

FINDINGS OF CUSTOMER RETENTION DATASET:-

INTRODUCTION:-

The customer retention definition in marketing is the process of engaging existing customers to continue buying products or services from your business. It's different from customer acquisition or lead generation because you've already converted the customer at least once.

The best customer retention tactics enable you to form lasting relationships with consumers who will become loyal to your brand. They might even spread the word within their own circles of influence, which can turn them into brand ambassadors.

The Importance of Customer Retention for an Online Business :-

You might have heard that it's easier and less expensive to retain customers than to acquire them. The most recent statistics indicate that it's true.

For one thing, you'll spend five times less money on customer retention.

Additionally, at best, your probability of selling to an existing customer is at least 40 percent more likely than converting someone who has never bought from you before.

Existing customers also spend 31 percent more than new leads, and when you release a new product, your loyal customers are 50 percent more likely to give it a shot.

Those statistics should prove sufficient to compel you to build and test out a customer retention strategy.

How to Calculate Your Customer Retention Rate:-

Companies can calculate their customer retention rates in different ways. It all depends on what period of time you're examining, but many marketers use too many variables

. Let's say that you have 2,000 existing customers over a period of two months. During that same period, 900 of them return to buy something else from you. Those are the two numbers that will allow you to calculate your customer retention rate.

However, you have to discount any new customers you bring on during those two months. They're not part of the equation. You should only count the people who bought something from you prior to the two-month start date among your existing customers.

If you're measuring your customer retention rate from January 1 to February 28, you would take into consideration the customers who bought from you prior to January 1. If a new customer buys from you on January 15, he or she doesn't count.

EXPLORATORY DATA ANALYSIS:-

1. Checking the missing values.
2. Checking for numerical columns.
3. Checking for the distribution of numerical variables.
4. Checking for Categorical variables.
5. Types of categorical variables.

1. Checking the Missing Value:-

Missing value can be checked by the following Python Code:-

```
Missing_value=[feature for feature in data.columns
```

```
if data[feature].isnull().sum()>1]
```

```
Missing_value
```

Observation:- There are no missing values present in the database.

2. Checking the Numerical Columns:-

Numerical values can be checked using the following python code:-

```
NumericalFeature=[feature for feature in data.columns if data[feature].dtypes!="O"]
```

```
data[NumericalFeature]
```

Observation:-

There are 1 numerical values present in the dataset.

3.Checking the Categorical Variable:-

Categorical variable can be checked using the following python code

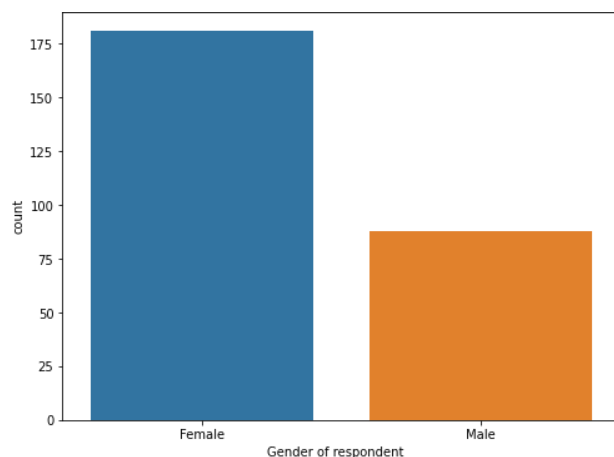
```
discreteFeature=[feature for feature in data.columns if feature not in numerical_feature]
```

```
data[discreteFeature]
```

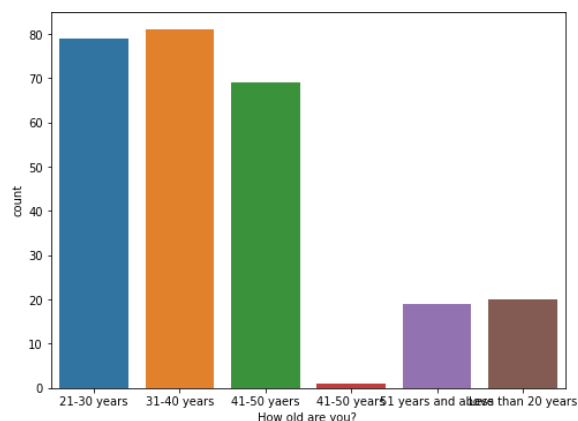
Observation:-

There are 70 categorical values present in dataset.

Data Visualisation:-



Observation:- There are 181 female and 88 males.



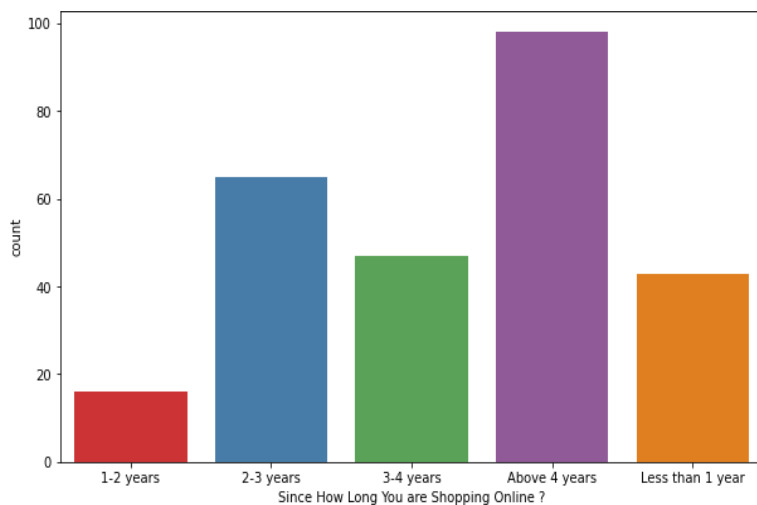
Observations:-

1. There are 81 peoples in age between 31 and 40 years.
2. there are 70 peoples in the age between 41 and 50 years.
3. there are 20 peoples in less than 20 years
4. There are 19 peoples 51 years and above.



Observations:-

1. 58 people shop online from Delhi.
2. 43 people shop online from Greater Noida.
3. 40 people shop online from Noida.
4. 27 People shop online from Karnal.
5. 12 People shop online from Gurgaon.
6. 9 People shop online from Meerut.
7. 5 People shop online from Moradabad.
8. People shop online from Bulandshahar.
9. 18 people shop online from Ghaziabad



Observation:-

- There are 98 people are shopping online above 4 years.
- There are 65 people are shopping online between 2 and 3 years.
- There are 47 peoples are shopping online between 3 and 4 years.
- There are 43 peoples are shopping online less than 1 year.
- There are 16 peoples are shopping online in between 1 and 2 years.

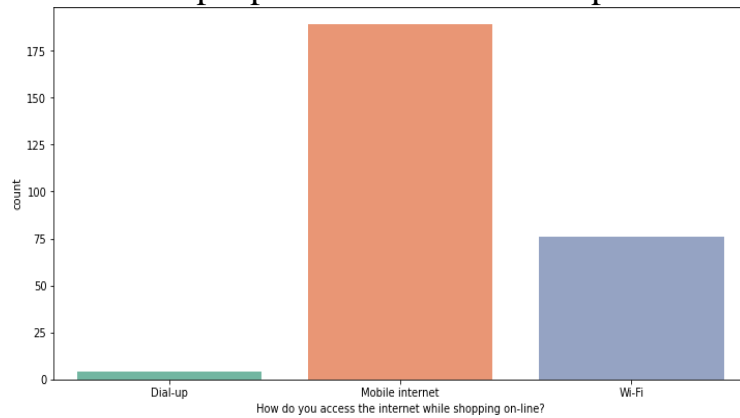


Observation:-

1. There are 114 people have made online purchase less than 10 times
2. There are 63 peoples have made online purchase in between 31 and 40 times.
3. There are 47 peoples have made online purchase 41 times and above
4. There are 29 peoples have made online purchase 11-20 times
5. There are 10 peoples have made online purchase less than 10 times

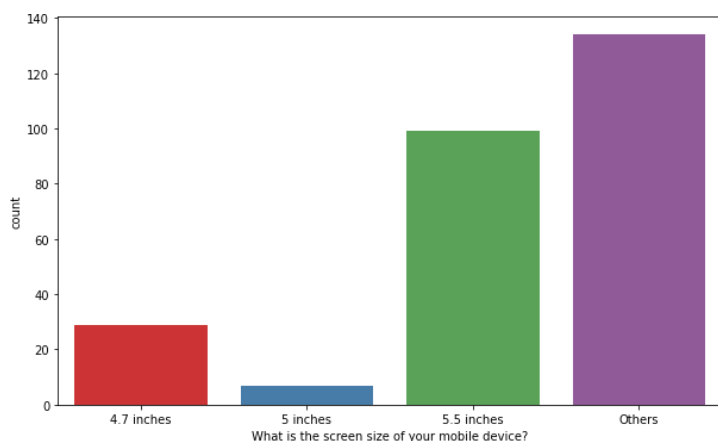
21-30 times.

6. there are 6 peoples have made online purchase 42 times and above.



Observation:-

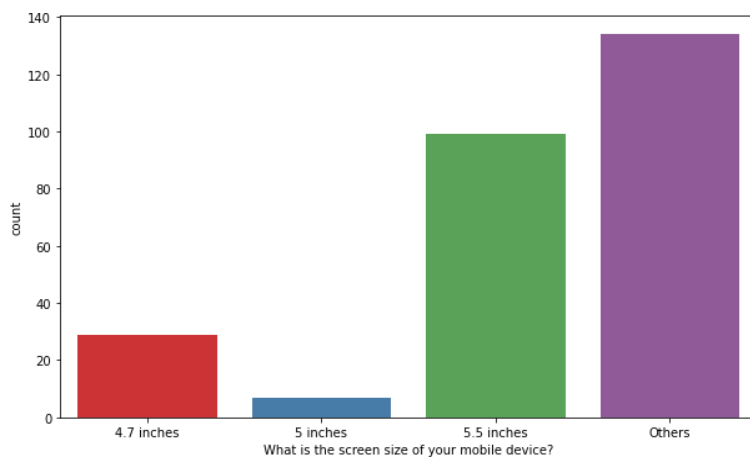
1. There are 189 people accessing the mobile internet.
2. In this, there are 76 people accessing the Wi-Fi network.
3. In this, there are 4 people accessing the Dial-up network.



Which device do you use to access the online shopping?

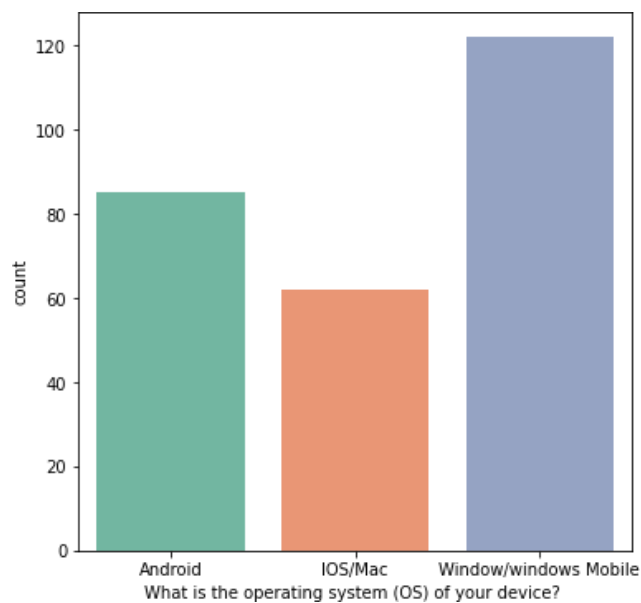
Observations:-

1. 141 people use smart phone to access the shopping online.
2. 86 people use laptop to access the shopping online.
3. 30 people use desktop to access the shopping online.
4. 12 people use tablet to access the shopping online.



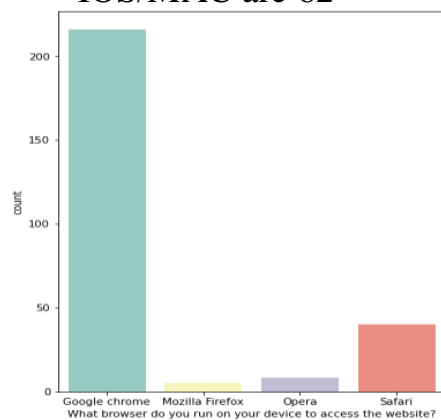
Observations:-

1. The screen size of Mobile device of the people shopping online of 5.5 inches are 99.
2. The screen size of Mobile device of the people shopping online of 4.7 inches are 29.
3. The screen size of Mobile device of the people shopping online of 5 inches are 7.
3. The screen size of Mobile device of the people shopping online of others are 134.



Observations:-

1. The operating system used by people who are shopping online in windows/ windowsMobile are 122.
2. The operating system used by people who are shopping online in Android are 85.
3. The operating system used by people who are shopping online in IOS/MAC are 62

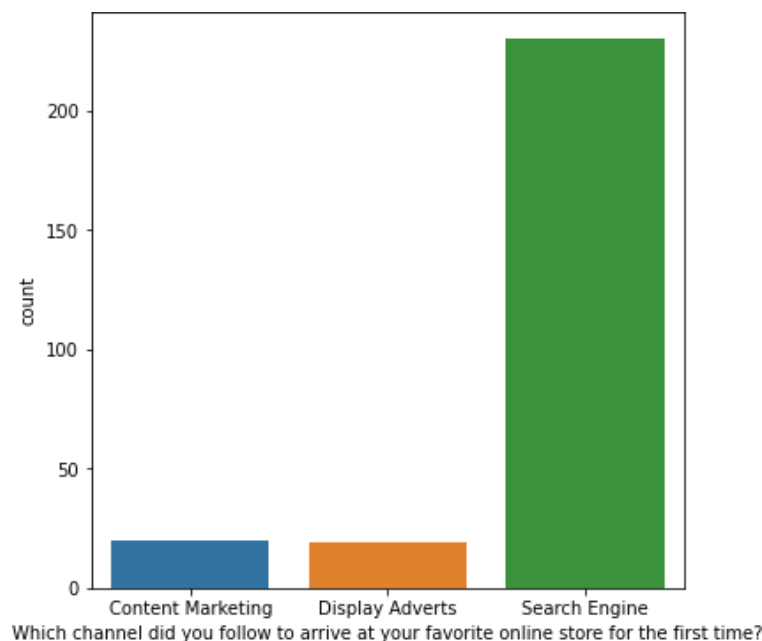


What browser do you run on your device to access the website?

Observation:-

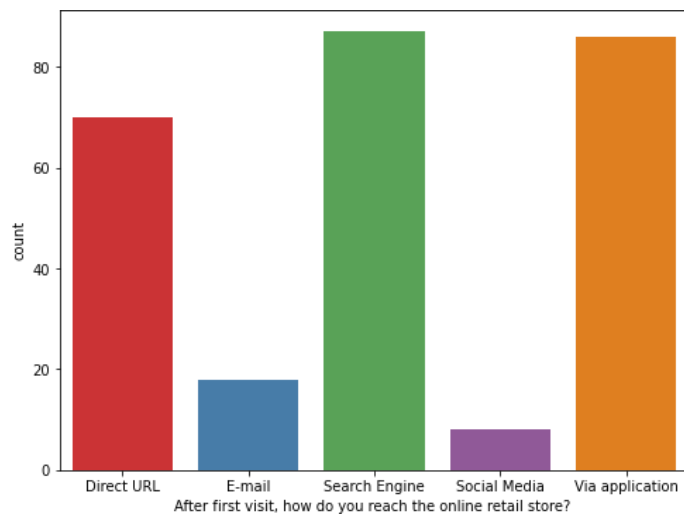
1. the browser used by people in the device to access the website in GoogleChrome are 216.

2. the browser used by people in the device to access the website in safari are 40.
3. The browser used by people in the device to access the website in opera are 8.
4. The browser used by people in the device to access the website in Mozilla Firefox is 5.



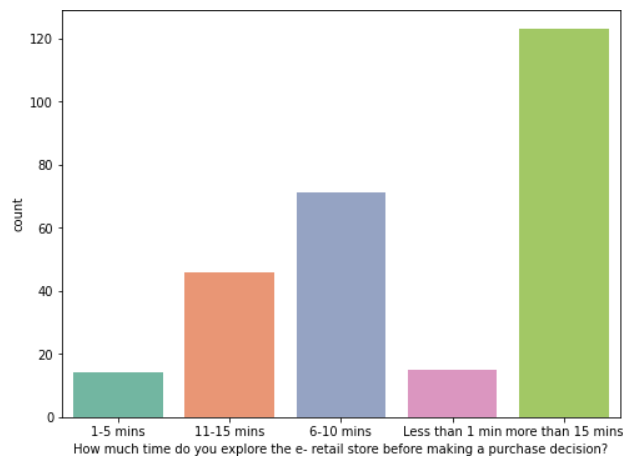
Observations:-

1. There are 230 people who follow the search engine channel to arrive at your Favorite online store for the first time.
2. There are 20 people who follow the content marketing channel to arrive at your Favourite online store for the first time.
3. There are 19 people who follow the Display Adverts to arrive at your favourite online store for the first time.



Observation:-

1. after the first visit, people do reach the online retail score through the searchengine are 87
2. After the first visit, people do reach the online retail score through the Via Application are 86.

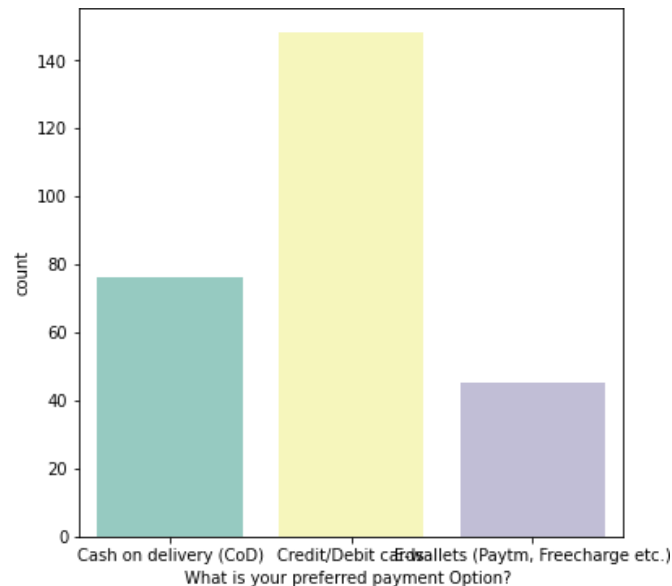


Observation:-

1. The people exploring the e-retail store before making the purchase decision more than 15 mins are 123.
2. The people exploring the e-retail store before making the purchase decision between 6 and 10 minutes are 71.
3. The people exploring the e-retail store before making the purchase decision between 11 and 15 mins are 46.

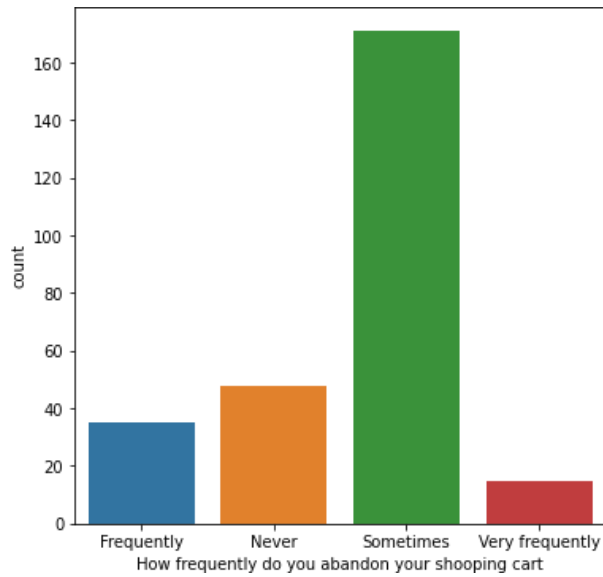
4. The people exploring the e-retail store before making the purchase decision less than 1mins are 15.

5.The people exploring the e-retail store before making the purchase decision between 1and5 mins are 14.



Observation:-

1. The number of people whose preferred payment option as credit/debit cards are 148.
- 2.The number of people who preferred payment option as cash on delivery are 76.
- 3.The number of people whose preferred payment location as E-wallets(Paytm, Freecharge, etc) cards are 45 .



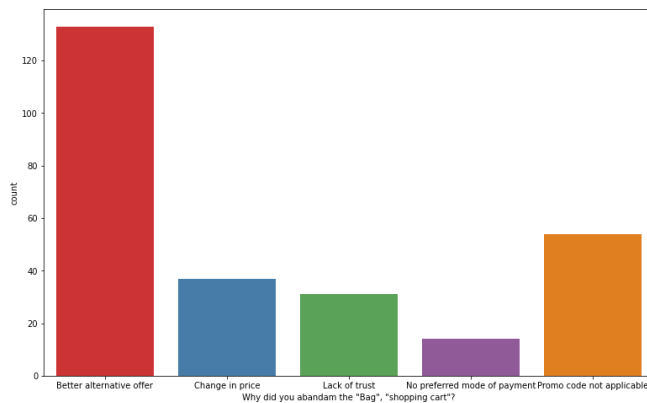
Observation:-

1.The people abandon on the shopping cart sometimes are 1712.

The people never abandon on the shopping cart are 48.

2.The people abandon on the shopping cart frequently are 35.

3. The people abandon on the shopping cart very Frequently are 15.



Observations:-

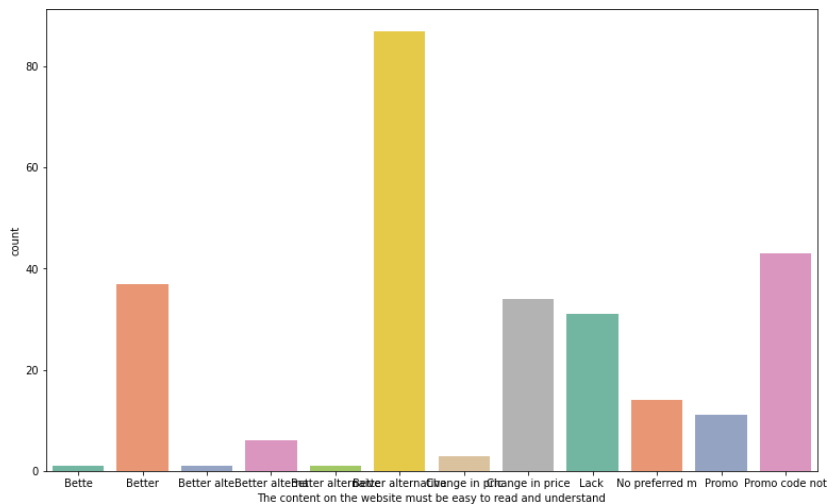
1. The people abandon the bag for better alternative offer are 133

2.The people abandon the bag for Promo code not applicable are 54

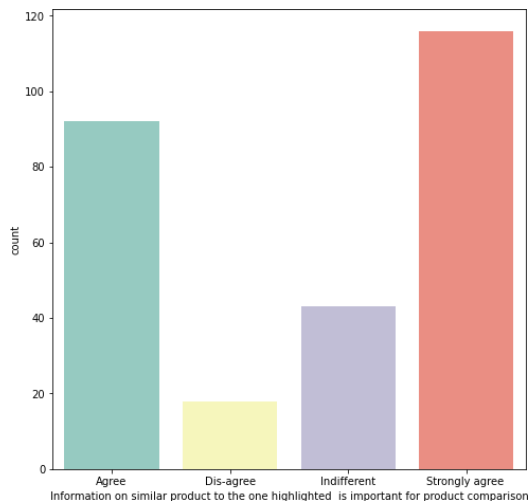
3.The people abandon the bag for change in price are 37.

4. The people abandon the bag for lack of trust are 31.

5. The people abandon the bag for no preferred mode of payment are 14.

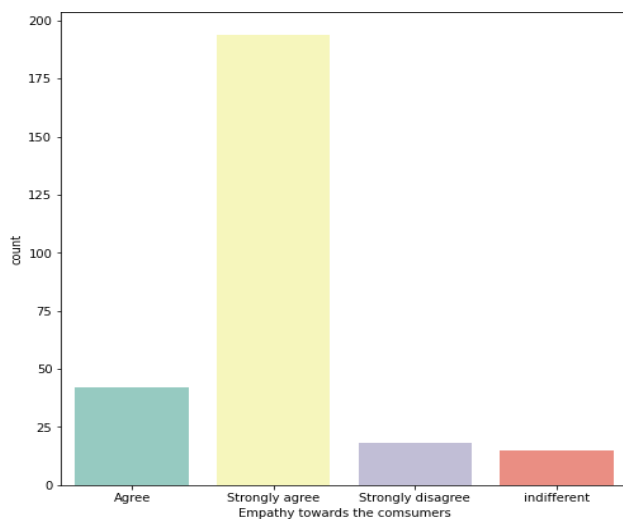


1. The content must be easy to read and understand by people in better way are 38.
2. The content must be easy to read and understand by people in better alternative way are 96.
3. The content must be easy to read and understand by people in lack are 31.
4. The content must be easy to read and understand by people in change in price are 37.
5. The content must be easy to read and understand by people in no preferred m are 14.



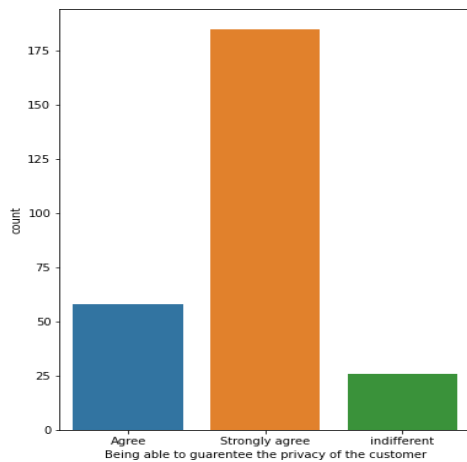
Observations:-

1. Information on similar product people who strongly agree are 116
2. information on similar product people who agree are 92
3. information on similar product people who are indifferent are 43.
4. information on similar product people who dis-agree are 18



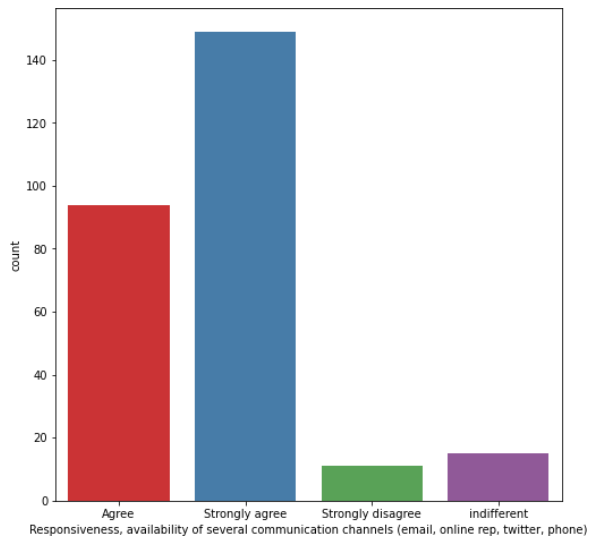
Observation:-

1. People who strongly agree on empathy towards the consumer are 194.
2. People who agree on empathy towards the consumer are 42.
3. People who strongly disagree on empathy towards the consumer are 18.
4. People who are indifferent on empathy towards the consumer are 15.



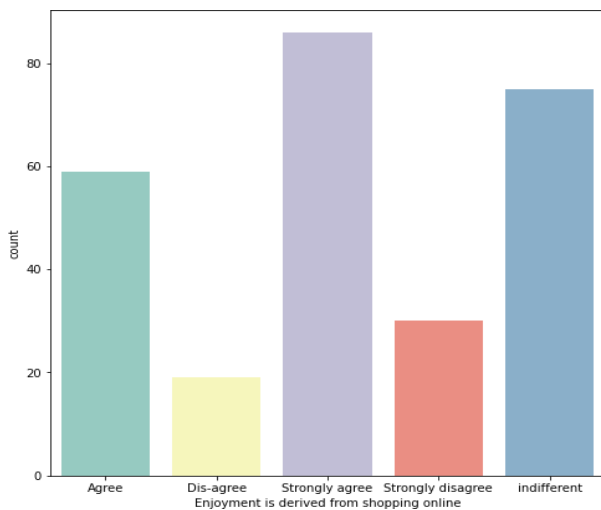
Observation:-

1. People who are strongly agree on being able to guarantee the privacy of the customer are 185.
2. People who agree on being able to guarantee the privacy of the customer are 58.
3. People who are indifferent on being able to guarantee the privacy of the customer are 2.



Observation:-

1. People who are strongly agree on the responsiveness, availability of several communication channels are 149.
2. People who are agree on the responsiveness, availability of several communication channels are 94.
3. People who are indifferent on the responsiveness, availability of several communication channels are 15.
4. People who are strongly disagree on the responsiveness, availability of several communication channels are 11.



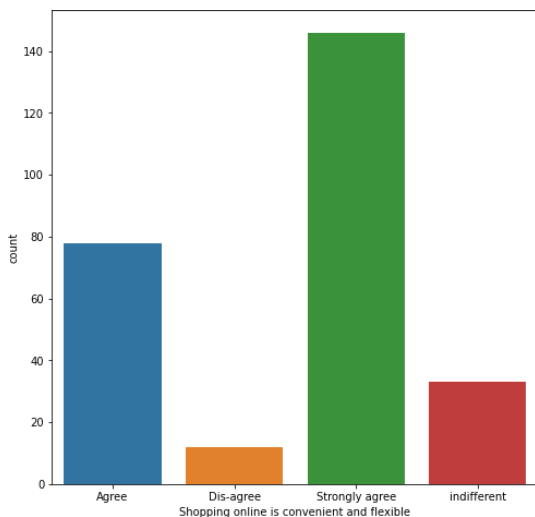
Observation:-

1. People who are strongly agree on the enjoyment is derived from shopping online are 86.

2. People who are indifferent on the enjoyment is derived from shopping online are 75. 3. People who are agree on the enjoyment is derived from shopping online are 59

4. People who are strongly disagree on enjoyment is derived from shopping online are 30.

5. People who are disagree on the enjoyment is derived from shopping online are 19.



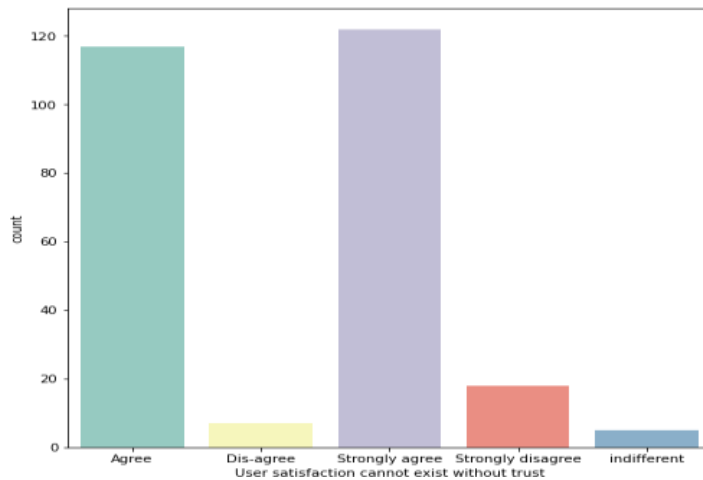
Observation:-

1. People who are strongly agree on the shopping online is convenient and flexible are 146.

2. People who are agree on the shopping online is convenient and flexible are 78.

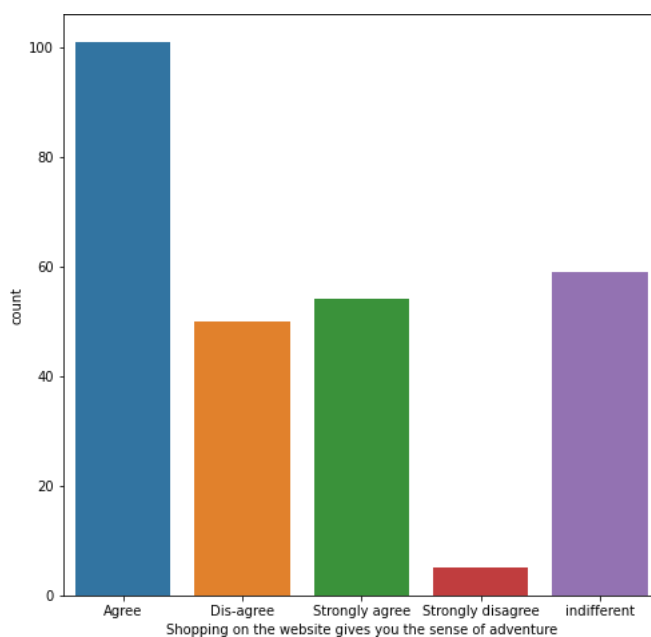
3. People who are indifferent on the shopping online is convenient and flexible are 33

4. People who are disagree on the shopping online are 12.



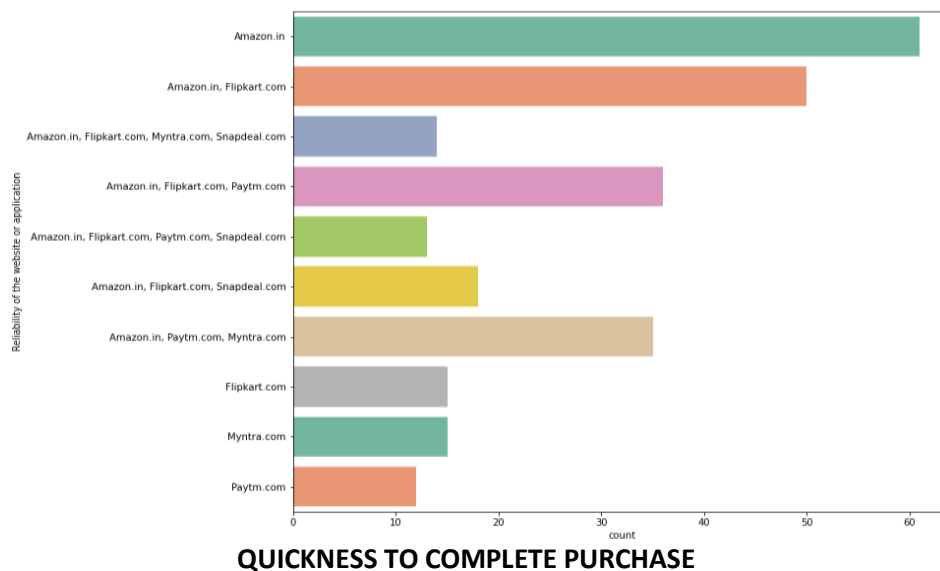
Observation:-

1. People who are strongly agree on the user satisfaction cannot exist without trust are 122.
2. People who are agree on the user satisfaction cannot exist without trust are 118.
3. People who are strongly disagree on the user satisfaction cannot exist without trust are 18.
4. People who are disagree on the user satisfaction cannot exist without trust are 8.
5. People who are indifferent on the user satisfaction cannot exist without trust are 5.



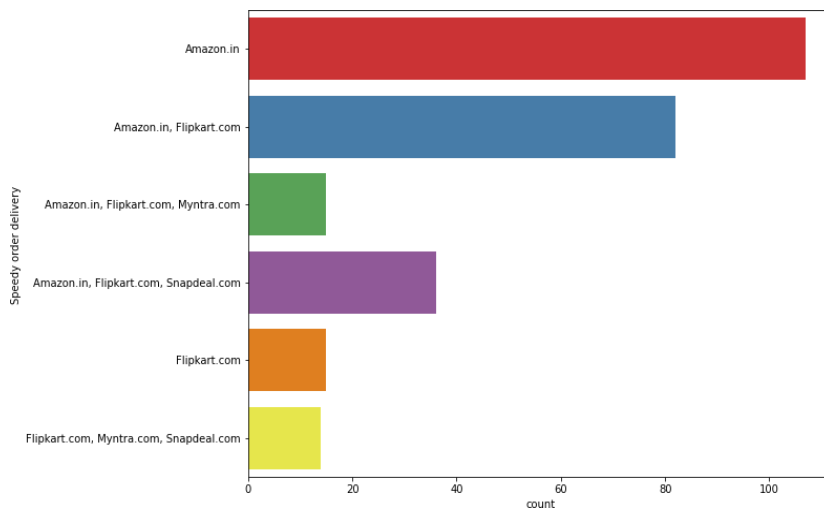
Observation:-

1. People who agree on Shopping on the website gives you the sense of adventure are 101.
2. People who are indifferent on Shopping on the website gives you the sense of adventure are 59.
3. People who strongly-agree on Shopping on the website gives you the sense of adventure are 54.
4. People who dis-agree on Shopping on the website gives you the sense of adventure are 50.



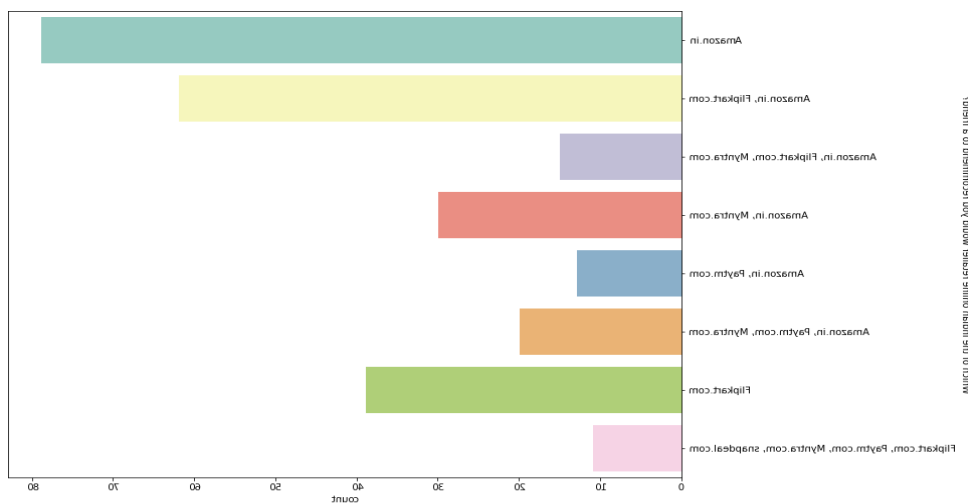
Observation:-

1. Quickness to complete purchase on Amazon.in are 66
2. Quickness to complete purchase on Amazon.com, Flipkart.com, Paytm.com is 73
3. Quickness to complete purchase on Amazon.com, Flipkart.com are 30.
4. Quickness to complete purchase on Amazon.com, Flipkart.com, Paytm.com are 20
5. Quickness to complete purchase on Amazon.com, Flipkart.com, Myntra.com 30.
6. Quickness to complete purchase on Paytm.com are 25.
7. Quickness to complete purchase on Amazon.com, Flipkart.com, Myntra.com are 30
8. Quickness to complete purchase on Amazon.com, Flipkart.com, Myntra.com are 30.



Observation:-

- 1.Speedy order delivery on Amazon.in are 107.
- 2.Speedy order delivery on Amazon.in, Flipkart.com are 82.
- 3.Speedy order delivery on Amazon.in, Flipkart.com, Snapdeal.com are 36.
- 4.speedy order delivery on Flipkart.com are 14.
- 5.Speedy order delivery on Amazon.in, Flipkart.com, Myntra.com are 15.
- 6.Speedy order delivery on Flipkart.com, Myntra.com, Snapdeal.com are 14



Which of the Indian online retailer would you recommend to a friend

CONCLUSION OF THE FINDINGS:-

So, as per the findings during the EDA Phase:-

The 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. 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 data is collected from the Indian online shoppers. Results indicate the e-retail success factors, which are very much essential for customer satisfaction.