Customer Retention Analysis

Submitted by:

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ACKNOWLEDGMENT

3. **"Customer Retention Based on BP ANN and Survival Analysis", IEEE Conference paper by the author Guozheng Zhang in the year October 2007**

Customer retention is an increasingly pressing issue in today's ever-competitive commercial arena. This is especially relevant and important for sales and services related industries. This paper focus on constructing a new customer retention framework based on BP ANN (artificial neural network) and survival analysis. The new customer retention framework constituted of two parts, one is the BP ANN survival analysis model which integrates ANN technology and survival analysis to predict customer likelihood of defection and estimating customer value, the other is CLV (customer lifetime value) & CSP (customer survival phase) segment model which segment customer into different cluster to target high value, retainable customer. Effective actions triggered by these models could be the key to eventual customer retention. The empirical analysis is based on 23560 customers selected from the data warehouse of a large Chinese telecommunications company. This paper also suggests some propositions for further research

4. "Decision Tree Technique for Customer Retention in Retail Sector" International Conference paper by the author Rose Tinabo in the year 2011

This paper tells about that Currently, data mining techniques are used in different areas, and numerous commercial data systems are available. The retail industry is a major application area for data mining techniques, since it collects large amount of data on sales, customer shopping history, goods transportation, consumption, and service. The quantity of data collected continues to expand rapidly, especially due to the increased ease, availability, and popularity of business conducted on the Web, or e-commerce. Therefore, most effective data mining technique must be identified from large number of the available data mining techniques. This paper explores four potential data mining techniques to the problem of customer retention in the retail sector and propose decision tree to be the most effective technique. The decision is made by considering the use and features of the retail datasets, such as size which include number of instances and number of attributes.

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.

Customer retention formula

The customer retention formula isn't difficult, but it's powerful. It's an illustration of how well you're building relationships and drawing existing customers back for subsequent purchases.

You'll need to do a little math, but if you have a calculator, it won't be a struggle.

The customer retention formula looks like this:

Number of customers at end of period	−	Number of customers acquired during period	/	Number of customers at start of period	X	100

Problem Statement:- 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. Results indicate the e-retail success factors, which are very much critical for customer satisfaction.

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

6.detecting outliers

1.Checking the missing value

Missing value can be checked by the following python code:-

missing_value=[feature for feature
in df.columns if df[feature].isnull().sum()>1]

missing_value

Observation:-
There are no missing values present in the dataset

2. Checking the numerical columns

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

numerical_feature=[feature for feature in df.columns if df[feature].dtypes!="O"]

df[numerical_feature]

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

discrete_feature=[feature for feature in df.columns if feature not in numerical_feature]

df[discrete_feature]

Observation:-
There are 70 categorical values present in dataset

Data Visualization:-
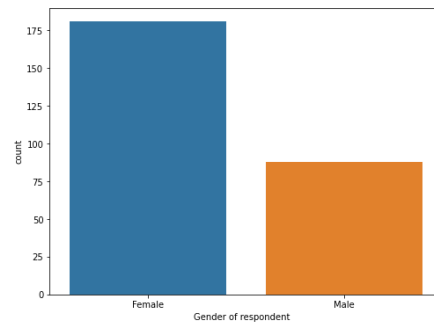
Gender of the respondent

observation:- There are 181 female and 88 male
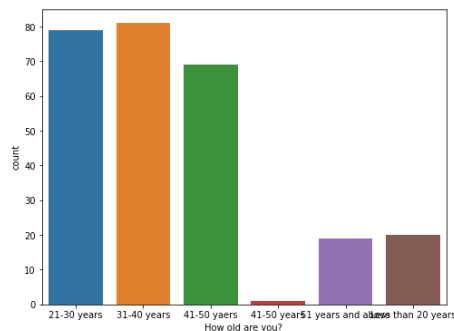
How old are you?

observation:-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
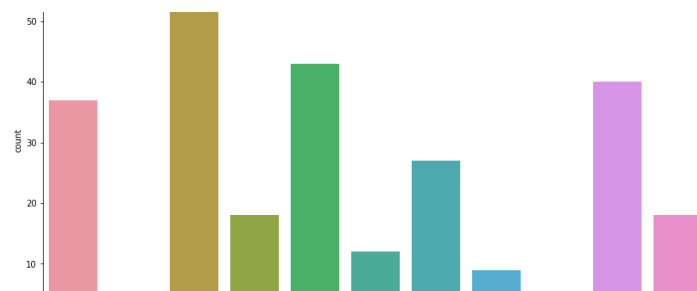
Which city do you shop online?

observation:

1. 58 people shop online from Dehli
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 Merrut
7. 5 People shop online from Moradabad

8. 2 People shop online from Bulandshahr

9. 18 people shop online from Ghaziabad

Since how long you are shopping online?

observation:-1. there are 98 people are shopping online above 4 years

2. there are 65 people are shopping online between 2 and 3 years

3. there are 47 peoples are shopping online between 3 and 4 years

4. there are 43 peoples are shopping online less than 1 year

5. there are 16 peoples are shopping online in between 1 and 2 years

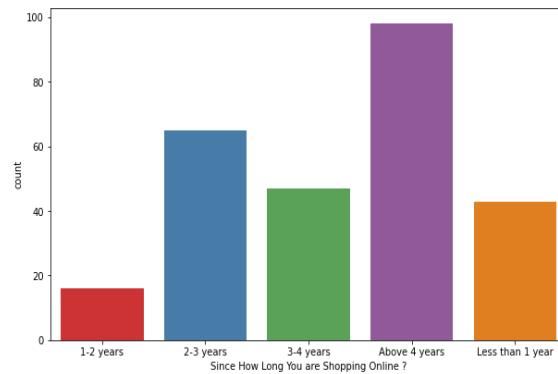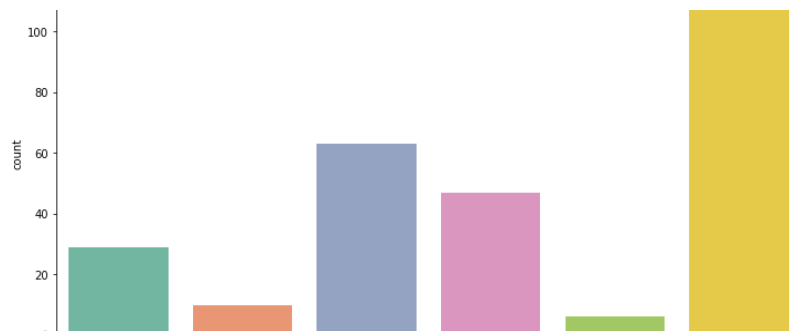How many times you have made an online purchase in the past 1 year?

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 21-30 times

6. there are 6 peoples have made online purchase 42 times and above
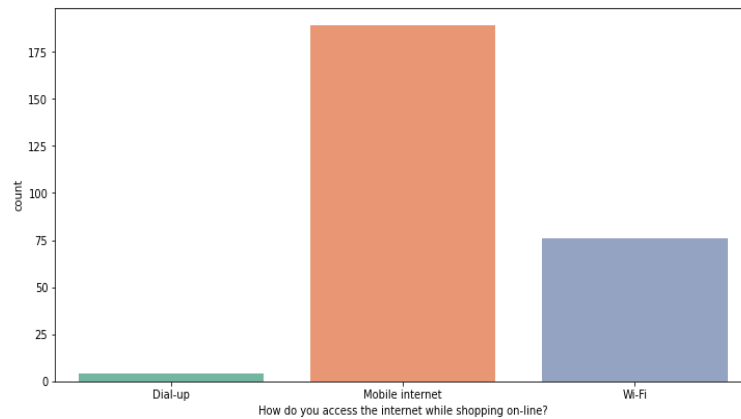
How do you access the internet while shopping on-line?

Observation:- 1.There are 189 people accessing the mobile internet

2. There are 76 people accessing the wifi network

3. There are 4 people acccesing the Dial-up network

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

Observation:- 1.There are 189 people accessing the mobile internet

2.There are 76 people accessing the wifi network

3.There are 4 people accessing the Dial-up network
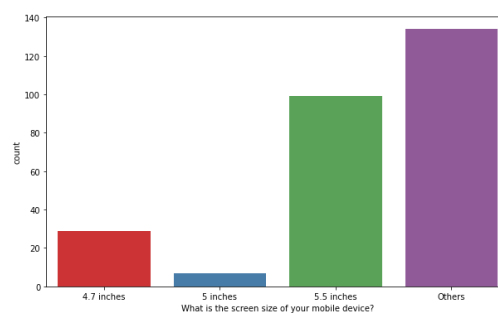
Which device do you use to access the online shopping?

Observation:-

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
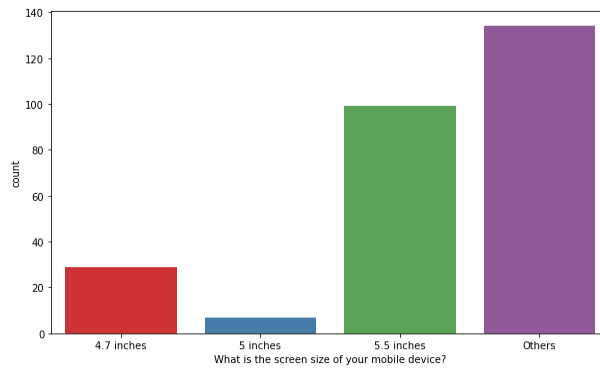
What is the screen size of your mobile device?

observation:-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

4. The screen size of Mobile device of the people shopping online of others are 134
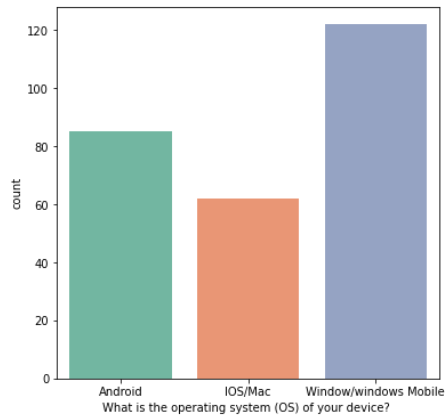
What is the operating system (OS) of your device?

Observation:-

1. The operating system used by people who are shopping online in windows/ windows Mobile 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 Google Chrome 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 are 5
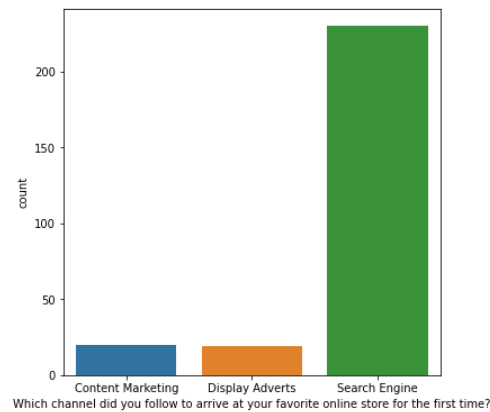
Which channel did you follow to arrive at your favourite online store for the first time?

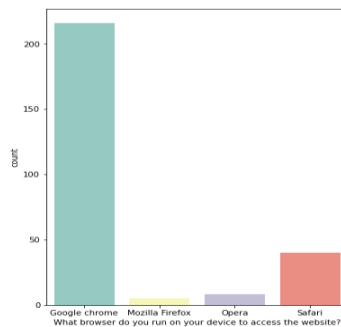Observation:- 1.There are 230 people who follow the search engine channel to arrive at your favourite online store for the first time.

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.
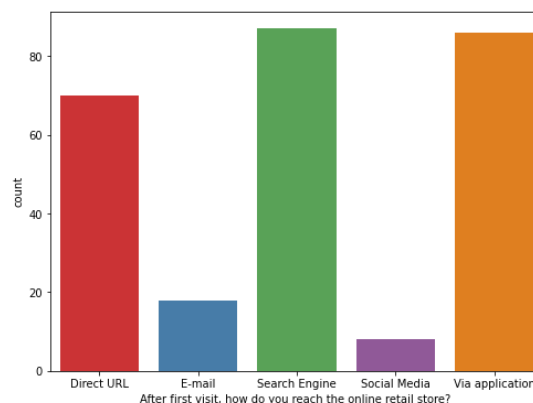
After first visit, how do you reach the online retail store

Observation:- 1.after the first visit, people do reach the online retail score through the search engine are 87

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

3.after the first visit, people do reach the online retail score through the Direct URL are 70.

4.after the first visit, people do reach the online retail score through the E-mail are 18.

5.after the first visit, people do reach the online retail score through the Social Media are 8

How much time do you explore the e- retail store before making a purchase decision

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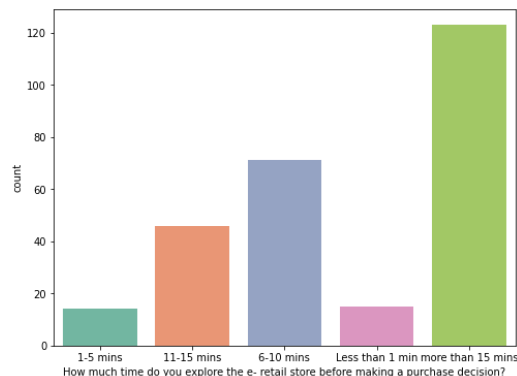
4.the people exploring the e-retail store before making the purchase decision less than 1 mins are 15.

5.the people exploring the e-retail store before making the purchase decision between 1and 5 mins are 14
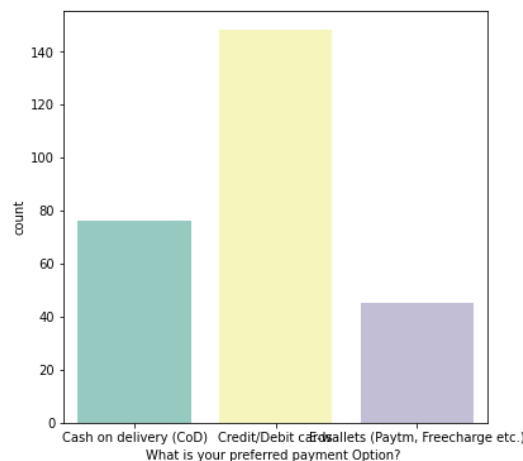
What is your preferred payment Option?

Observation:- 1. The number of people who preferred payment location as credit/debit cards are 148

2.The number of people who preferred payment location as cash on delivery are 76

3.The number of people who preferred payment location as E-wallets(paytm, Free charge etc) cards are 45
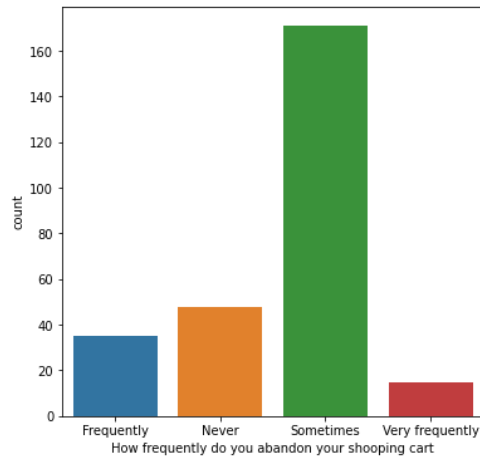
How frequently do you abandon your shopping cart

Observation:-1.the people abandon on the shopping cart sometimes are 171

2.the people never abandon on the shopping cart are 48

3.the people abandon on the shopping cart frequently are 35

4.the people abandon on the shopping cart very Frequently are 15
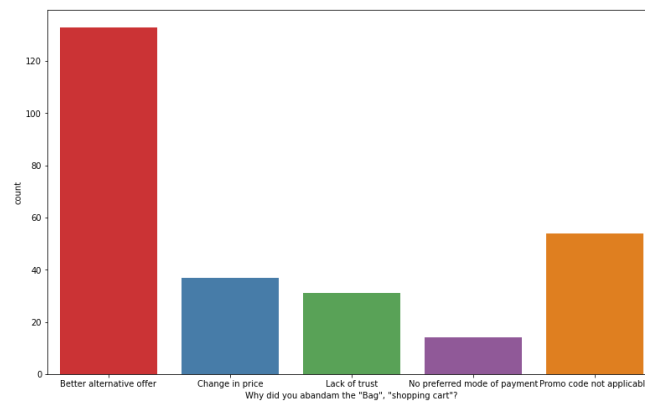
Why did you abandon the "Bag", "shopping cart

Observation:-

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
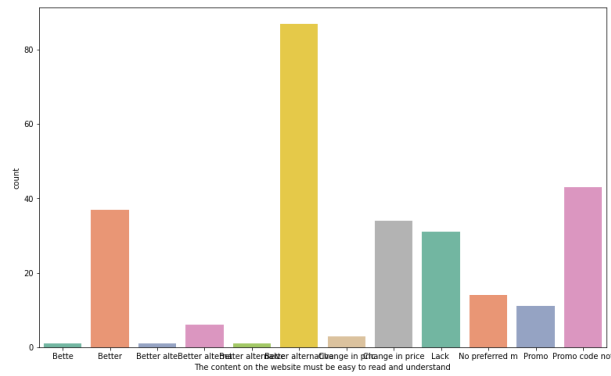
The content on the website must be easy to read and understand

actually in this data, better is same bette. in the code r is missing. better alternative, better alte, better alterna are all same, change in price is same as change in pric

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
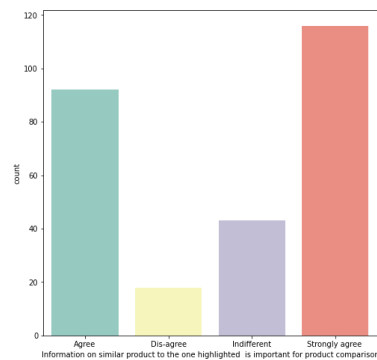
Information on similar product to the one highlighted is important for product comparison

observation:-

    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
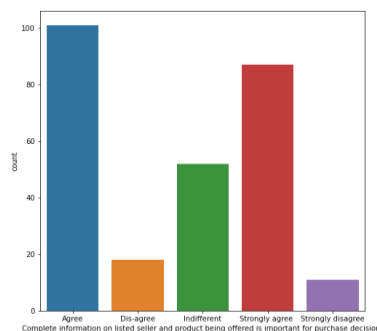
Complete information on listed seller and product being offered is important for purchase decision

Observation:- 1.people who agree on complete information on listed seller and product being offered is important by purchase factor are 101.

2.people who strongly agree on complete information on listed seller and product being offered is important by purchase factor are 87.

3.people who become indifferent on complete information on listed seller and product being offered is important by purchase factor are 52.

4.people who disagree on complete information on listed seller and product being offered is important by purchase factor are 18.

5.people who strongly disagree on complete information on listed seller and product being offered is important by purchase factor are 11.
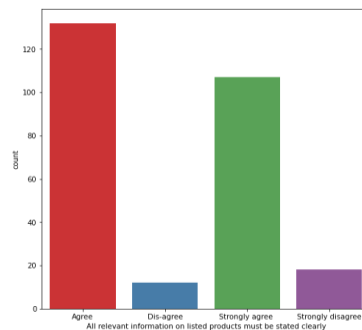
All relevant information on listed products must be stated clearly

Observation:-1. people who agree on all relevant information on listed products are 132

2.people who strongly agree on all relevant information on listed products are 107

3.people who strongly dis-agree on all relevant information on listed products are 18

4.people who disagree on all relevant information on listed products are 12
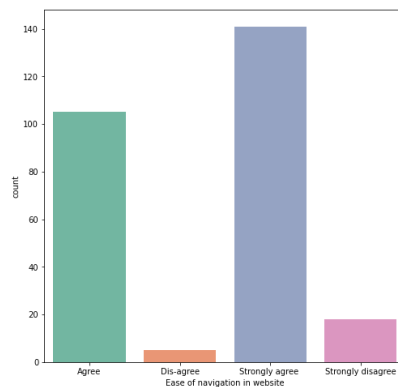
Ease of navigation in website

Observation:-1.people who strongly agree on ease of navigation are 141.

2.people who agree on ease of navigation are 105

3.people who strongly disagree on ease of navigation are 18

4.people who disagree on ease of navigation are 5
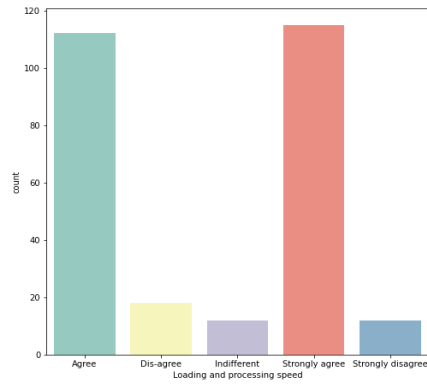
Loading and processing speed

Observation :- 1.people who strongly agree on loading and processing speed are 115.

2.people who agree on loading and processing the speed are 112.

3.people who dis-agree on loading and processing the speed are 18.

4.people who are indifferent in loading and processing the speed are 12.

5.people who are strongly dis-agree on loading and processing the speed are 12
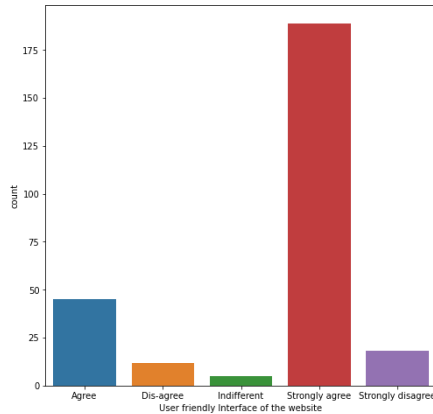
User friendly Interface of the website

Observation:-1. people who strongly agree on user-friendly interface of the website are 45.

2. people who strongly disagree on user-friendly interface of website are 18.

3.people who dis-agree on user-friendly interface of website are 12

4. people who are indifferent on user friendly interface on website are 5
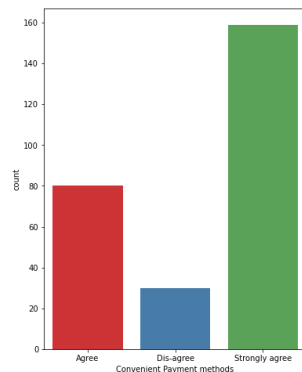
Convenient Payment methods

Observation:-1.people who strongly agree on convenient payment methods are 159.

2.people who agree on convenient payment methods are 80.

3.people who dies-agree on convenient payment methods are 30
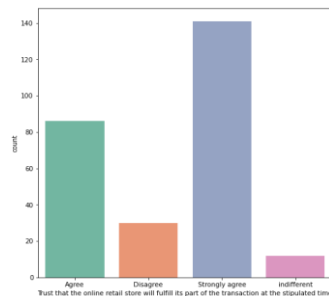
Trust that the online retail store will fulfill its part of the transaction at the stipulated time

Observation:-1.people who strongly agree on the trust that online retail score will fulfill its part of transaction at the stipulated time are 141

2.people who agree on the trust that online retail score will fulfill its part of transaction at the stipulated time are 86

3.people who disagree on the trust that online retail score will fulfill its part of transaction at the stipulated time are 30.

4.people who are indifferent on the trust that online retail score will fulfill its part of transaction at the stipulated time are 12
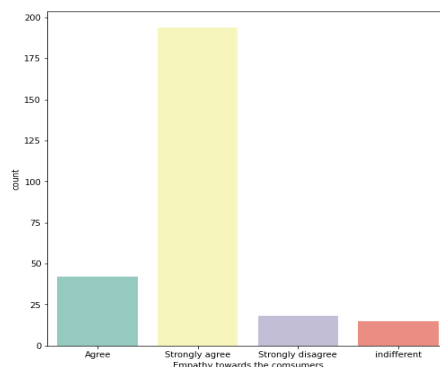
Empathy towards the consumers

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.
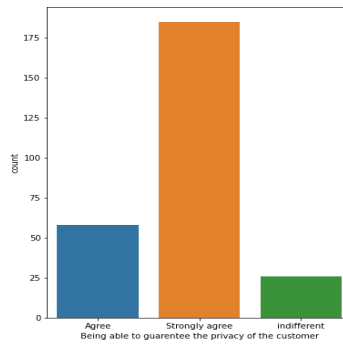
Being able to guarentee the privacy of the customer

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 26
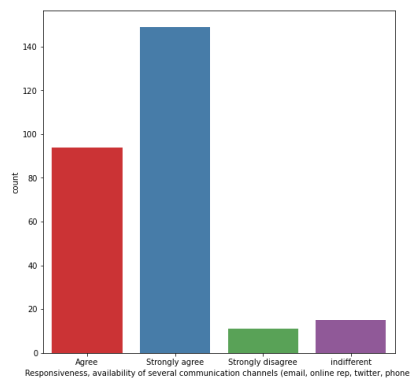
Responsiveness, availability of several communication channels

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
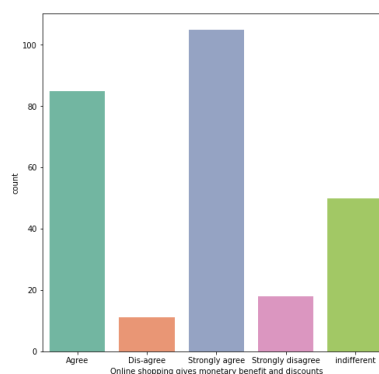
Online shopping gives monetary benefit and discounts

Observation:-1. people who are strongly agree on the online shopping gives monetary benefit are 105

2. people who are agree on the online shopping gives monetary benefit are 85.

3.people who are indifferent on the online shopping gives monetary benefit are 50.

4.people who are strongly disagree on the online shopping gives monetary benefit are 18.

5.people who are dis-agree on the online shopping gives monetary benefit are 11
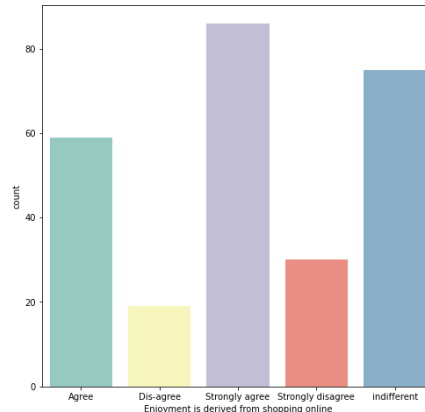
Enjoyment is derived from shopping online

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.
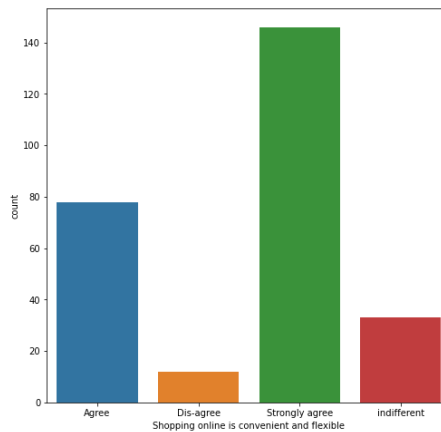
Shopping online is convenient and flexible

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
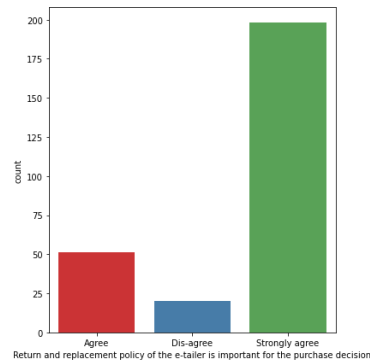
Return and replacement policy of the e-tailer is important for the purchase decision

Observation:-1.people who strongly agree on return and replacement policy of the e-tailor is important for the purchase decision are 198.

2.people who agree on return and replacement policy of the e-tailor is important for the purchase decision are 51.

3.people who dis-agree on return and replacement policy of the e-tailor is important for the purchase decision are 20
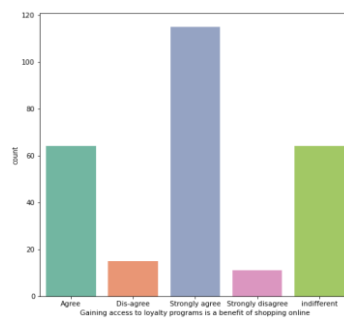
Gaining access to loyalty programs is a benefit of shopping online

Observation:-1. people who are strongly agree on the gaining access to loyalty programs is a benefit of shopping online are 115

2.people who are indifferent on the gaining access to loyalty programs is a benefit of shopping online are 64.

3.people who are agree on the gaining access to loyalty programs is a benefit of shopping online are 64

4.people who are disagree on the gaining access to loyalty programs is a benefit of shopping online are 15

5.people who are strongly disagree on the gaining access to loyalty programs is a benefit of shopping online are 11
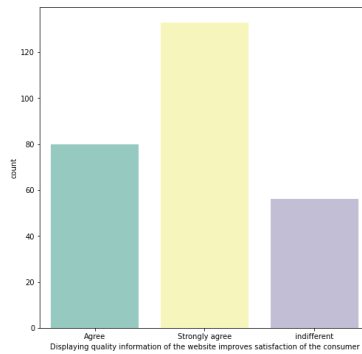
Displaying quality information of the website improves satisfaction of the consumer

Observation:-1.people who are strongly agree on displaying the quality information of the website improves satisfaction of the customer are 133.

2.people who are agree on displaying the quality information of the website improves satisfaction of the customer are 80.

3.people who are indifferent on displaying the quality information of the website improves satisfaction of the customer are 56
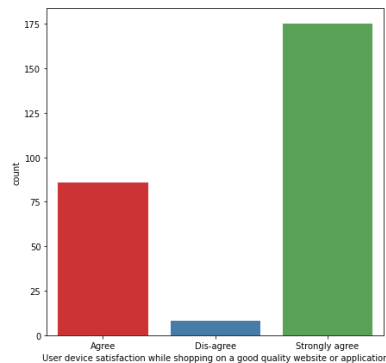
User device satisfaction while shopping on a good quality website or application

Observation:-1. people who are strongly agree on User device satisfaction while shopping on a good quality website or application are 175.

2.people who are agree on User device satisfaction while shopping on a good quality website or application are 86.

3.people who are disagree on User device satisfaction while shopping on a good quality website or application are 8.
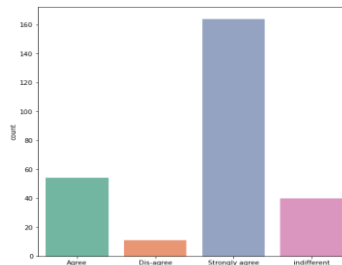
Net Benefit derived from shopping online can lead users satisfaction

Observation:-1.people who are strongly agree on Net Benefit derived from shopping online can lead users satisfaction are 164.

2.people who are agree on Net Benefit derived from shopping online can lead users satisfaction are 54

3.people who are indifferent on Net Benefit derived from shopping online can lead users satisfaction are 40.

4.people who are disagree on Net Benefit derived from shopping online can lead users satisfaction are 11.
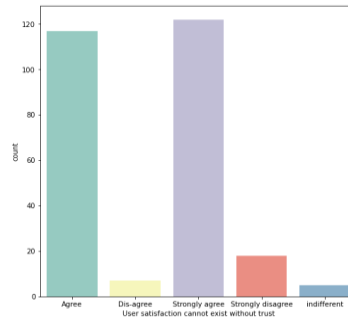
User satisfaction cannot exist without trust

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 122.

3.people who are strongly disagree on the user satisfaction cannot exist without trust are 122.

4.people who are disagree on the user satisfaction cannot exist without trust are 122.

5.people who are indifferent on the user satisfaction cannot exist without trust are 122.
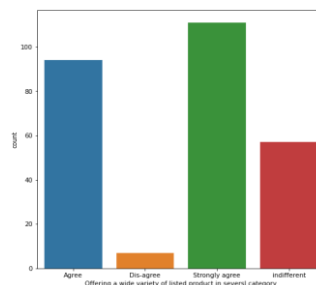
Offering a wide variety of listed product in several category

Observation:-1.people who strongly agree on Offering a wide variety of listed product in several category are 111

2.people who agree on Offering a wide variety of listed product in several category are 94.

3. people who are indifferent on Offering a wide variety of listed product in several category are 57

4.people who are disagree on Offering a wide variety of listed product in several category are 7
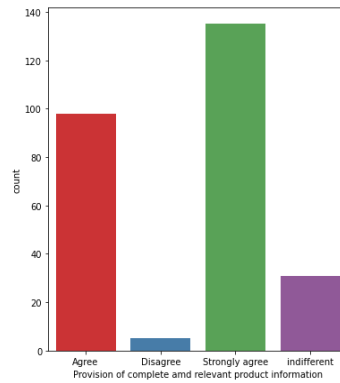
Provision of complete and relevant product information

Observation:-1.people who strongly agree on the Provision of complete and relevant product information are 135

2.people who agree on the Provision of complete and relevant product information are 98

3.people who are in different on the Provision of complete and relevant product information are 31

4.people who are disagree on the Provision of complete and relevant product information are 5
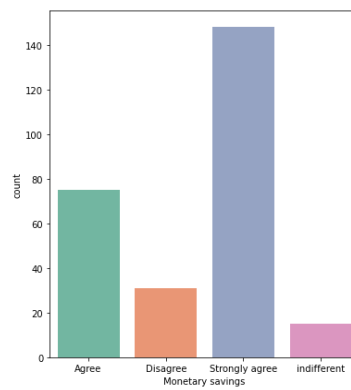
Monetary savings

Observation:-1.people who are strongly agree on the monetary savings are 148

2.people who are agree on the monetary savings are 75

3.people who are disagree on the monetary savings are 31

4.people who are indifferent on the monetary savings are 15
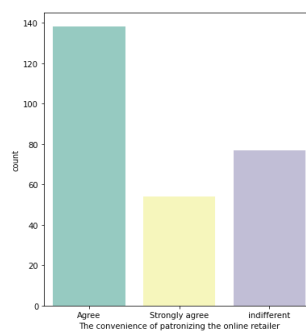
The convenience of patronizing the online retailer

Observation:-1.people who are strongly agree on The convenience of patronizing the online retailer are 138

2.people who are indifferent on The convenience of patronizing the online retailer are 77

3.people who are strongly agree on The convenience of patronizing the online retailer are 54
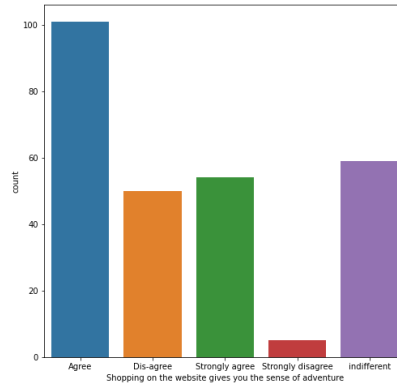
Shopping on the website gives you the sense of adventure

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.

5. people who strongly disagree on Shopping on the website gives you the sense of adventure are 5
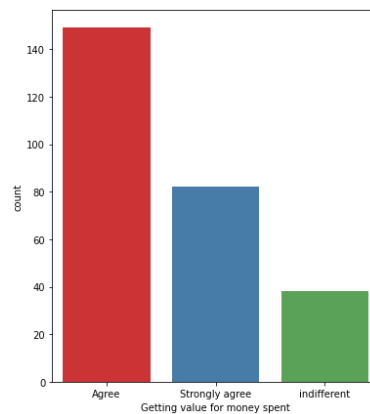
Getting value for money spent

Observation:-1.people who are agree on Getting value for money spent are 149

2.people who are strongly agree on Getting value for money spent are 82

3.people who are indifferent on Getting value for money spent are 38
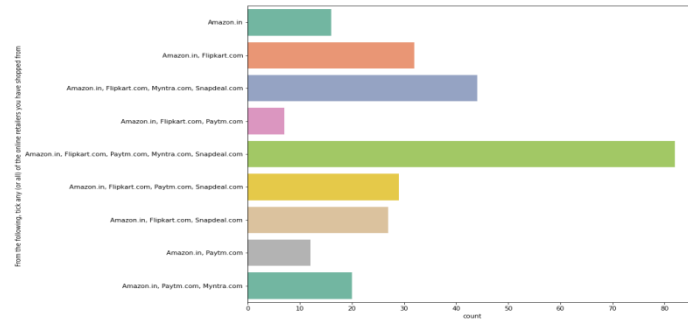
From the following, tick any (or all) of the online retailers you have shopped from ?

Observation:-

1.From the following, the online retailers people have shopped from Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com

are 82

2.From the following, the online retailers people have shopped from Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com

are 44

3.From the following, the online retailers people have shopped from Amazon.in, Flipkart.com, are 32

4.From the following, the online retailers people have shopped from Amazon.in, Flipkart.com, Paytm.com, Snapdeal.com are 29

5.From the following, the online retailers people have shopped from Amazon.in, Flipkart.com, Snapdeal.com are 27

6.From the following, the online retailers people have shopped from Amazon.in, Flipkart.com, Paytm.com, Snapdeal.com

are 20.

7.From the following, the online retailers people have shopped from Amazon.in are 16.

8.From the following, the online retailers people have shopped from Amazon.in, Flipkart.com, Paytm.com are 12.

9.From the following, the online retailers people have shopped from Amazon.in, Flipkart.com, Paytm.com are 7

Easy to use website or application

Observation:-1.people Easy to use website or application in Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com are 64

   2.people Easy to use website or application in Amazon.in, Flipkart.com are 44

   3.people Easy to use website or application in Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com are 44.

   4.people Easy to use website or application in Amazon.in are 29.

   5.people Easy to use website or application in Amazon.in, Flipkart.com, Paytm.com, Snapdeal.com are 22.

   6.people Easy to use website or application in Amazon.in, Paytm.com, Myntra.com are 20

   7.people Easy to use website or application in Amazon.in, Flipkart.com, Myntra.com are 19.

   8.people Easy to use website or application in paytm.com are 12
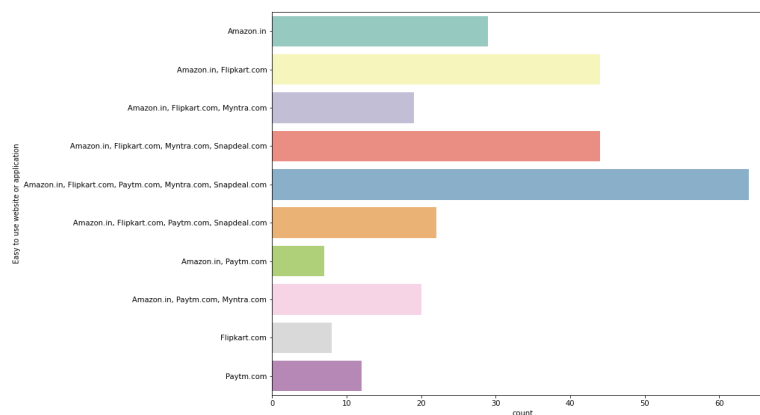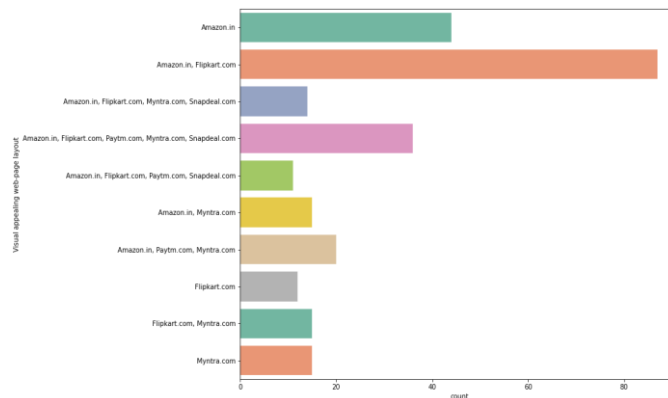
   9.people Easy to use website or application in Flipkart.com are 8

   10.people Easy to use website or application in Amazon.in, paytm.com are 7

Visual appealing web-page layout

Observation:-1.people who visual appealing the web page layout in Amazon.in, Flipkart.com are 87

   2.people who visual appealing the web page layout in Amazon.in, Flipkart.com, paytm.com, myntra.com, snapdeal.com are 44.

   3.people who visual appealing the web page layout in Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com are 36

   4.people who visual appealing the web page layout in Amazon.in, Paytm.com, Myntra.com are 20

   5.people who visual appealing the web page layout in Amazon.in, Myntra.com are 15

   6.people who visual appealing the web page layout in Myntra.com are 15.

   7.people who visual appealing the web page layout in Flipkart.com, Myntra.com are 15

   8.people who visual appealing the web page layout in Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com are 14

   9.people who visual appealing the web page layout in Flipkart.com are 12

   10.people who visual appealing the web page layout in Amazon.in, Flipkart.com, paytm.com, Snapdeal.com are 11
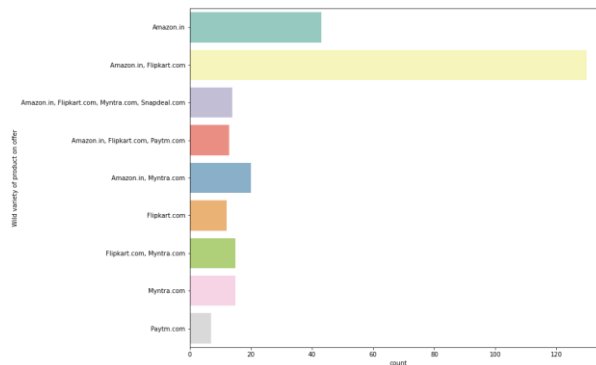
Wide variety of product on offer

Observation:-1.wide variety of product on offer in Amazon.in, Flipkart.com are 130

    2.wide variety of product on offer in Amazon.in are 43

    3.wide variety of product on offer in Amazon.in, myntra.com are 20

    4.wide variety of product on offer in Myntra.com, Flipkart.com are 15

    5.wide variety of product on offer in Myntra.com are 15

    6.wide variety of product on offer in Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com are 14

    7.wide variety of product on offer in Amazon.in, Flipkart.com, Paytm.com   are 13

    8.wide variety of product on offer in flipkart.com are 12

    9.wide variety of product on offer in paytm.com are 7
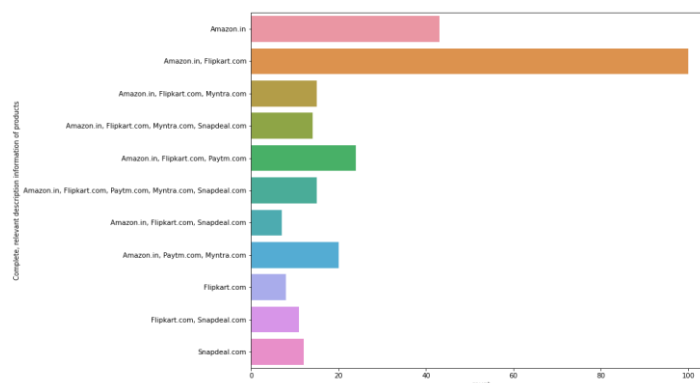
Complete, relevant description information of products

Observation:1.-people know the Complete, relevant description information of products on Amazon.in, Flipkart.com are 100

    2.people know the Complete, relevant description information of products on Amazon.in are 43

    3.people know the Complete, relevant description information of products on Amazon.in, Flipkart.com, paytm.com are 24

    4.people know the Complete, relevant description information of products on Amazon.in, Paytm.com, Myntra.com are 20

    5.people know the Complete, relevant description information of products on Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com are 15

    6.people know the Complete, relevant description information of products on Amazon.in, Flipkart.com, Myntra.com are 15.

7.people know the Complete, relevant description information of products on Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com are 14.

8.people know the Complete, relevant description information of products on Snapdeal.com are 12.

9.people know the Complete, relevant description information of products on Flipkart.com, Snapdeal.com are 11.

10.people know the Complete, relevant description information of products on Flipkart.com are 8

11.people know the Complete, relevant description information of products on Amazon.com, Flipkart.com, Snapdeal.com are 7
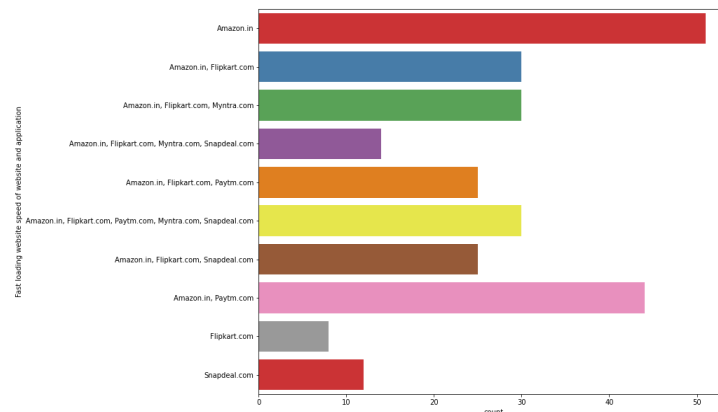
Fast loading website speed of website and application

Observation:-

1.fast loading website speed of website and application in Amazon.in are 51

2.fast loading website speed of website and application in Amazon.in, Paytm.com are 44

3.fast loading website speed of website and application in Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com are 30

4.fast loading website speed of website and application in Amazon.in, Flipkart.com, Snapdeal.com are 25

5.fast loading website speed of website and application in Amazon.in, Flipkart.com, Paytm.com are 25

6.fast loading website speed of website and application in Amazon.in, Flipkart.com, Paytm.com.com, Myntra.com are 14

7.fast loading website speed of website and application in snapdeal.com are 12.

8.fast loading website speed of website and application in Flipkart.com are 8

Reliability of the website or application

Observation:-1.Reliability of the website or application on Amazon.in are 61

2.Reliability of the website or application on Amazon.in, flipkart.com are 50

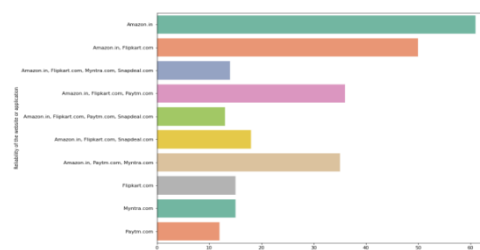3.Reliability of the website or application on Amazon.in, Flipkart.com, Paytm.com are 36

4.Reliability of the website or application on Amazon.in, Paytm.com, Myntra.com are 35

5.Reliability of the website or application on Amazon.in, Flipkart.com, Snapdeal.com   are 18

6.Reliability of the website or application on Flipkart.com   are 15

7.Reliability of the website or application on Myntra.com   are 15

8.Reliability of the website or application on Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com are 14

9.Reliability of the website or application on Amazon.in, Flipkart.com, Paytm.com, Snapdeal.com are 13

10.Reliability of the website or application on   Paytm.com are 12
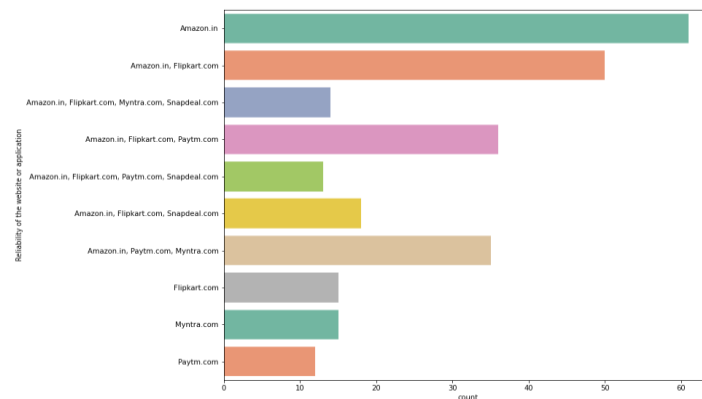
Quickness to complete purchase

Observation:-1.Quickness to complete purchase on Amazon.in are 66

2.Quickness to complete purchase on Amazon.com, Flipkart.com, Paytm.com are 37

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 are 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
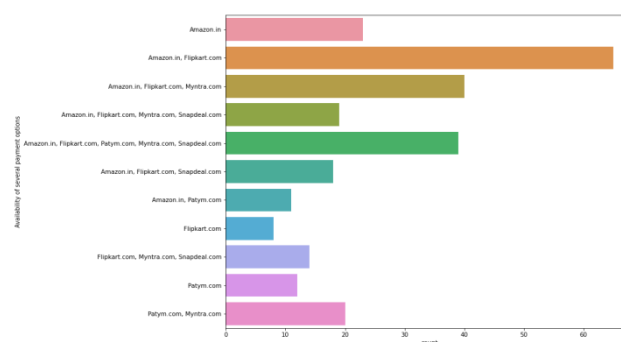
Availability of several payment options

Observation:-

    1.Availability of several payment options on Amazon.in, Flipkart.com by people is 65

    2.Availability of several payment options on Amazon.in, Flipkart.com, Myntra.com   by people is 40.

    3.Availability of several payment options on Amazon.in, Flipkart.com, Patym.com, Myntra.com, Snapdeal.com   by people is 39.

    4.Availability of several payment options on Amazon.in   by people is 23

    5.Availability of several payment options on Patym.com, Myntra.com   by people is 20.

    6.Availability of several payment options on Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com   by people is 19

    7.Availability of several payment options on Amazon.in, Flipkart.com, Snapdeal.com   by people is 18.

    8.Availability of several payment options on   Flipkart.com, Myntra.com, Snapdeal.com   by people is 14.

    9.Availability of several payment options on   paytm.com   by people is 12.

    10.Availability of several payment options on   Amazon.in, Patym.com   by people is 11.

    11.Availability of several payment options on   Flipkart.com by people is 8.

Speedy order delivery
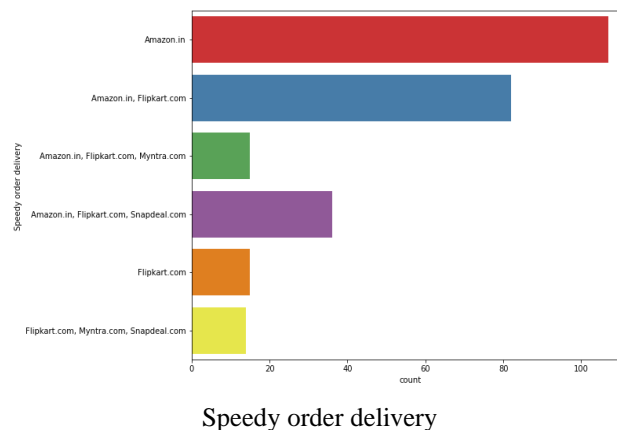
Observation:- 1.speedy order delivery on Amazon.in are 107.

    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 36.

    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.
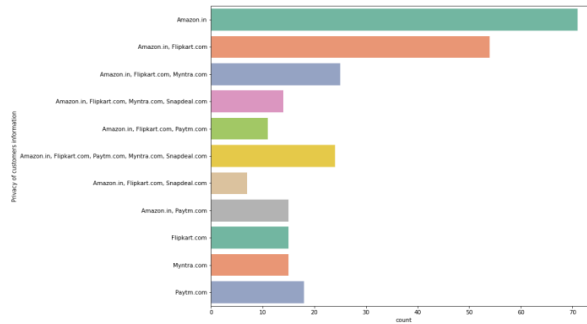
Privacy of customers information
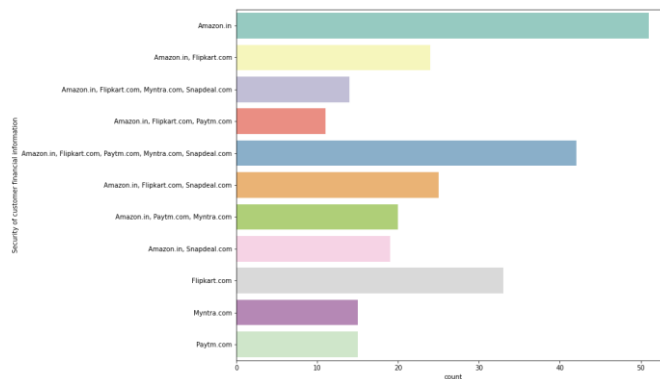
Observation:- privacy of customers information by people in Amazon.in are 71

privacy of customers information by people in Amazon.in, Flipkart.com are 54

privacy of customers information by people in Amazon.in, Flipkart.com, Myntra.com are 25

privacy of customers information by people in Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com are 24

privacy of customers information by people in Paytm.com are 18

privacy of customers information by people in Flipkart.com are 15

privacy of customers information by people in Myntra.com are 15

privacy of customers information by people in Amazon.in, Paytm.com are 15.

privacy of customers information by people in Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com   are 14

privacy of customers information by people in Amazon.in, Flipkart.com, Paytm.com are 11

privacy of customers information by people in Amazon.in, Flipkart.com, Snapdeal.com are 7

Security of customer financial information

Observation:-

Security of customer financial information on Amazon.in is 51

Security of customer financial information on Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com is 33

Security of customer financial information on Flipkart.com is 33

Security of customer financial information on Amazon.in, Flipkart.com, Snapdeal.com is 25

Security of customer financial information on Amazon.in, Flipkart.com   is 24

Security of customer financial information on Amazon.in, Paytm.com, Myntra.com is 20

Security of customer financial information on Amazon.in, Snapdeal.com   is 19

Security of customer financial information on Myntra.com is 15

Security of customer financial information on paytm.com is 15.

Security of customer financial information on Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com is 14.

Security of customer financial information on Amazon.in, Flipkart.com, paytm.com is 11.
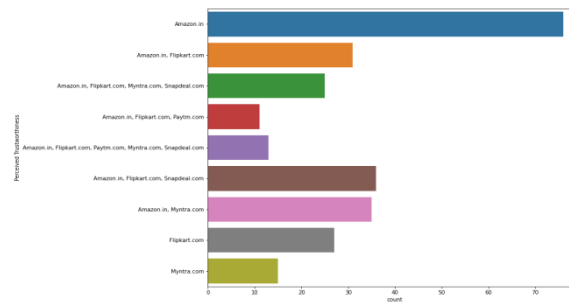
Perceived Trustworthiness

Observation:-1. perceived trustworthiness on Amazon.in are 76

2.perceived trustworthiness on Amazon.in, Flipkart.com, Snapdeal.com are 36

3.perceived trustworthiness on Amazon.in, Myntra.com are 35

4.perceived trustworthiness on Amazon.in, flipkart.com are 31

5.perceived trustworthiness on flipkart.com are 27

6.perceived trustworthiness on Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com are 25

7.perceived trustworthiness on Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com are 13

8.perceived trustworthiness on Amazon.in, Flipkart.com, Paytm.com   are 11
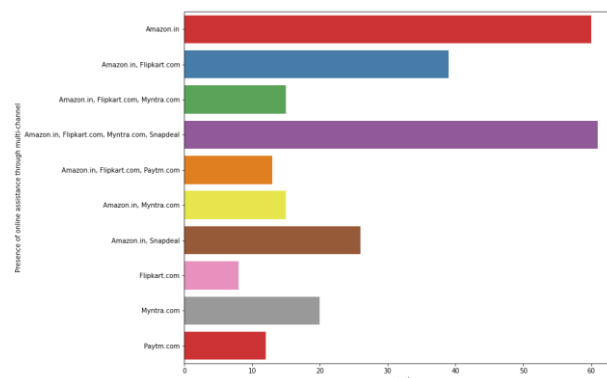
Presence of online assistance through multi-channel

Observation:-Presence of online assistance through multi-channel on Amazon.in, Flipkart.com, Myntra.com, Snapdeal are 61

Presence of online assistance through multi-channel on Amazon.in is 60

Presence of online assistance through multi-channel on Amazon.in, Flipkart.com   is 39

Presence of online assistance through multi-channel on Amazon.in, Snapdeal.com   is 26

Presence of online assistance through multi-channel on Myntra.com is 20

Presence of online assistance through multi-channel on Amazon.in, Flipkart.com, Myntra.com is 15

presence of online assistance through multi-channel on Amazon.in, Myntra.com   is 15

presence of online assistance through multi-channel on Amazon.in, Flipkart.com, Paytm.com is 13

presence of online assistance through multi-channel on Flipkart.com   is 8
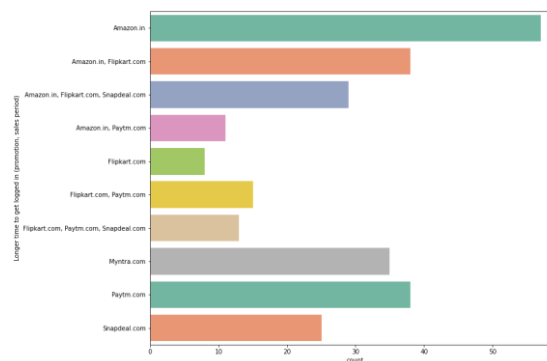
Longer time to get logged in (promotion, sales period)

Observation:-1.Longer time to get logged in Amazon.in are 57

 2.Longer time to get logged in paytm.com are 38

3.Longer time to get logged in Amazon.in, Flipkart.com   are 38

 4. Longer time to get logged in Myntra.com are 35

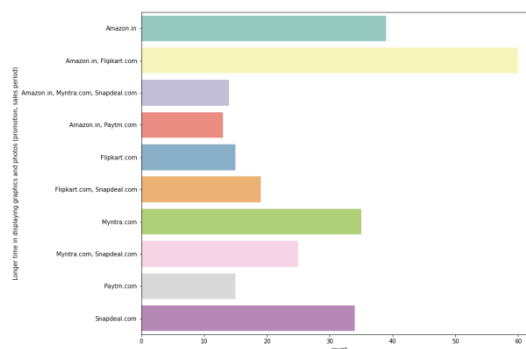 5.Longer time to get logged in Amazon.in, Flipkart.com, Snapdeal.com are 29

 6.Longer time to get logged in Flipkart.com, Paytm.com   are 15

 7.Longer time to get logged in Flipkart.com, Paytm.com, Snapdeal.com are 13

 8.Longer time to get logged in Amazon.in, Paytm.com are 11

 9.Longer time to get logged in Flipkart.com   are 8

Longer time in displaying graphics and photos (promotion, sales period)

Observation:-

1.Longer time in displaying graphics and photos on Amazon.in, Flipkart.com are 60

2.Longer time in displaying graphics and photos on Amazon.in are 39

3.Longer time in displaying graphics and photos on Myntra.com are 35

4.Longer time in displaying graphics and photos on snapdeal.com are 34

5.Longer time in displaying graphics and photos on Myntra.com snapdeal.com are 25

6.Longer time in displaying graphics and photos on Flipkart.com snapdeal.com are 19

7.Longer time in displaying graphics and photos on paytm.com are 15

8.Longer time in displaying graphics and photos on Amazon.in, Myntra.com, Snapdeal.com are 14

9.Longer time in displaying graphics and photos on Amazon.in, paytm.com are 13
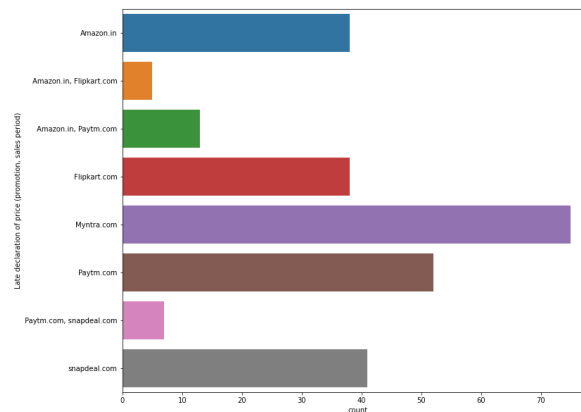
Late declaration of price (promotion, sales period)

Observation:-Late declaration of price (promotion, sales period) on Myntra.com are 75

Late declaration of price (promotion, sales period) on paytm.com are 41

Late declaration of price (promotion, sales period) on paytm.com are 52

Late declaration of price (promotion, sales period) on snapdeal.com are 41

Late declaration of price (promotion, sales period) on flipkart.com are 38

Late declaration of price (promotion, sales period) on Amazon.in are 38

Late declaration of price (promotion, sales period) on Amazon.in, Paytm.com are 13.

Late declaration of price (promotion, sales period) on Paytm.com, snapdeal.com are 7.

Late declaration of price (promotion, sales period) on Amazon.in, Flipkart.com are 5
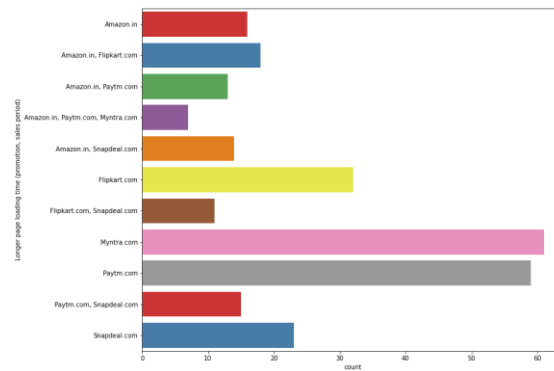
Longer page loading time (promotion, sales period

Observation:-Longer page loading time (promotion, sales period) on Myntra.com   are 61

Longer page loading time (promotion, sales period) on paytm.com are 59

Longer page loading time (promotion, sales period) on FlipKart.com are 32

Longer page loading time (promotion, sales period) on snapdeal.com are 23

Longer page loading time (promotion, sales period) on Amazon.in, Flipkart.com are 18

Longer page loading time (promotion, sales period) on Amazon.in are 16

Longer page loading time (promotion, sales period) on Paytm.com, Snapdeal.com are 15

Longer page loading time (promotion, sales period) on Amazon.in, Snapdeal.com are 14

Longer page loading time (promotion, sales period) on Amazon.in, Paytm.com are 13

Longer page loading time (promotion, sales period) on Flipkart.com, Snapdeal.com   are 11

Longer page loading time (promotion, sales period) on Amazon.in, Paytm.com, Myntra.com are 7
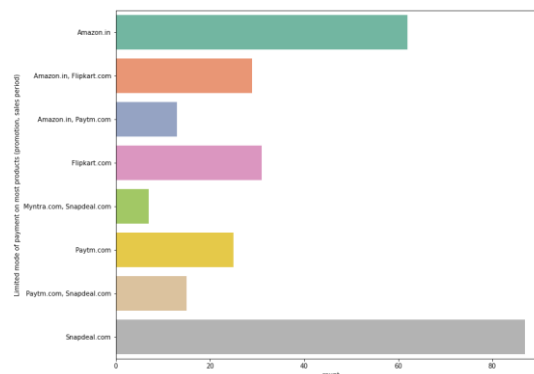
Limited mode of payment on most products (promotion, sales period)

Observation:-Limited mode of payment on most products (promotion, sales period) on Snapdeal.com are 87

   Limited mode of payment on most products (promotion, sales period) on Amazon.in are 62

   Limited mode of payment on most products (promotion, sales period) on Flipkart.com are 31

    Limited mode of payment on most products (promotion, sales period) on Amazon.in, Flipkart.com are 29

   Limited mode of payment on most products (promotion, sales period) on paytm.com are 25

Limited mode of payment on most products (promotion, sales period) on Paytm.com, Snapdeal.com are 15

Limited mode of payment on most products (promotion, sales period) on Amazon.in, Paytm.com   are 13

Limited mode of payment on most products (promotion, sales period) on Myntra.com, Snapdeal.com   are 7
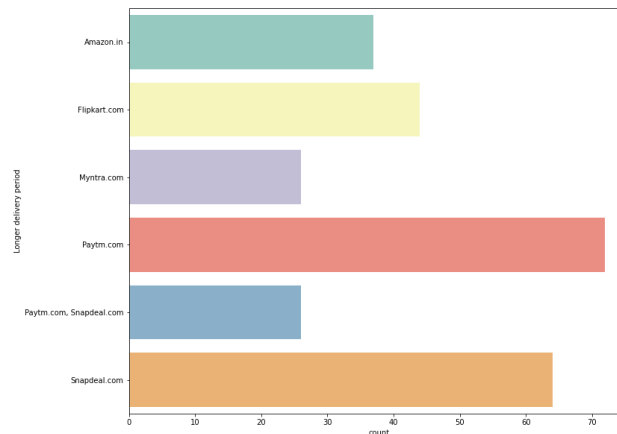
Longer delivery period

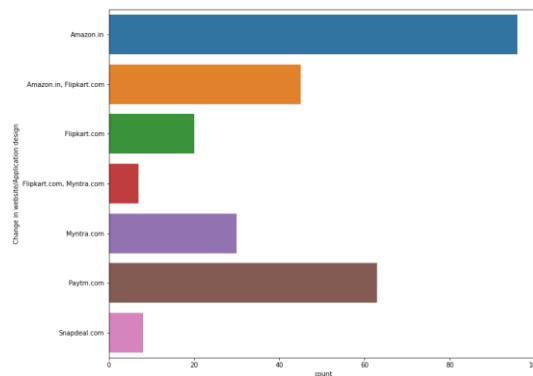Observation:-1.Longer delivery period on paytm.com are 72

2. longer delivery period on snapdeal.com are 64

3.longer delivery period on Flipkart.com are 44

4.longer delivery period on Amazon.in   are 37

5.longer delivery period on Paytm.com, Snapdeal.com are 26

6.longer delivery period on myntra.com are 26

Change in website/Application design

Observation:-

1.Change in website/Application design in Amazon.com is 96

2.Change in website/Application design in Paytm.com   is 63
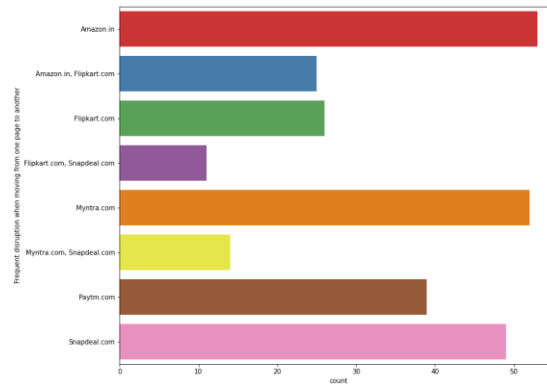
3.Change in website/Application design in Amazon.in, Flipkart.com   is 45

4.Change in website/Application design in Myntra.com   is 45

5.Change in website/Application design in Flipkart.com is 20.

6.Change in website/Application design in Snapdeal.com   is 8.

7.Change in website/Application design in Flipkart.com, Myntra.com   is 7.

Frequent disruption when moving from one page to another

Observation:-1. Frequent disruption when moving from one page to another in Amazon.in are 53

2. Frequent disruption when moving from one page to another in Myntra.com   are 52

3. Frequent disruption when moving from one page to another in snapdeal.com   are 49

4. Frequent disruption when moving from one page to another in paytm.com   are 39

5.Frequent disruption when moving from one page to another in Flipkart.com   are 26

6. Frequent disruption when moving from one page to another in Amazon.in, Flipkart.com are 25

7.Frequent disruption when moving from one page to another in Myntra.com, Snapdeal.com   are 14

8.Frequent disruption when moving from one page to another in Flipkart.com, Snapdeal.com   are 11
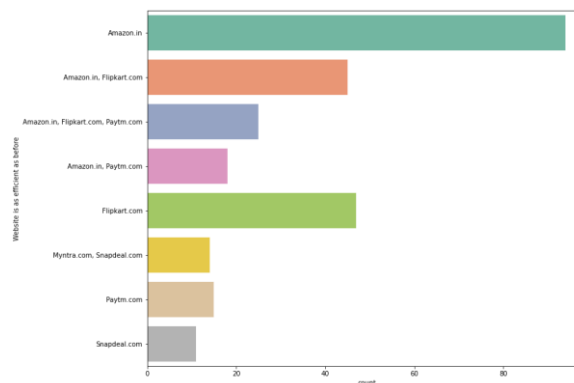
Website is as efficient as before

Observation:-1.Website is as efficient as before in Amazon.in for 94 peoples

2.Website is as efficient as before in Flipkart.com for 47 peoples

3.Website is as efficient as before in Amazon.in, Flipkart.com   for 45 peoples

4.Website is as efficient as before in Amazon.in, Flipkart.com, paytm.com   for 25 peoples

5.Website is as efficient as before in Amazon.in, paytm.com   for 18 peoples

6.Website is as efficient as before in   paytm.com   for 15 peoples
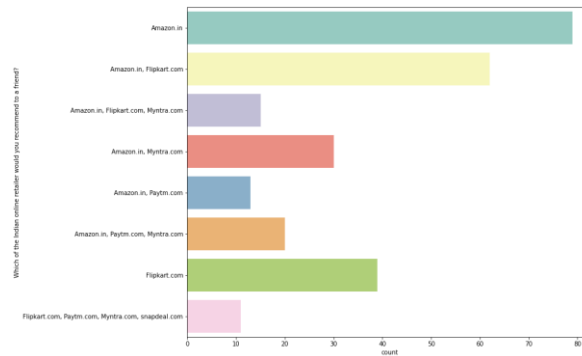
7.Website is as efficient as before in amazon.in, Paytm.com   for 18 peoples

8.Website is as efficient as before in   Paytm.com   for 15 peoples

9.Website is as efficient as before in   Paytm.com   for 15 peoples

10. Website is as efficient as before in   Myntra.com, Snapdeal.com   for 14 peoples

11.Website is as efficient as before in Snapdeal.com   for 11 peoples

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

Observation:-1.the Indian online retailer would you recommend to a friend by people in Amazon.in are 79

2. the Indian online retailer would you recommend to a friend by people in Amazon.in, Flipkart.com are 39

3.the Indian online retailer would you recommend to a friend by people in Amazon.in, Flipkart.com are 62

4.the Indian online retailer would you recommend to a friend by people in Flipkart.com   are 39

5.the Indian online retailer would you recommend to a friend by people in Amazon.in, Myntra.com   are 30

6.the Indian online retailer would you recommend to a friend by people in Amazon.in, Paytm.com, Myntra.com   are 20

7.the Indian online retailer would you recommend to a friend by people in Amazon.in, Flipkart.com, Myntra.com   are 15

8.the Indian online retailer would you recommend to a friend by people in Amazon.in, Paytm.com   are 13

9.the Indian online retailer would you recommend to a friend by people in Flipkart.com, Paytm.com, Myntra.com, snapdeal.com are 11

CONCLUSION

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. Results indicate the e-retail success factors, which are very much critical for customer satisfaction.