



NAME OF THE PROJECT

Submitted by:  
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## **ACKNOWLEDGMENT**

I would like to express my special thanks of gratitude to the source [ngdata.com](http://ngdata.com) which helped me to accomplish this project.

## **INTRODUCTION**

- **What is Customer Retention?**

Customer retention refers to the activities and actions companies and organizations take to reduce the number of customer defections. The goal of customer retention programs is to help companies retain as many customers as possible, often through customer loyalty and brand loyalty initiatives. It is important to remember that customer retention begins with the first contact a customer has with a company and continues throughout the entire lifetime of the relationship.

- **Conceptual Background of the Domain Problem**

Customer satisfaction has emerged as one of the most important factors that guarantee the success of online store; it has been posited as a key stimulant of purchase, repurchase intentions and customer loyalty. A comprehensive review of the literature, theories and models have been carried out to propose the models for customer activation and customer retention.

- **Review of Literature**

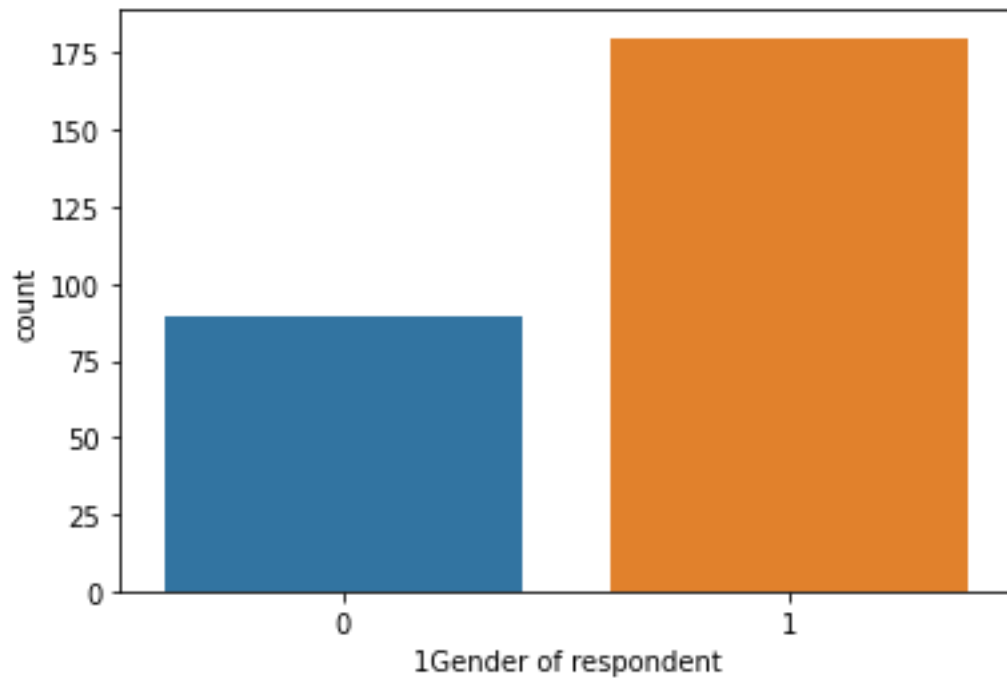
Customer acquisition, customer retention and customer development are the three elements that form a customer lifecycle. A customer is acquired into the company as a part of reaching the ambition to grow the business. Acquired customers form the base of customer retention – without any customers, there is no churn to prevent or value to enhance.

- **Motivation for the Problem Undertaken**

The aim of this project is to determine and understand customer patterns and their needs while shopping online from different websites. Five major factors that contributed to the success of an e-commerce store have been identified as: service quality, system quality, information quality, trust and net benefit. The research furthermore investigated the factors that influence the online customers repeat purchase intention. The combination of both utilitarian value and hedonistic values are needed to affect the repeat purchase intention (loyalty) positively. The data is collected from the Indian online shoppers.

## **Analytical Problem Framing**

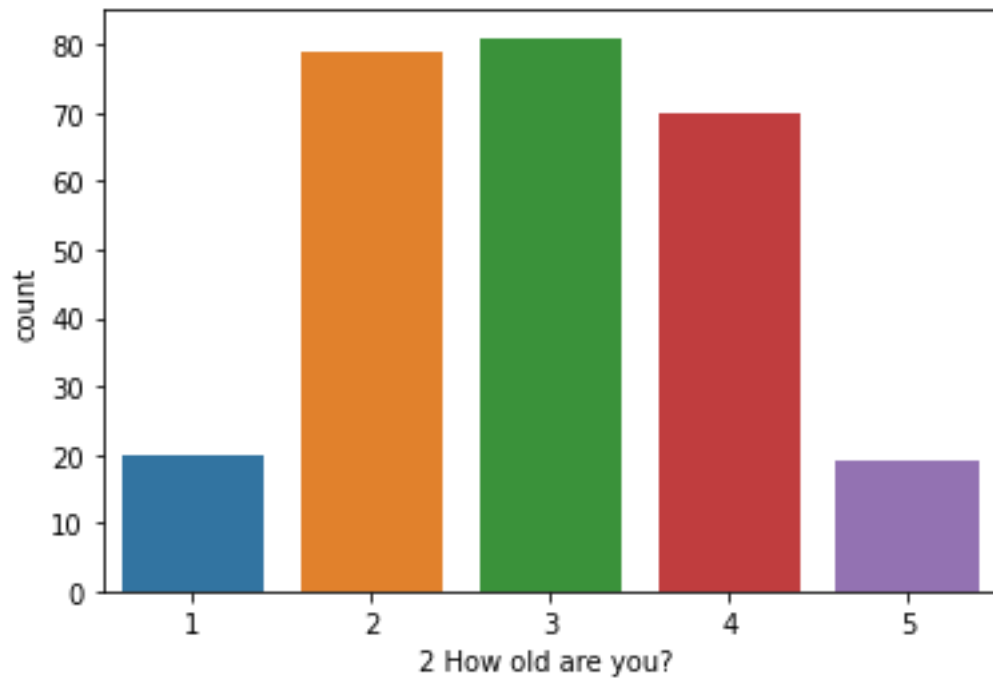
Our dataset consists of 269 rows and 71 columns, the dataset consists of object values and integer values. So, to get better analysis of our data, we will convert the object values in integer values by using LabelEncoder. Once we have converted the values in integer format, we will check if there any null values present in the dataset. Since there are no null values present in our dataset, we can continue with the graphical visualization for understanding the data better.



```
1    180
0     89
Name: 1Gender of respondent, dtype: int64
```

### Observations:

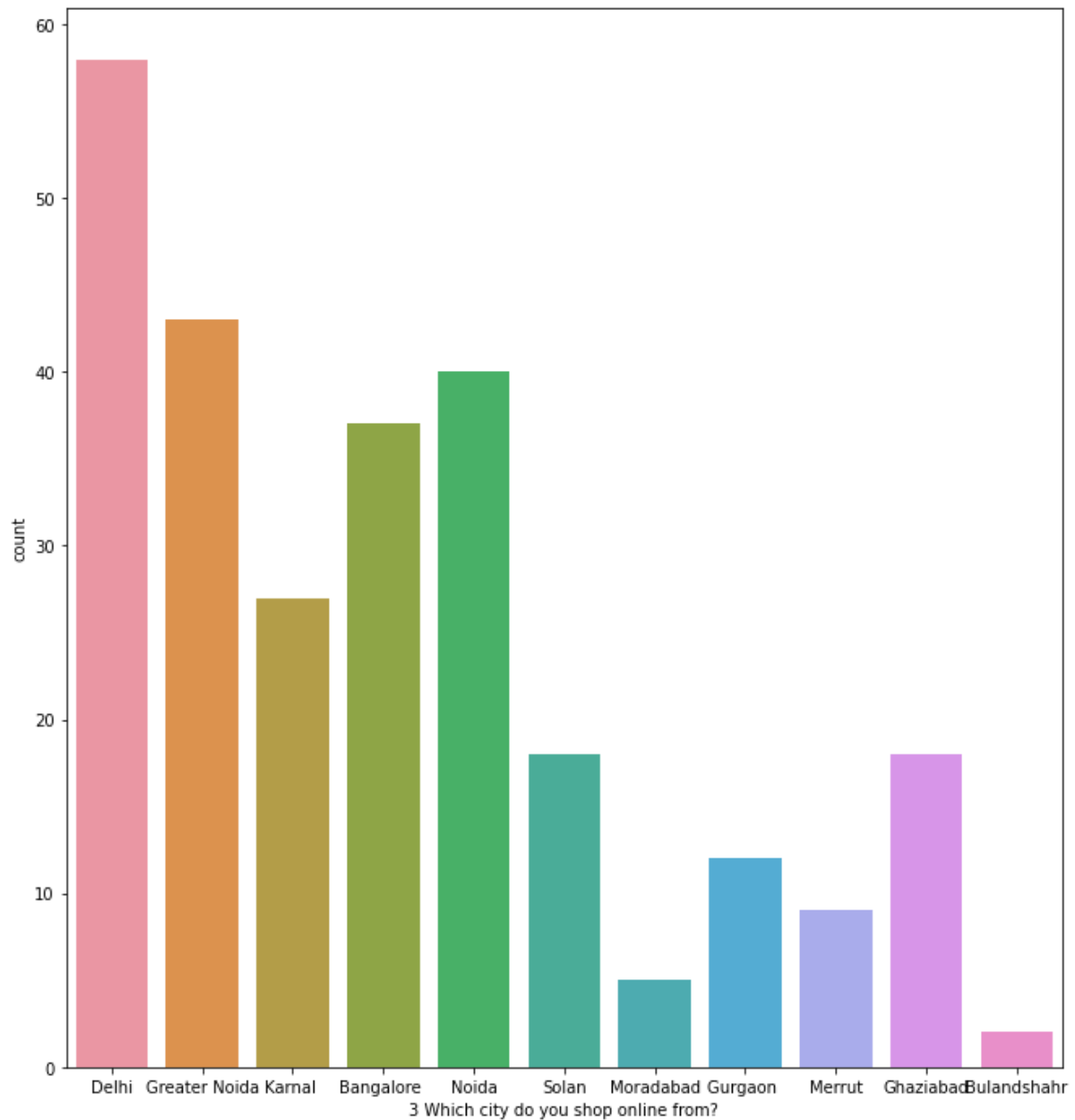
Here, female count of 181 is greater than male count of 89



```
3      81
2      79
4      70
1      20
5      19
Name: 2 How old are you? , dtype: int64
```

**Observation:**

Majority, 81 of the customers are from index column 3.



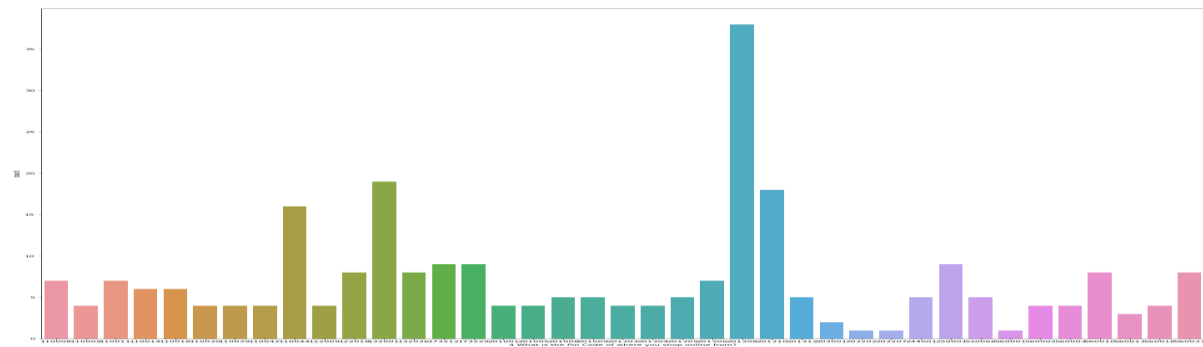
```

Delhi          58
Greater Noida  43
Noida          40
Bangalore      37
Karnal         27
Ghaziabad      18
Solan          18
Gurgaon        12
Merrut         9
Moradabad       5
Bulandshahr    2
Name: 3 Which city do you shop online from?, dtype: int64

```

### Observation:

Majority, 58 of the customers placed the order from Delhi city.



```

201308      38
132001      19
201310      18
110044      16
173229       9
173212       9
250001       9
122018       8
560037       8
132036       8
560010       8
110011       7
110008       7
201306       7
110014       6
110018       6
201008       5
201009       5
201305       5
201312       5
244001       5
530068       5
201005       4
110009       4
110042       4
110039       4
110030       4
201304       4
122009       4
201303       4
560018       4
201001       4
560003       4
560002       4
560013       3
203001       2
203207       1
560001       1
203202       1

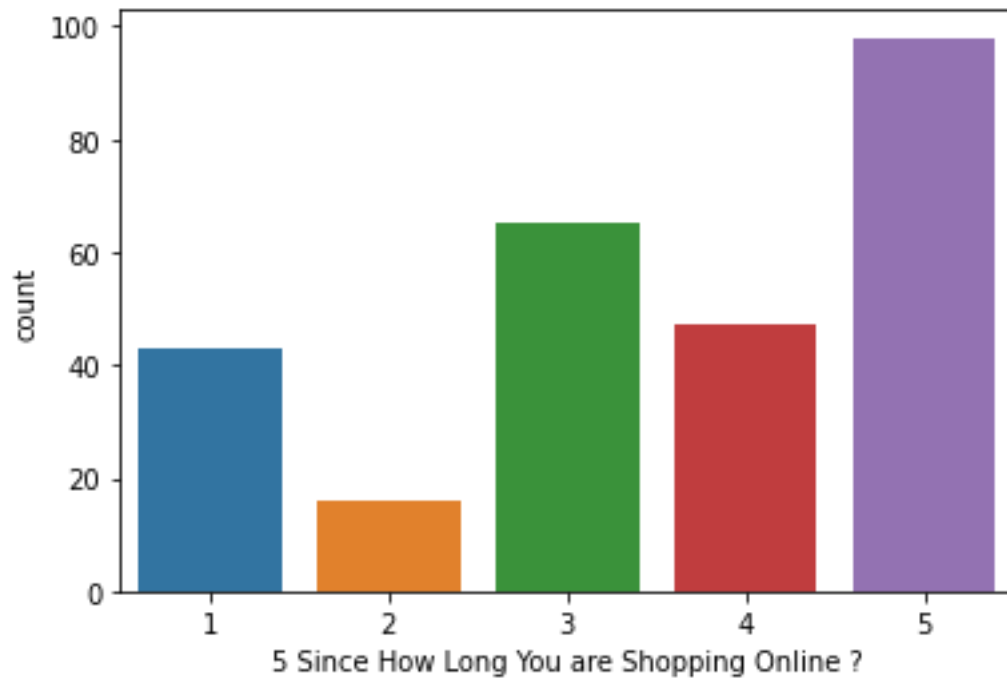
```

Name: 4 What is the Pin Code of where you shop online from?, dtype: int64

## Observation:

Majority, 38 of the customers placed an order from the pincode 201308.





```
5    98
3    65
4    47
1    43
2    16
Name: 5 Since How Long You are Shopping Online ?, dtype: int64
```

**Observation:**

Majority, 98 customers are shopping for 5 years.

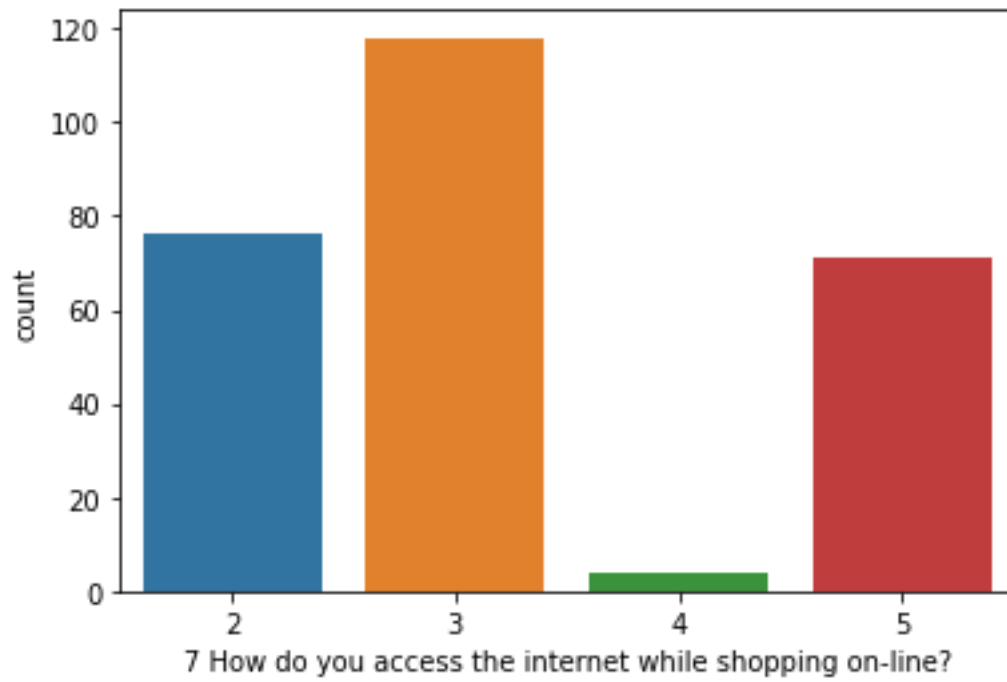


```
1    114
4     63
5     53
2     29
3     10
```

```
Name: 6 How many times you have made an online purchase in the past 1 y
ear?, dtype: int64
```

### Observation:

Majority 114 of the customers have made less than 10 times online purchase in past 1 year

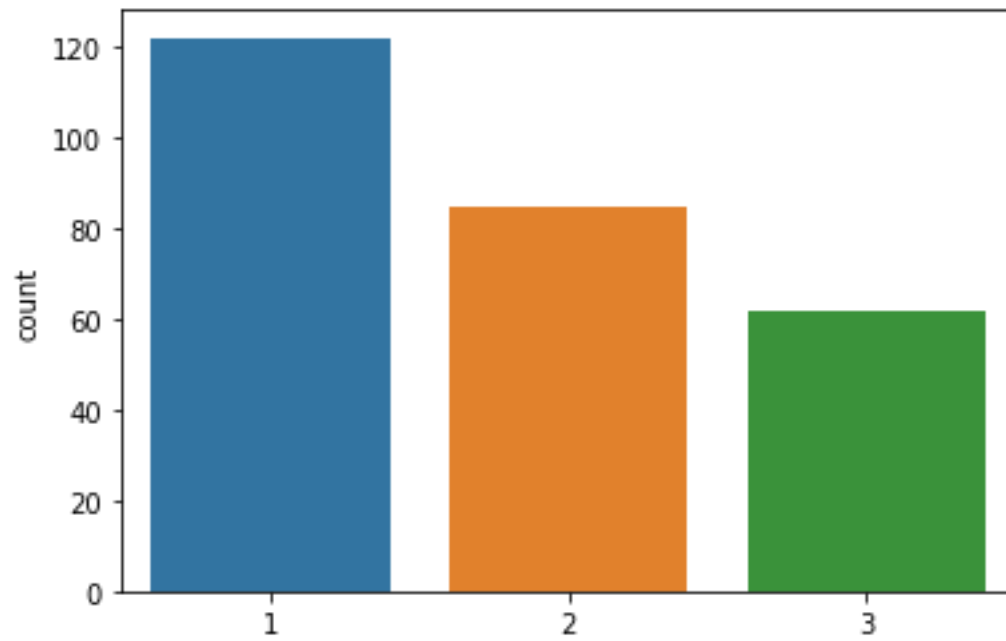


```
3    118
2     76
5     71
4       4
```

Name: 7 How do you access the internet while shopping on-line?, dtype: int64

### Observation:

Majority, 118 customers use 3<sup>rd</sup> index column while shopping online.



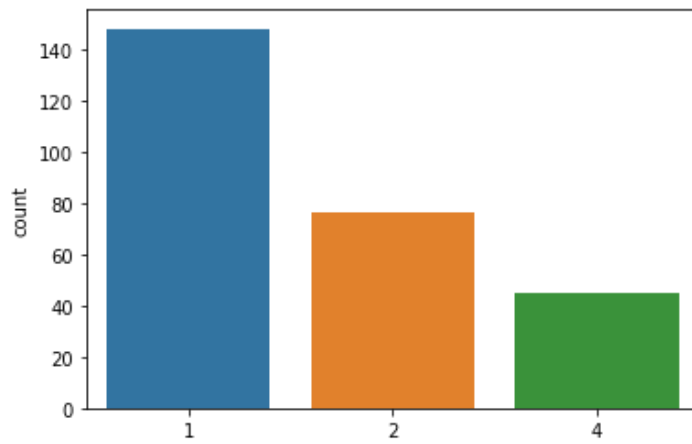
10 What is the operating system (OS) of your device?□□□□

```
1    122
2     85
3     62
```

```
Name: 10 What is the operating system (OS) of your device?\t\t\t\t
, dtype: int64
```

### Observation:

Majority, 122 customers device operating system is 1<sup>st</sup> index column.



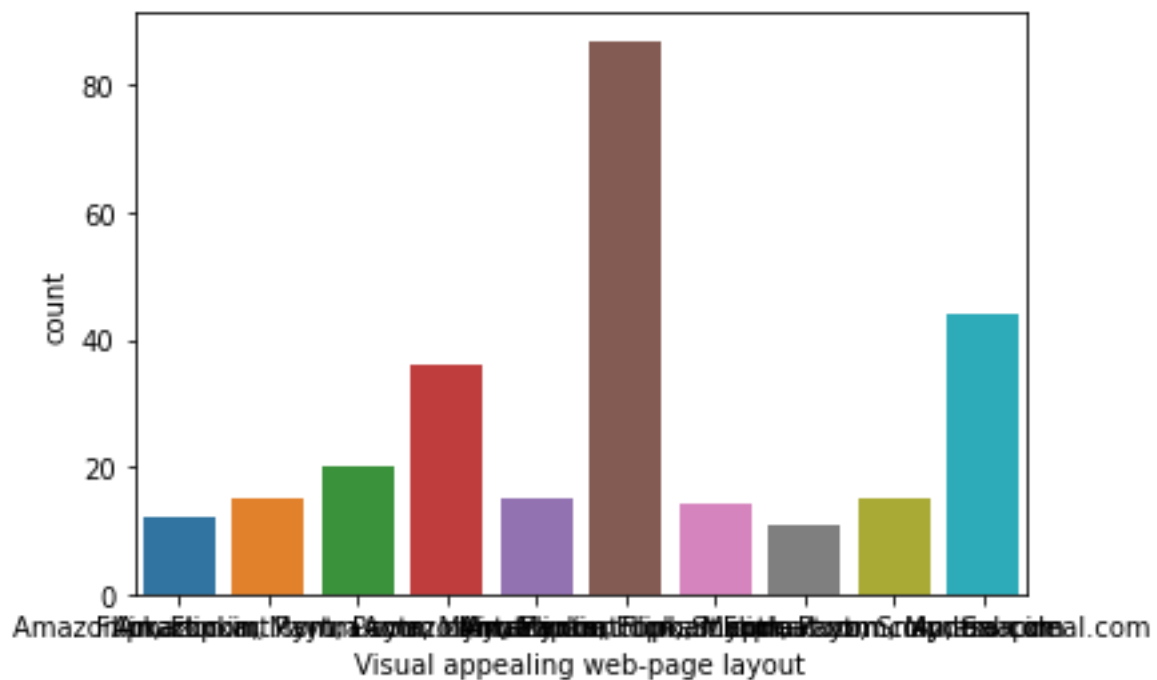
15 What is your preferred payment Option?□□□□□

```
1    148
2     76
4     45
```

```
Name: 15 What is your preferred payment Option?\t\t\t\t\t
, dtype: int64
```

### Observation:

According to the data, 148 customers choose the 1st payment option the most.



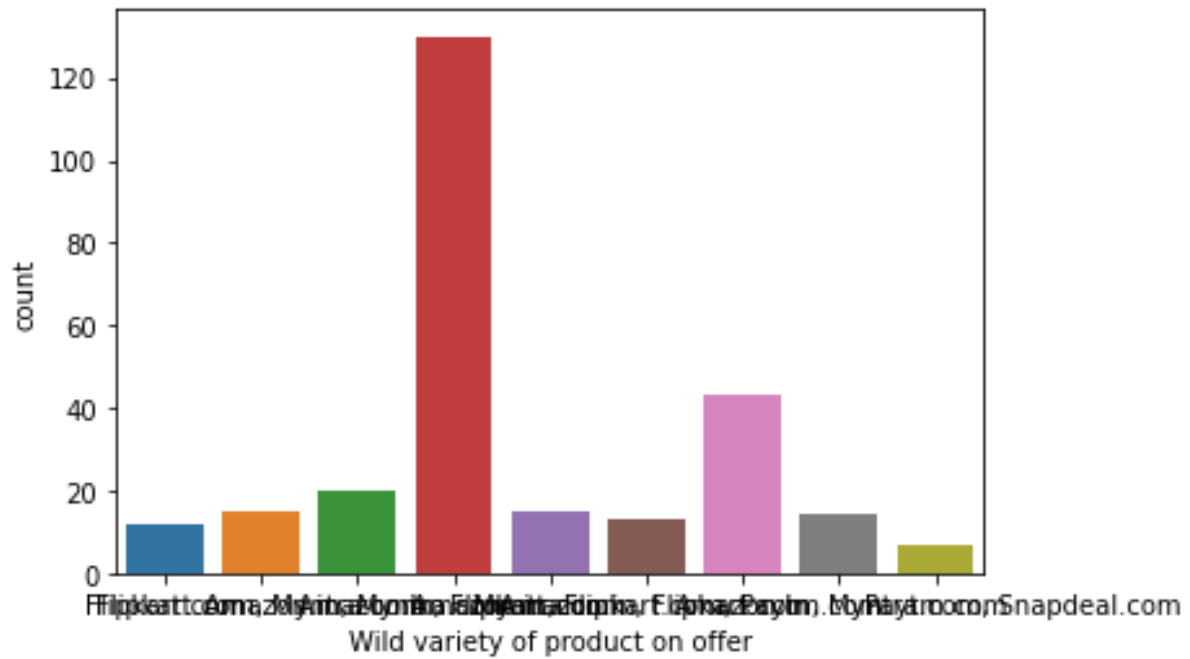
```

Amazon.in, Flipkart.com 87
Amazon.in 44
Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com 36
Amazon.in, Paytm.com, Myntra.com 20
Myntra.com 15
Flipkart.com, Myntra.com 15
Amazon.in, Myntra.com 15
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com 14
Flipkart.com 12
Amazon.in, Flipkart.com, Paytm.com, Snapdeal.com 11
Name: Visual appealing web-page layout, dtype: int64

```

### Observation:

87 customers think Amazon.in and Flipkart.com has Visual appealing web-page layout



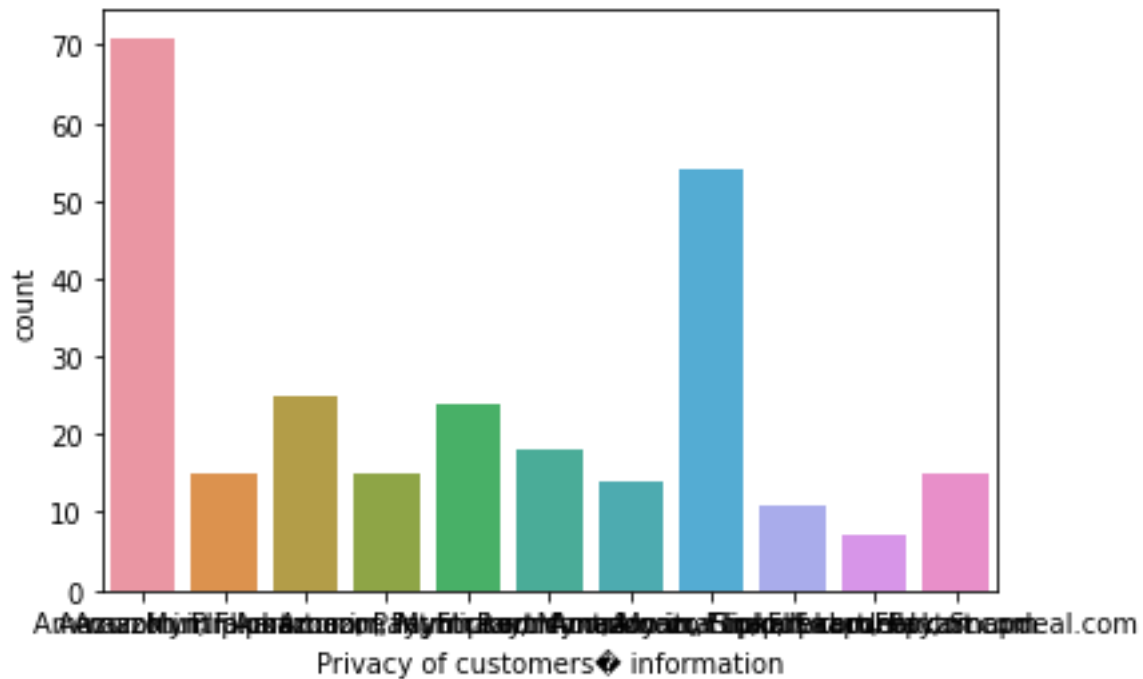
```

Amazon.in, Flipkart.com      130
Amazon.in                   15
Amazon.in, Myntra.com       20
Myntra.com                  12
Flipkart.com, Myntra.com     15
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com 14
Amazon.in, Flipkart.com, Paytm.com 13
Flipkart.com                12
Paytm.com                   7
Name: Wild variety of product on offer, dtype: int64

```

### Observation:

130 customers think Amazon.in and Flipkart.com have Wild variety of product on offer.



```

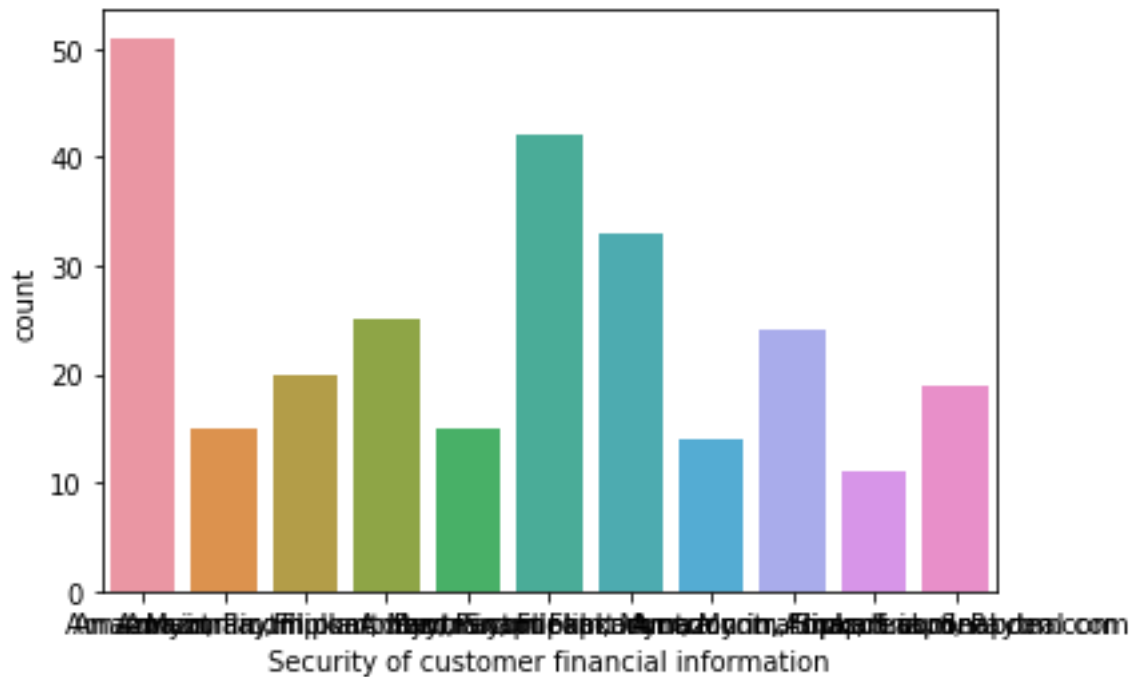
Amazon.in 71
Amazon.in, Flipkart.com 54
Amazon.in, Flipkart.com, Myntra.com 25
Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com 24
Paytm.com 18
Myntra.com 15
Amazon.in, Paytm.com 15
Flipkart.com 15
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com 14
Amazon.in, Flipkart.com, Paytm.com 11
Amazon.in, Flipkart.com, Snapdeal.com 7
Name: Privacy of customers information, dtype: int64

```

### Observation:

71 customers think Amazon.in has highest Privacy of customers information.





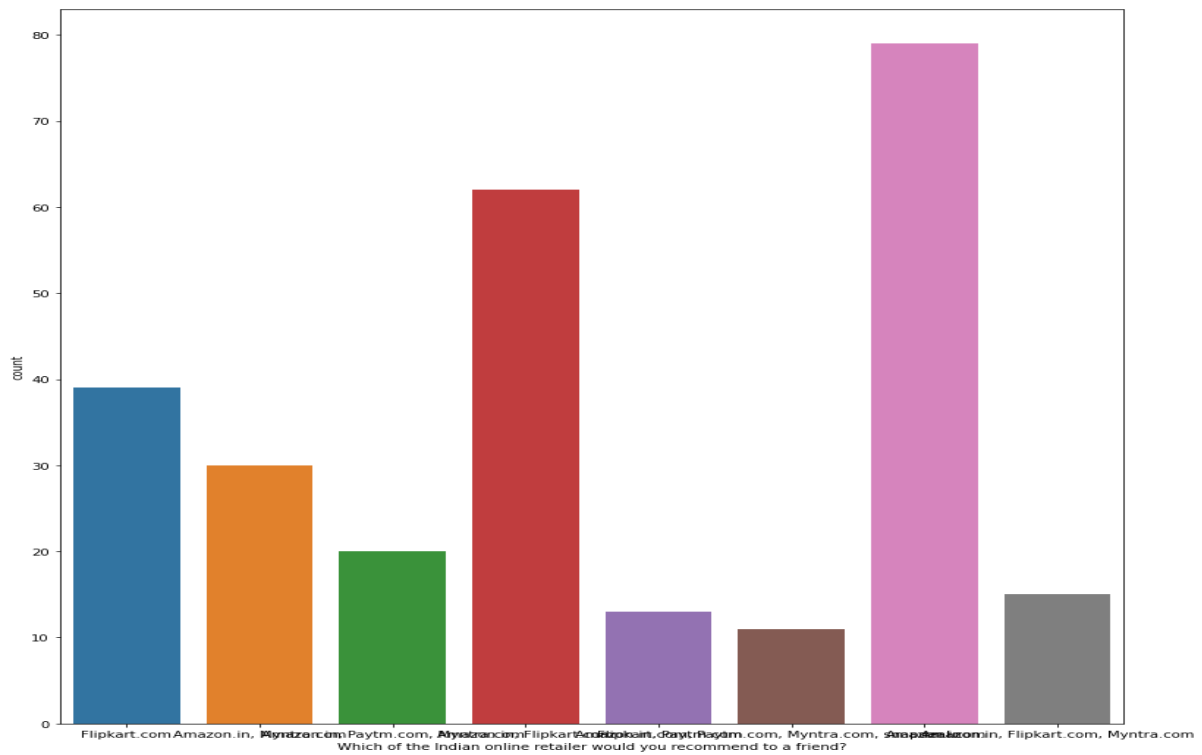
```

Amazon.in 51
Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com 42
Flipkart.com 33
Amazon.in, Flipkart.com, Snapdeal.com 25
Amazon.in, Flipkart.com 24
Amazon.in, Paytm.com, Myntra.com 20
Amazon.in, Snapdeal.com 19
Myntra.com 15
Paytm.com 15
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com 14
Amazon.in, Flipkart.com, Paytm.com 11
Name: Security of customer financial information, dtype: int64

```

### Observation:

51 customers think Amazon.in has highest Security of customer financial information.



```

Amazon.in 79
Amazon.in, Flipkart.com 62
Flipkart.com 39
Amazon.in, Myntra.com 30
Amazon.in, Paytm.com, Myntra.com 20
Amazon.in, Flipkart.com, Myntra.com 15
Amazon.in, Paytm.com 13
Flipkart.com, Paytm.com, Myntra.com, snapdeal.com 11
Name: Which of the Indian online retailer would you recommend to a friend?, dtype: int64

```

## Observation:

Majority, 79 customers agree to Amazon.in to recommend to a friend.

## **CONCLUSION**

Customer retention was determined as the way to keep the customers in house, maintain the customer relationship and the improvement of the level of customer service. The improvement of the level of customer service was seen as the end result of the activities the customer dissatisfaction causes.

### **Limitations of this work and Scope for Future Work**

We are able to properly analyse the valuable feedback of the customers but given, the dataset was very small as it may result in bias understanding. If we are able to increase the feedbacks from more customers all over it would provide a great understanding of the strategies we will have to use to improve customer retention.