Fawzy Almatary

Data · Healthcare

Travel Insurance

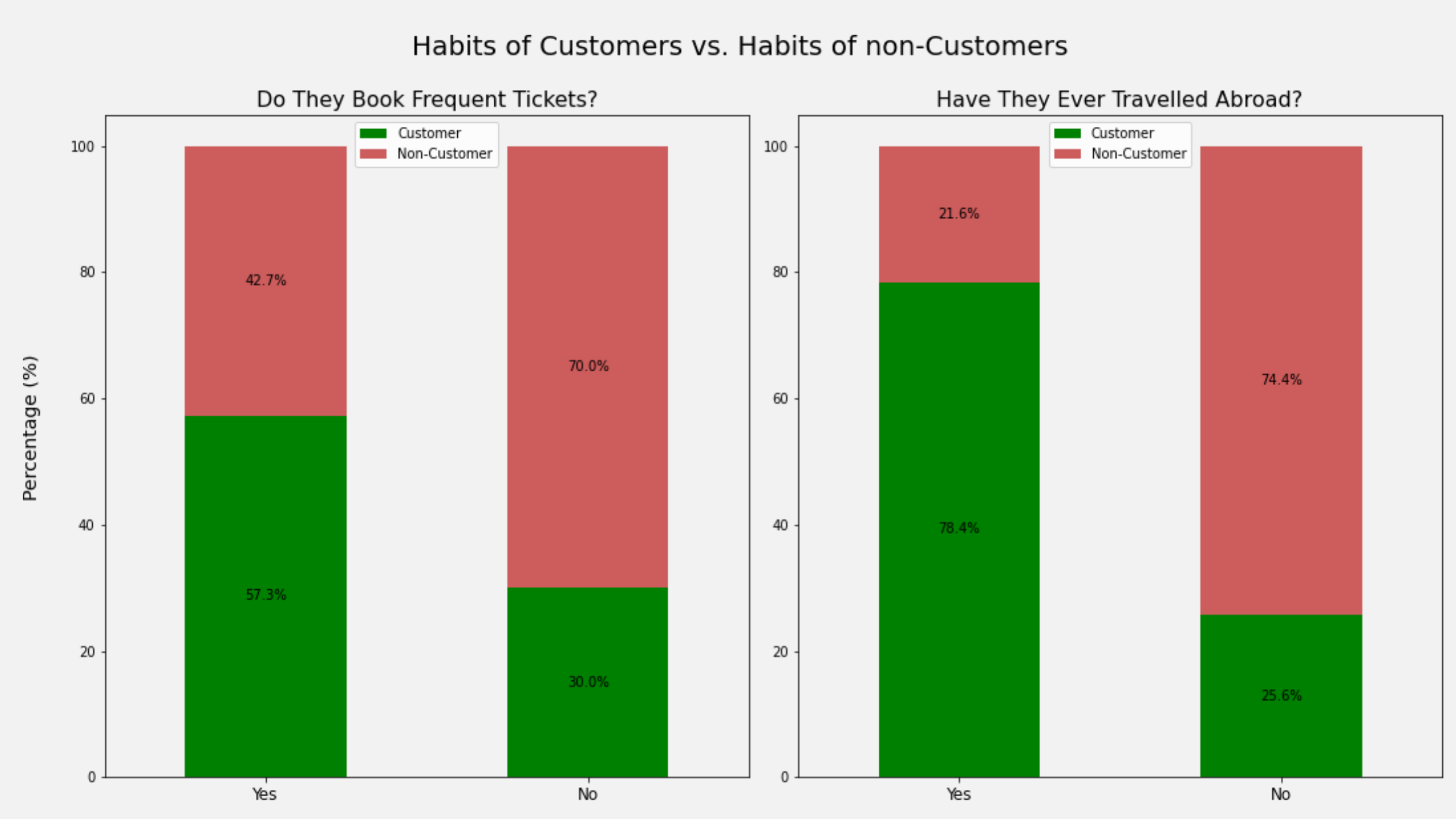
Background

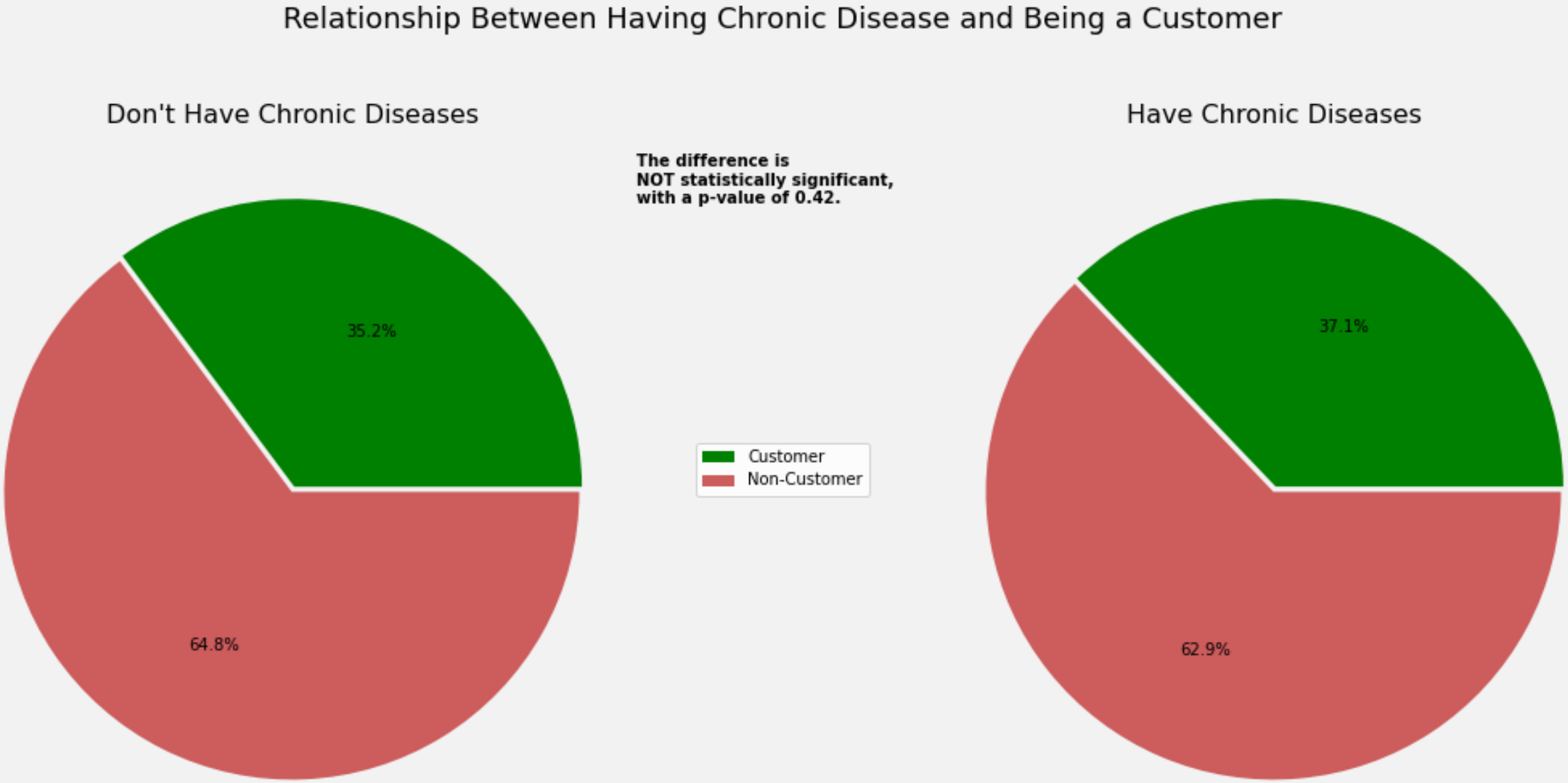
Travel Assured is a travel insurance company. Due to the COVID pandemic, they have had to cut their marketing budget by over 50%. It is more important than ever that they advertise in the right places and to the right people.

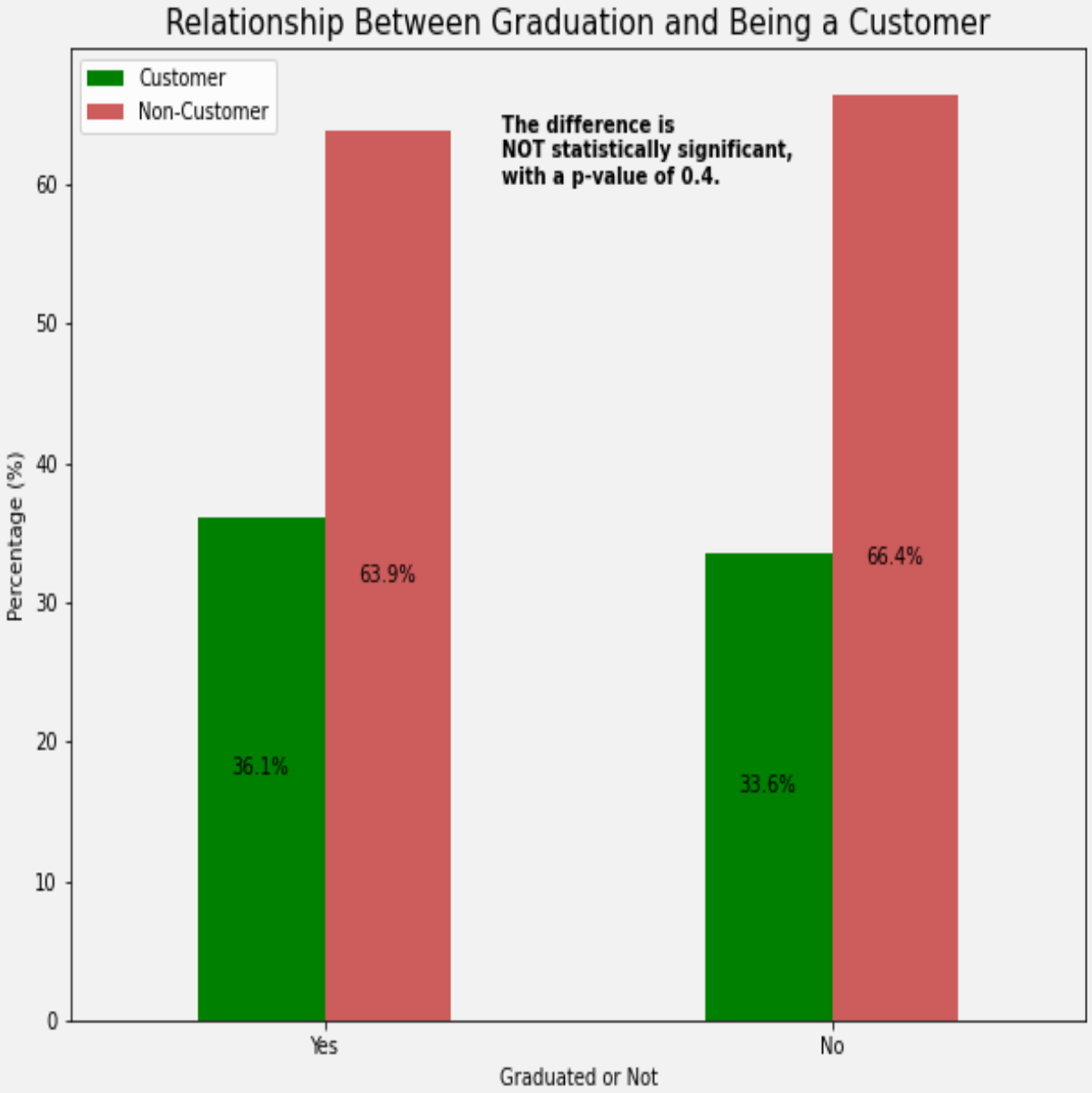
This case study is will analyze the data Travel Assured has on their current customers as well as people who got quotes but never bought insurance. With the objective of answering the customer's two questions:

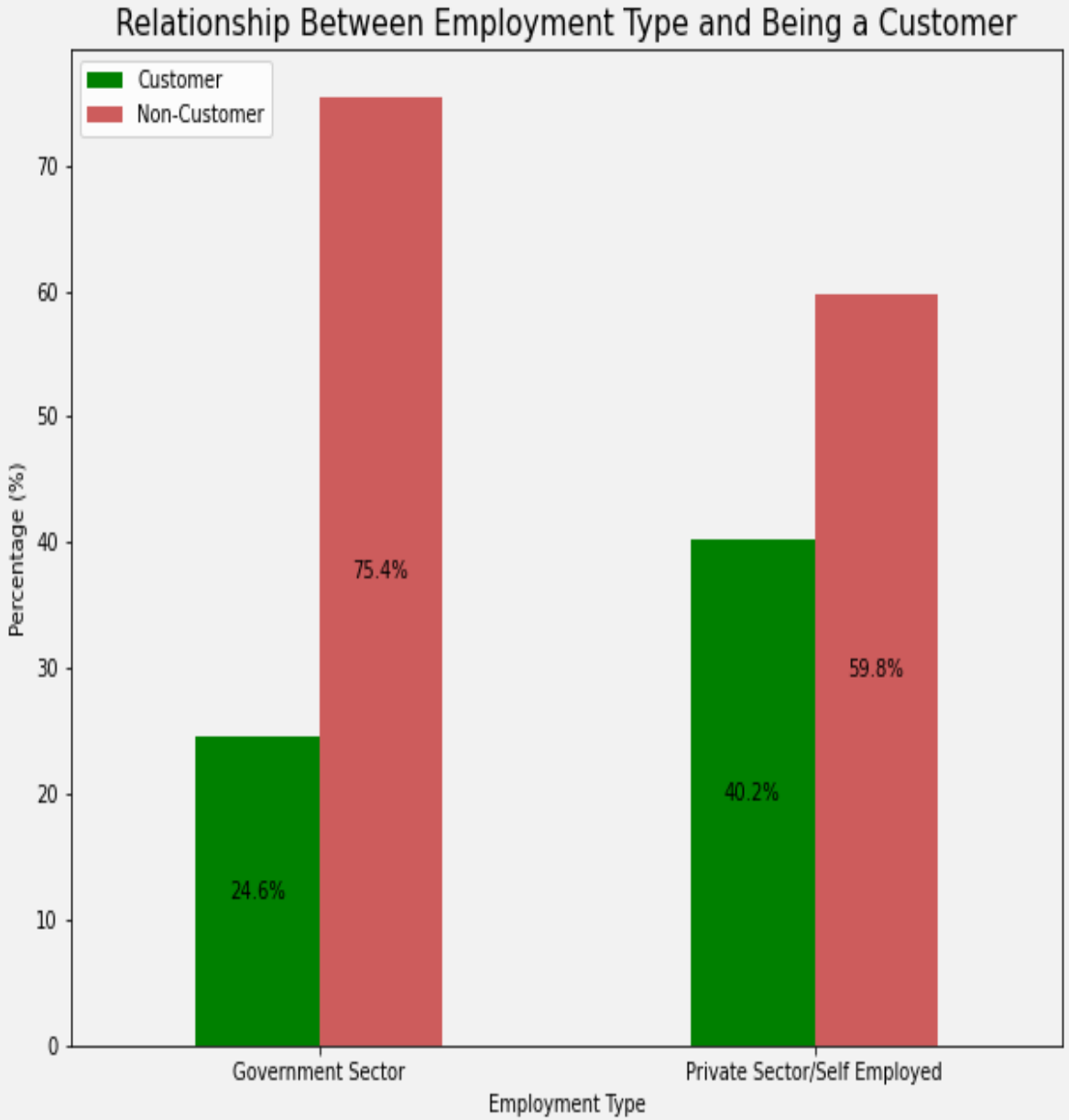
1. Are there differences in the travel habits between customers and non-customers?
2. What is the typical profile of customers and non-customers?

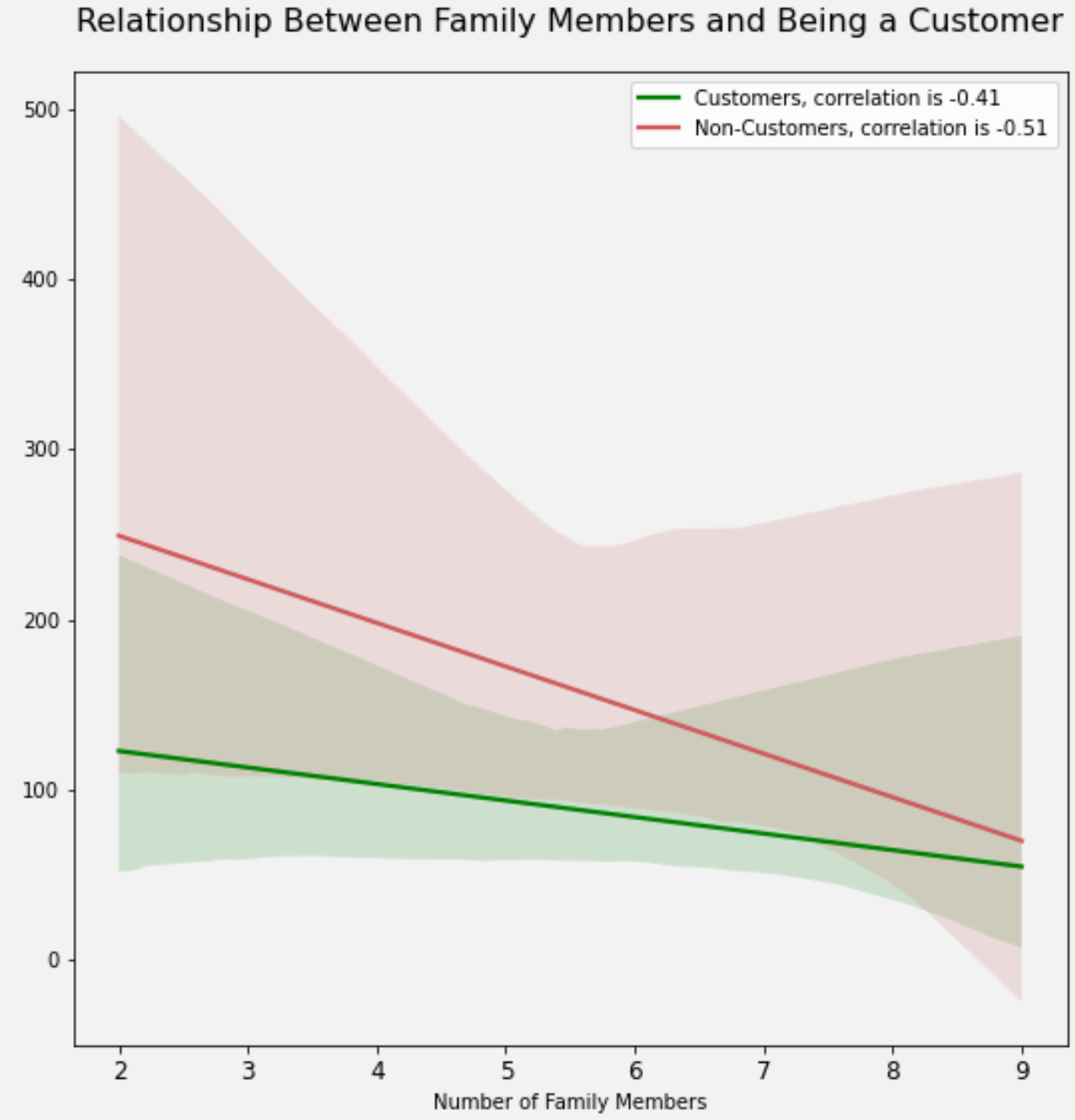
To view the python code used for this analysis, click here.

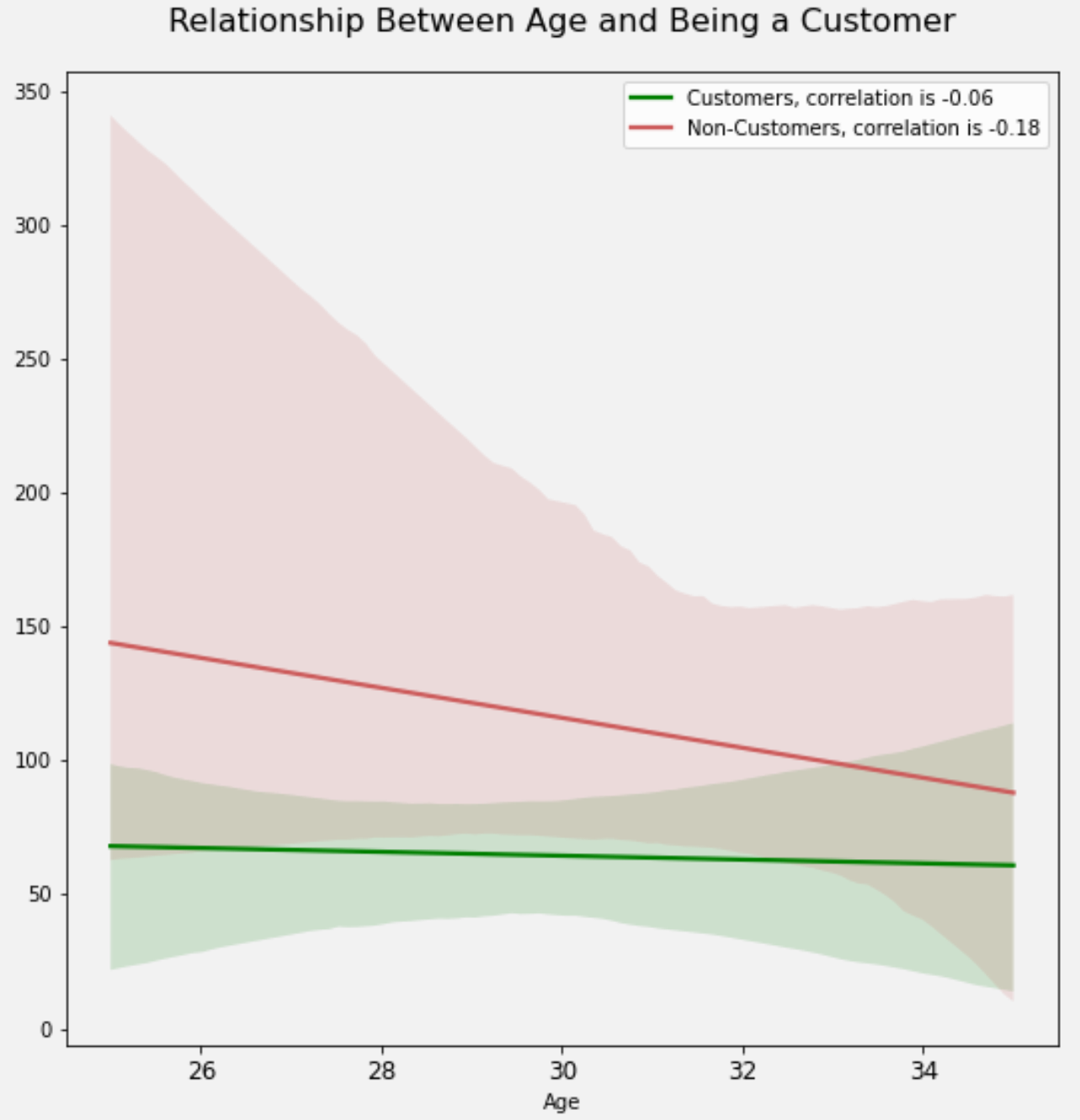

Habits of Customers vs. Habits of non-Customers
Do They Book Frequent Tickets?
Have They Ever Travelled Abroad?
Customer
Non-Customer
Percentage (%)
100
80
60
40
20
0
42.7%
57.3%
70.0%
30.0%
21.6%
78.4%
74.4%
25.6%
Yes
No

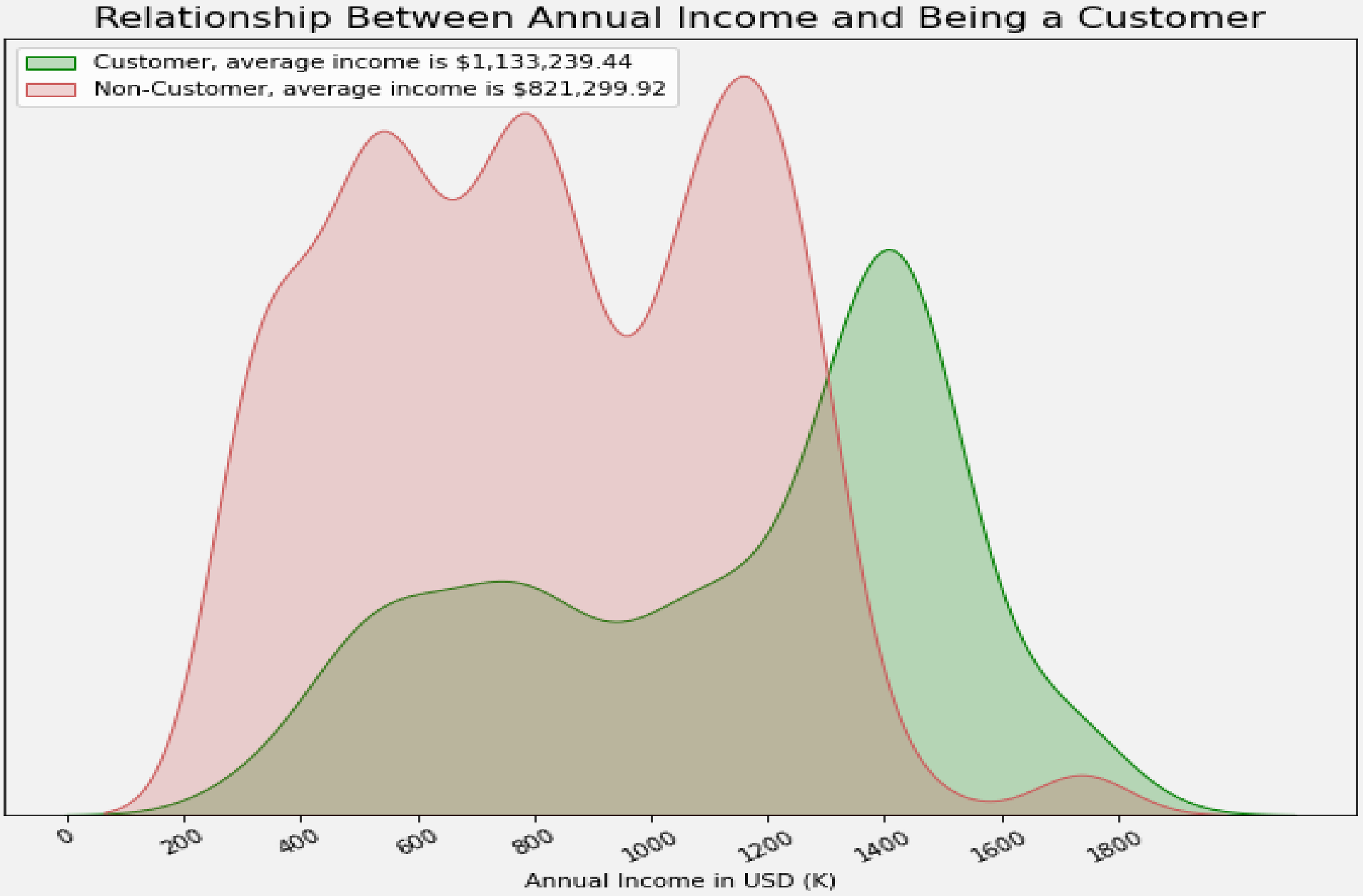

Relationship Between Having Chronic Disease and Being a Customer
Don't Have Chronic Diseases
35.2%
64.8%
The difference is
NOT statistically significant,
with a p-value of 0.42.
Customer
Non-Customer
Have Chronic Diseases
37.1%
62.9%


Relationship Between Graduation and Being a Customer
Customer
Non-Customer
The difference is
NOT statistically significant,
with a p-value of 0.4.
Percentage (%)
0
10
20
30
40
50
60
36.1%
63.9%
33.6%
66.4%
Yes
No
Graduated or Not


Relationship Between Employment Type and Being a Customer
Customer
Non-Customer
Percentage (%)
0
10
20
30
40
50
60
70
24.6%
75.4%
40.2%
59.8%
Government Sector
Private Sector/Self Employed
Employment Type


Relationship Between Family Members and Being a Customer
Customers, correlation is -0.41
Non-Customers, correlation is -0.51
500
400
300
200
100
0
2
3
4
5
6
7
8
9
Number of Family Members


Relationship Between Age and Being a Customer
Customers, correlation is -0.06
Non-Customers, correlation is -0.18
350
300
250
200
150
100
50
0
26
28
30
32
34
Age


Relationship Between Annual Income and Being a Customer
Customer, average income is $1,133,239.44
Non-Customer, average income is $821,299.92
0
200
400
600
800
1000
1200
1400
1600
1800
Annual Income in USD (K)

Key Findings:

Q1. Are there differences in the travel habits between customers and non-customers?

A1. Customers tend to travel more frequently and have higher chances to travelling abroad.

Q2. What is the typical profile of customers and non-customers?

A2. Compared to non-Customers, customers' profile tend to be:

- Those who travel more frequently and travelling abroad.
- Those who work in private sectors or self-employed.
- Those who earn more, especially more than 1.2 millions USD.

- As for these factors, they seem to have little to no significance in the difference between customers and non-customers: (Age - Graduation status - Health status - Family size)

Recommendations:

According to the findings in this analysis, for **Travel Assured** to get the best out of advertising with the limited budget, what should be done is:

- **Try to target:**
  - The people who travel abroad as they are more likely to be customers.
  - The people who are self-employed or work in private sectors.
  - Those who have fewer family members.

- **Do not waste resources on:**
  - Trying to target people according to their health, whether they have chronic diseases or not.
  - Trying to target a specific age or education level.

To view the python code used for this analysis, click here.