

E-RETAIL FACTORS FOR CUSTOMER ACTIVATION AND RETENTION

Submitted By :

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ACKNOWLEDGMENT

I would like to express my gratitude towards my internship mentor Ms. Srishti Maan for helping me in completion of the project.

BUSINESS PROBLEM

From my understanding the problem is about how to retain customers and what are the factors that are affecting the customer's loyalty towards a particular online retail store so that customer won't leave them and go to some other online retail store. The business problem is about how to keep your customers satisfied by providing them best services so that they would like to return for more shopping onto the that particular online retail store.

OBJECTIVE FOR PROBLEM UNDERTAKEN

We have to study every feature's behaviour present in the dataset & make observation from its behaviour about how every feature is affecting the customers mindset about paying another visit to the particular online retail store or not.

ANALYTICAL PROBLEM FRAMING

- **Origin of dataset & data types of every features**

Dataset is provided by the company & we have to import it using various libraries necessary for the project to get completed. Also data types of every feature is categorical except one which is continuous.

- **Mathematical/Analytical modelling of the problem**

Only countplot we used for every feature present in the dataset to get to know that in every feature what most of the customers are doing on online retail store.

- **Assumptions related to problem statement**

Only one assumption was made as we go through the whole dataset there was not one feature signaling about customers retention so we made the assumption that there is no target feature given in the dataset.

- **Libraries & Tools used**

We had to use numpy, pandas, matplotlib.pyplot, seaborn & warnings libraries for this task.

STEPS TAKEN FOR THE TASK

1. Importing Libraries for the task

numpy, pandas, matplotlib.pyplot, seaborn & warnings libraries were imported for task to get completed.

2. Importing Dataset using libraries

Imported the dataset using pandas library in jupyter notebook

3. Checking Dimension of dataset

By checking dimensions of dataset we get to know that it contains 269 rows & 71 columns

4. Checking Description of dataset

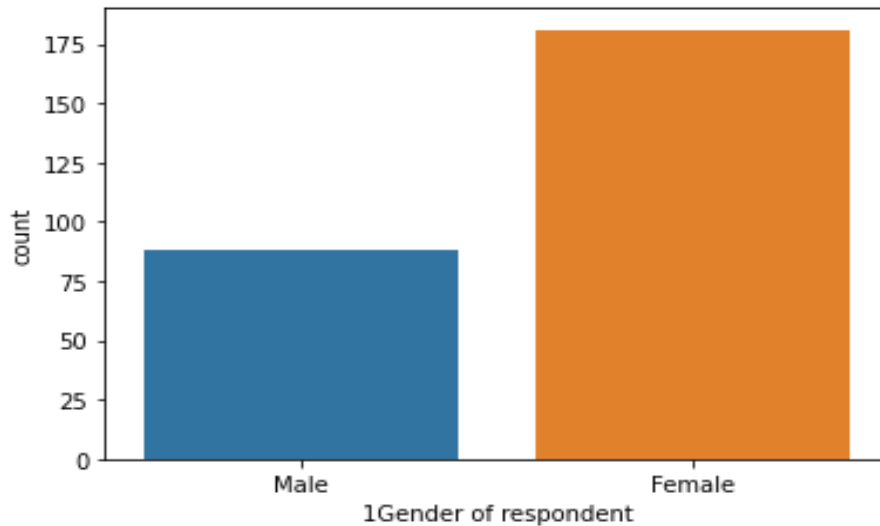
From description we get to know that only one column contains continuous data in whole dataset & description is giving mean, max value, min value, etc of that column

5. Checking for presence of null values in dataset

We checked for the presence of null values in every column of dataset by doing it repeatedly for every column as doing it for whole dataset does not show every columns null value value_counts & we concluded that there are no null values present in the dataset.

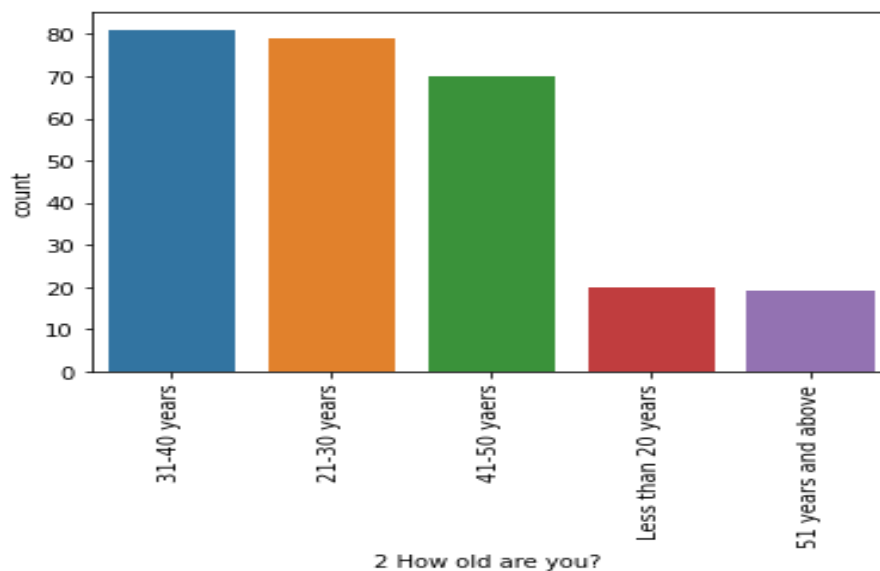
6. Performing EDA on whole dataset

- Gender of respondent



From visualization we concluded that most people visiting E-commerce sites are Female.

- How old are you?



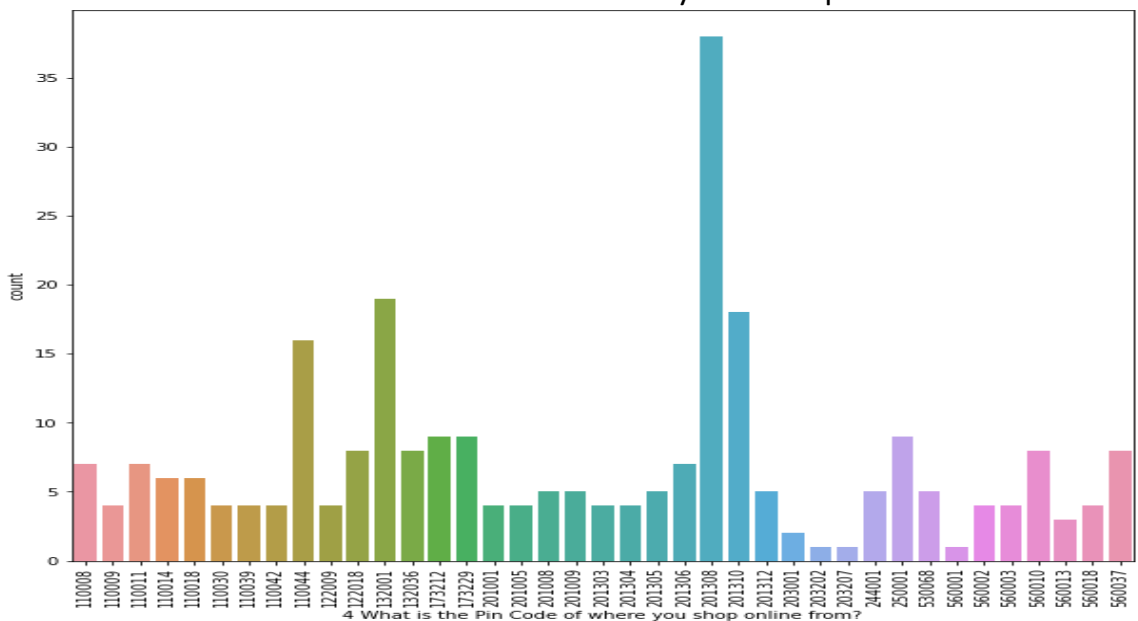
From visualization we conclude that most people visiting E-commerce websites age between 31-40 years.

- Which city do you shop online from ?



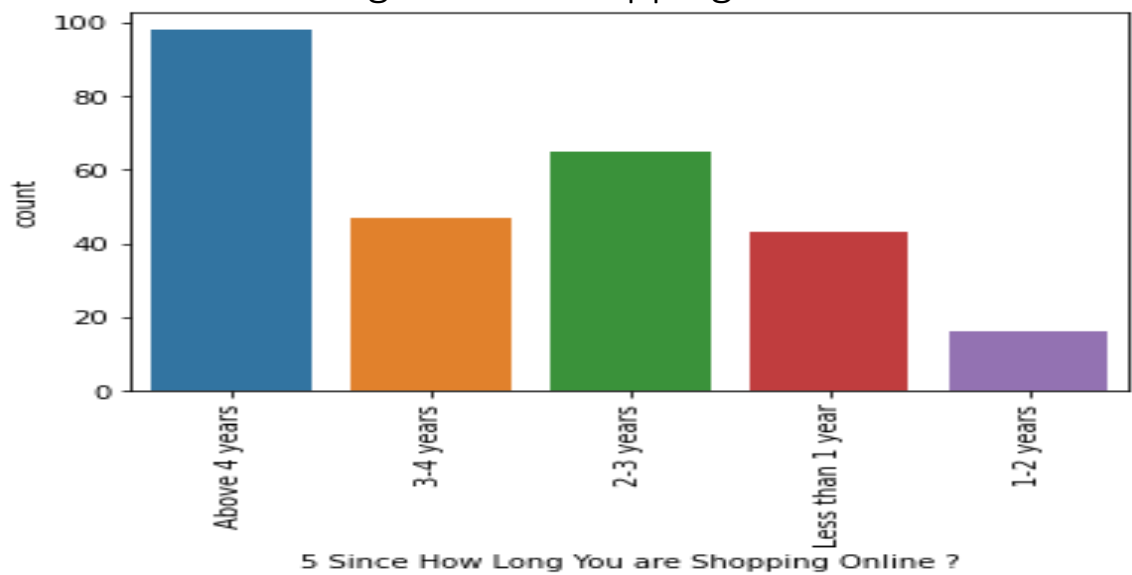
From visualization we conclude that most people doing shopping are from city Delhi.

- What is the Pin Code of where you shop online from?



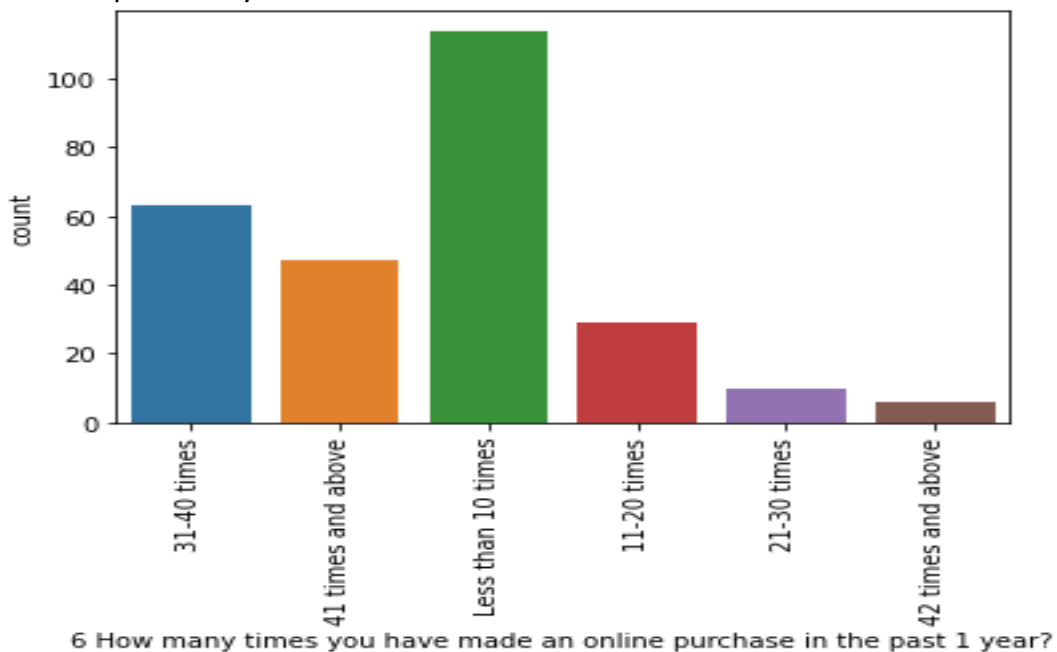
From visualization we concluded that most people doing online shopping are residing in area whose pin code is 201308

- Since How Long You are Shopping Online?



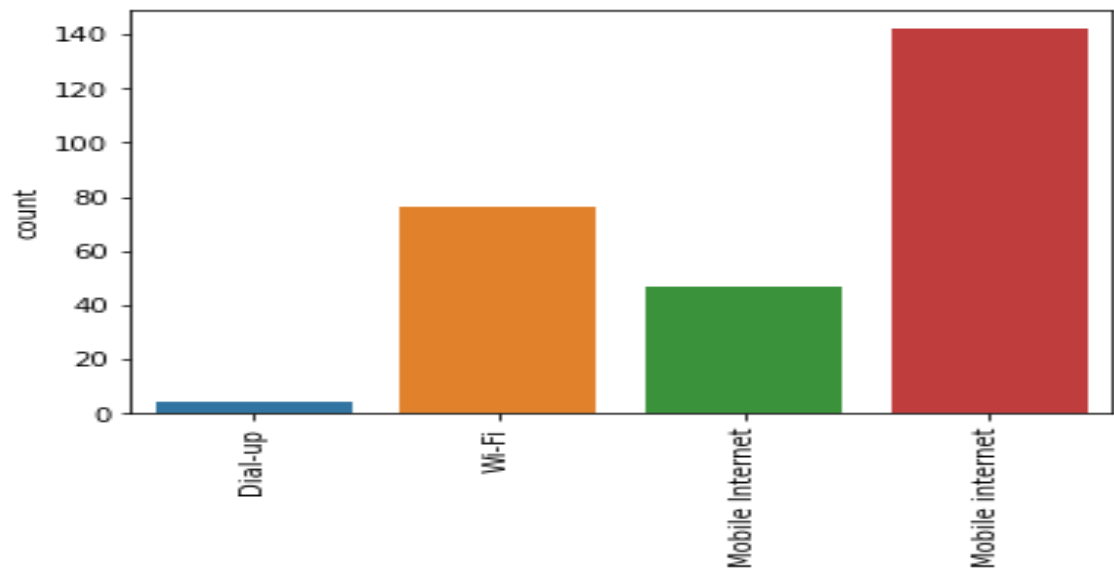
From visualization we concluded that most people doing shopping on these websites are doing it for more than past 4 years.

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



From visualization we concluded that most people purchased items from these sites has done purchasing less than 10 times in past 1 year.

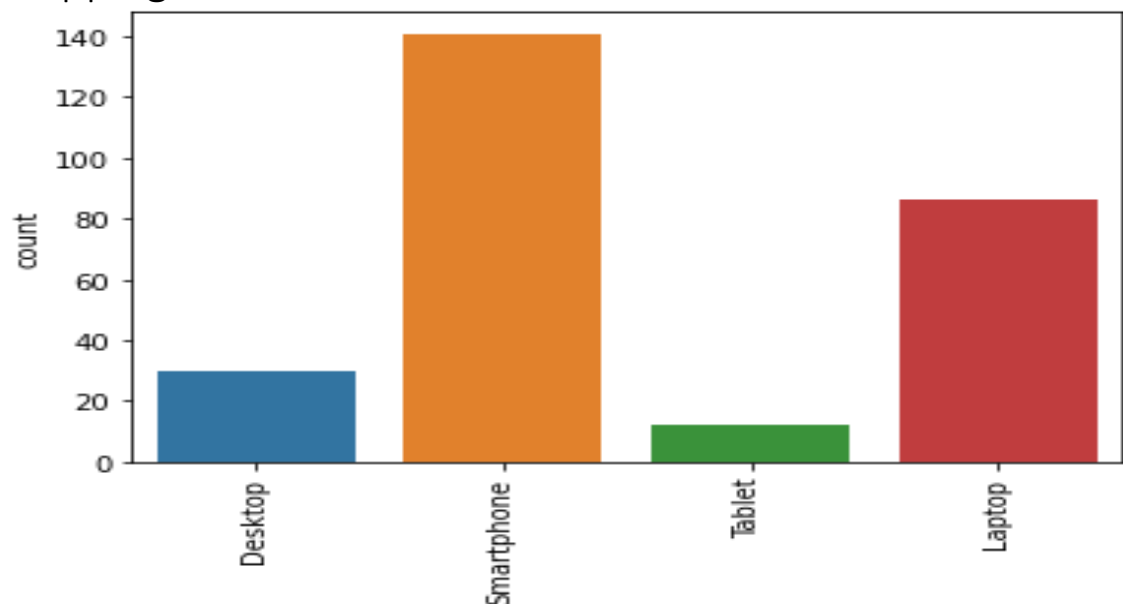
- How do you access the internet while shopping on-line?



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

From visualization we concluded that most people accessing internet are using mobile internet as their medium

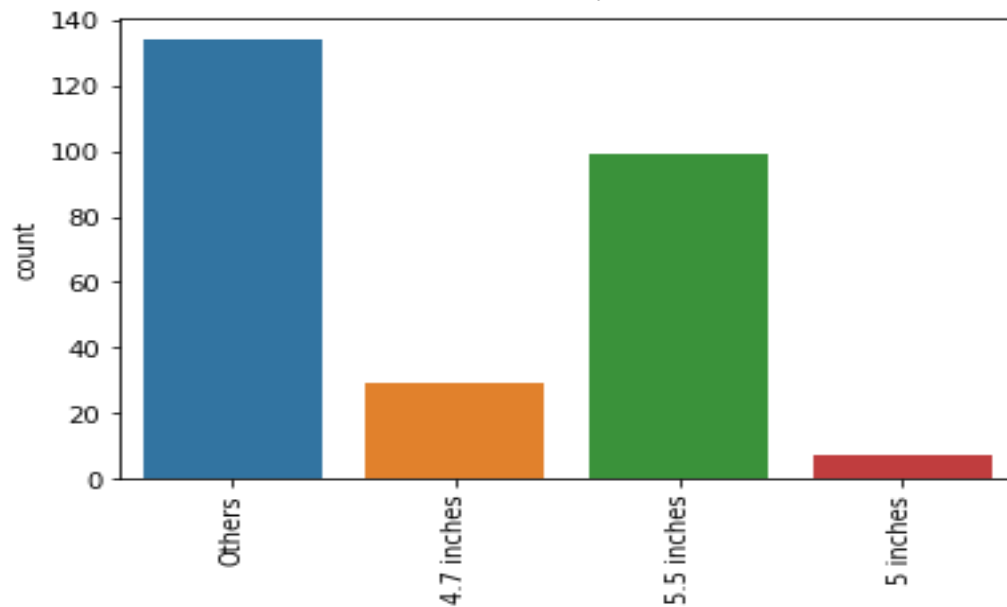
- Which device do you use to access the online shopping?



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

From visualization we concluded that most people doing online shopping are using Smartphones for doing it.

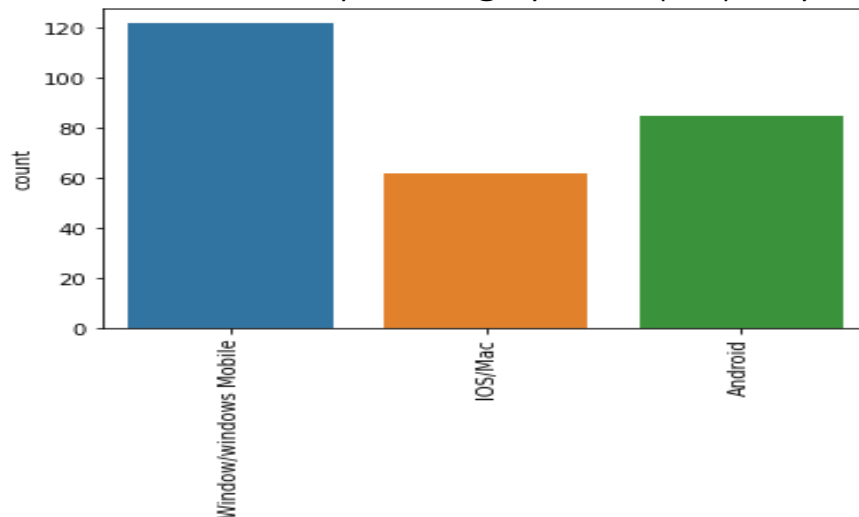
- What is the screen size of your mobile device?



9 What is the screen size of your mobile device? □□□□□□

From visualization we concluded that most people's doing online shopping using mobile device have their mobile's screen size registered as others

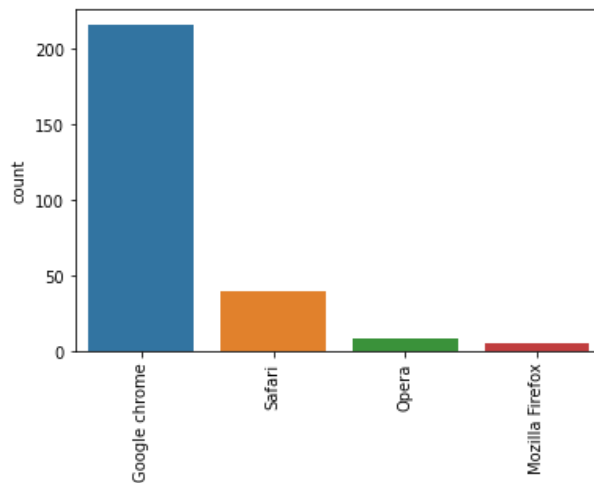
- What is the operating system (OS) of your device?



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

From visualization we concluded that most people doing online shopping are doing it using device which contains Windows/windows Mobile as Operating System (OS)

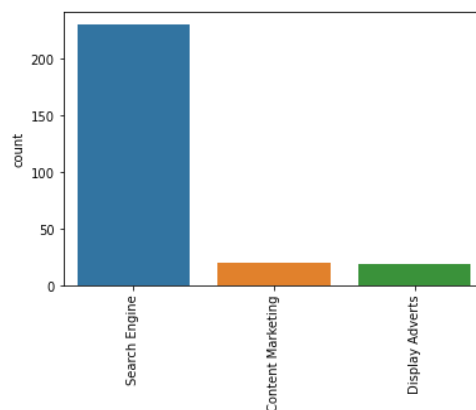
- What browser do you run on your device to access the website?



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

From visualization we concluded that most people doing online shopping are using Chrome web browser to do it.

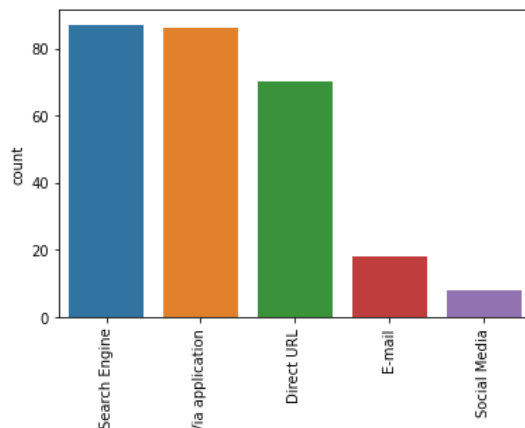
- Which channel did you follow to arrive at your favorite online store for the first time?



12 Which channel did you follow to arrive at your favorite online store for the first time?

From visualization we concluded that most used Search Engine as the channel to arrive at online store for first time.

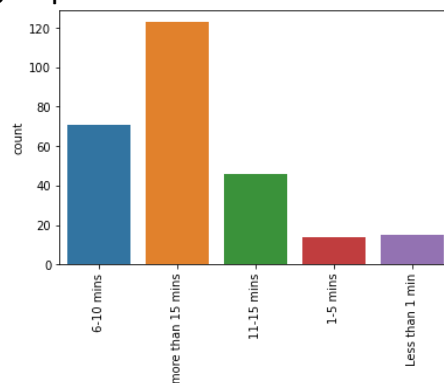
- After first visit, how do you reach the online retail store?



13 After first visit, how do you reach the online retail store? [] [] [] [] []

From visualization we concluded that most people visiting online retail store after first visit via search engine.

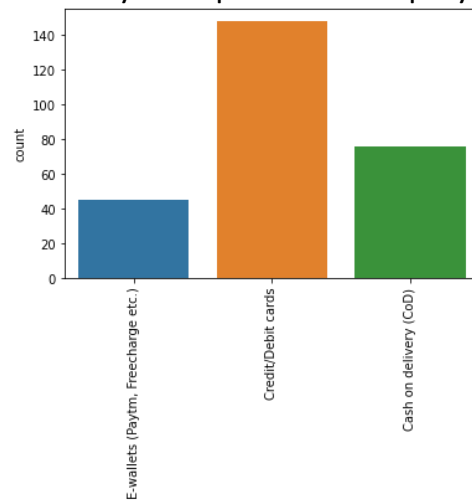
- How much do you explore the e-retail store before making a purchase decision?



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

From visualization we concluded that most people explore e-retail store more than 15 times before making a purchase decision.

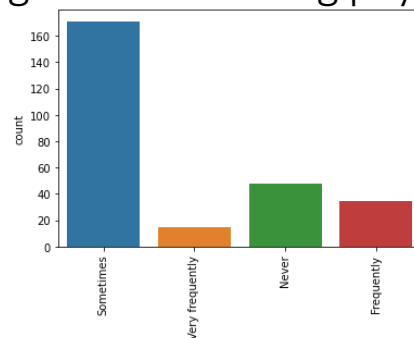
- What is your preferred payment option?



15 What is your preferred payment Option?

From visualization we concluded that most people prefer to make payments via credit/debit cards

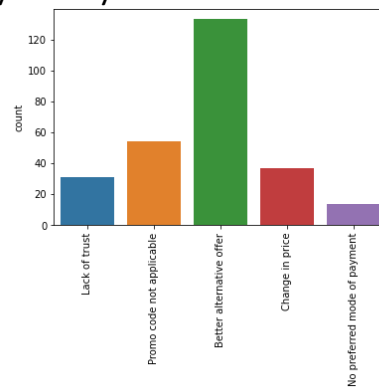
- How frequently do you abandon (selecting an items and leaving without making payment) your shopping cart?



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

From visualization we concluded that most people abandon their shopping cart sometimes.

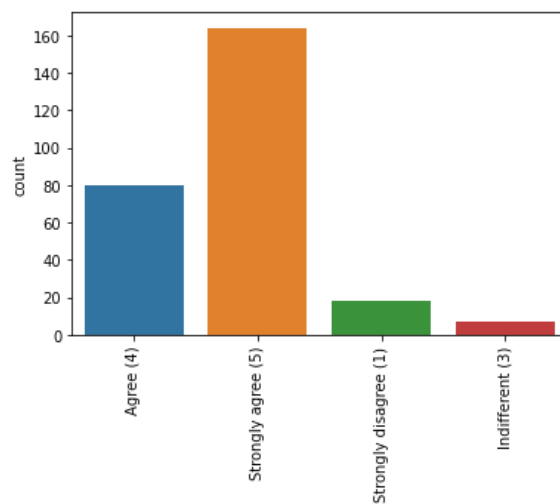
- Why did you abandon the “Bag”, “Shopping Cart”?



17 Why did you abandon the “Bag”, “Shopping Cart”?

From visualization we concluded that most people abandon the shopping cart because of better alternative offer

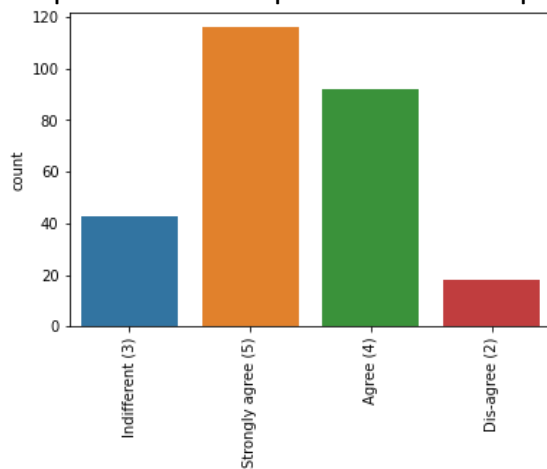
- The content on the website must be easy to read and understand



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

From visualization we concluded that most people strongly agree that content on website must be easy to read & understand.

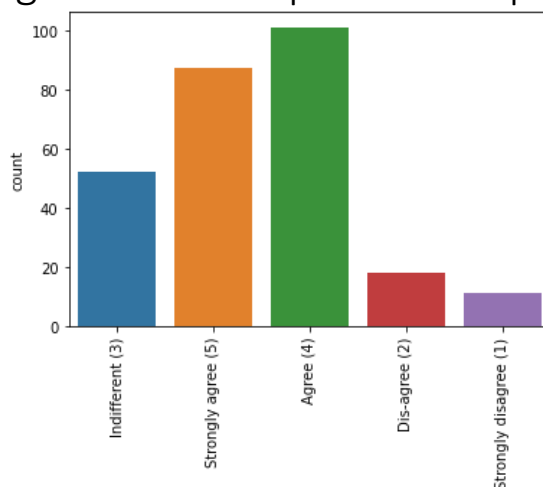
- Information on similar product to the one highlighted is important for product comparison



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

From visualization we concluded that most people strongly agree that Information on similar product to the one highlighted is important for product comparison

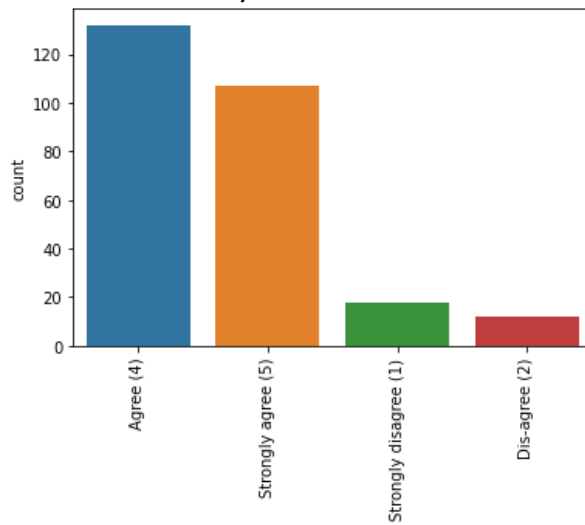
- Complete information on listed seller and product being offered is important for purchase decision



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

From visualization we concluded that most people agree that Complete information on listed seller and product being offered is important for purchase decision

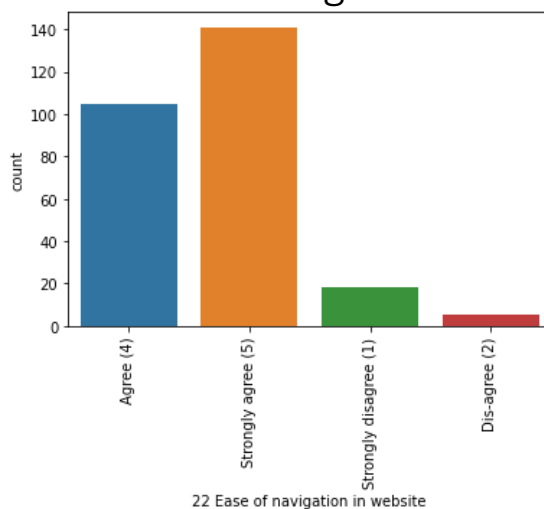
- All relevant information on listed products must be stated clearly



21 All relevant information on listed products must be stated clearly

From visualization we concluded that most people agree that all relevant information on listed products must be stated clearly

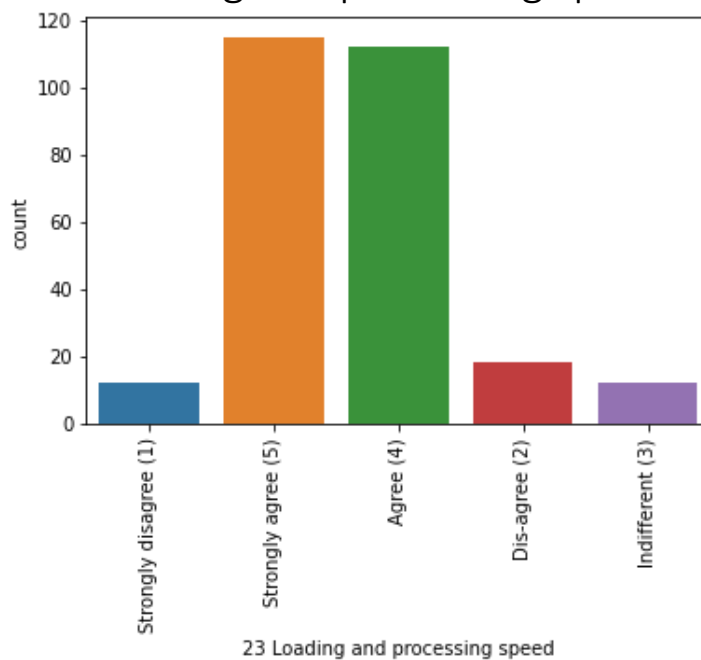
- Ease of navigation in website



22 Ease of navigation in website

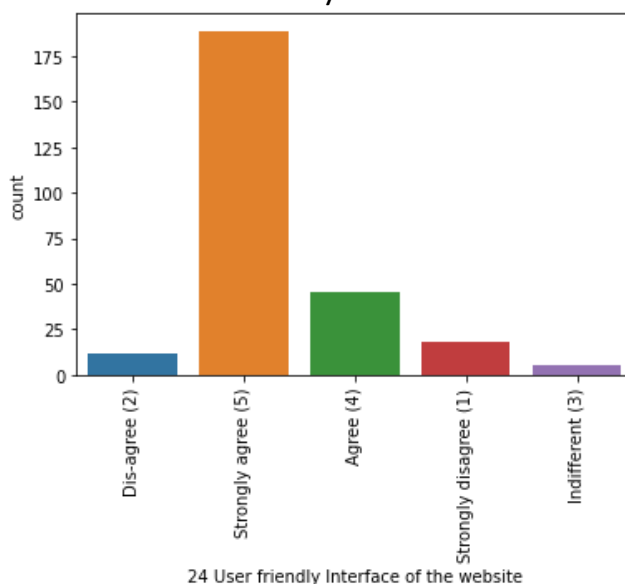
From visualization we concluded that most people strongly agree for ease of navigation in website.

- Loading and processing speed



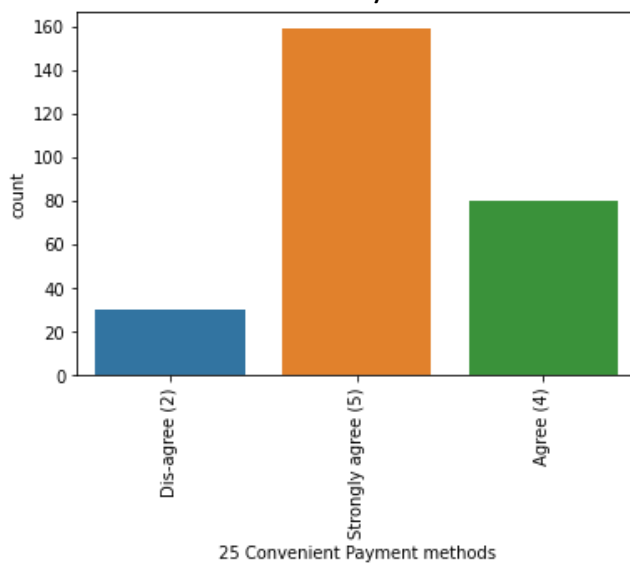
From visualization we concluded that most people strongly agree that e-retail should have better loading & processing speed

- User friendly interface of website



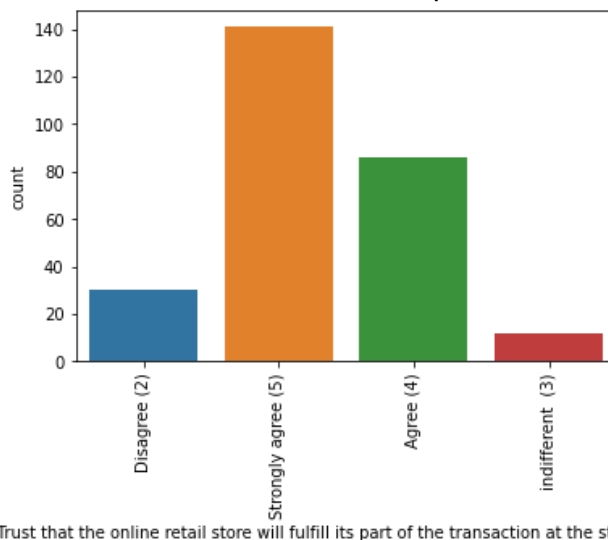
From visualization we concluded that most people strongly agree that website should have user friendly interface

- Convenient Payment methods



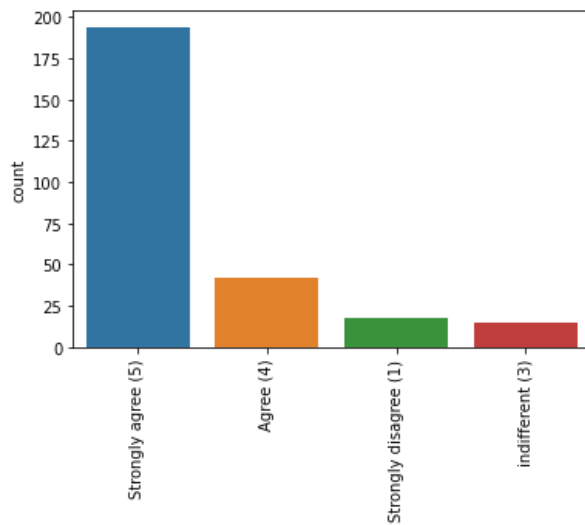
From visualization we concluded that most people strongly agree that e-retail store should have convenient payment methods

- Trust that the online retail store will fulfill its part of the transaction at the stipulated time



From visualization we concluded that most people strongly agree that e-retail store would fulfil its part of transaction at the stipulated time

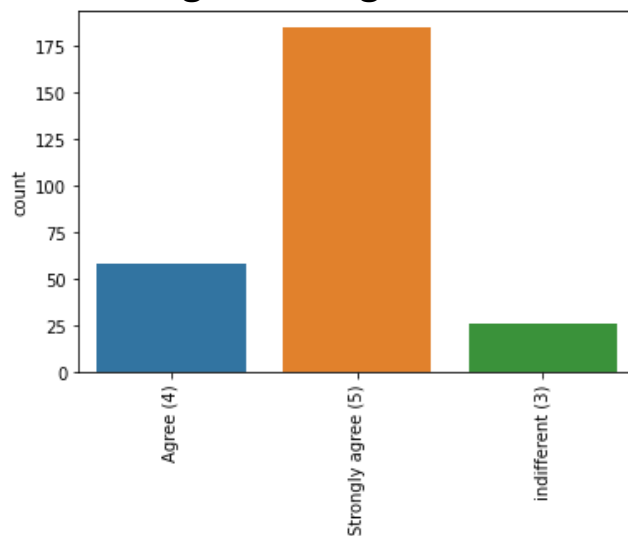
- Empathy (readiness to assist with queries) towards the customers



27 Empathy (readiness to assist with queries) towards the customers

From visualization we concluded that most people strongly agree that e-retail store should have empathy towards customers

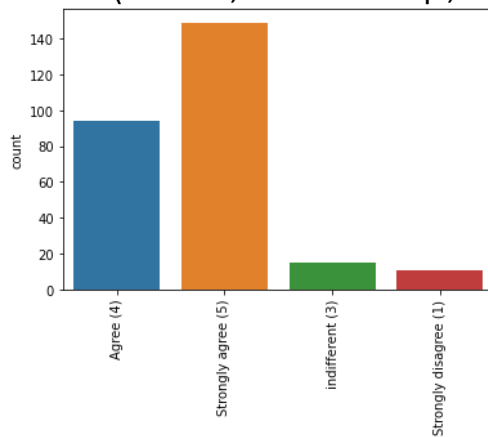
- Being able to guarantee the privacy of the customer



28 Being able to guarantee the privacy of the customer

From visualization we concluded that most people strongly agree that e-retail store should make guarantee to provide privacy of the customer

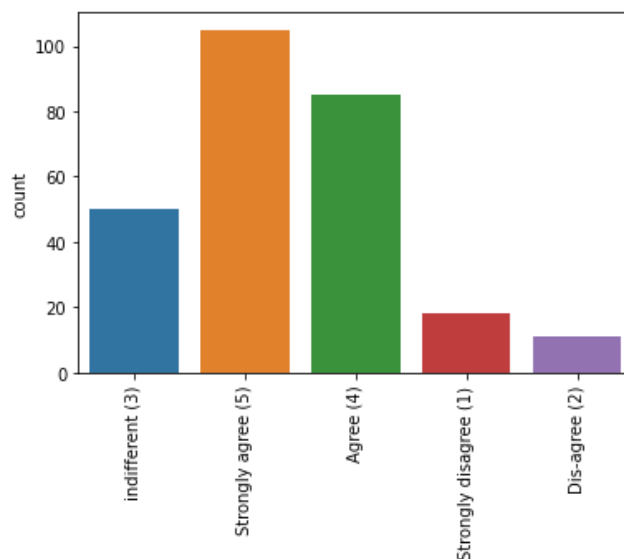
- Responsiveness availability of several communication channels (email, online rep, twitter, phone, etc)



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

From visualization we concluded that most people strongly agree that e-retail store should more than one responsiveness communication channels

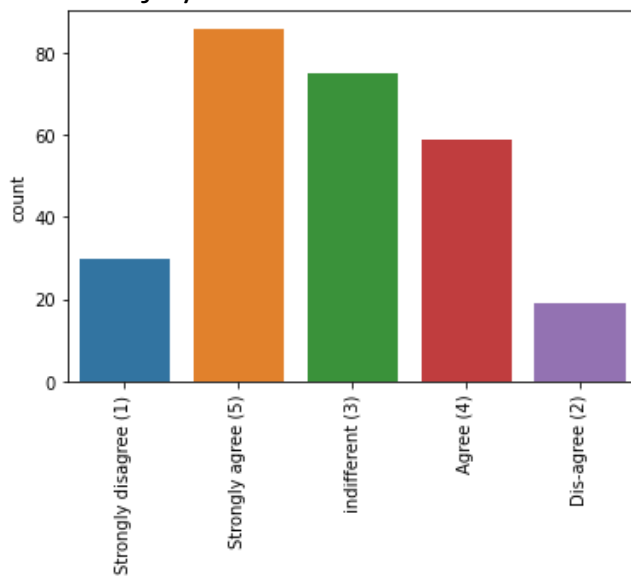
- Online shopping gives monetary benefit and discounts



30 Online shopping gives monetary benefit and discounts

From visualization we concluded that most people strongly agree that online shopping should give monetary benefit and discounts

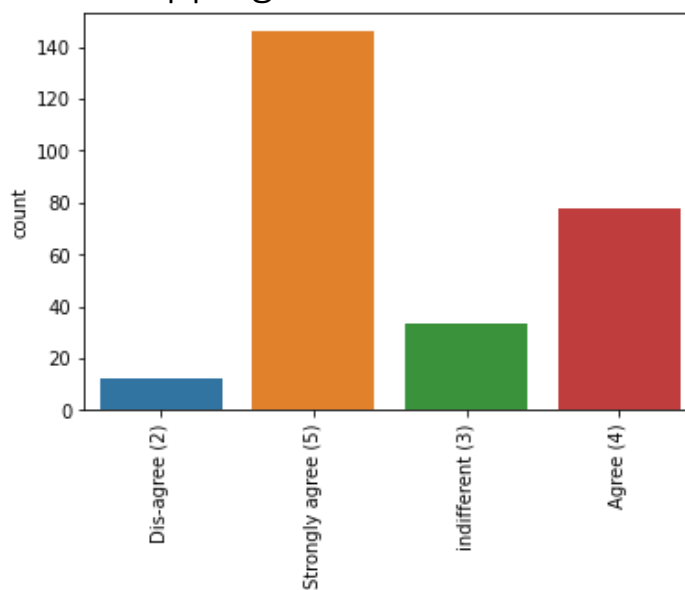
- Enjoyment is derived from shopping online



31 Enjoyment is derived from shopping online

From visualization we concluded that most people strongly agree that enjoyment is derived from shopping online

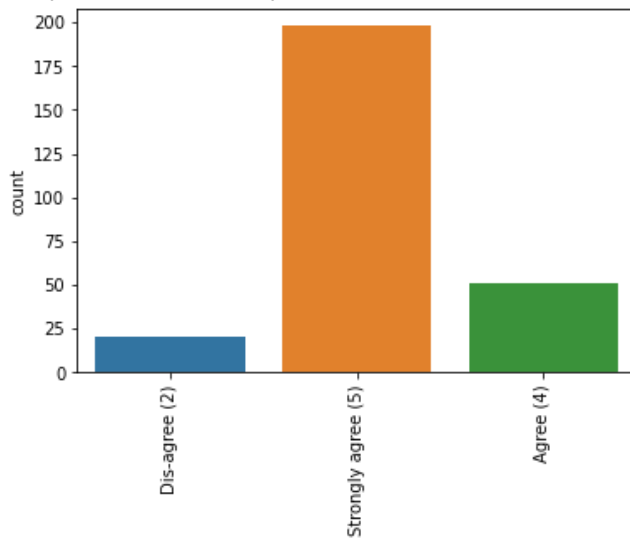
- Shopping online is convenient and flexible



32 Shopping online is convenient and flexible

From visualization we concluded that most people strongly agree that shopping online is convenient and flexible

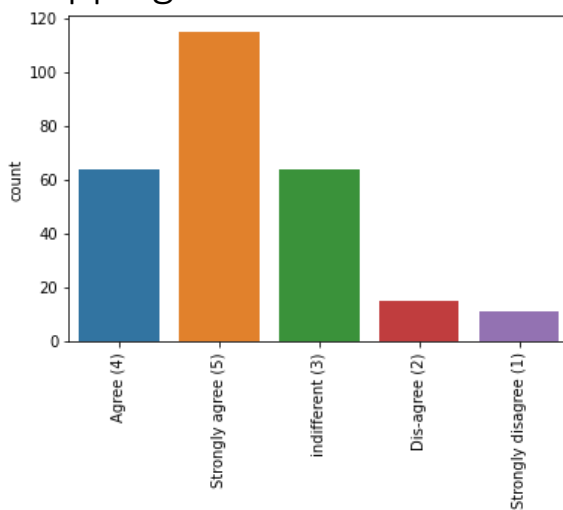
- Return & replacement policy of the e-tailer is important for purchase decision



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

From visualization we concluded that most people strongly agree that return & replacement policy of e-tailer is important for purchase decision

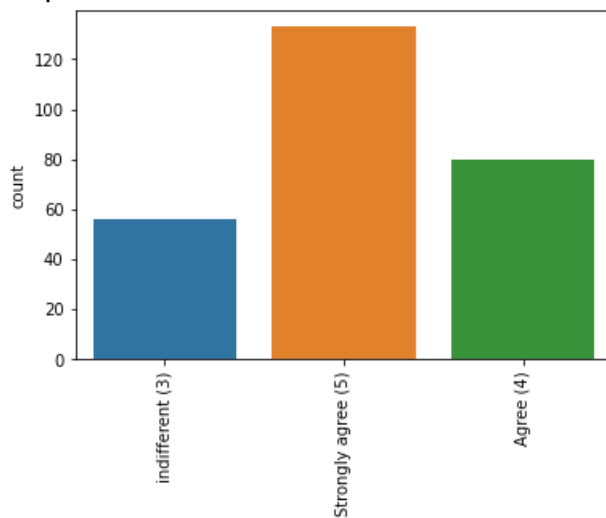
- Gaining access to loyalty programs is a benefit of shopping online



34 Gaining access to loyalty programs is a benefit of shopping online

From visualization we concluded that most people strongly agree that gaining access to loyalty programs is a benefit of shopping online

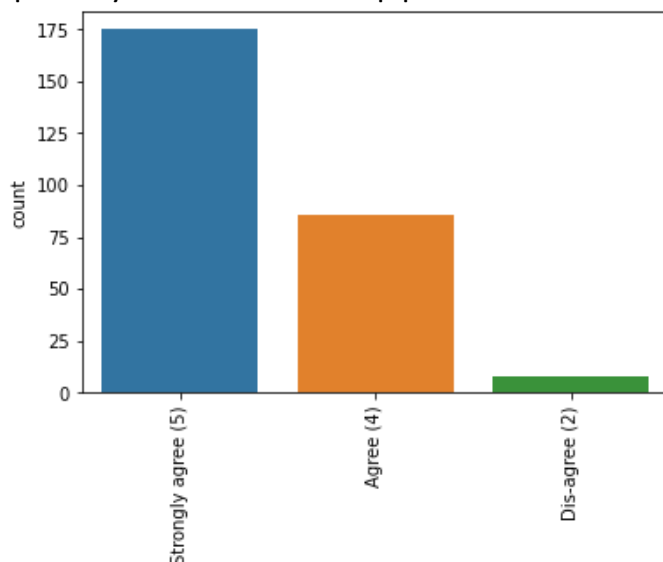
- Displaying quality information on the website improves satisfaction of customers



35 Displaying quality Information on the website improves satisfaction of customers

From visualization we concluded that most people strongly agree that displaying quality information on website improves customer satisfaction.

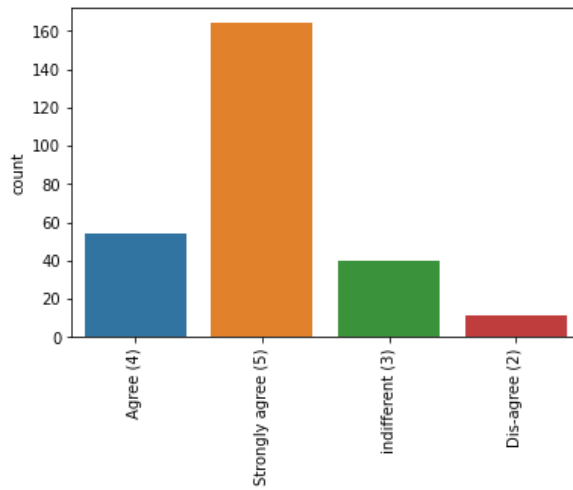
- User derive satisfaction while shopping on a good quality website or application



36 User derive satisfaction while shopping on a good quality website or application

From visualization we concluded that most people strongly agree that user derive satisfaction can be achieved by providing good quality online shopping website or application

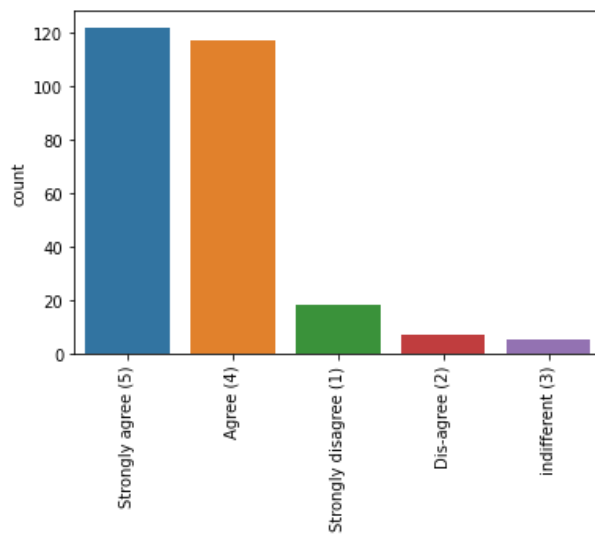
- Net Benefit derived from shopping online can lead to user satisfaction



37 Net Benefit derived from shopping online can lead to users satisfaction

From visualization we concluded that most people strongly agree that net benefit derived from shopping online can lead to user satisfaction

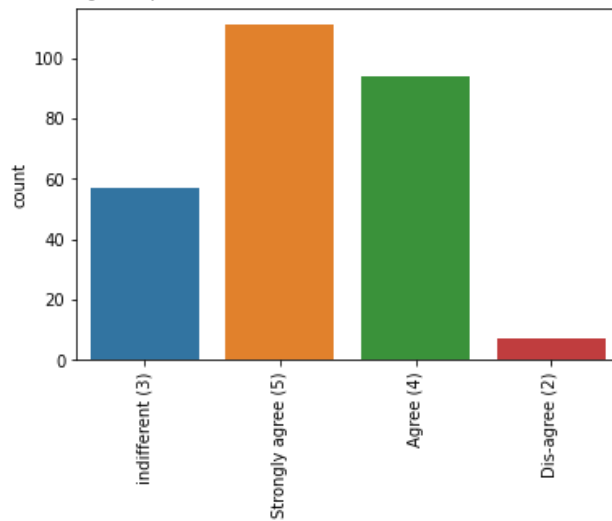
- User satisfaction cannot exist without trust



38 User satisfaction cannot exist without trust

From visualization we concluded that most people strongly agree that user satisfaction cannot exist without trust

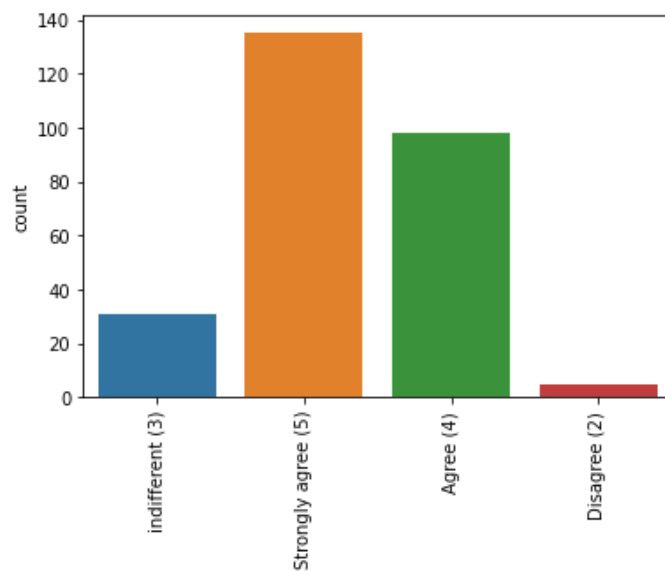
- Offering a wide variety of listed product in several category



39 Offering a wide variety of listed product in several category

From visualization we concluded that most people strongly agree that e-retail store should offer a wide variety of listed product in several category

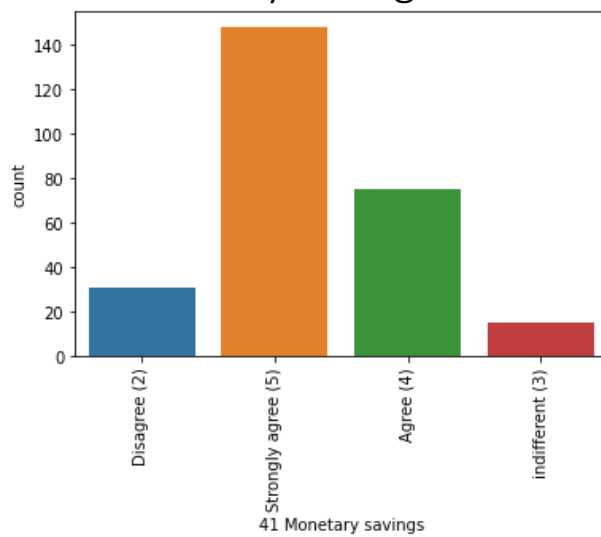
- Provision of complete & relevant product information



40 Provision of complete and relevant product information

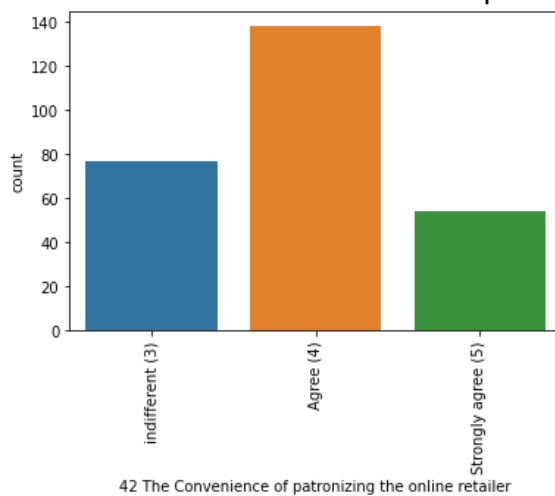
From visualization we concluded that most people strongly agree that there should be provision of complete & relevant product information on e-retail stores

- Monetary savings



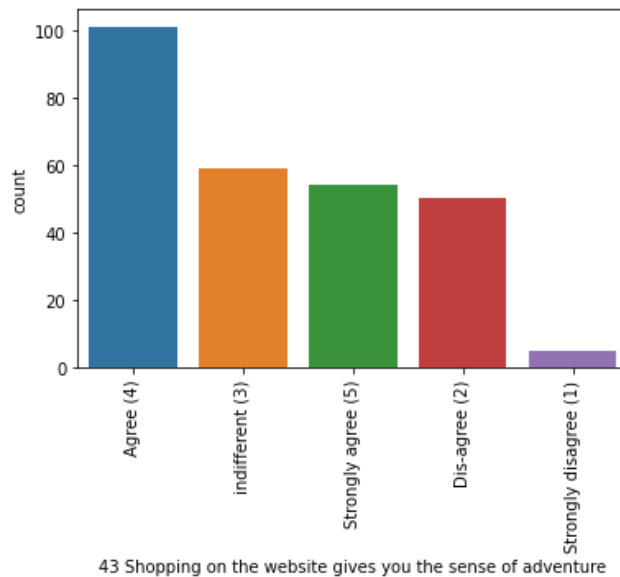
From visualization we concluded that most people strongly agree that e-retail stores provide monetary savings

- The convenience of patronizing the online retailer.



From visualization we concluded that most people agree about convenience of patronizing online retailer

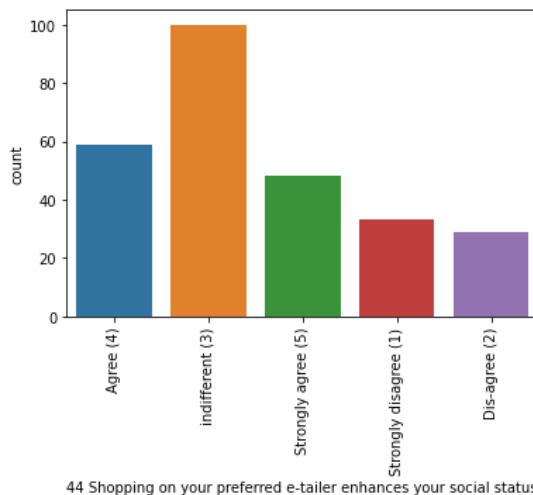
- Shopping on the website gives you the sense of adventure



43 Shopping on the website gives you the sense of adventure

From visualization we concluded that most people agree that shopping online gives them sense of adventure

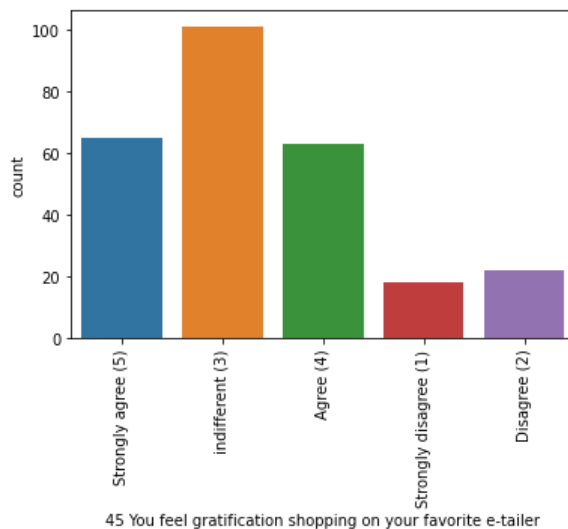
- Shopping on your preferred e-tailer enhances your social status



44 Shopping on your preferred e-tailer enhances your social status

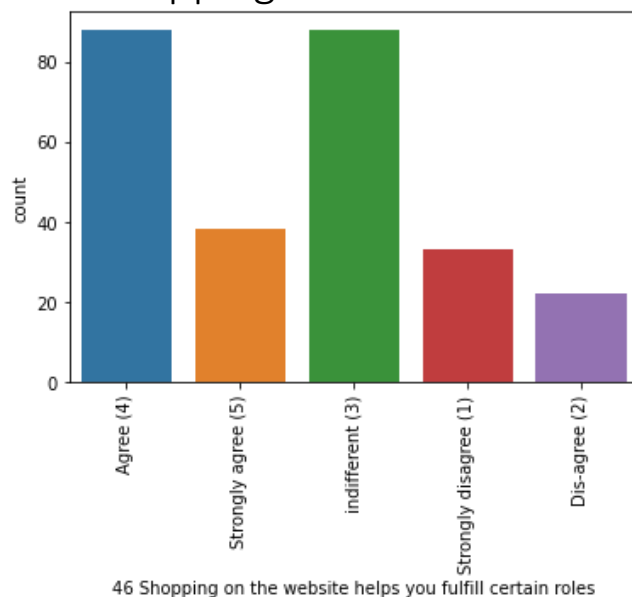
From visualization we concluded that most people feel indifferent about shopping on your preferred e-tailer enhances your social status

- You feel gratification shopping on your favorite e-tailer



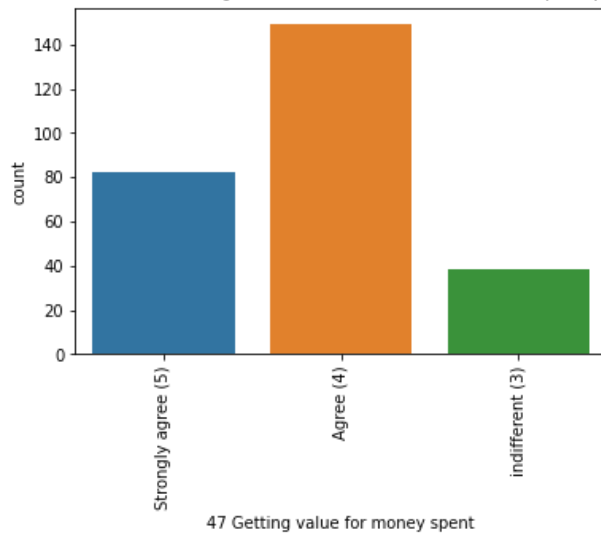
From visualization we concluded that most people feel indifferent about feeling gratification shopping on their favorite e-tailer

- Shopping on the website helps you fulfill certain roles



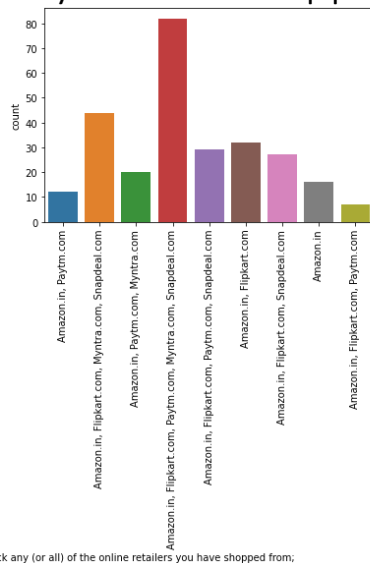
From visualization we concluded that people with both categories (Agree & indifferent) are having same amount of votes about shopping on website helps in fulfilling certain roles

- Getting value for money spent



From visualization we concluded that most people agree that they are getting value for money they spent

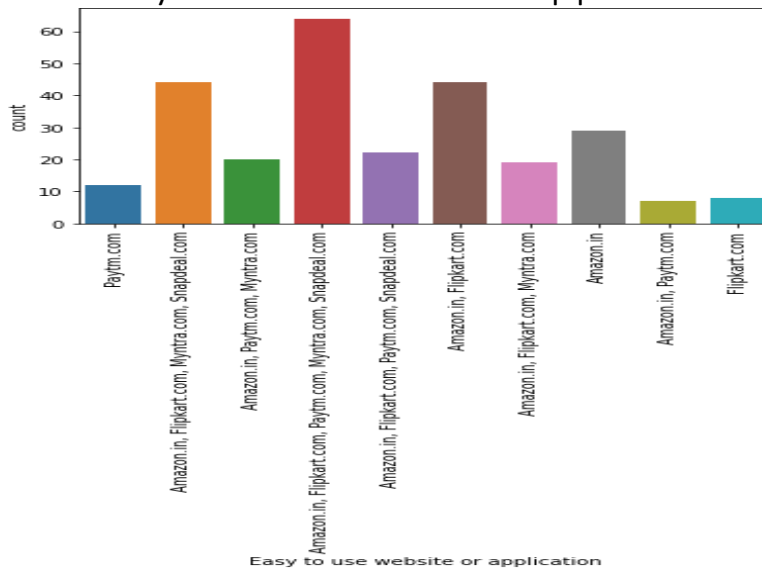
- From the following, tick any (or all) of the online retailers you have shopped from



From the following, tick any (or all) of the online retailers you have shopped from;

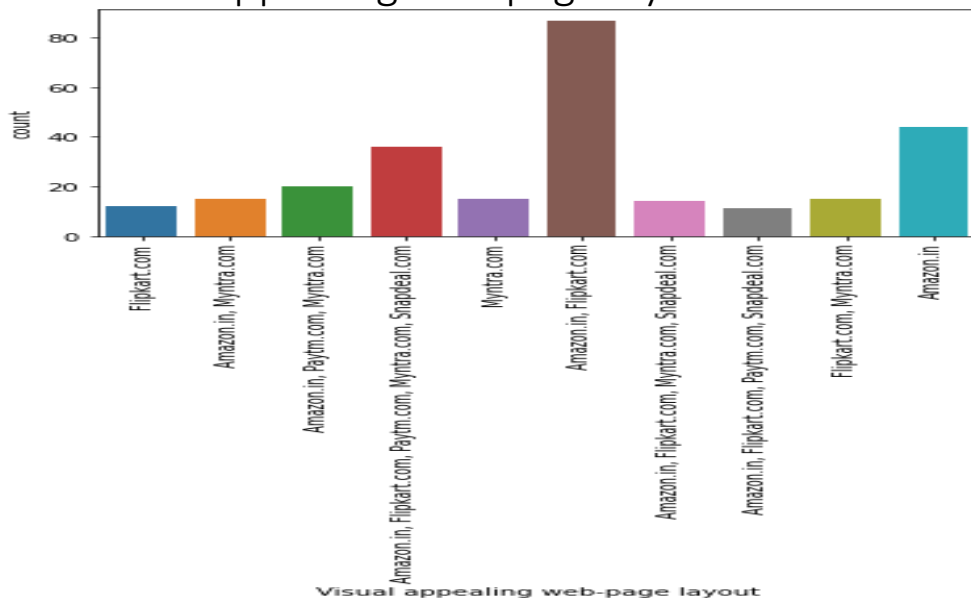
From visualization we concluded that most people are visiting cluster of Amazon.in, Flipkart.com, Paytm.com, myntra.com & snapdeal.com website

- Easy to use website or application



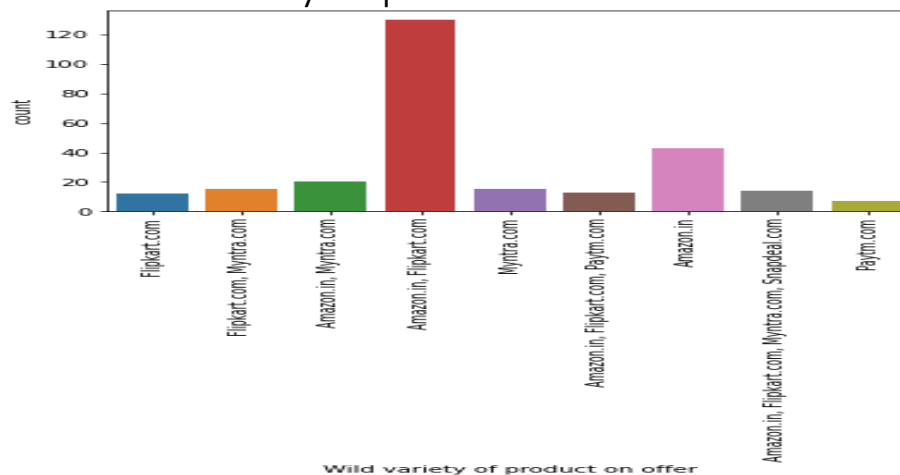
From visualization we concluded that most people feel that easy to use website or application are of Amazon.in, Flipkart.com, Paytm.com, myntra.com & snapdeal.com

- Visual appealing web-page layout



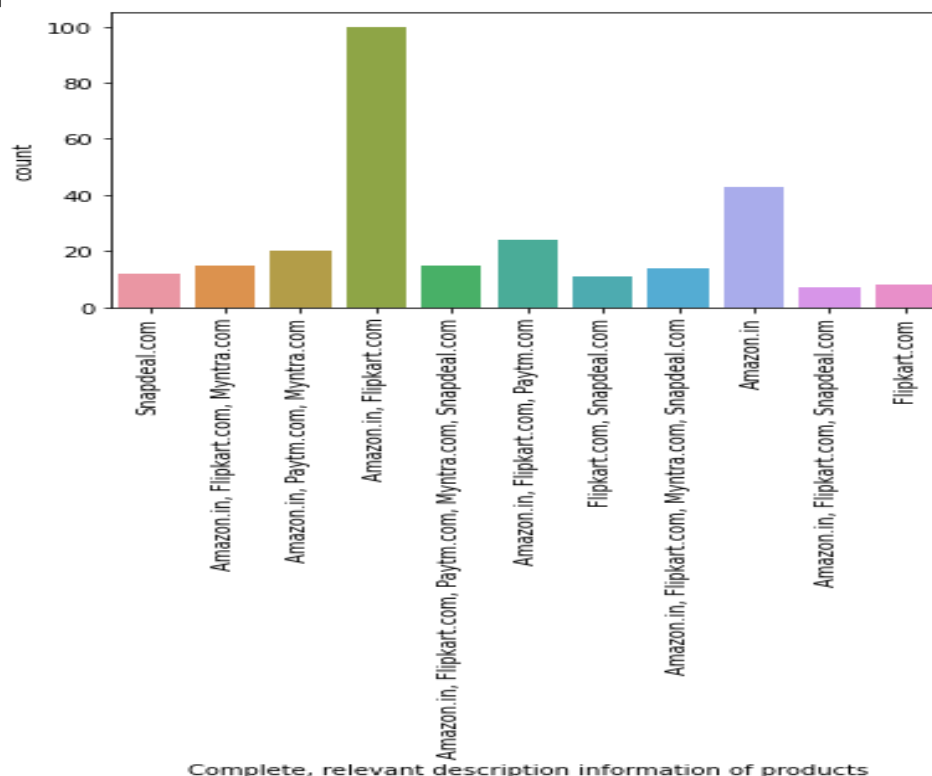
From visualization we concluded that most people that qmost visual appealing web-page layout are of Amazon.in & Flipkart.com websites

- Wild variety of product on offer



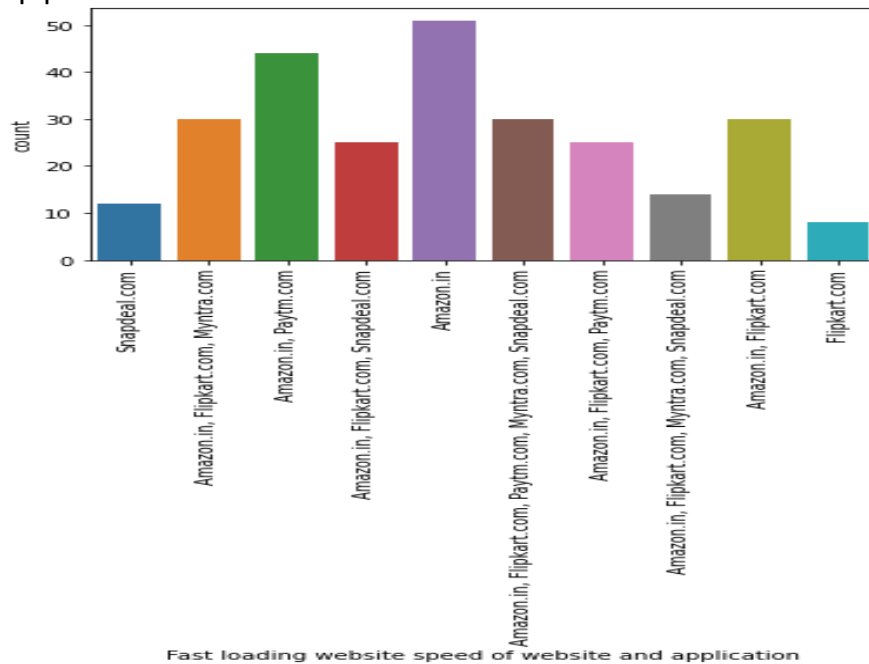
From visualization we concluded that most wild variety of product on offer are present on Amazon.in & Flipkart.com website

- Complete, relevant description information of products



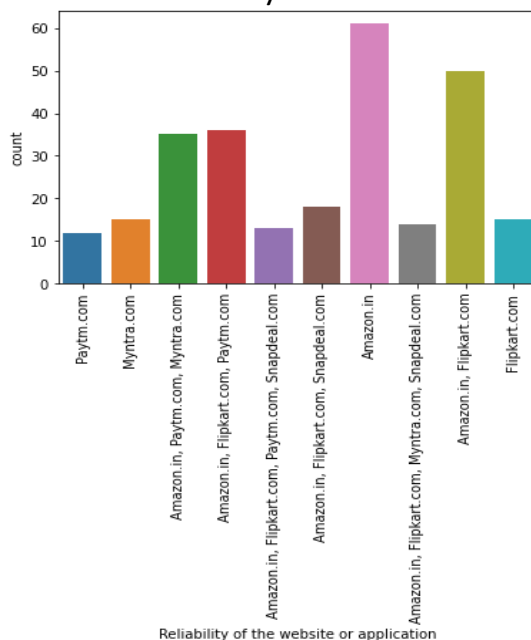
From visualization we concluded that most complete, relevant information of products are available on Amazon.in & Flipkart.com websites

- Fast loading website speed of website and application



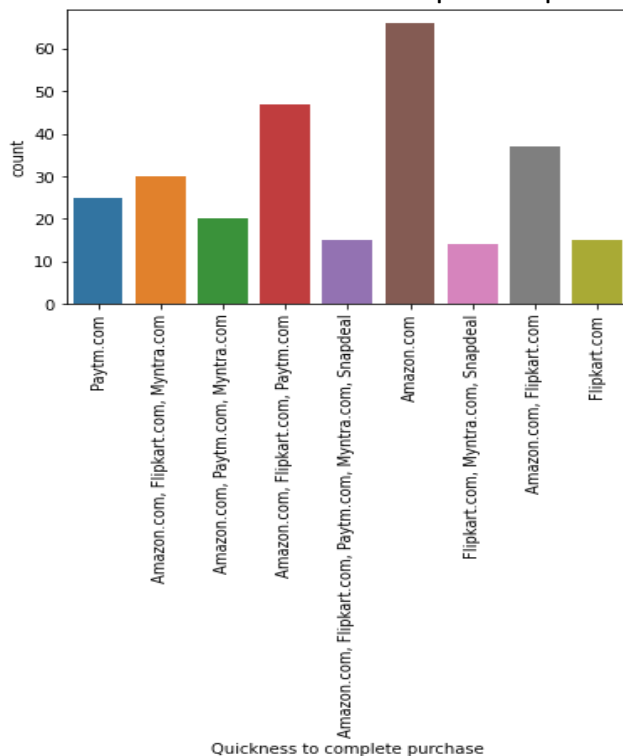
From visualization we concluded that most people thinks that Amazon.in has fast loading website & application speed

- Reliability of the website or application



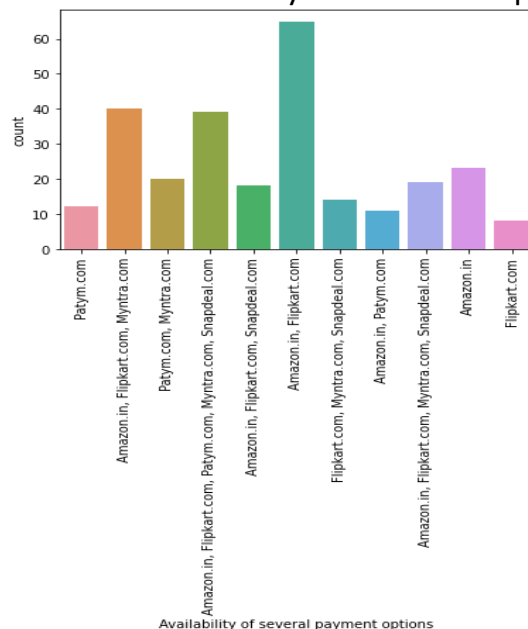
From visualization we concluded that most people thinks that most reliable website or application is of Amazon.in

- Quickness to complete purchase



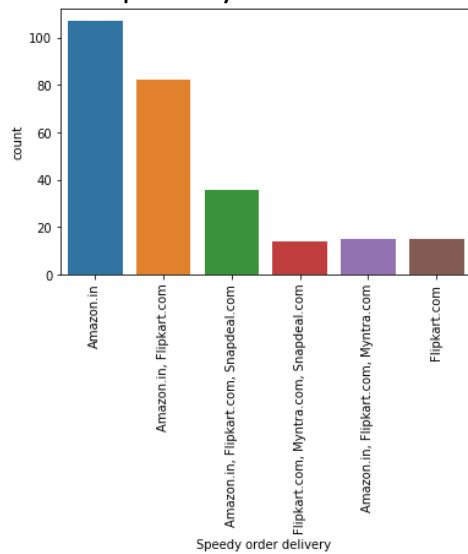
From visualization we concluded that most people thinks Amazon.com provides quickness to complete purchase

- Availability of several payment options



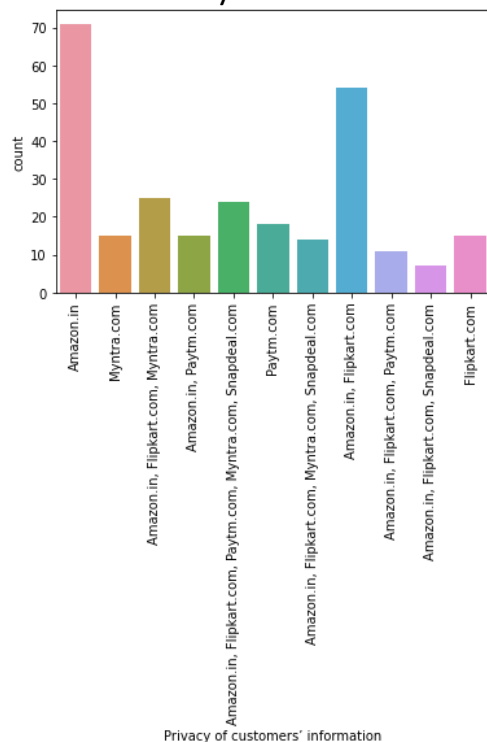
From visualization we concluded that most people think that Amazon.in & Flipkart.com have several payment options

- Speedy order delivery



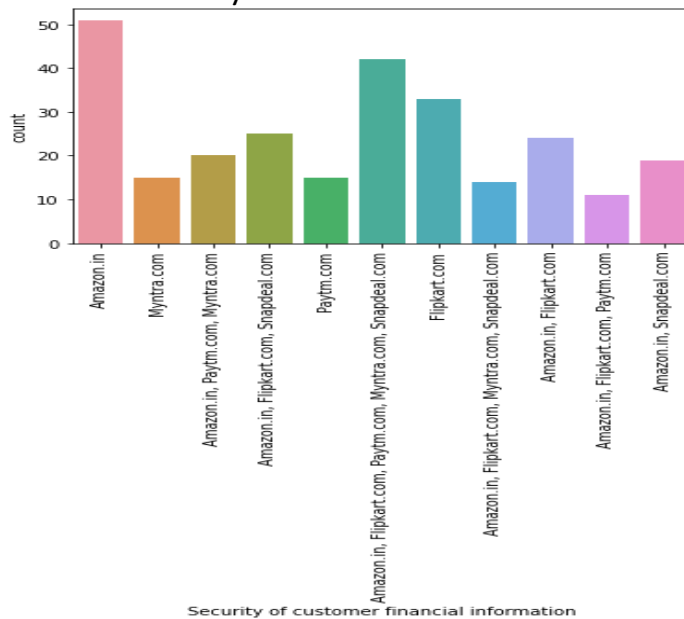
From visualization we concluded that most people think that Amazon.in has speedy order delivery

- Privacy of customer's information



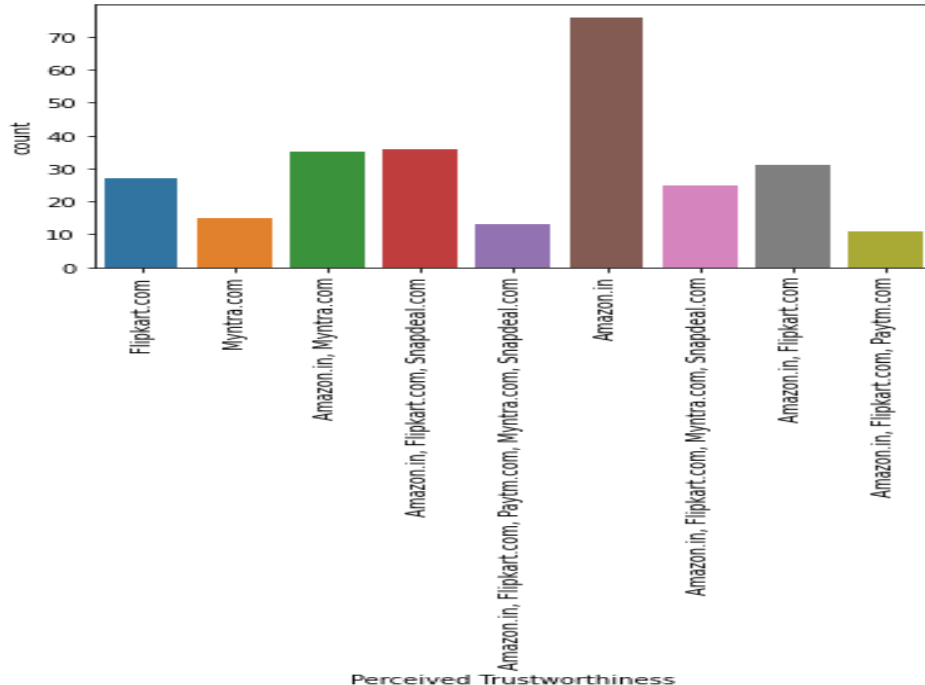
From visualization we concluded that most people think Amazon.in provides privacy of customer's information

- Security of customer financial information



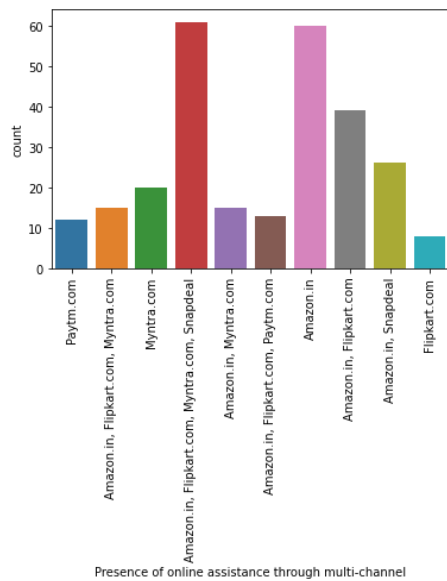
From visualization we concluded that most people think that Amazon.in provides security of customer financial information

- Perceived Trustworthiness



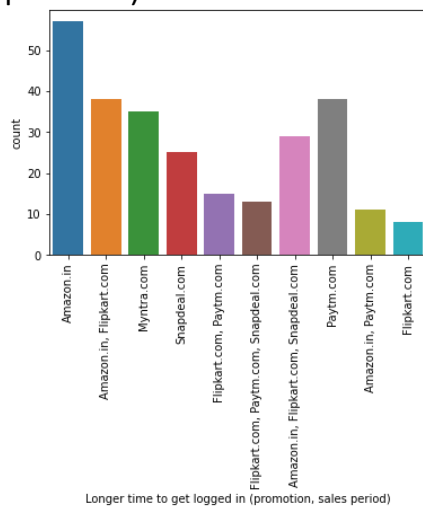
From visualization we concluded that most people think that Amazon.in provides Perceived Trustworthiness

- Presence of online assistance through multi-channel



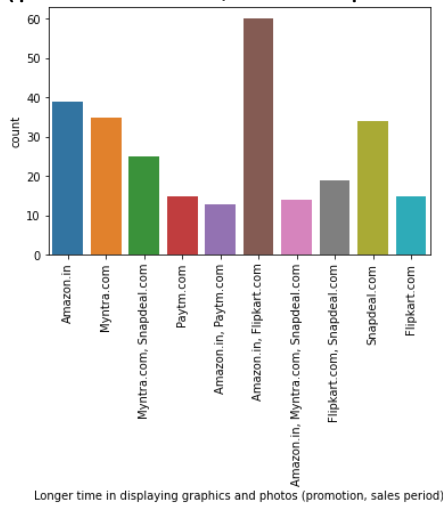
From visualization we concluded that most people think that Amazon.in, Flipkart.com, Myntra.com & snapdeal.com websites provides presence of online assistance through multi-channel

- Longer time to get logged in (promotion, sales period)



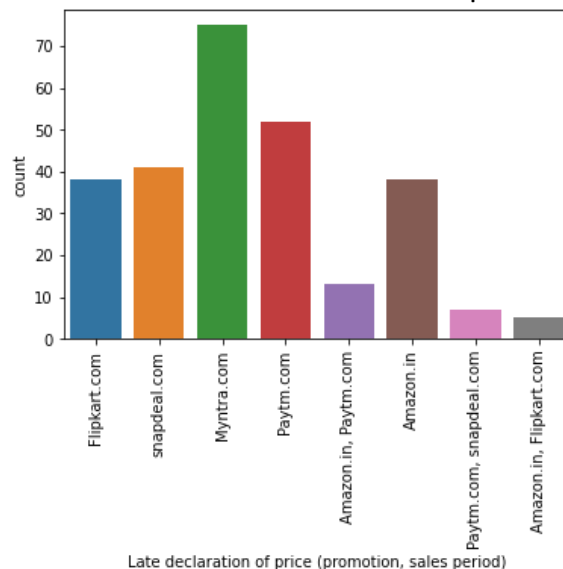
From visualization we concluded that most people think that Amazon.in website takes longer time to get logged in (promotion, sales period)

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



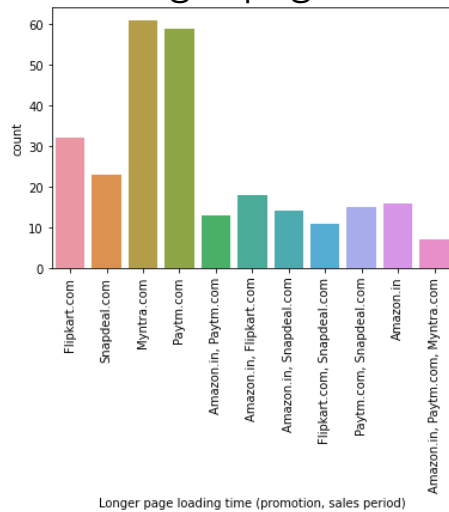
From visualization we concluded that most people think that Amazon.in & Flipkart.com websites takes longer time in displaying graphics & photos (promotion, sales period)

- Late declaration of price (promotion, sales period)



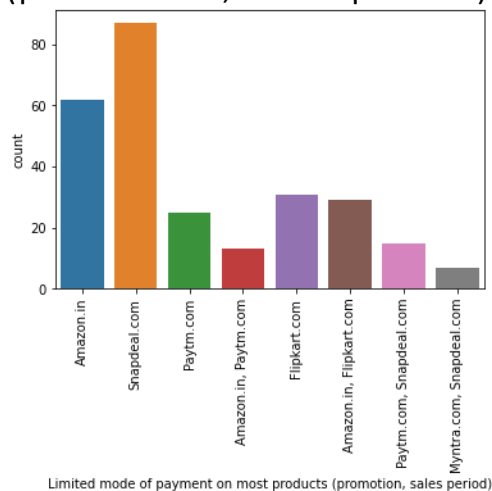
From visualization we concluded that most people think that Myntra.com website provide late declaration of price

- Longer page loading time (promotion, sales period)



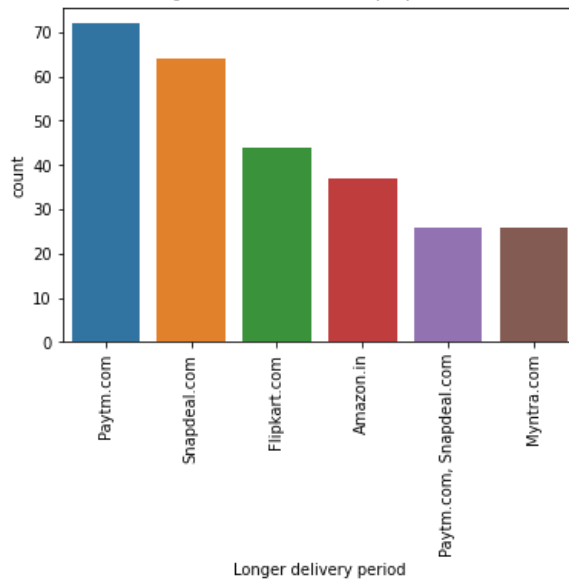
From visualization we concluded that most people think that Myntra.com website takes longer page loading time (promotion, sales period)

- Limited mode of payment on most products (promotion, sales period)



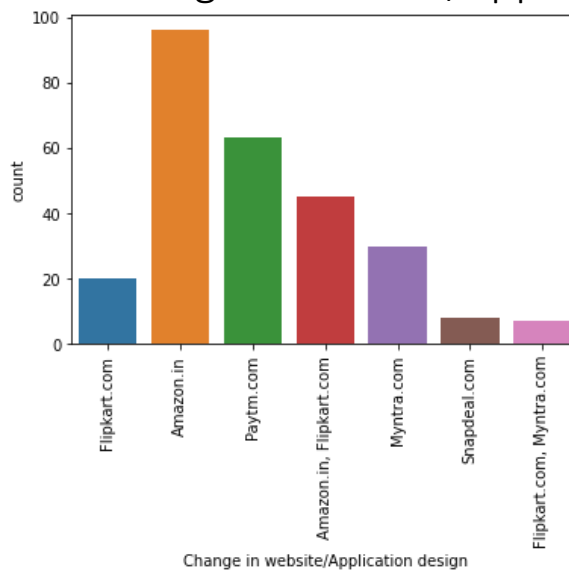
From visualization we concluded that most people think that Snapdeal.com website has limited mode of payment on most products (promotion, sales period)

- Longer delivery period



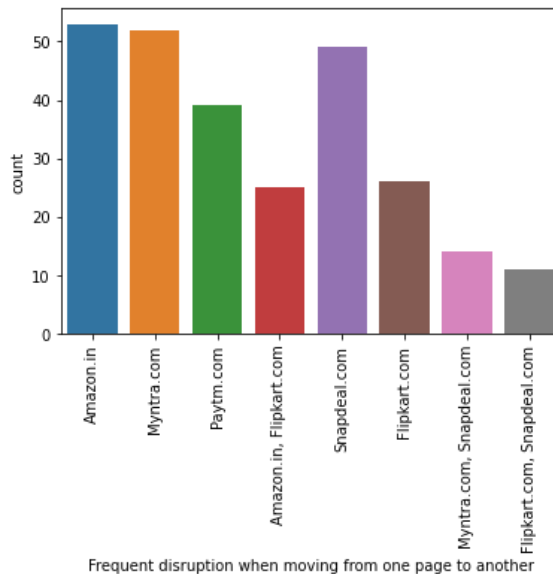
From visualization we concluded that most people think that Paytm.com website takes longer delivery period.

- Change in website/Application design



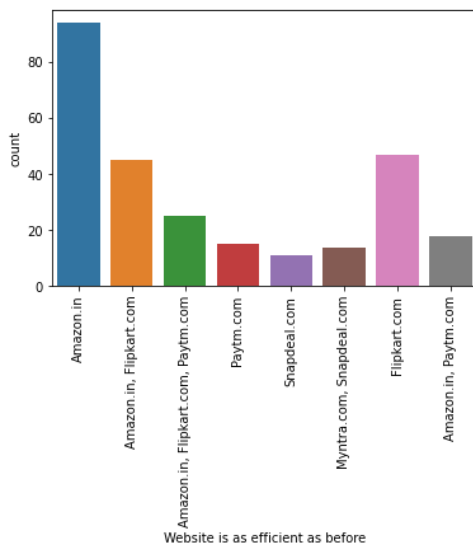
From visualization we concluded that most people think that there is a change in website/Application design of Amazon.in

- Frequent disruption when moving from one page to another



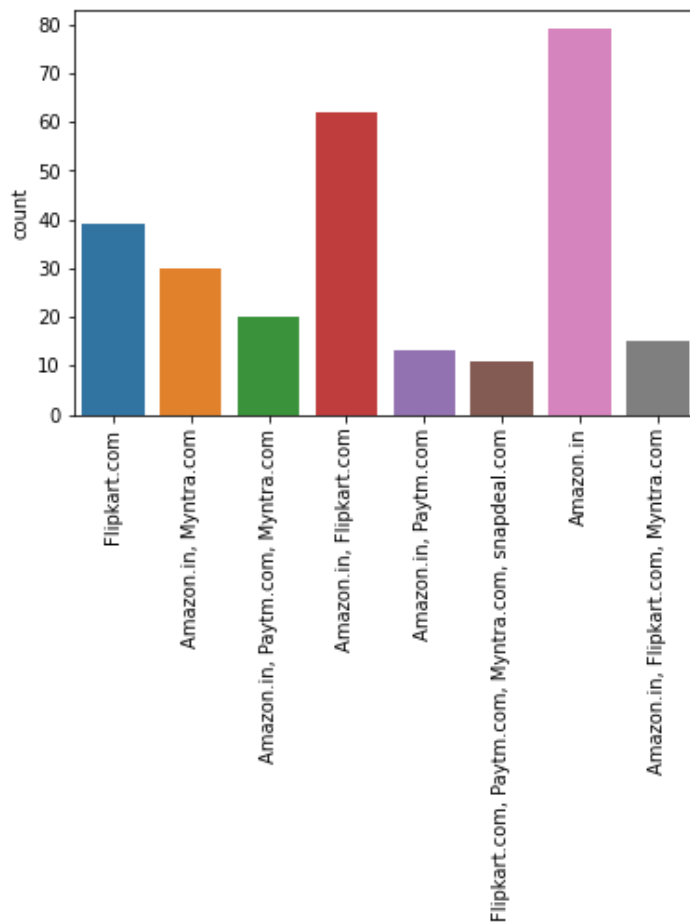
From visualization we concluded that most people think that Amazon.in has frequent disruption when moving from one page to another

- Website is as efficient as before



From visualization we concluded that most people think that Amzon.in website is as efficient as before

- Which of the Indian online retailer would you recommended to a friend?



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

From visualization we concluded that most people think that they would recommend Amazon.in online retail store to a friend

CONCLUSION

In the end we can conclude 2 things in summary from the visualization of all the features in the dataset & those two conclusions are that :

- The most customers that are visiting online retail stores are females.
- From various features countplot we can see that most customers are preferring one specific online retail store which is Amazon.in. So on that basis we can say that customer retention rate for Amazon.in is the highest.

