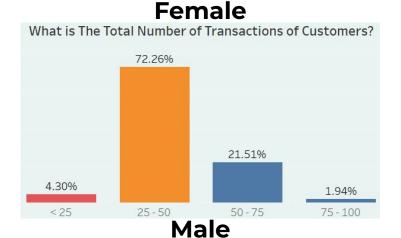




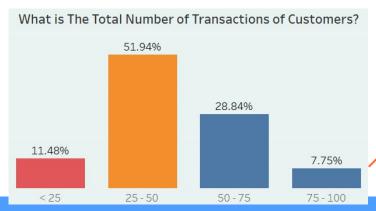


Both male and female do less transactions! (1)

It is interesting that male churners are actually **do more** transactions than female churners. At least, the male bar chart one is roughly distributed!

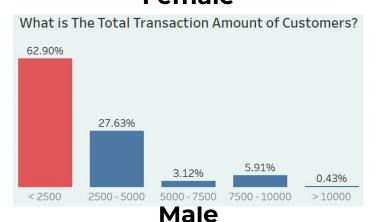


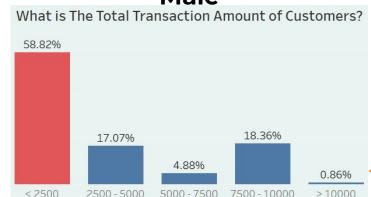
X



Both male and female do less transactions! (2)

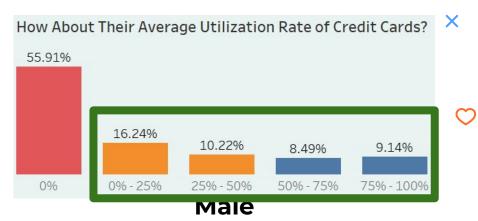
Since male churners do more transaction, then their total transaction amount is higher than the female ones.

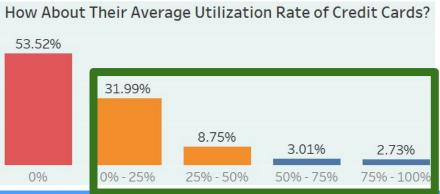




Who is the most one to utilize the credit card?

Male churners are actually more seldom to use credit card **services** than the female ones since only 2.73% of them use it 75% or higher.





[▽] What the insights we get?

- The bank churners or the attrited customers are mostly **females** who are **31 years old and older**. They are mostly **graduates** who are **married or single** and has **income less than \$40 K per year**.
- The demographic of all women attrited customers is proportional to the demographic of all customers.
- 1/3 of all attrited customers have a relationship with the bank for 2 3 years (which is average loyalist) but they are hibernating of using credit card for 3 or more months.
- 39% of all attrited customer have less than 100 transactions and their transactions have its total amount less than \$ 2.5 K.
- Only customer income per year makes the characteristics of male and female churners differ significantly.
- Male churners do more transactions and have higher total amount transaction than female one but they are actually more seldom to use credit card services.

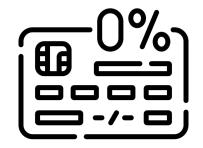




Recommendations



that are going to leave using credit cards such as how to use credit cards



Give them annual fee reduction or waiver per year.

X



Give them bonus
points for these
customers that
spend certain
amount of money

Thank you!



Thank you!





Appendix

Dashboard Link

