



DATA - ANALYSIS FOR CUSTOMER ACTIVATION & RETENTION

Submitted by:

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ACKNOWLEDGMENT

This project includes the professional reference of much external research analysis done by various organisations and individuals. Such references are mentioned below:

1. Consumer's perceptions of website's utilitarian and hedonic attributes and online purchase intentions: A cognitive–affective attitude approach

<https://www.sciencedirect.com/science/article/pii/S2444969516300191>

2. The Impact of Utilitarian and Hedonic Value on Online Shopping Behavior.

<http://www.asmaindia.in/pdf/press/29-The-Impact-of-Utilitarian-and-Hedonic-Value-on-Online-Shopping-Behavior.pdf>

3. THE INFLUENCE OF UTILITARIAN VALUE, HEDONIC VALUE, SOCIAL VALUE, AND PERCEIVED RISK ON CUSTOMER SATISFACTION: SURVEY OF E- COMMERCE CUSTOMERS IN INDONESIA

<https://journals.vgtu.lt/index.php/BTP/article/view/12143>

4. Hedonic and Utilitarian Aspects of Consumer Behavior: an Attitudinal

<https://www.acrwebsite.org/volumes/6348/volumes/v12/NA->

5. Hedonic and Utilitarian Values Behind Engagement of Online Consumers

<https://www.igi-global.com/gateway/article/257192#pnlRecommendationForm>

6. <https://www.geeksforgeeks.org>

7. <https://en.wikipedia.org/wiki/Wiki>

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INTRODUCTION

1. What is Customer Retention?

Customer retention refers to a company's ability to turn customers into repeat buyers and prevent them from switching to a competitor. It indicates whether your product and the quality of your service please your existing customers. It's also the lifeblood of most subscription-based companies and service providers.

Customer retention strategies are the processes and initiatives businesses put in place to build customer loyalty and improve customer lifetime value.

2. Why is customer retention important?

Keeping your current customers happy is generally more cost-effective than acquiring first-time customers. According to the Harvard Business Review, acquiring a new customer can be 5 to 25 times more expensive than holding on to an existing one.

You don't need to spend big on marketing, advertising, or sales outreach. It is easier to turn existing customers into repeating ones, since they already trust your brand from previous purchases. New customers, however, often require more convincing when it comes to that initial sale.

Customer loyalty won't just give you repeat business. Loyal customers are more likely to give free recommendations to their colleagues, friends, and family. Creating that cycle of retained customers and buzz marketing is one way your company can cultivate customer loyalty for long-term success.

3. Customer retention benefits:

- **Cost savings:** Customer retention is generally more cost-effective than acquiring first-time customers.
- **Positive word of mouth marketing:** Loyal customers are more likely to tell their friends and family about your brand.
- **A better bottom line:** Increasing retention rates by just 5 percent can increase revenue by 25 percent to 95 percent.

4. E-Commerce websites and Customer Retention :

For an e-commerce store, the customer retention rate is directly related to how much your customers trust you and how much they relish the experience of spending time on your website/app.

- **Trust** is built by being honest and upfront about the product and service. Questions like how you guarantee quality, what your process of customer service is, what the options for customer grievance redressal are and the like need to be answered upfront and put into practice. This builds trust and subsequently word of mouth.

Coming to the experience that you create for your customers, aesthetics, ease of use and clarity are the three most important parameters.

- **Aesthetics** - A good looking vibrant user interface that functions smoothly without bugs is an absolute must. Do make sure it functions equally on all kinds of interfaces like laptop, tablet, mobile etc.

- **Ease of use** - Customers like to come back to e-commerce sites where they could view the product, compare options, read reviews and complete their transaction with minimum fuss and in the minimum time.
- **Clarity** - People love clarity when buying online. Clarity in terms of - how is my product going to be packed? How many days would it take for delivery? Is there a tracking mechanism? I may know there is a return policy if am not satisfied with it, but how does the return actually work? All these and more questions provide clarity to the buyer and enhance his experience manifold. Other than these, there can also be loyalty programs, tie-ups with other complimentary e-commerce providers and co-branded events with physical stores that will boost customer acquisition and retention. Tying up with a more known brand rubs off some of the reliability and trust onto us. That leads to further customer retention over a period of time.

5. Review of Literature :

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 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.

ANALYTICS OF THE BUSINESS PROBLEM

1. What is Analytical problem framing?

Analytic problem framing involves translating the business problem into terms that can be addressed analytically via data and modelling. It's at this stage that you work backwards From the results / outputs you want to the data/inputs you're going to need, where you identify potential drivers and hypotheses to test, and where you nail down your assumptions. Analytic problem framing is the antithesis of merely working with the ready-to-hand data and seeing what comes of it, hoping for something insightful. Typically, the process moves on from here to data collection, cleansing and transformation, Methodology selection and model building, never to return. But if you're willing to borrow and use a concept from complex adaptive systems—maps and models—you can make repeat use of this stage to improve your overall outcome.

2. Hardware Requirements

A mid level computer that runs on Intel i3/i5/i7 or A10/A11/M1 or ryzen 3/5 or any other equivalent chipset and a suitable processor.

3. Software Requirements

Windows / Linux / Mac OS

4. Tools, Libraries and Packages used

Tool: 1. Anaconda Navigator
2. Jupyter Notebook

Libraries and Packages:

1. Numpy
2. Pandas
3. Matplotlib
4. Seaborn

5. Data Pre-Processing

For understanding the factors influencing the customer retention, we should consider 4 important variables.

These 4 variables manipulate the 'customer satisfaction', which in turn makes the customer to stay.

These variables are:

1. Hedonic Value.
2. Utilitarian Value.
3. Perceived Risk.
4. Customer Experience.

By Analysing on the basis of these variables, we can find the basic factors influencing the 'customer satisfaction'. Thus, by achieving the 'customer satisfaction' we can make the customer to stay and make them buy more products.

So we will do the following Analysis in 5 parts. We will use different parts of the given data-set to help us find the customer retention factors.

By following these processes we can achieve a more efficient data-set. We will use **Python** through **Jupyter notebook** for dataprocessing. Also we will use Libraries such as **Pandas, Numpy for Analysis** and **Matplotlib, seaborn for visualization**.

6. Exploratory Data-Analysis

```
#importing Libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sn
import warnings
warnings.filterwarnings("ignore")
```

```
#Loading the data-set
```

```
#checking the shape of the data-set
df.shape
```

```
(269, 71)
```

1. checking the null values, data type and title of the columns :

Title : 1 Gender of respondent

Col dtype : object

NaN val: 0

Title : 2 How old are you? Col dtype : object NaN

val: 0

Title : 3 Which city do you shop online from?

Col dtype : object

NaN val: 0

Title : 4 What is the Pin Code of where you shop online from?

Col dtype : int64

NaN val: 0

Title : 5 Since How Long You are Shopping Online ? Col

dtype : object

NaN val: 0

Title : 6 How many times you have made an online purchase in the past 1 year?

Col dtype : object

NaN val: 0

Title : 7 How do you access the internet while shopping on-line?

Col dtype : object

NaN val: 0

Title : 8 Which device do you use to access the online shopping?

Col dtype : object

NaN val: 0

Title : 9 What is the screen size of your mobile device?

Col dtype : object NaN val: 0

Title : 10 What is the operating system (OS) of your device? Col dtype : object
NaN val: 0

Title : 11 What browser do you run on your device to access the website? Col dtype : object
NaN val: 0

Title : 12 Which channel did you follow to arrive at your favorite online store for the first time?
Col dtype : object
NaN val: 0

Title : 13 After first visit, how do you reach the online retail store? Col dtype : object
NaN val: 0

Title : 14 How much time do you explore the e- retail store before making a purchase decision?
Col dtype : object
NaN val: 0

Title : 15 What is your preferred payment Option? Col dtype : object
NaN val: 0

Title : 16 How frequently do you abandon (selecting an items and leaving without making payment) your shopping cart?
Col dtype : object
NaN val: 0

Title : 17 Why did you abandon the “Bag”, “Shopping Cart”? Col dtype : object
NaN val: 0

Title : 18 The content on the website must be easy to read and understand Col dtype : object
NaN val: 0

Title : 19 Information on similar product to the one highlighted is important for product comparison
Col dtype : object
NaN val: 0

Title : 20 Complete information on listed seller and product being offered is important for purchase decision.
Col dtype : object
NaN val: 0

Title : 21 All relevant information on listed products must be stated clearly Col dtype : object
NaN val: 0

Title : 22 Ease of navigation in website Col dtype : object
NaN val: 0

Title : 23 Loading and processing speed Col dtype : object
NaN val: 0

Title : 24 User friendly Interface of the website Col dtype : object

NaN val: 0
Title : 25 Convenient Payment methods
Col dtype : object
NaN val: 0
Title : 26 Trust that the online retail store will fulfill its part of the transaction at the stipulated time
Col dtype : object
NaN val: 0
Title : 27 Empathy (readiness to assist with queries) towards the customers
Col dtype : object
NaN val: 0
Title : 28 Being able to guarantee the privacy of the customer
Col dtype : object
NaN val: 0
Title : 29 Responsiveness, availability of several communication channels (email, online rep, twitter, phone etc.)
Col dtype : object
NaN val: 0
Title : 30 Online shopping gives monetary benefit and discounts
Col dtype : object
NaN val: 0
Title : 31 Enjoyment is derived from shopping online
Col dtype : object
NaN val: 0
Title : 32 Shopping online is convenient and flexible
Col dtype : object
NaN val: 0
Title : 33 Return and replacement policy of the e-tailer is important for purchase decision
Col dtype : object
NaN val: 0
Title : 34 Gaining access to loyalty programs is a benefit of shopping online
Col dtype : object
NaN val: 0
Title : 35 Displaying quality Information on the website improves satisfaction of customers
Col dtype : object
NaN val: 0
Title : 36 User derive satisfaction while shopping on a good quality website or application
Col dtype : object
NaN val: 0
Title : 37 Net Benefit derived from shopping online can lead to users satisfaction
Col dtype : object
NaN val: 0
Title : 38 User satisfaction cannot exist without trust
Col dtype : object
NaN val: 0
Title : 39 Offering a wide variety of listed product in several category

Col dtype : object
NaN val: 0
Title : 40 Provision of complete and relevant product information
Col dtype : object
NaN val: 0
Title : 41 Monetary savings
Col dtype : object
NaN val: 0
Title : 42 The Convenience of patronizing the online retailer
Col dtype : object
NaN val: 0
Title : 43 Shopping on the website gives you the sense of adventure
Col dtype : object
NaN val: 0
Title : 44 Shopping on your preferred e-tailer enhances your social status
Col dtype : object
NaN val: 0
Title : 45 You feel gratification shopping on your favorite e-tailer
Col dtype : object
NaN val: 0
Title : 46 Shopping on the website helps you fulfill certain roles
Col dtype : object
NaN val: 0
Title : 47 Getting value for money spent
Col dtype : object
NaN val: 0
Title : From the following, tick any (or all) of the online retailers you have shopped from;
Col dtype : object
NaN val: 0
Title : Easy to use website or application
Col dtype : object
NaN val: 0
Title : Visual appealing web-page layout
Col dtype : object
NaN val: 0
Title : Wild variety of product on offer
Col dtype : object
NaN val: 0
Title : Complete, relevant description information of products
Col dtype : object
NaN val: 0
Title : Fast loading website speed of website and application
Col dtype : object
NaN val: 0
Title : Reliability of the website or application
Col dtype : object
NaN val: 0
Title : Quickness to complete purchase

Col dtype : object
NaN val: 0
Title : Availability of several payment options
Col dtype : object
NaN val: 0
Title : Speedy order delivery
Col dtype : object
NaN val: 0
Title : Privacy of customers' information
Col dtype : object
NaN val: 0
Title : Security of customer financial information
Col dtype : object
NaN val: 0
Title : Perceived Trustworthiness
Col dtype : object
NaN val: 0
Title : Presence of online assistance through multi-channel
Col dtype : object
NaN val: 0
Title : Longer time to get logged in (promotion, sales period)
Col dtype : object
NaN val: 0
Title : Longer time in displaying graphics and photos (promotion, sales period)
Col dtype : object
NaN val: 0
Title : Late declaration of price (promotion, sales period)
Col dtype : object
NaN val: 0
Title : Longer page loading time (promotion, sales period)
Col dtype : object
NaN val: 0
Title : Limited mode of payment on most products (promotion, sales period)
Col dtype : object
NaN val: 0
Title : Longer delivery period
Col dtype : object
NaN val: 0
Title : Change in website/Application design
Col dtype : object
NaN val: 0
Title : Frequent disruption when moving from one page to another
Col dtype : object
NaN val: 0
Title : Website is as efficient as before
Col dtype : object
NaN val: 0
Title : Which of the Indian online retailer would you recommend to a friend?
Col dtype : object

NaN val: 0

2. Visualising the null values using Heat-Map:



3. Observation about the Data-set:

- The Data-set seems to have 271 rows and 71 columns.
- The Data-set does not have any Null values.
- All the data's present in the Data-set seems to be Object type.

4. We will divide the given data-set into 5 parts for the EDA:

- Part-1 will be information about the customer.
- Part-2 will be Utilitarian Value.
- Part-3 will be Hedonic Value.

- Part-4 will be Perceived Risk.
- Part-5 will be Customer Experience.

For this we will divide the given Data-set into 5 parts.

PART-1

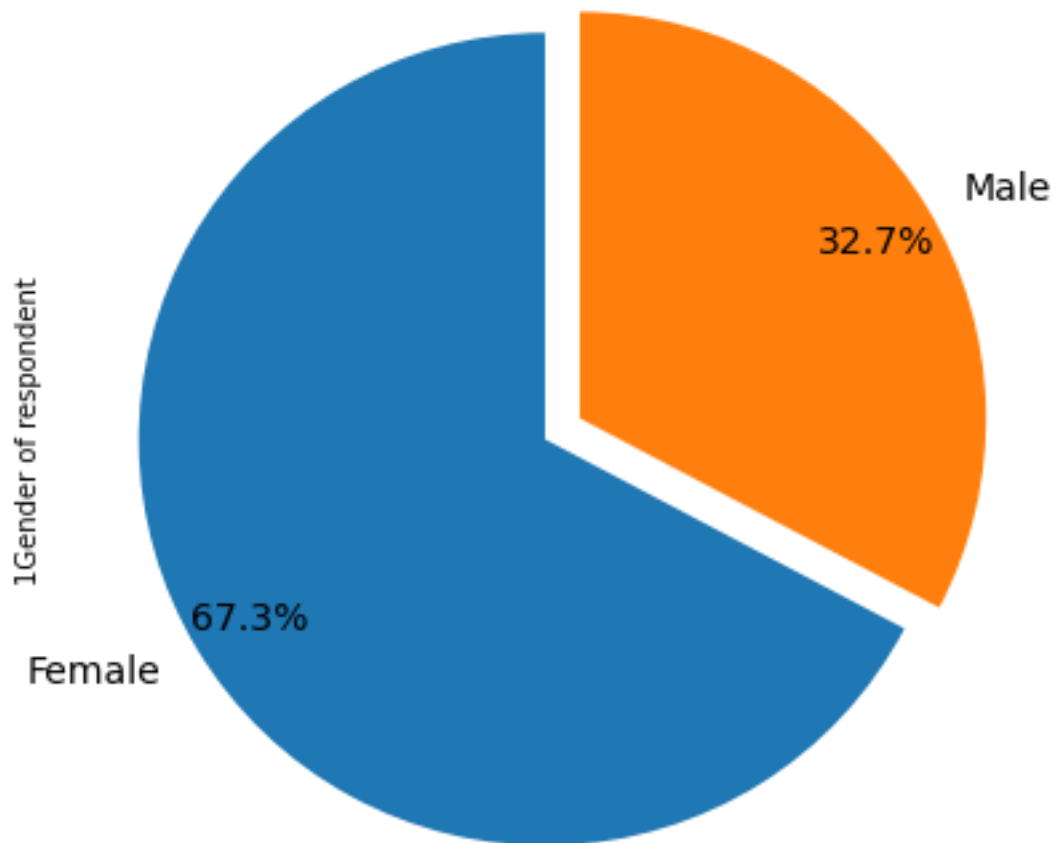
CUSTOMER INFORMATION

1. Visualising the Gender of respondent

Female 181

Male 88

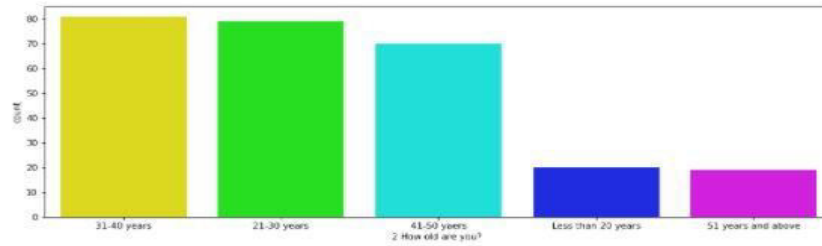
Name: 1Gender of respondent



```

31-40 years      81
21-30 years      79
41-50 years      70
Less than 20 years 28
51 years and above 19
Name: 2 How old are you?, dtype: int64

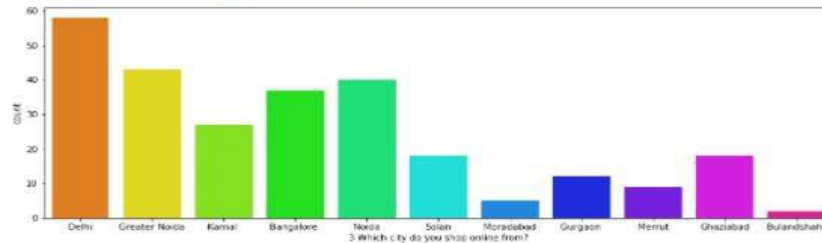
```



```

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

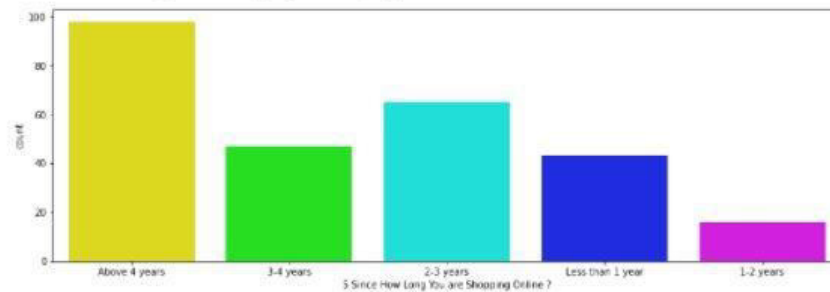
```



```

Above 4 years      98
2-3 years          65
3-4 years          47
Less than 1 year   43
1-2 years          16
Name: 5 Since How Long You are Shopping Online ?, dtype: int64

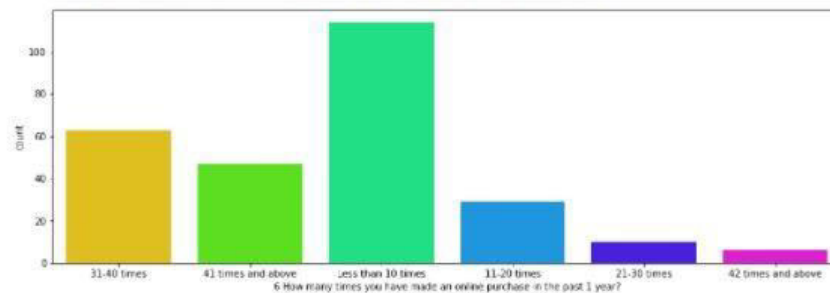
```



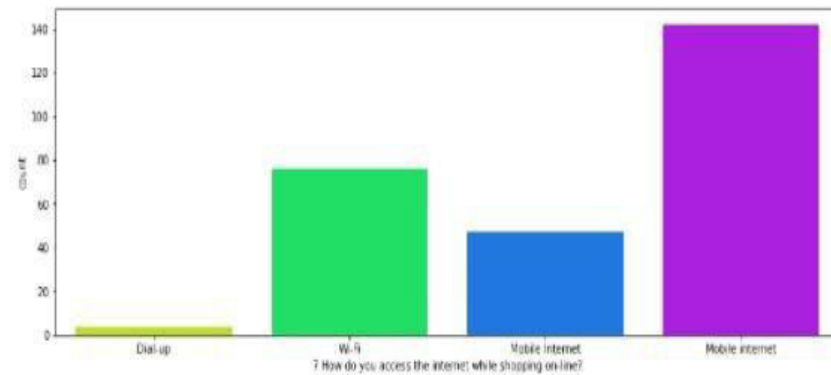
```

Less than 10 times 114
31-40 times        63
41 Times and above 47
11-20 times        29
21-30 times        10
42 Times and above 6
Name: 6 How many times you have made an online purchase in the past 1 year?, dtype: int64

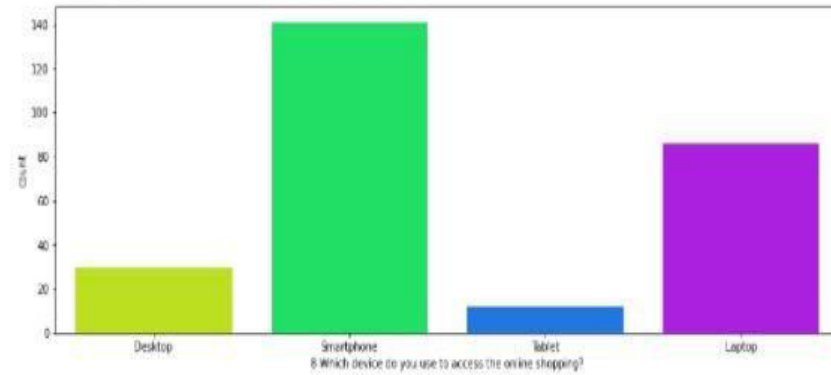
```



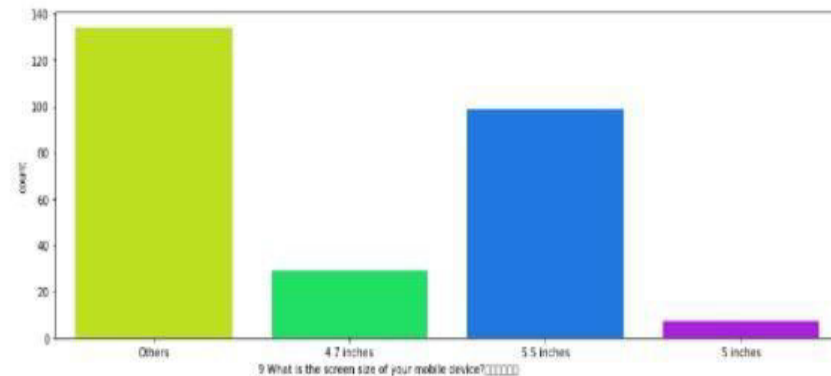
Mobile internet	142
Wi-Fi	76
Mobile Internet	47
Dial-up	4



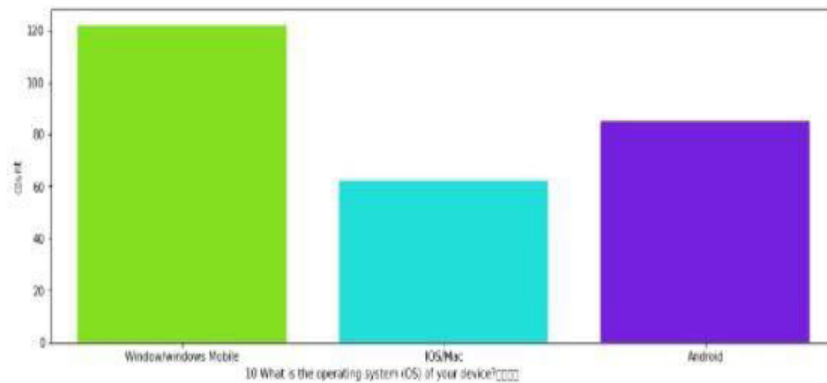
Smartphone	141
Laptop	86
Desktop	38
Tablet	12



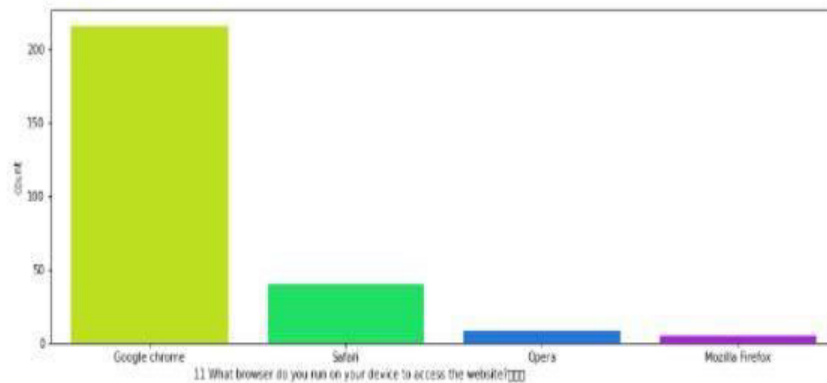
Others	134
5.5 inches	99
4.7 inches	29
5 inches	7



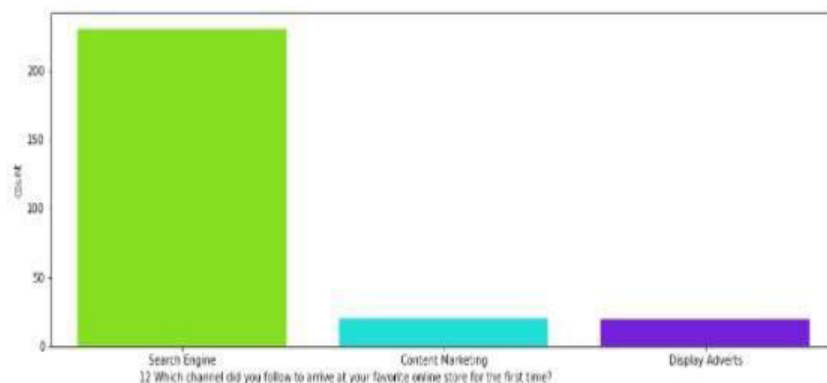
Window/windows Mobile 122
 Android 85
 IOS/Mac 62
 Name: 10 What is the operating system (OS) of your device?\t\t\t\t\t, dtype: int64



Google chrome 216
 Safari 40
 Opera 8
 Mozilla Firefox 5
 Name: 11 What browser do you run on your device to access the website?\t\t\t\t, dtype: int64

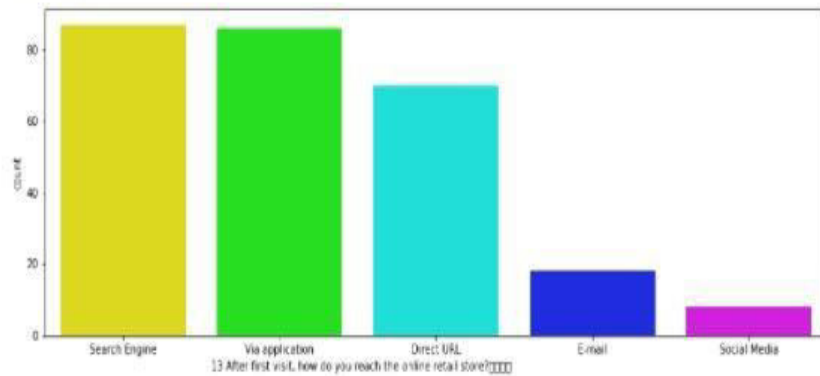


Search Engine 230
 Content Marketing 20
 Display Adverts 19
 Name: 12 Which channel did you follow to arrive at your favorite online store for the first time?, dtype: int64



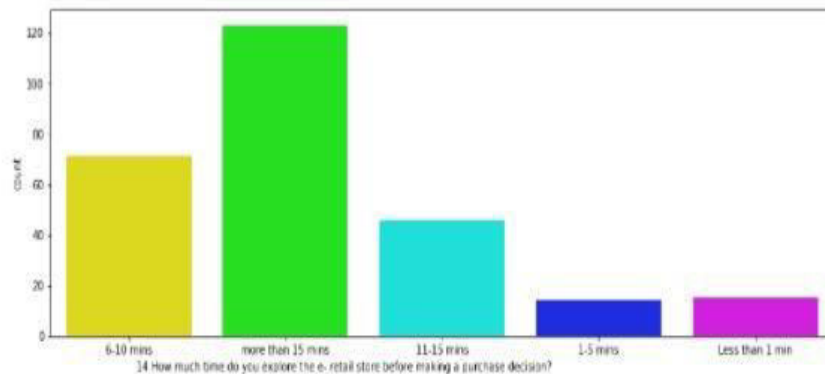
Search Engine	87
Via application	86
Direct URL	70
E-mail	18
Social Media	8

Name: 13 After first visit, how do you reach the online retail store?
, dtype: int64



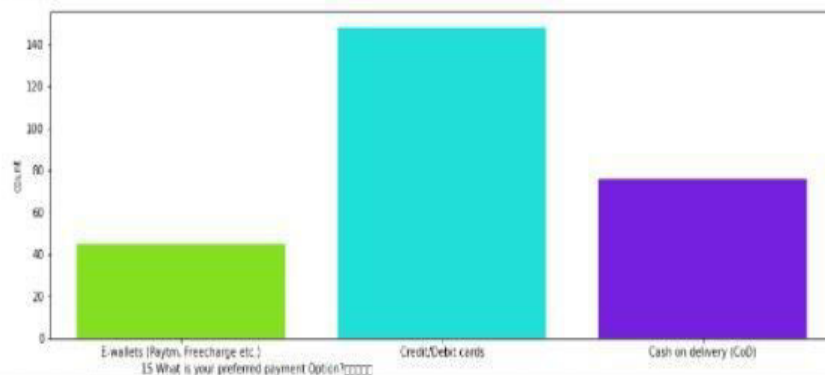
more than 15 mins	123
6-10 mins	71
11-15 mins	46
Less than 1 min	15
1-5 mins	14

Name: 14 How much time do you explore the e- retail store before making a purchase decision?
, dtype: int64



Credit/Debit cards	148
Cash on delivery (CoD)	76
E-wallets (Paytm, Freecharge etc.)	45

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

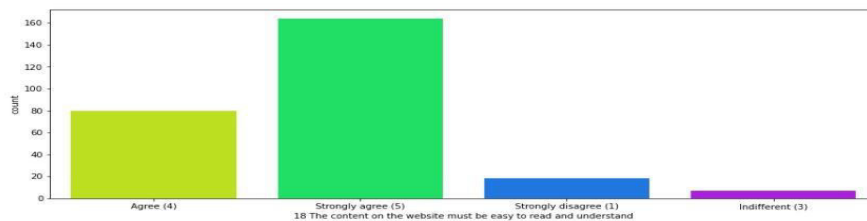


OBSERVATION ON CUSTOMER INFO:

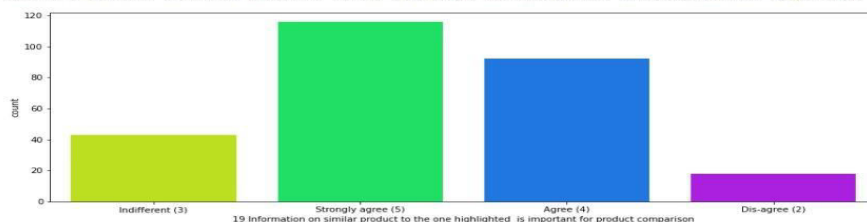
1. Most of the people fall between the age of 21 to 50 years and it occupies 85.50% percentage in overall dataset. Only 7.5% of the people are below 20 years and above 51 years.
2. Delhi tops with the list of 21.5% and followed by "GR.Noida" and "Noida" with 16% and "Bangalore" with nearly 14 percent of the customer form the given dataset.
3. 36.4% of the people are shopping online for more than 4 years.
4. 42% of people are shopped online for less than 10 times in an year and 17.5% of people are shopped for more than 41 times in an year.
5. 52.78% of people used mobile internet while shopping online.
6. 52.6% of people used Smartphone while shopping online.
7. 80% of people used Google Chrome website for shopping.
8. 85.5% of people used Search Engine to accessed the favourite store for the first time and after the first visit Search Engine percentage drops to 32% and increase in application upto 32%.
9. More than 45% of people spend over 15 minutes to make a purchase decision in E-Retail Store.
10. 55% of people used credit/debit cards for the payments and only 28.25% of people are paying through Cash on Delivery mode.

PART-2: UTILITARIANVALUE

```
Strongly agree (5)    164
Agree (4)            80
Strongly disagree (1) 18
Indifferent (3)       7
Name: 18 The content on the website must be easy to read and understand, dtype: int64
```

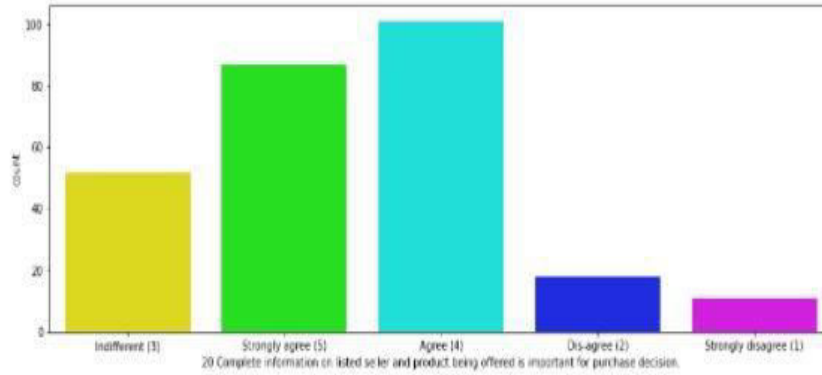


```
Strongly agree (5)    116
Agree (4)            92
Indifferent (3)       43
Dis-agree (2)         18
Name: 19 Information on similar product to the one highlighted is important for product comparison, dtype: int64
```



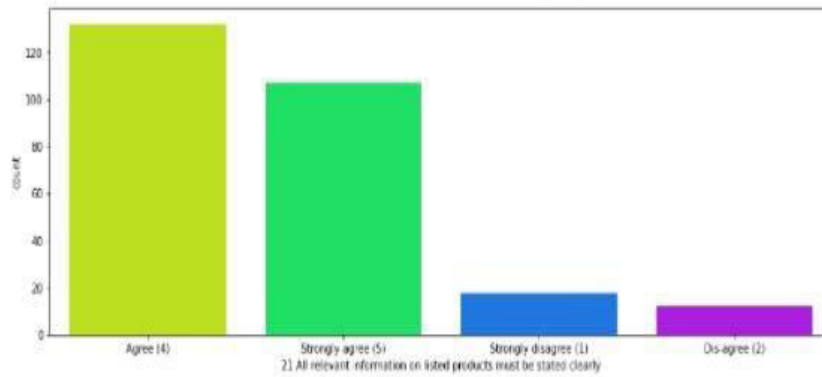
Agree (4)	181
Strongly agree (5)	87
Indifferent (3)	52
Dis-agree (2)	18
Strongly disagree (1)	11

Name: 20 Complete information on listed seller and product being offered is important for purchase decision., dtype: int64



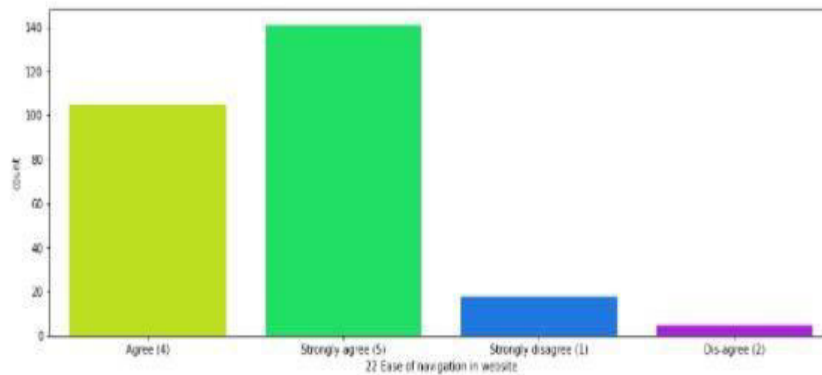
Agree (4)	132
Strongly agree (5)	107
Strongly disagree (1)	18
Dis-agree (2)	12

Name: 21 All relevant information on listed products must be stated clearly, dtype: int64

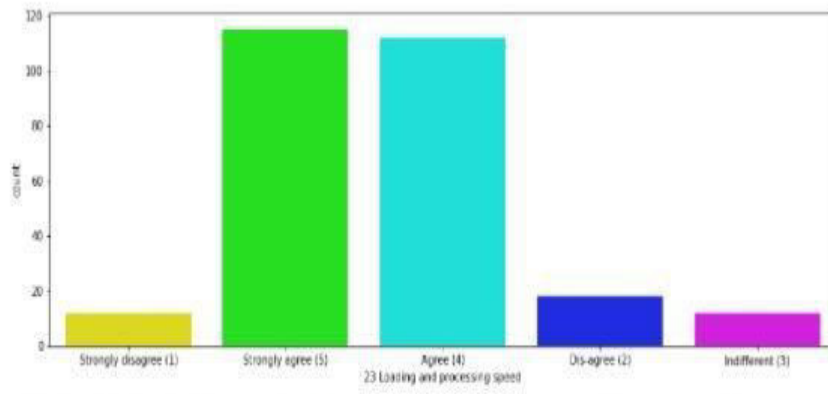


Strongly agree (5)	141
Agree (4)	105
Strongly disagree (1)	18
Dis-agree (2)	5

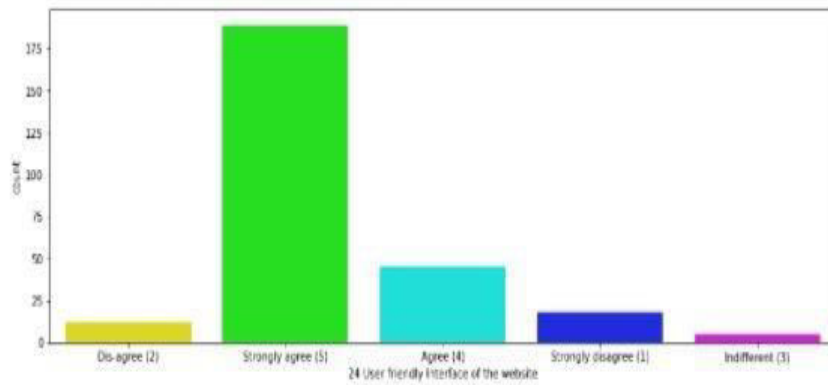
Name: 22 Ease of navigation in website, dtype: int64



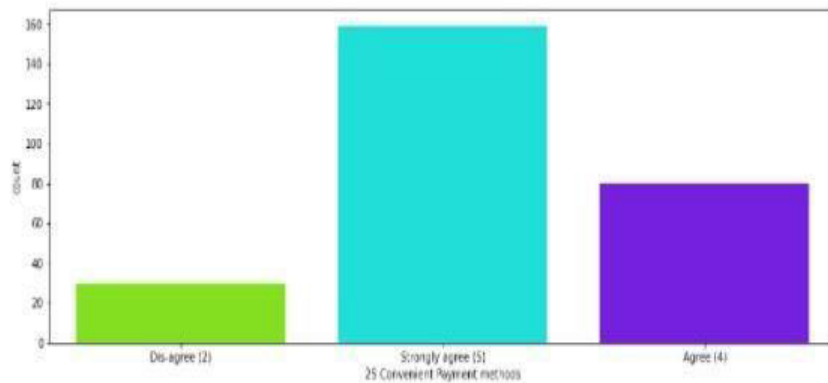
Strongly agree (5) 115
 Agree (4) 112
 Dis-agree (2) 18
 Strongly disagree (1) 12
 Indifferent (3) 12
 Name: 23 Loading and processing speed, dtype: int64



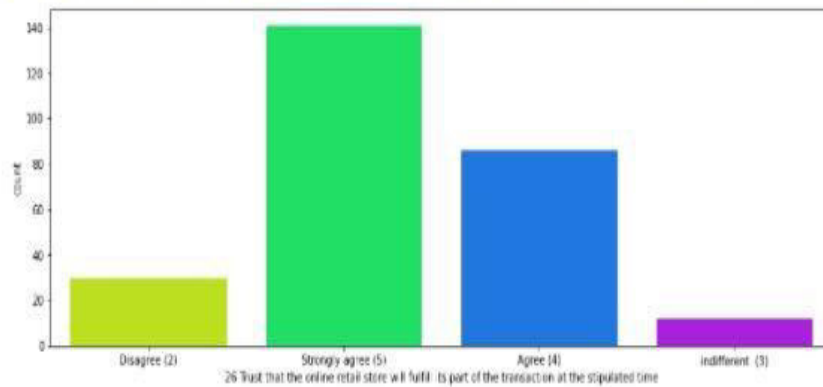
Strongly agree (5) 189
 Agree (4) 45
 Strongly disagree (1) 18
 Dis-agree (2) 12
 Indifferent (3) 5
 Name: 24 User friendly Interface of the website, dtype: int64



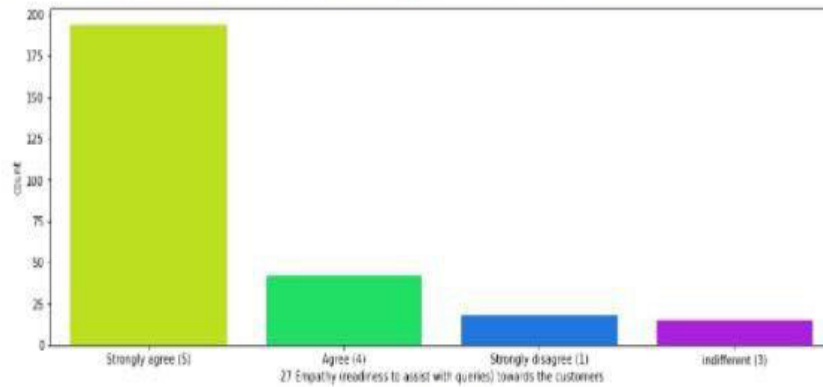
Strongly agree (5) 159
 Agree (4) 80
 Dis-agree (2) 30
 Name: 25 Convenient Payment methods, dtype: int64



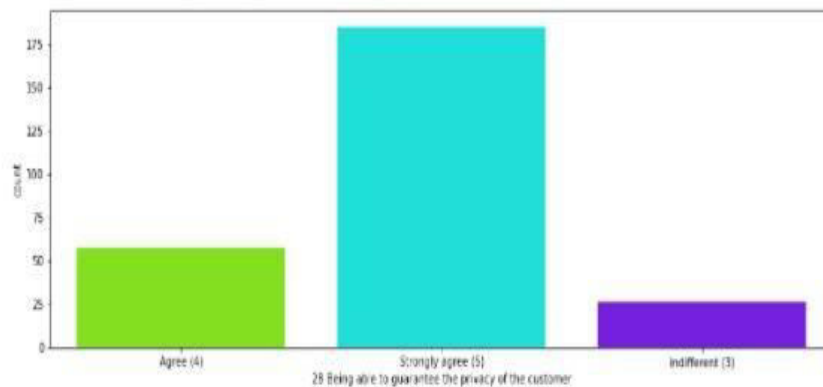
Strongly agree (5) 141
 Agree (4) 86
 Disagree (2) 38
 Indifferent (3) 12
 Name: 26 Trust that the online retail store will fulfill its part of the transaction at the stipulated time, dtype: int64



Strongly agree (5) 194
 Agree (4) 42
 Strongly disagree (1) 18
 Indifferent (3) 15
 Name: 27 Empathy (readiness to assist with queries) towards the customers, dtype: int64

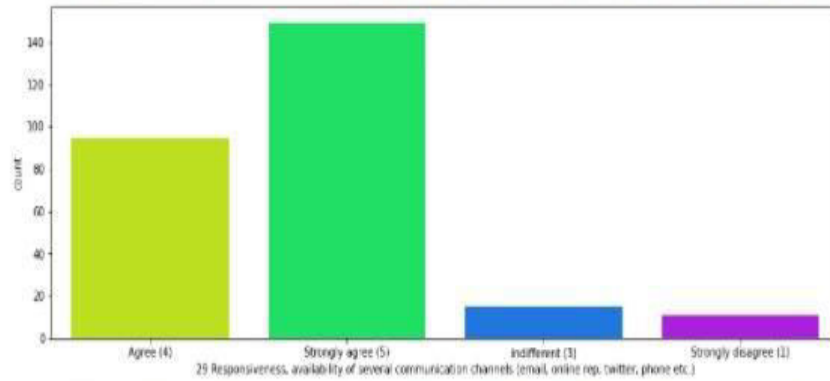


Strongly agree (5) 185
 Agree (4) 58
 Indifferent (3) 26
 Name: 28 Being able to guarantee the privacy of the customer, dtype: int64



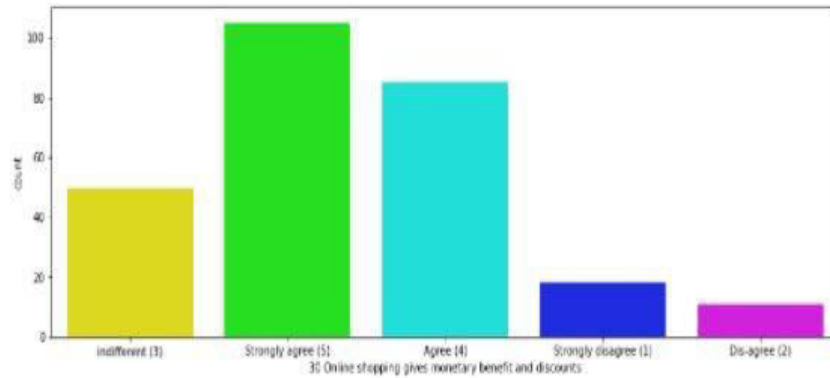
Strongly agree (5)	149
Agree (4)	94
Indifferent (3)	15
Strongly disagree (1)	11

Name: 29 Responsiveness, availability of several communication channels (email, online rep, twitter, phone etc.), dtype: int64



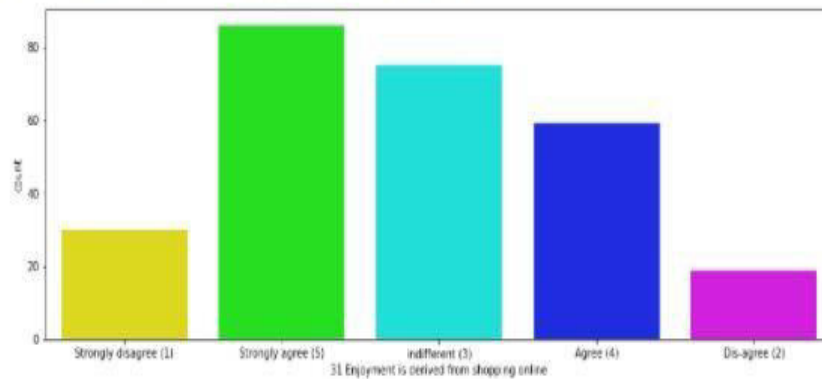
Strongly agree (5)	105
Agree (4)	85
Indifferent (3)	50
Strongly disagree (1)	18
Dis-agree (2)	11

Name: 30 Online shopping gives monetary benefit and discounts, dtype: int64

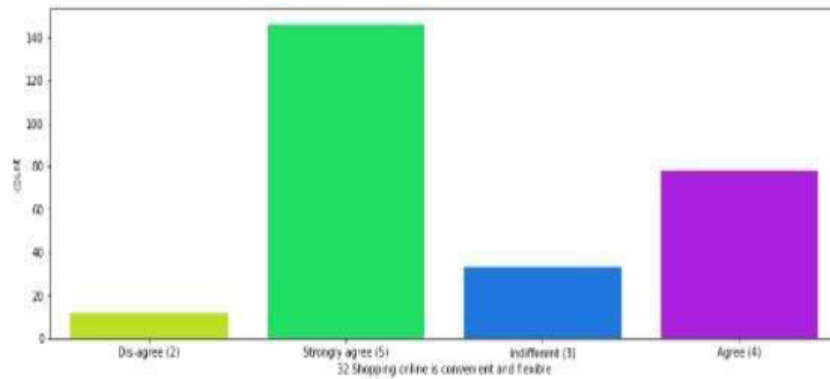


Strongly agree (5)	86
Indifferent (3)	75
Agree (4)	59
Strongly disagree (1)	30
Dis-agree (2)	19

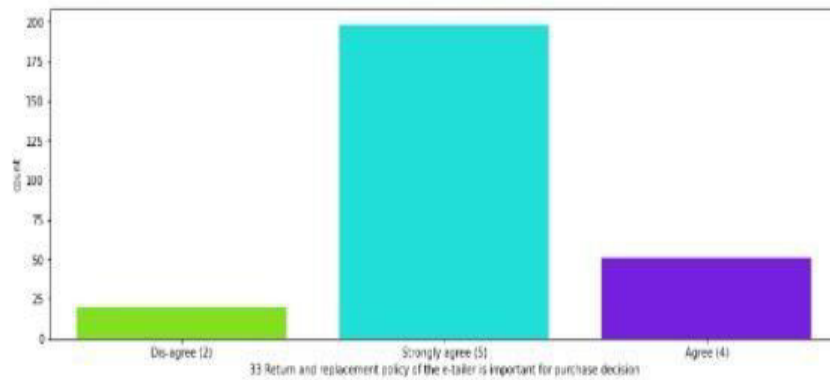
Name: 31 Enjoyment is derived from shopping online, dtype: int64



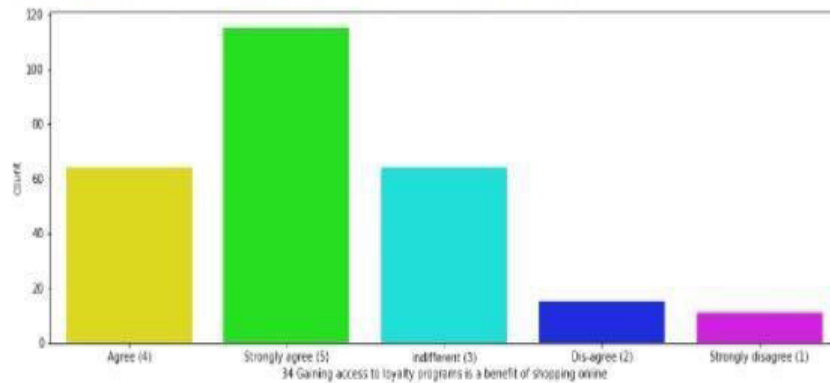
Strongly agree (5) 146
 Agree (4) 78
 Indifferent (3) 33
 Dis-agree (2) 12
 Name: 32 Shopping online is convenient and flexible, dtype: int64



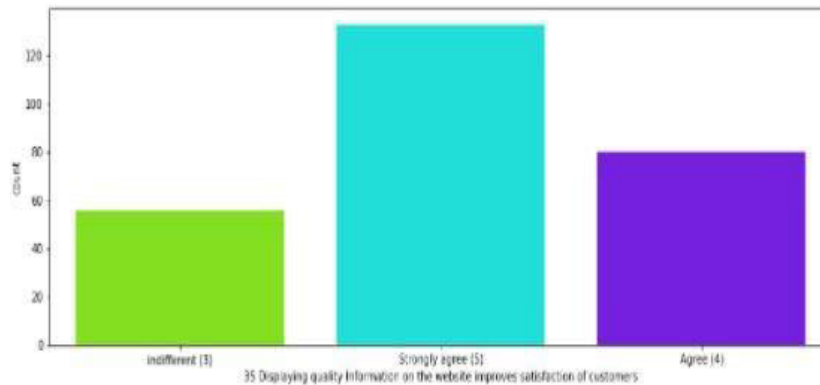
Strongly agree (5) 198
 Agree (4) 51
 Dis-agree (2) 20
 Name: 33 Return and replacement policy of the e-tailer is important for purchase decision, dtype: int64



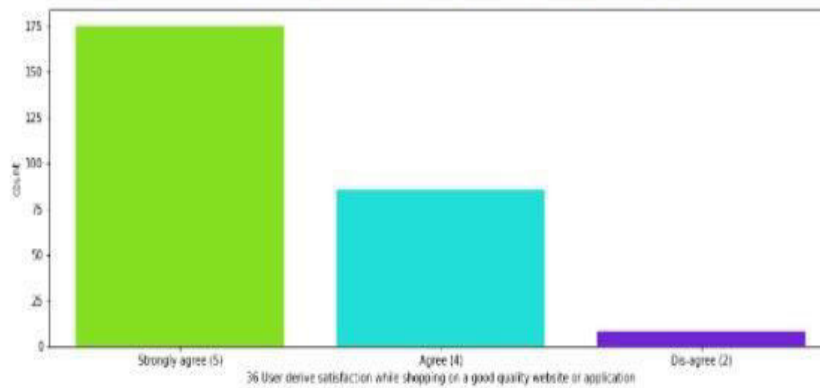
Strongly agree (5) 115
 Indifferent (3) 64
 Agree (4) 64
 Dis-agree (2) 15
 Strongly disagree (1) 11
 Name: 34 Gaining access to loyalty programs is a benefit of shopping online, dtype: int64



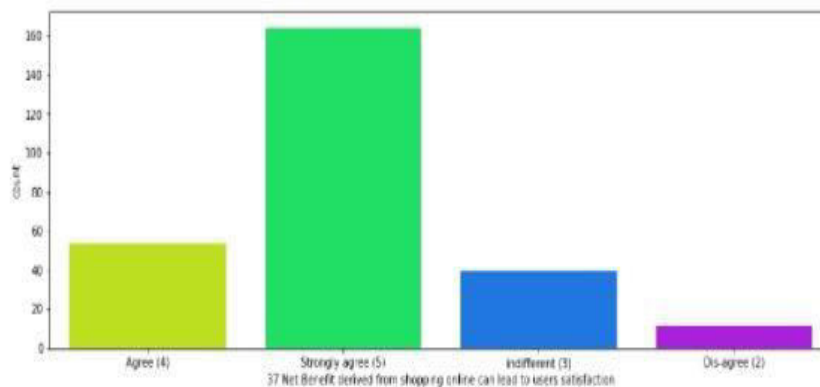
Strongly agree (5) 133
 Agree (4) 88
 Indifferent (3) 56
 Name: 35 Displaying quality Information on the website improves satisfaction of customers, dtype: int64



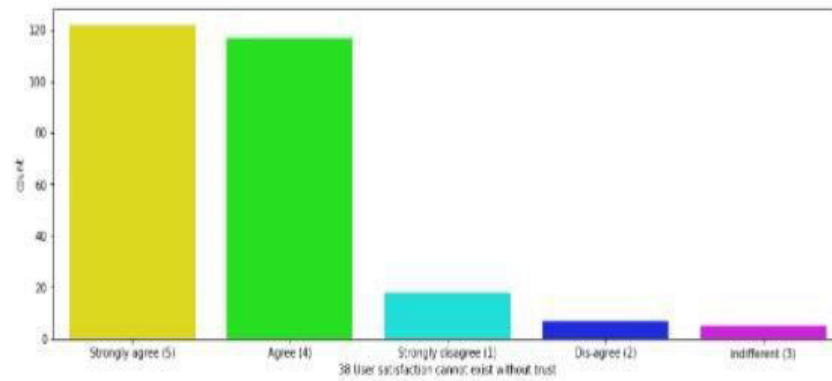
Strongly agree (5) 175
 Agree (4) 86
 Dis-agree (2) 8
 Name: 36 User derive satisfaction while shopping on a good quality website or application, dtype: int64



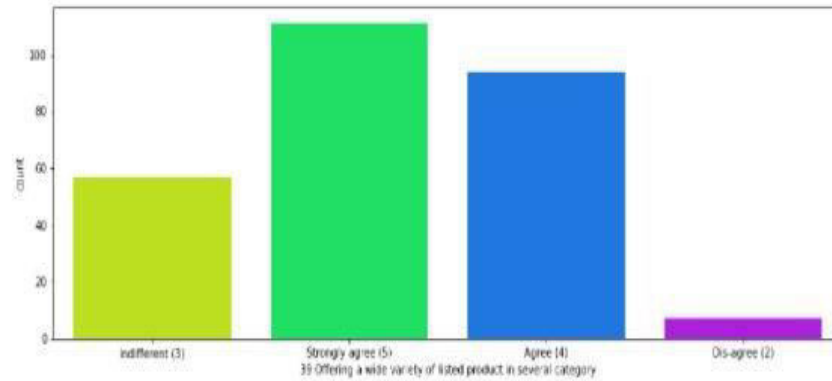
Strongly agree (5) 164
 Agree (4) 54
 Indifferent (3) 40
 Dis-agree (2) 11
 Name: 37 Net Benefit derived from shopping online can lead to users satisfaction, dtype: int64



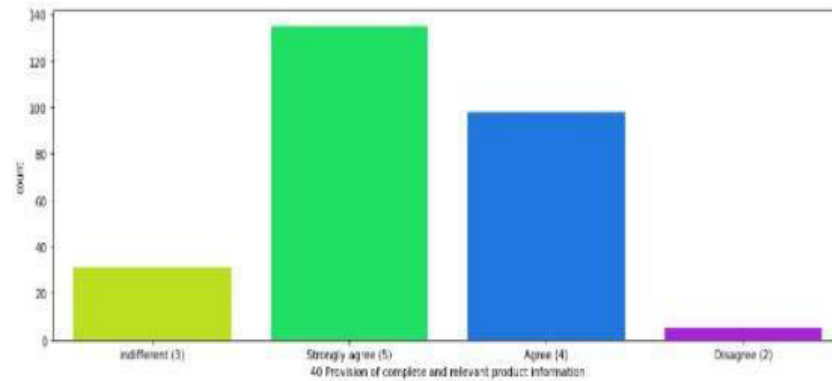
Strongly agree (5) 122
 Agree (4) 117
 Strongly disagree (1) 18
 Dis-agree (2) 7
 Indifferent (3) 5
 Name: 38 User satisfaction cannot exist without trust, dtype: int64



Strongly agree (5) 111
 Agree (4) 94
 Indifferent (3) 57
 Dis-agree (2) 7
 Name: 39 Offering a wide variety of listed product in several category, dtype: int64



Strongly agree (5) 135
 Agree (4) 98
 Indifferent (3) 31
 Disagree (2) 5
 Name: 40 Provision of complete and relevant product information, dtype: int64



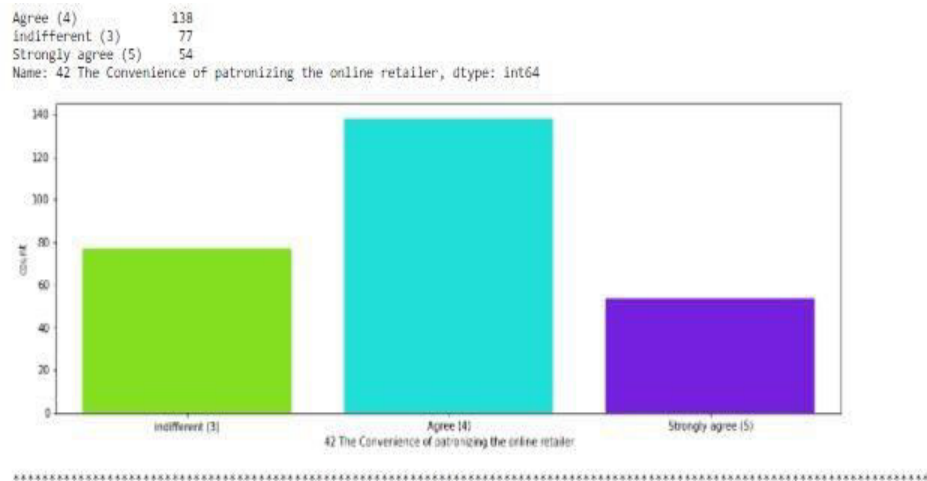
OBSERVATION ON UTILITARIAN VALUES:

1. 61% of the participants Strongly Agrees with that the content on the website is easy to read and understand.
2. 43% of the participant "Strongly Agrees" that information about similar product to the one highlighted is important for product comparison.
3. 37% and 32% participants are "Agrees" and "Strongly Agrees" about the Complete information about the listed seller and product being offered is important for purchase decision.
4. 53% of the participants "Strongly Agrees" that the Website should be Easy to Navigate.
5. 43% of the participants "Strongly Agrees" about the Loading and Processing Speed.
6. 70% of the participants "Strongly Agrees" about the User Friendly Interface of the website.
7. 59% of the participants "Strongly Agrees" about the Convenient Payment methods.
8. 53% of the participants "Strongly Agrees" about the Trust that the online retail store will fulfill its part of the transaction at the stipulated time.
9. 72% of the participants "Strongly Agrees" about the Empathy (readiness to assist with queries) towards the customers.
10. Nearly 40% of the participants "Strongly Agrees" about the Online shopping gives monetary benefit and discounts.
11. 54% of the participants "Strongly Agrees" about the Shopping online is convenient and flexible.
12. 73% of the participants "Strongly Agrees" about the Return and replacement policy of the e-tailer is important for purchase decision.
13. Nearly 50% of the participants "Strongly Agrees" about Displaying quality Information on the website improves satisfaction of customers.

14. 61% of the participants "Strongly Agrees" about Net Benefit derived from shopping online can lead to users satisfaction.

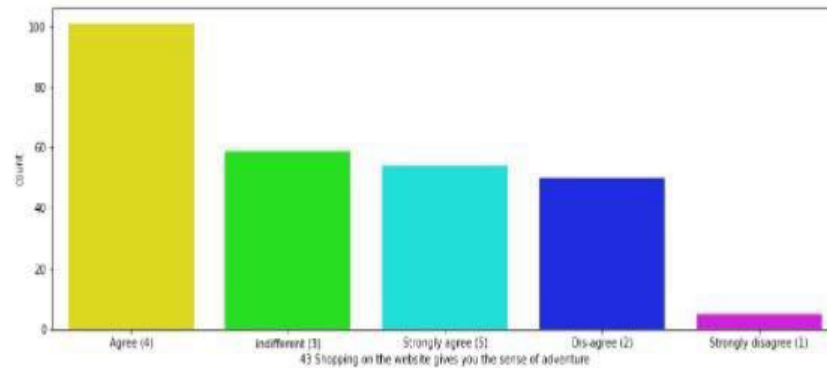
15. 55% of the people "Strongly Agrees" about the Monetary savings.

PART-3 : HEDONIC VALUE



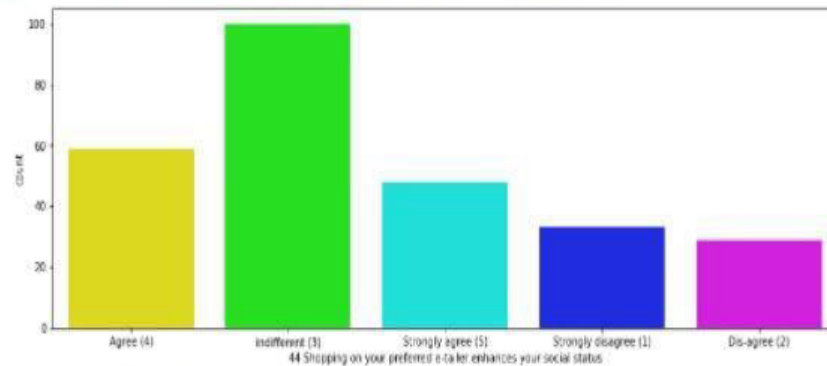
Agree (4)	101
Indifferent (3)	59
Strongly agree (5)	54
Dis-agree (2)	50
Strongly disagree (1)	5

Name: 43 Shopping on the website gives you the sense of adventure, dtype: int64



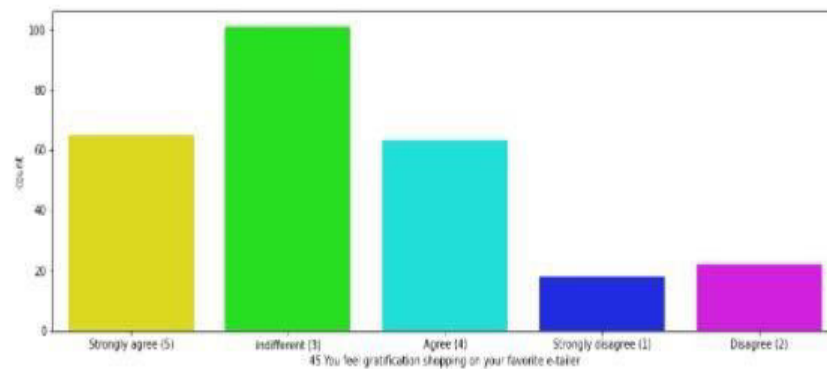
Indifferent (3)	100
Agree (4)	59
Strongly agree (5)	48
Strongly disagree (1)	33
Dis-agree (2)	29

Name: 44 Shopping on your preferred e-tailer enhances your social status, dtype: int64



Indifferent (3)	101
Strongly agree (5)	65
Agree (4)	63
Disagree (2)	22
Strongly disagree (1)	18

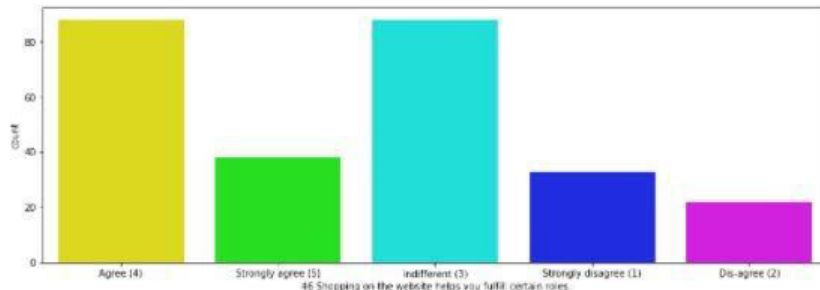
Name: 45 You feel gratification shopping on your favorite e-tailer, dtype: int64



```

Indifferent (3)      88
Agree (4)            88
Strongly agree (5)   38
Strongly disagree (1) 33
Dis-agree (2)        22
Name: 46 Shopping on the website helps you fulfill certain roles, dtype: int64

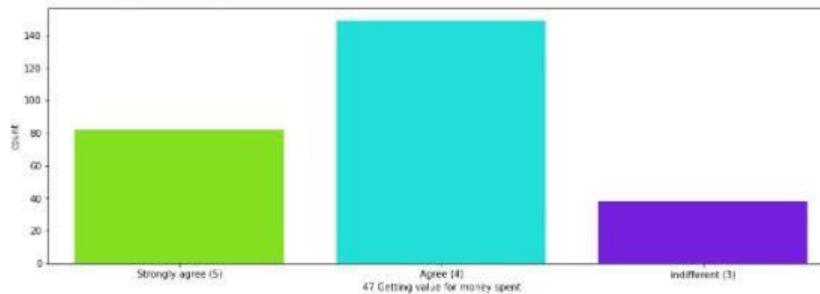
```



```

Agree (4)            149
Strongly agree (5)   82
Indifferent (3)      38
Name: 47 Getting value for money spent, dtype: int64

```

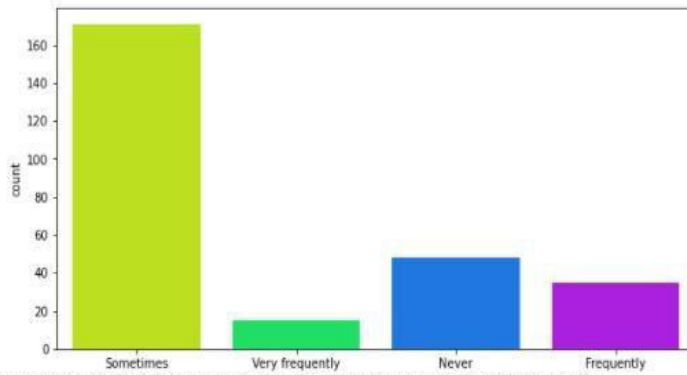


OBSERVATION ON HEDONIC VALUES:

1. 65% participants agree that they like the convenience of patronizing the online retailer.
2. More than half of the customers doing online shopping accept that they like the sense of adventure while shopping online.
3. Many customers don't agree that shopping on their preferred website enhances their social status.
4. Half of the total participants say that shopping on the website helps them fulfill certain roles.
5. 90% of the customer agrees that they are getting value for money spent while shopping online.

PART-4: PRECIEVED RISK

```
Sometimes      171
Never          48
Frequently     35
Very frequently 15
Name: 16 How frequently do you abandon (selecting an items and leaving without making payment) your shopping cart?, dtype: int64
```

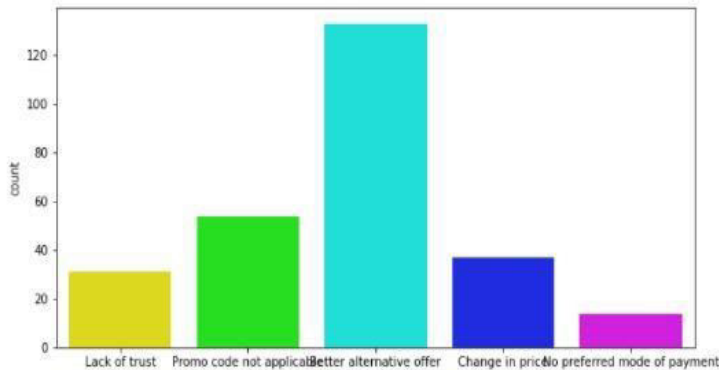


16 How frequently do you abandon (selecting an item and leaving without making payment) your shopping cart?

```

Better alternative offer      133
Promo code not applicable    54
Change in price              37
Lack of trust                31
No preferred mode of payment 14
Name: 17 Why did you abandon the "Bag", "Shopping Cart"?\\t\\t\\t\\t\\t\\t
, dtype: int64

```



OBSERVATION ON PERCEIVED RISK:

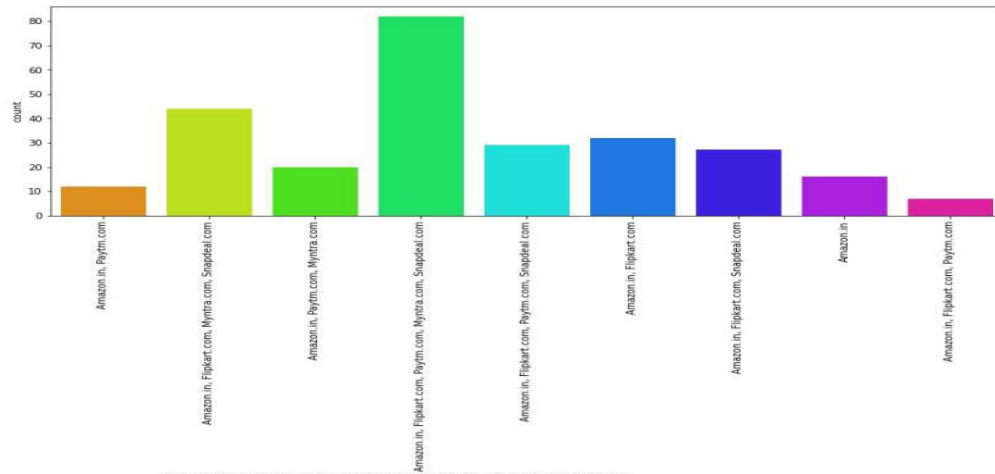
1. Nearly 64% of people occasionally abandoned the shopping cart without payment and nearly 18% of people never abandon the shopping cart and 13% of people oftenly abandon the shopping cart.

2. Reason for abandoning the shopping cart is "Better Alternative Offer" for about 50% and interestingly lack of trust and change in price for about 11% and 14% of people answered and also "No Preferred mode of payment is very less percentage of about only 5%.

```

Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com 82
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com 44
Amazon.in, Flipkart.com 32
Amazon.in, Flipkart.com, Paytm.com, Snapdeal.com 29
Amazon.in, Flipkart.com, Snapdeal.com 27
Amazon.in, Paytm.com, Myntra.com 20
Amazon.in 16
Amazon.in, Paytm.com 12
Amazon.in, Flipkart.com, Paytm.com 7
Name: From the following, tick any (or all) of the online retailers you have shopped from;
, dtype: int64

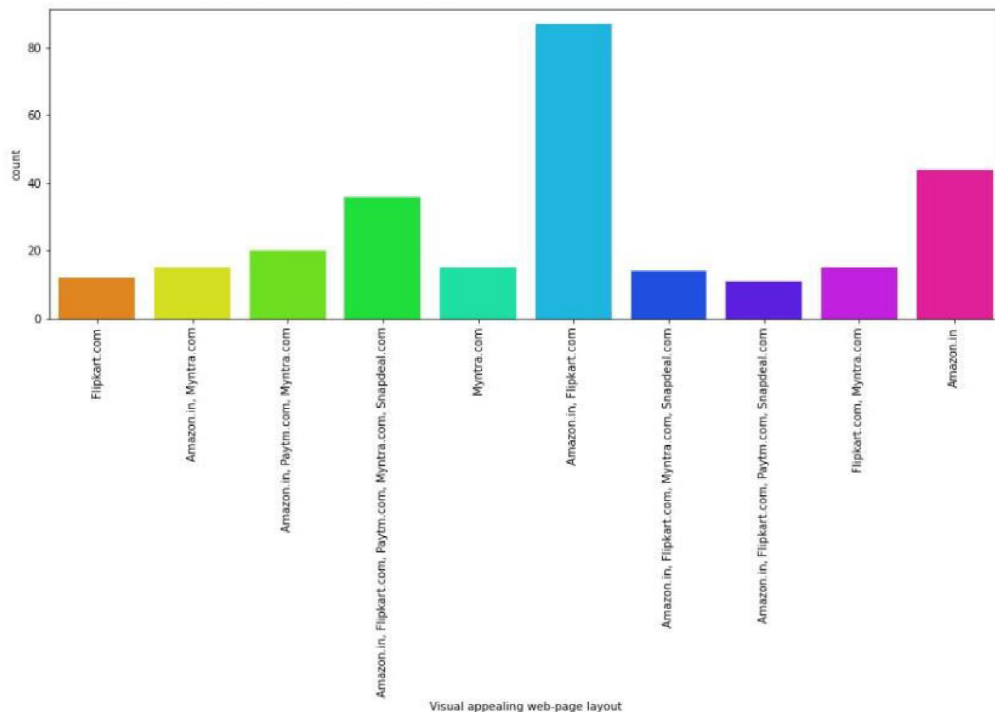
```



```

From the following, tick any (or all) of the online retailers you have shopped from;
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
Flipkart.com, Myntra.com 15
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

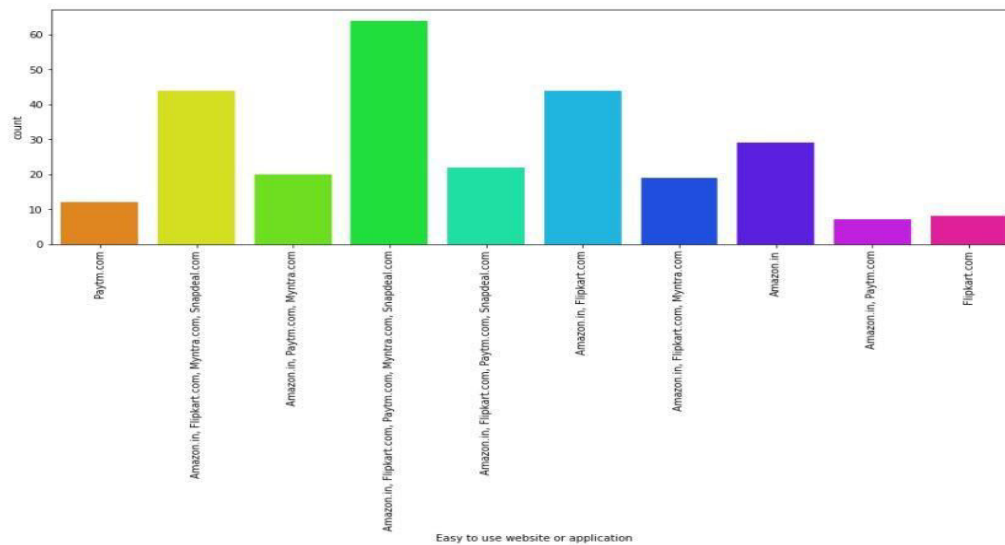
```



PART-5: CUSTOMER EXPERIENCE

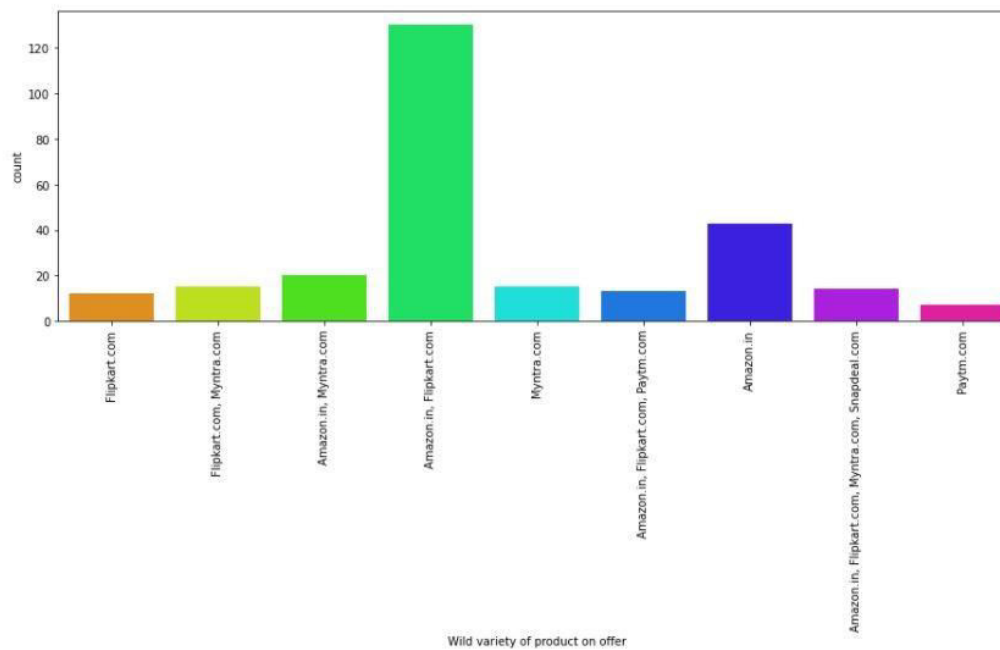
Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com	64
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com	44
Amazon.in, Flipkart.com	44
Amazon.in	29
Amazon.in, Flipkart.com, Paytm.com, Snapdeal.com	22
Amazon.in, Paytm.com, Myntra.com	20
Amazon.in, Flipkart.com, Myntra.com	19
Paytm.com	12
Flipkart.com	8
Amazon.in, Paytm.com	7

Name: Easy to use website or application, dtype: int64

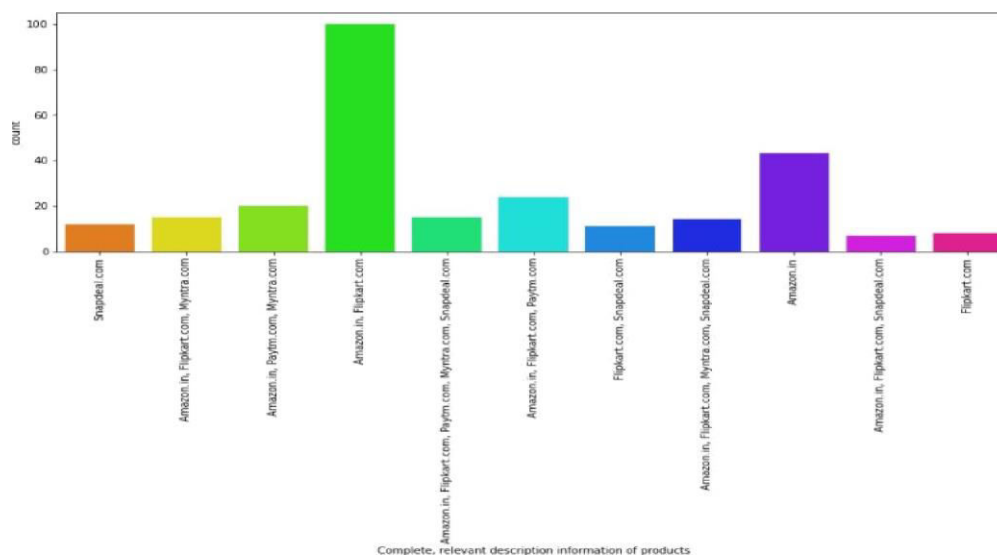


Amazon.in, Flipkart.com	130
Amazon.in	43
Amazon.in, Myntra.com	20
Flipkart.com, Myntra.com	15
Myntra.com	15
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com	14
Amazon.in, Flipkart.com, Paytm.com	13
Flipkart.com	12
Paytm.com	7

Name: Wild variety of product on offer, dtype: int64

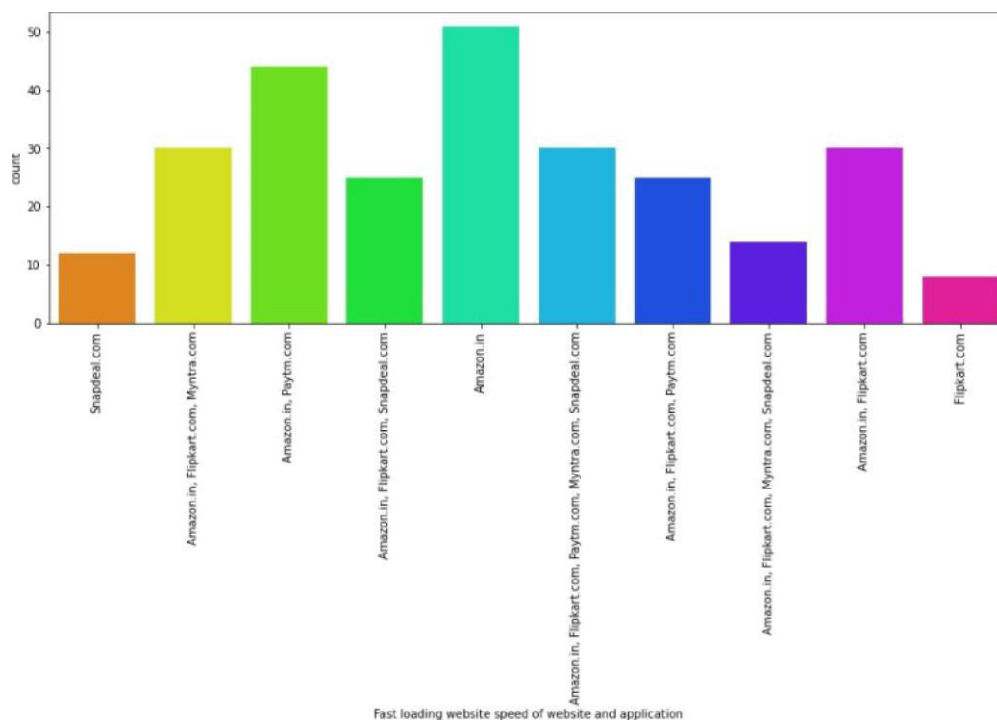


Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com	15
Amazon.in, Flipkart.com, Myntra.com	15
Amazon.in, Flipkart.com, riynta. om, snapdual. om	14
Snapdeal.com	12



Amazon.in	51
Amazon.in, Paytm.com	44
Amazon.in, Flipkart.com, Myntra.com	30
Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com	30
Amazon.in, Flipkart.com	38
Amazon.in, Flipkart.com, Snapdeal.com	25
Amazon.in, Flipkart.com, Paytm.com	35
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com	14
Snapdeal.com	12

Name: Fast loading website speed of website and application, dtype: int64



```
Paytm.com 12
Name: Reliability of the website or application, dtype: int64
```



Amazon.com

Asa,on.com, Flipkdrt.cms 37

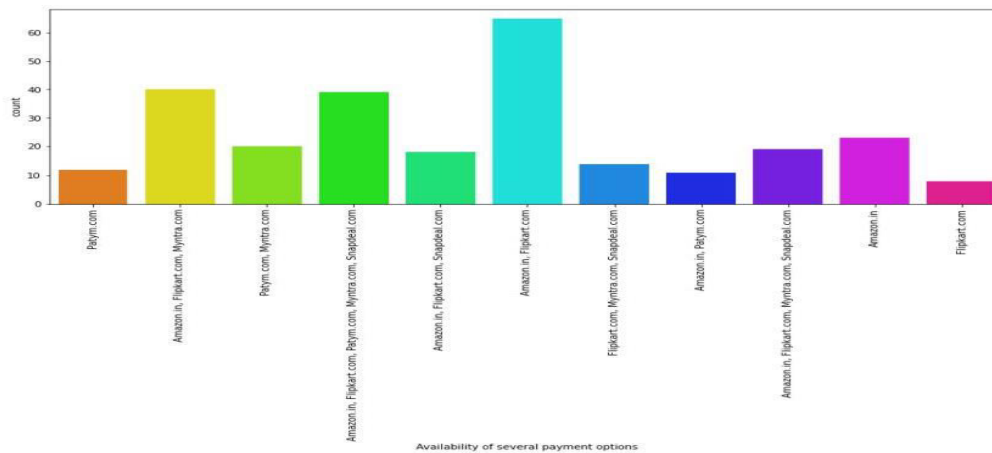


Quickness to complete purchase

```

Amazon.in, Flipkart.com      65
Amazon.in, Flipkart.com, Myntra.com 40
Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com 39
Amazon.in 23
Paytm.com, Myntra.com 20
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com 19
Amazon.in, Flipkart.com, Snapdeal.com 18
Flipkart.com, Myntra.com, Snapdeal.com 14
Paytm.com 12
Amazon.in, Paytm.com 11
Flipkart.com 8
Name: Availability of several payment options, dtype: int64

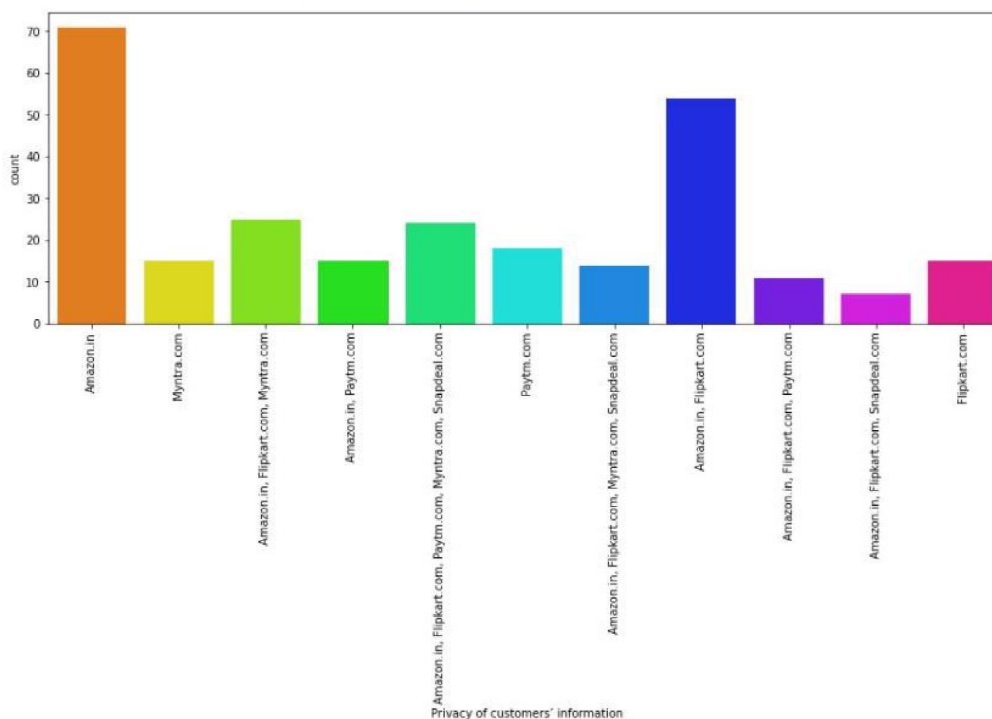
```



```

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
Flipkart.com 15
Myntra.com 15
Amazon.in, Paytm.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

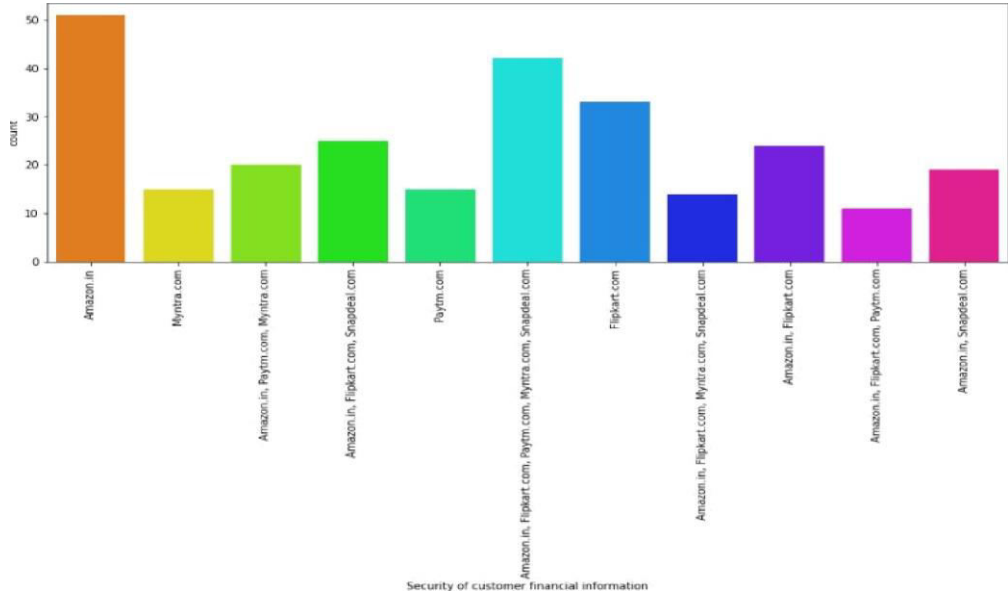
```



Amazon.in

Amazon.in, Flipkart.com, Snapdeal.com as
Amazon.in, Flipkart.com 24

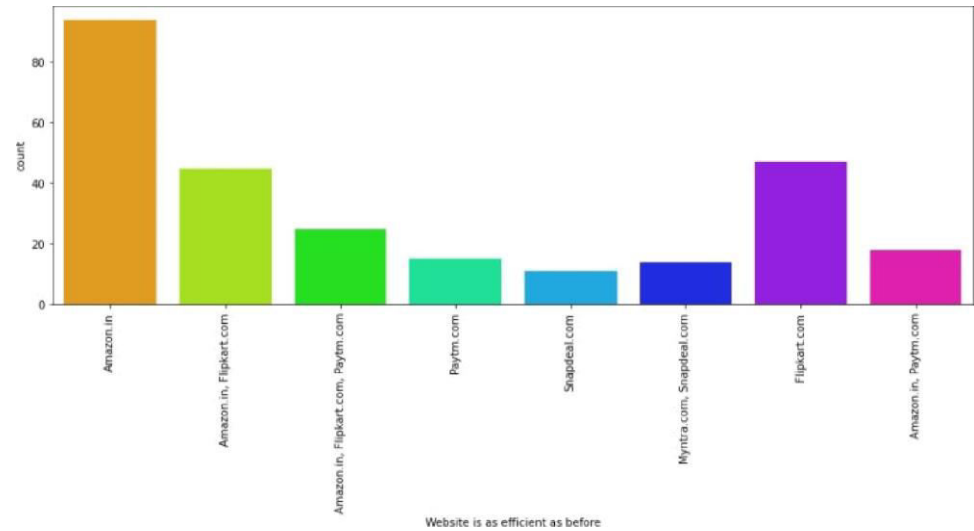
Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com 14
Amazon.in, Flipkart.com, Paytm.com 12



Amazon.in

Amazon.in, Flipkart.com 45
Amazon.in, Flipkart.com, Paytm.com 25
Amazon.in, Paytm.com 18

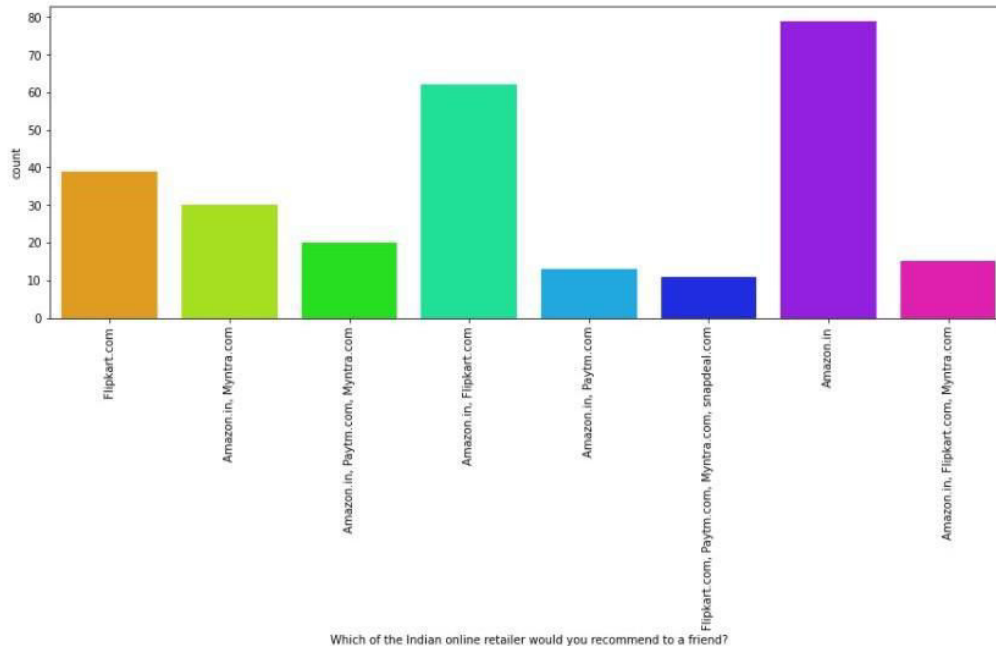
snapdeal.com 11
Name: website is as efficient as before, dtype: int64



```

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

```



OBSERVATIONS ON CUSTOMER EXPERIENCE:

1. 20% of the total participants "Strongly Agree" that Website gives them a sense of Adventure and only 2% of the participants "Strongly disagrees" that Website doesn't.
2. Surprisingly 40% of the participants Indifferently responded for the Gratification survey. But 24% of the People Strongly agrees that they felt Gratification shopping on their favourite e-tailer.
3. Nearly 85% of the participants Agrees that they are getting value for the money they spent.
4. 30% of the total participants answered that they from all ie (Amazon , Flipkart Myntra, Snapdeal , Paytm) of the online retailers and 12% of the participants answered that purchased only from (Amazon and Flipkart) and 6% of the participants have shopped only from Amazon.
5. 24% of the participants answered that all the Website/Application has easy to use and 10% of the participants said that only amazon is so easy to access.
6. 32% of the participants said that (Amazon and Flipkart) has Visually Appealing Web page-Layout,16% of the people said that (Amazon) has Visually appealing

web-page layout, 5% of the participants said that (flipkart) also has the Visually appealing web-page layout.

7. 48% of the total participants said that (Amazon and Flipkart) has the wide variety of products on offer and 16% of the total participants said that (Amazon) has the wide variety of products on offer.
8. 37% OF THE total participants said that (Amazon and Flipkart) has the Complete information about the product, 16% of the participants said that only (Amazon) has the relevant information and also 5% of participants said that Snapdeal has the complete information about the products and 3% of the participants said Flipkart is the only one.
9. 19% of the participants said that Amazon's website/application is loading fast than the other and also 16% participants answered that both Amazon and Paytm has fast loading website/application.
10. 23% of the participants said that Amazon is best to reliable and 25% of participants said that one can complete the purchase quickly in Amazon.
11. 24% of the people said that Amazon and Flipkart has the Availability of several payment method.
12. 40% of the participants said that Amazon deleivered their products so quickly and 31% of the participants said that both Amazona nd Flipkart will deleivered their product so quickly.
13. 27% of the participants said that Amazon will kept the privacy of customer's information.
14. 22% of the participants said that Amazon only shows their online assistance through Multi-channel,but also 22% of the total participants answered that both Amazon and Flipkart shows their online assistance through Multi-channel.
15. 22% of the participants has said that (Amazon and Flipkart) has took longer time in displaying the graphics and photos.
16. 27.8% of the participants has said that price declaration in Myntra took longer time. 23% of the participants said that the Myntra Website/App has taken longer time to loading the page.
17. 27% of the participants has said that Paytm has taken longer time to deliver the product followed by Snapdeal.
18. 20% of the participants has said that in "Amazon" and "Myntra" by moving from one page to another there is a frquent disruption in those apps/website.
19. 35% of the participants has said that efficiency of the Amazon Website is as good as before.
20. 30% of the participants has said that they would recommend Amazon to their Friend.

CONCLUSION

- The purpose of this study is to understand the influence of utilitarian values, hedonic values, customer experience and perceived risk on E-commerce customer satisfaction in India.
- The analysis shows that the Utilitarian Value significantly influences Customer Satisfaction, meaning that the level of Utilitarian Value of e-commerce customers will affect the level of Customer Satisfaction. In other words, the better (higher) Utilitarian Value given by e-commerce products will lead to satisfaction with customers. Hedonic Value significantly influences Customer Satisfaction, meaning that the high and low Hedonic Value of e-commerce customers will affect the level of Customer Satisfaction. In other words, the higher the Hedonic Value given by e-commerce products will lead to the satisfaction of e-commerce customers.
- The following factors should be considered by the E-commerce websites to improve the customer satisfaction:

1. Utilitarian Value

- Product offerings
- Product information
- Monetary savings
- Convenience

2. Hedonic Value

- Adventure Shopping
- Social Shopping
- Gratification Shopping

- Idea Shopping
- Role Shopping
- Value Shopping

3. Social Value

- Feel acceptable
- Good impression
- I am perceived
- Social approval

4. Perceived Risk

- Financial Risk
- Functional Risk
- Physical Risk
- Psychological Risk
- Social Risk
- Temporal Risk

5. Customer Satisfaction

- Purchasing Experience
- Site Selection

On the basis of these factors we could see that,

1. Amazon.in

2. Flipkart.com

are doing great in their performance on customer satisfaction and retention.

THANK YOU