



## **Customer Retention**

Submitted by:  
Bramee Venkatesan

## **ACKNOWLEDGMENT**

This includes mentioning of all the references, research papers, data sources, professionals and other resources that helped you and guided you in completion of the project.

# INTRODUCTION

- Business Problem Framing

Customer satisfaction is one of the important key factors to get success in online shopping.

It includes a wide variety of products and its quality and price and return/ replacement policy and delivery speed etc.

It makes the customer to re-visit or re-purchase the E-comm shopping site for purchase the products from the store.

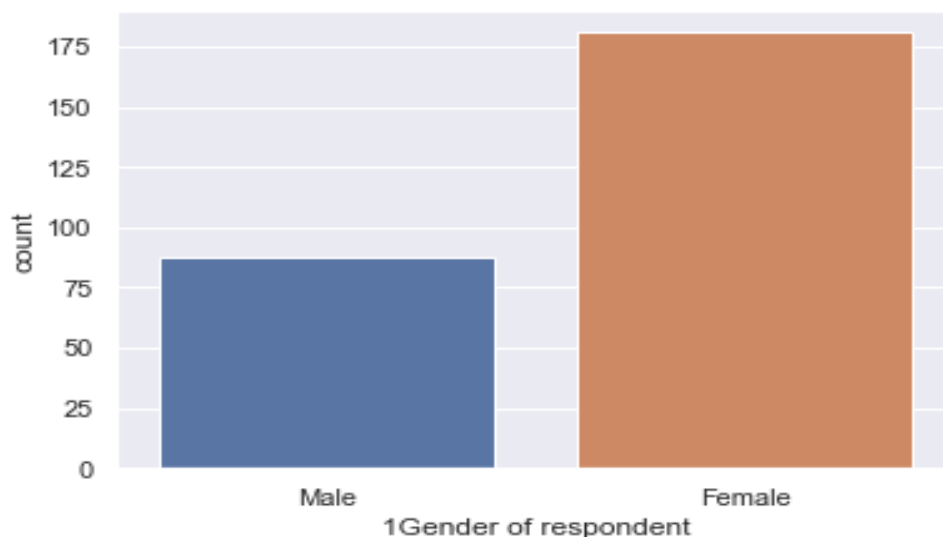
Generally, It is the process of engaging the existing customers to buy products from the store.

## Analytical Problem Framing

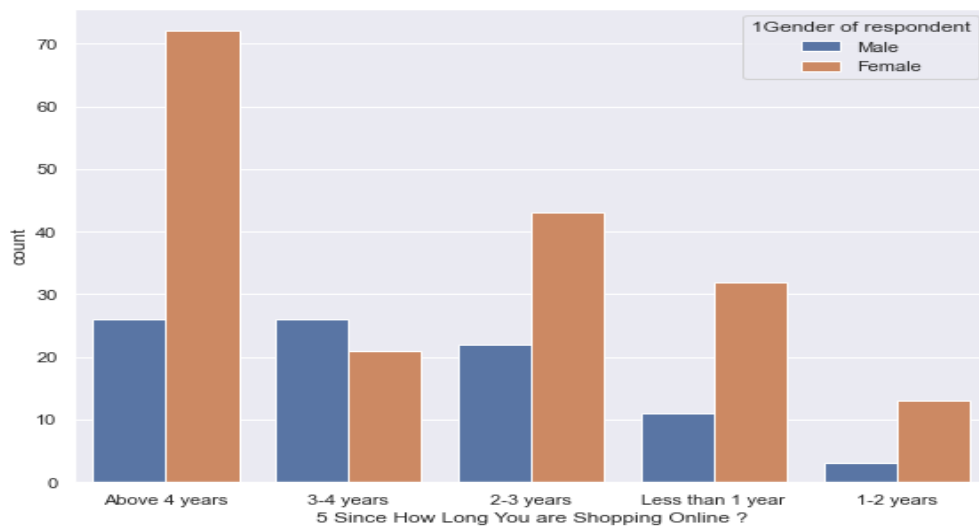
- Data Sources and their formats

The given task is here to provide a analysis on this topic, I can see that there are so many columns which indicates a different factors regarding customer shopping on E-comm site.

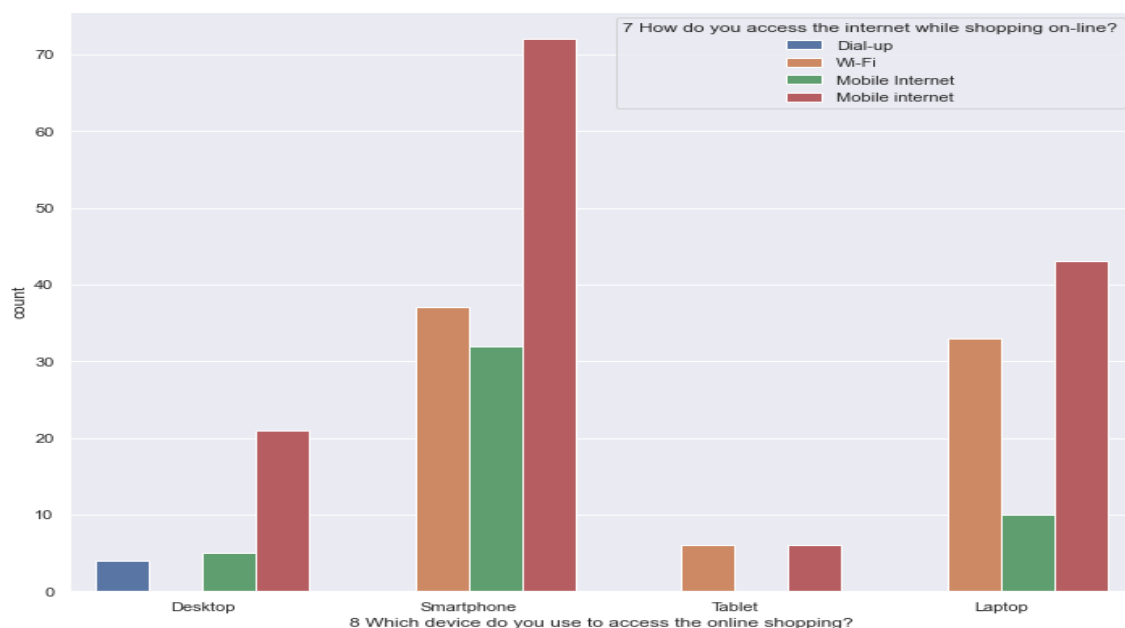
Most of the customers who do online shopping are **Females** than males in terms of Gender.



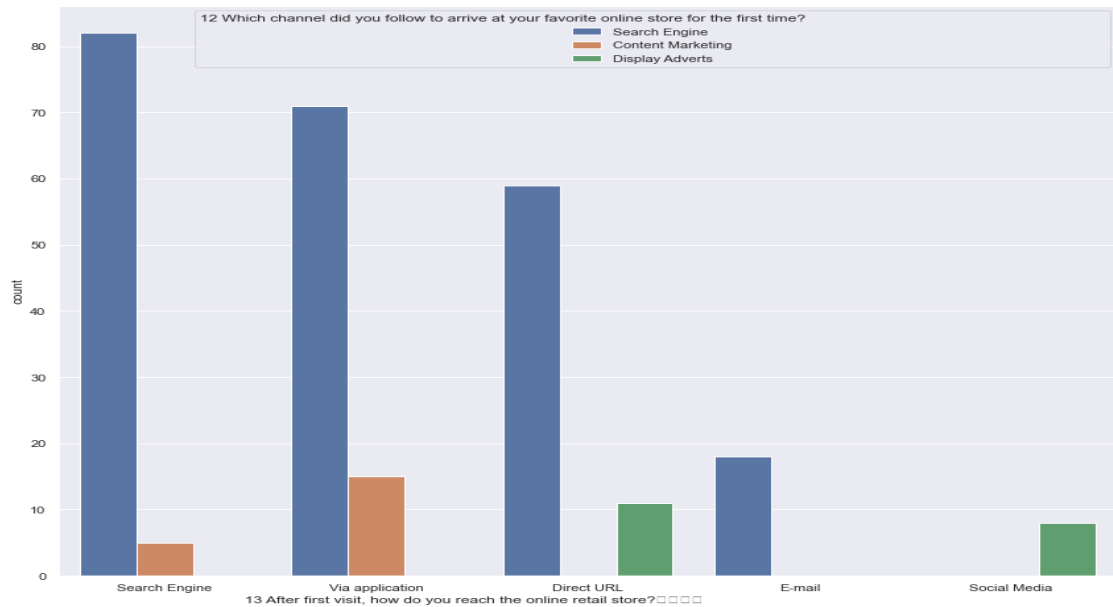
As online shopping is in trends from last 6-7 years, it used to take time for the people to get familiar on the site especially trust on the site which is very important. So, as they are getting used to it, the plot shows that most of the customers are actively using online shopping for **>4 years**.



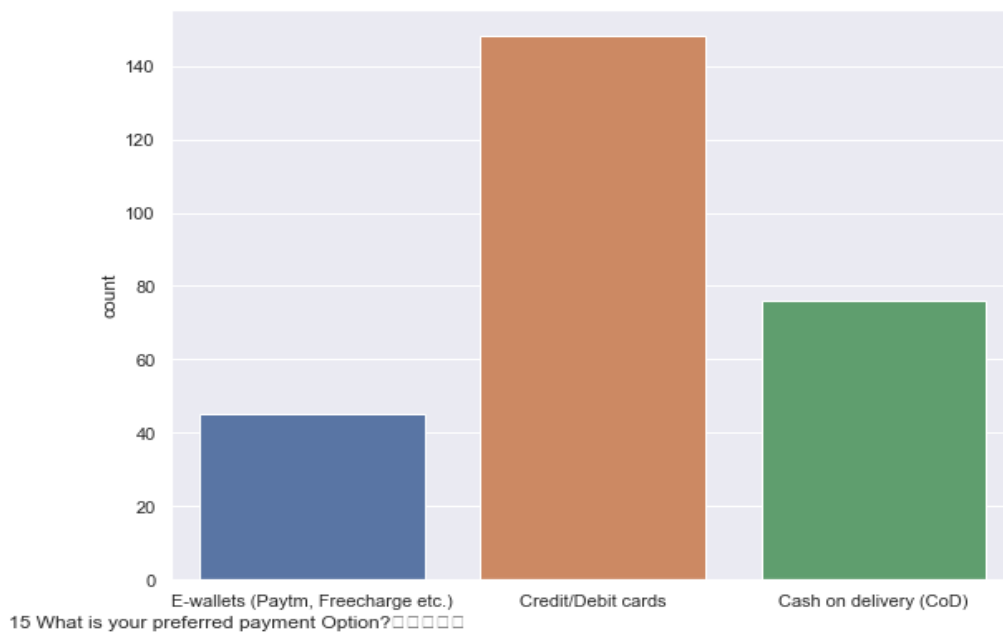
Customers prefer to use smartphones than desktop or laptop for online shopping as it is easy to carry and flexible and user friendly.



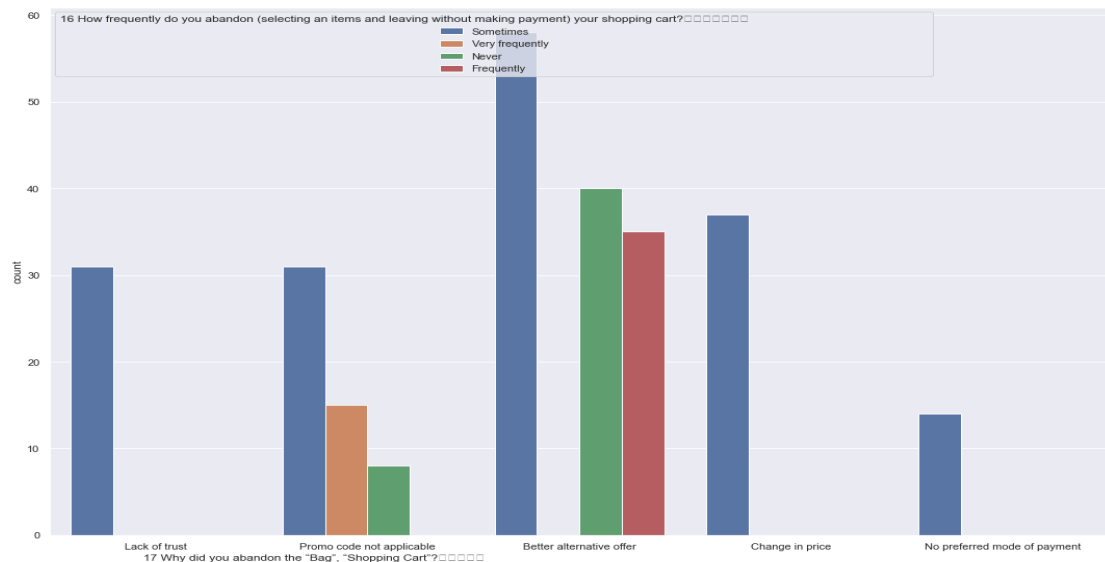
While visiting the store, Customers are using search engine more than content and AD's.



Important thing is about payment and most of the customers preferred to pay online through credit /debit cards and safe transaction as well and COD as well.

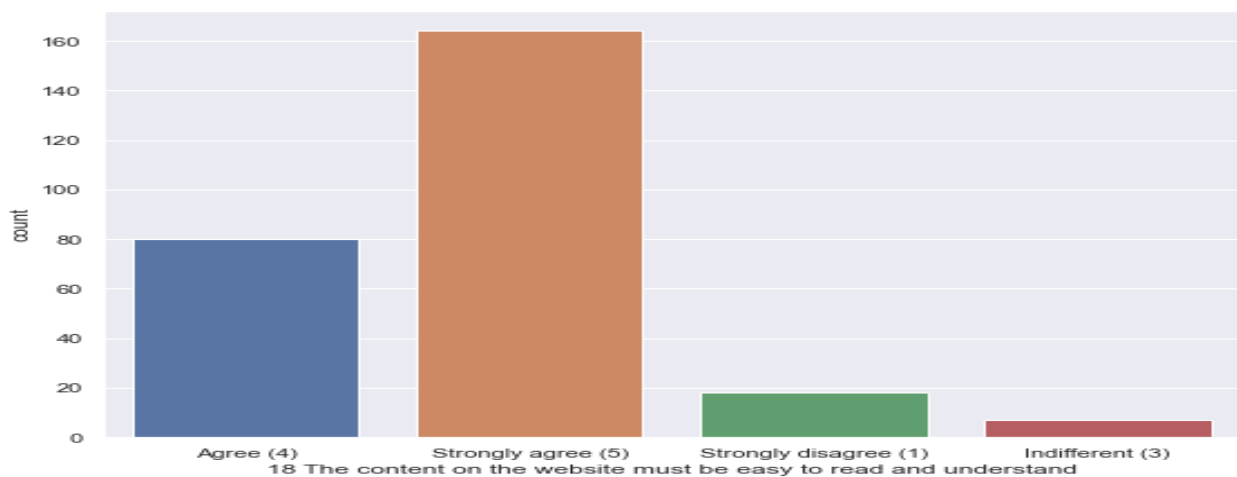


Most customers are expecting a good offer with good quality of products. If not, then they are abandoning the shopping cart and going for alternative offer where the needs of the customers are getting satisfied which is making the website to lose its customer.



- What and all we can do to make the customers to come back or make them stay?

1) Website should be easy to read and understand and it should be easily accessible but without data leakage like transactions.



2)Website loading and processing should be speed and site should be user-friendly for the customers.

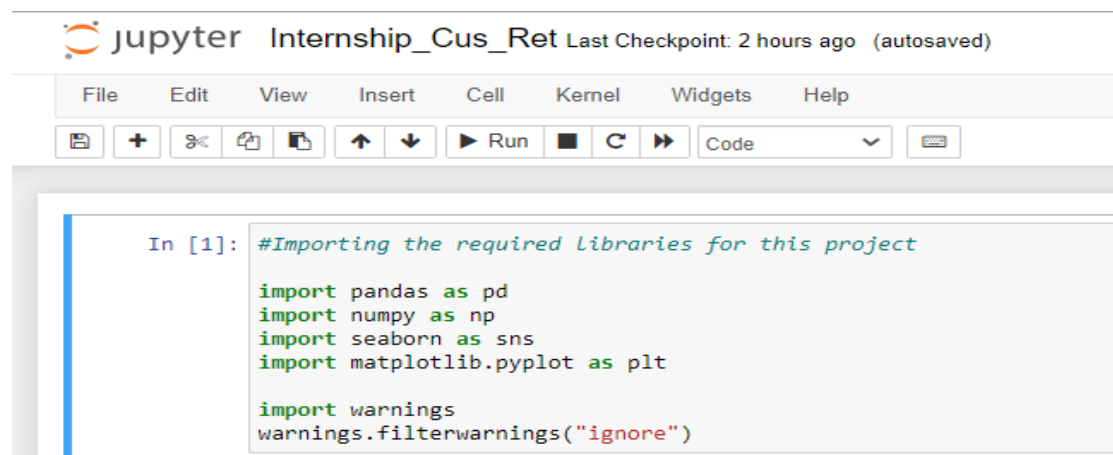
3)Customer's satisfaction is more important in terms of purchasing from Online shopping.

4) Some customer's felt that Return/replacement policy from the e-retailer is important for purchasing the products.

5)Site should offer a wide variety of products in – order to retain a customer to the site.

- Hardware and Software Requirements and Tools Used

Jupyter Notebook for the detailed description through visualization for understanding the data in a better way.

A screenshot of a Jupyter Notebook interface. The top bar shows the Jupyter logo and the file name 'Internship\_Cus\_Ret' with a status 'Last Checkpoint: 2 hours ago (autosaved)'. Below the top bar is a menu bar with 'File', 'Edit', 'View', 'Insert', 'Cell', 'Kernel', 'Widgets', and 'Help'. Under the menu bar is a toolbar with icons for file operations, navigation, and execution. The main area contains a code cell with the following Python code:

```
In [1]: #Importing the required libraries for this project

import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt

import warnings
warnings.filterwarnings("ignore")
```

Pandas is an open-source python library providing high performance data analysis tool by its powerful data structures.

It helps to shorten the procedure of handling the data with extensive set of features.

NumPy is most used package for scientific computing, and it is mostly used for multi-dimensional array of objects.

NumPy is mostly compatible with Python packages, Pandas, matplotlib.

Seaborn and matplotlib are the 2 python data visualization libraries which provides a stunning plot for visualizing the data in a plot.

## **CONCLUSION**

- **Key Findings and Conclusions of the Study**

In-order to retain the customer to back to the site, Websites should have easily accessible and limiting the process in Login/Register.

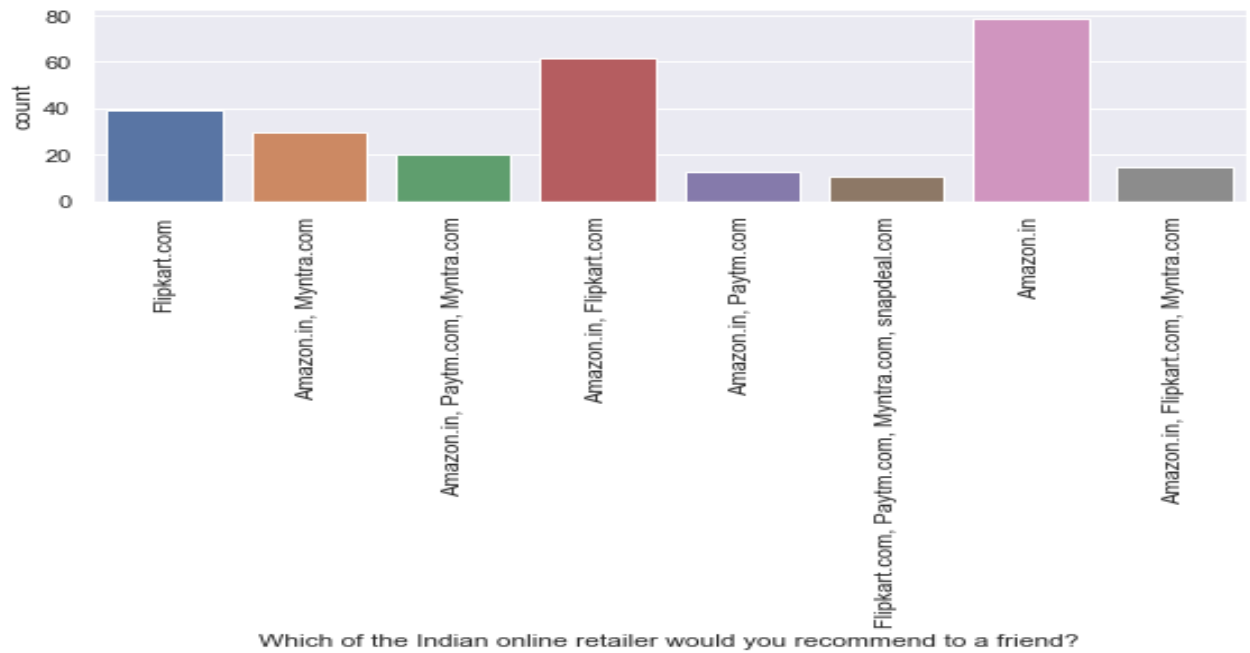
As most of the customers are females, Websites can spend a quality time on analytics to see what the customers has purchased often and their recently viewing items and how many items they have viewed that products etc.

Also, to attract a male customer, Website can give specific discount or offers to customers to retain them back.

Trust is an important factor which plays between customer's and website, transaction details can be encrypted safely to avoid data leakage.

Also, customer's prefer mode of payment is through CARDS and so website can give the option to users and the encrypted transaction details for secure checkout process in Online Shopping.





On comparing with many sites, most of the **customers are happy with service of Amazon and Flipkart** in terms of offer, speed delivery, return/replacements, user-friendly site and wide range of collections and so on.