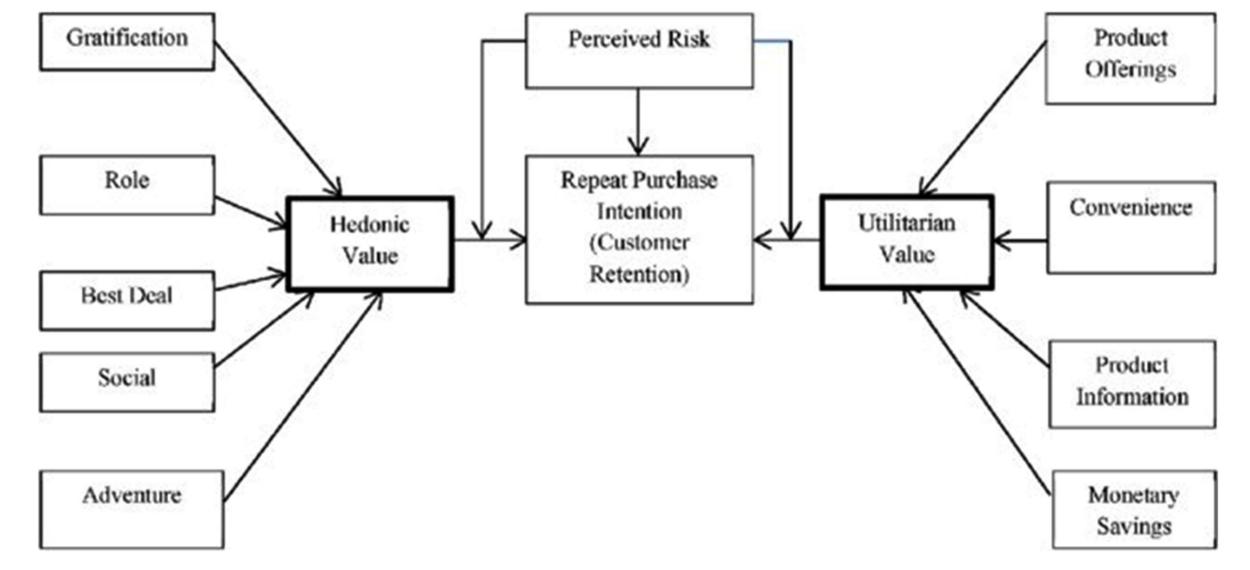


# E-Commerce Platform Analysis Report

## About the dataset:

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.



1Gender of respondent	2How old are you?	3Which city do you shop online from?	4What is the Pin Code of where you shop online from?	5Since How Long You are Shopping Online ?	6How many times you have made an online purchase in the past 1 year?	7How do you access the internet while shopping on-line?	8Which device do you use to access the online shopping?	9What is the screen size of your mobile device?	10What is the operating system (OS) of your device? ...	Longer time to get logged in (promotion, sales period)	Longer time in displaying graphics and photos (promotion, sales period)	Late declaration of price (promotion, sales period) :
0	Male 31-40 years	Delhi 110009	Above 4 years	31-40 times	Dial-up	Desktop	Others	Window/windows Mobile	... Windows	Amazon.in	Amazon.in	Flipkart.com
1	Female 21-30 years	Delhi 110030	Above 4 years	41 times and above	Wi-Fi	Smartphone	4.7 inches	iOS/Mac	... iOS	Amazon.in, Flipkart.com	Mynta.com	snapdeal.com
2	Female 21-30 years	Greater Noida 201308	3-4 years	41 times and above	Mobile Internet	Smartphone	5.5 inches	Android	... Android	Mynta.com	Mynta.com	Mynta.com
3	Male 21-30 years	Karnal 132001	3-4 years	Less than 10 times	Mobile Internet	Smartphone	5.5 inches	iOS/Mac	... iOS	Snapdeal.com	Mynta.com, Snapdeal.com	Mynta.com
4	Female 21-30 years	Bangalore 530068	2-3 years	11-20 times	Wi-Fi	Smartphone	4.7 inches	iOS/Mac	... iOS	Flipkart.com, Paytm.com	Paytm.com	Paytm.com

5 rows x 71 columns

The dataset contains 269 observations with 71 columns in each observation. The columns consist:

- **Column 1 to Column 6** - contains customer information like gender, age, city, pincode, duration of doing online shopping and how many times a customer shop online in a past year
- **Column 7 to Column 15** - contains the way to access the online shopping platform, channel to reach the online store, time spent on platform before making a purchase decision and their preferred payment methods
- **Column 16 and Column 17** - tells the frequency and the reason of abandoning the shopping cart after adding the items in the cart of online platform
- **Column 18 to Column 47** - contains customer experience of online shopping on the e-commerce platform
- **Column 48** - tells about customer's preferred online – retailer
- **Column 49 to Column 61** - tells about the performance of the online-retailers
- **Column 62 to Column 70** - tells about the bad experiences of the online-retailers
- **Column 71 - preferred online-retailer (target variable)** considering all good and bad factors of the given e-commerce platforms

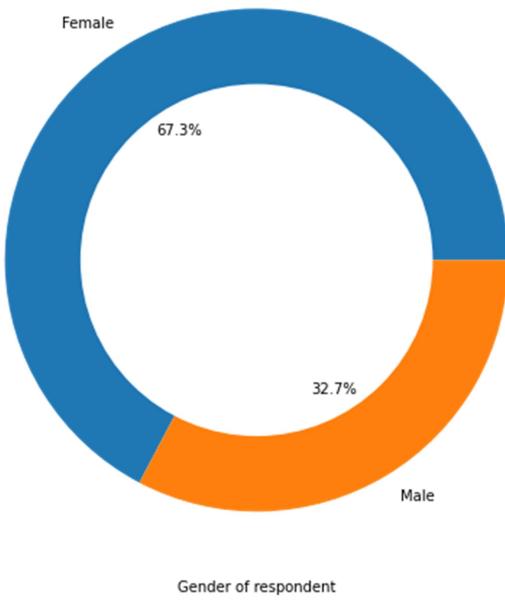
#### **Initial Observations:**

- a) The dataset contains **269 rows and 71 columns**.
- b) The given dataset has **no missing values** in the observations.
- c) All the columns are of **object data type** except pincode column.
- d) On checking unique values of the columns, we observe that **all the columns are categorical** in nature.
- e) As far as **columns heading** is concerned, it consists of **tab spaces, digits, leading and trailing spaces** which need to be handled.

#### **Exploratory Data Analysis:**

##### **1. Univariate Analysis:**

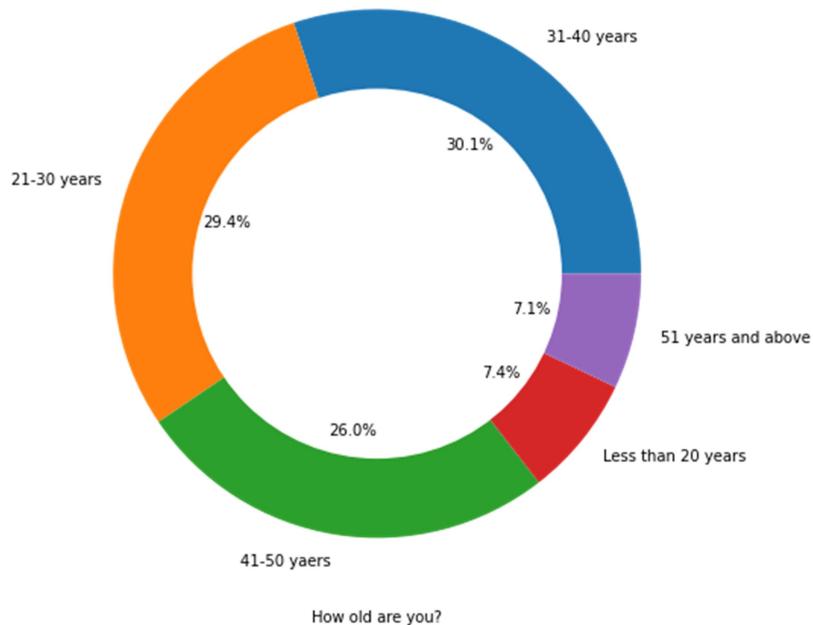
Univariate analysis is basically the simplest form to analyze data. Uni means one and this means that the data has only one kind of variable. The major reason for univariate analysis is to use the data to describe. The analysis will take data, summarize it, and then find some pattern in the data.



Gender of respondent

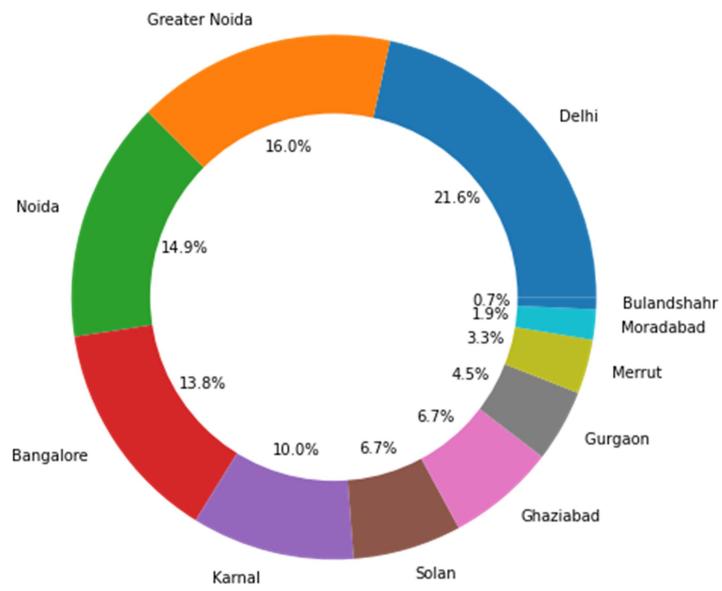
---

- ❖ There is double the number of women than men who have taken this survey.
- ❖ **67.3%** - Women and **32.7%** - Men



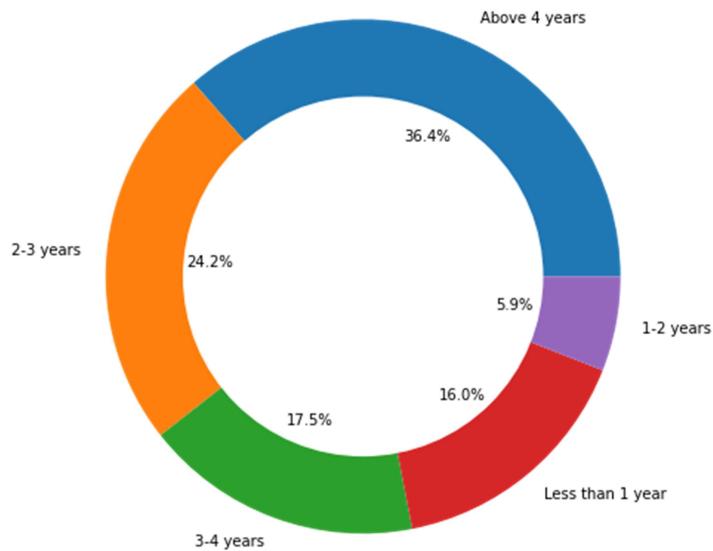
How old are you?

- ❖ Most of the people are in their 30's followed by 20's, teenagers and senior citizen are the least in number



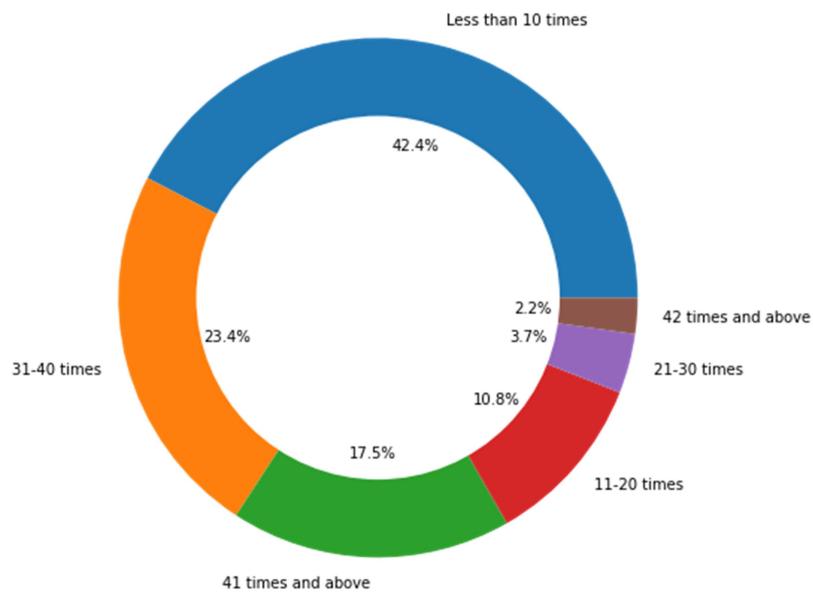
Which city do you shop online from?

- ❖ Most of the people belong from Delhi, Noida and Bangalore, ambiguity can also be seen as Noida has two categories (Noida and Greater Noida) which need to be handled



Since How Long You are Shopping Online ?

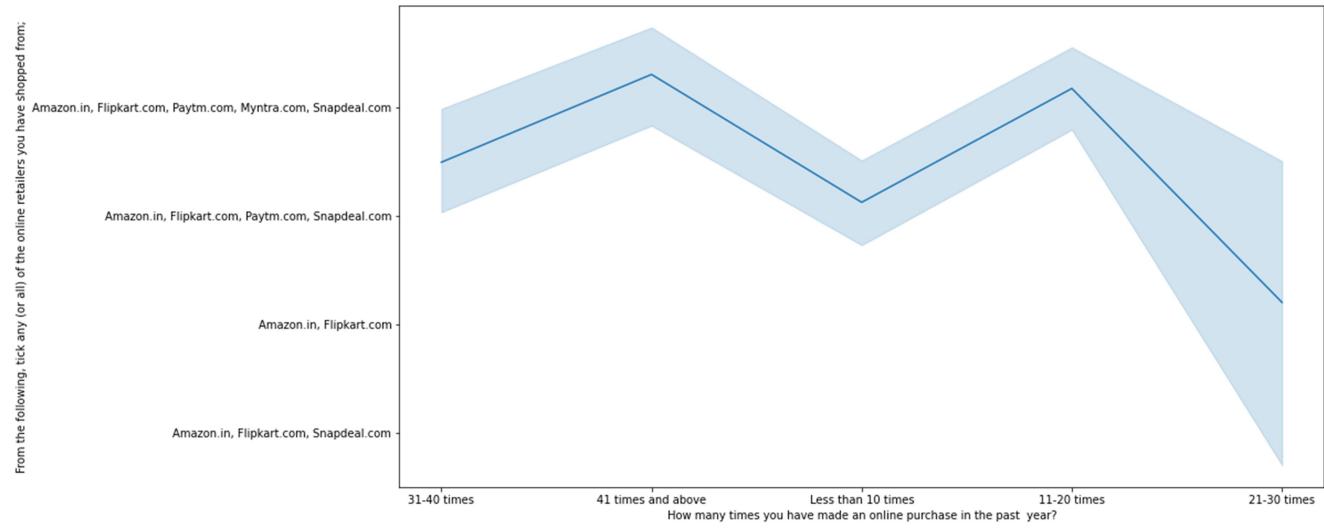
- ❖ Most of the people shopping online have been shopping from a long time



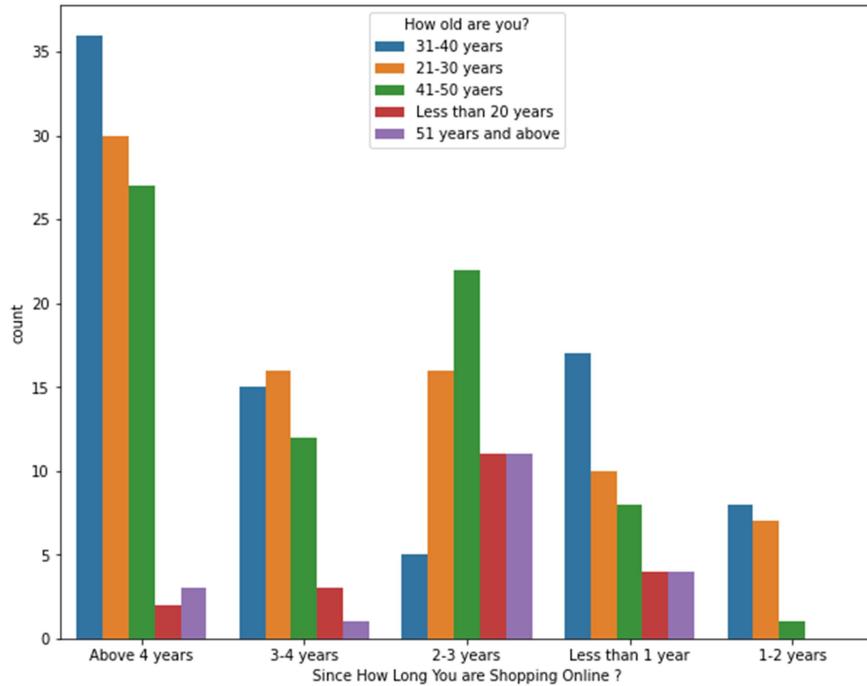
- ❖ Majority of people shop online 10 times a year, ambiguity can also be seen for range 42 times and above which needs to be handled

## 2. Bivariate Analysis:

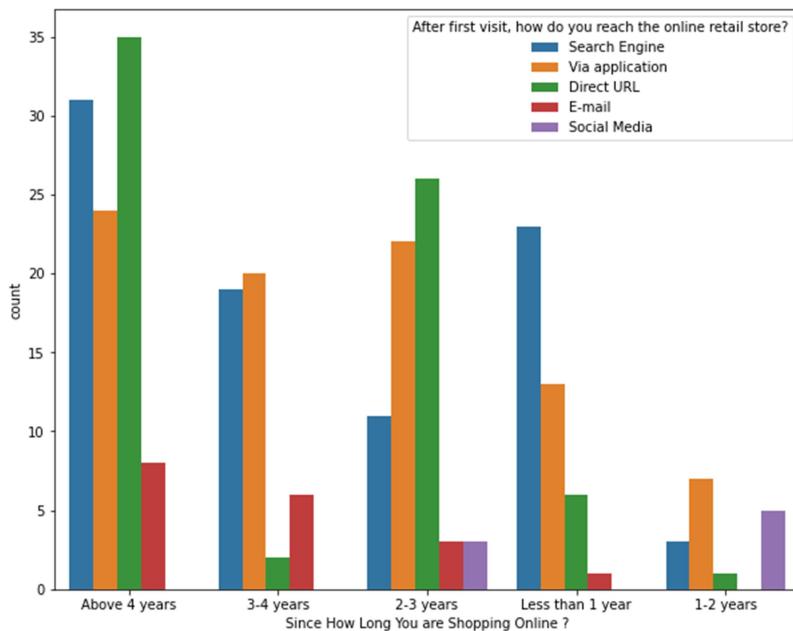
Bivariate analysis refers to **the analysis of two variables to determine relationships between them.**



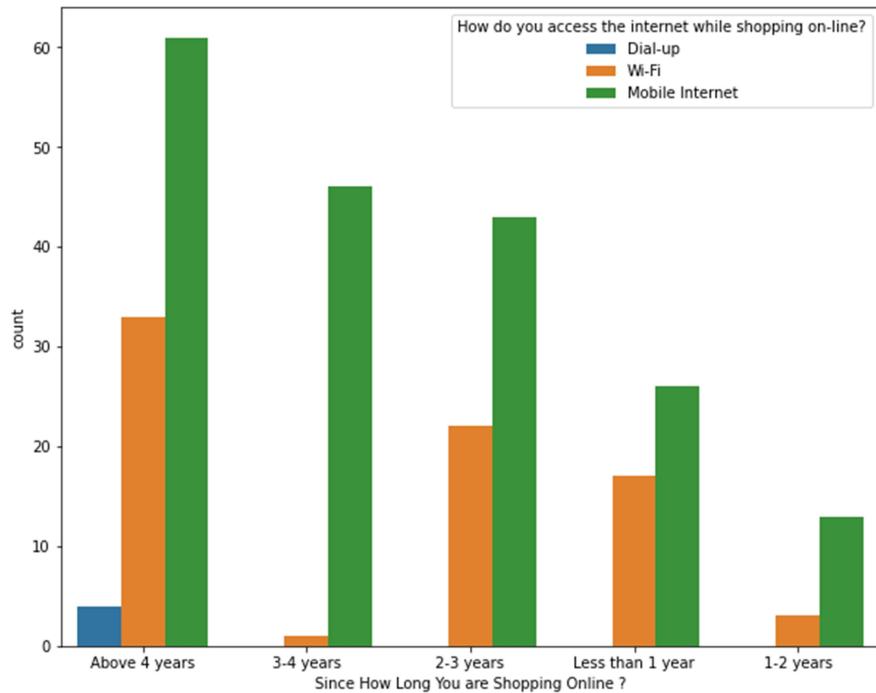
- ❖ Heavy shoppers who shop more than 41 times a year shop from all the online brands
- ❖ Some of the people who shop for 31-40 and less than 10 times a year seem to exclude Myntra
- ❖ People shop from Amazon and Flipkart whatever be the case



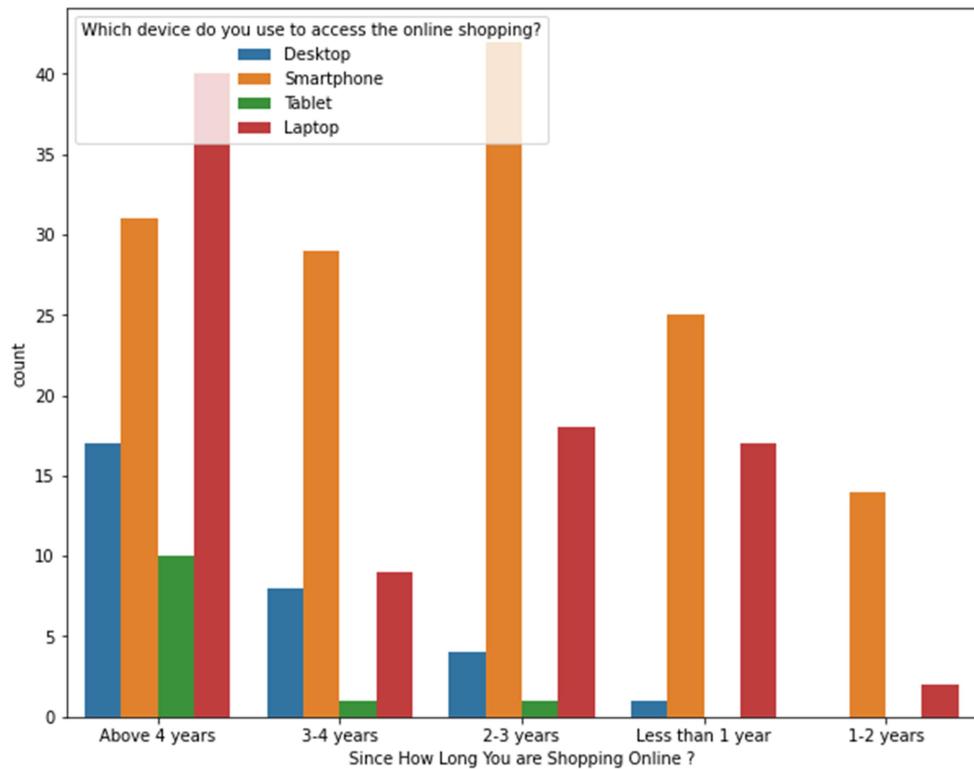
- ❖ Highest number of people have been shopping online for above 4 years except for the age group below 20 years and above 50 years
- ❖ People who are shopping online for 1-2 years does not include teenagers and elder people



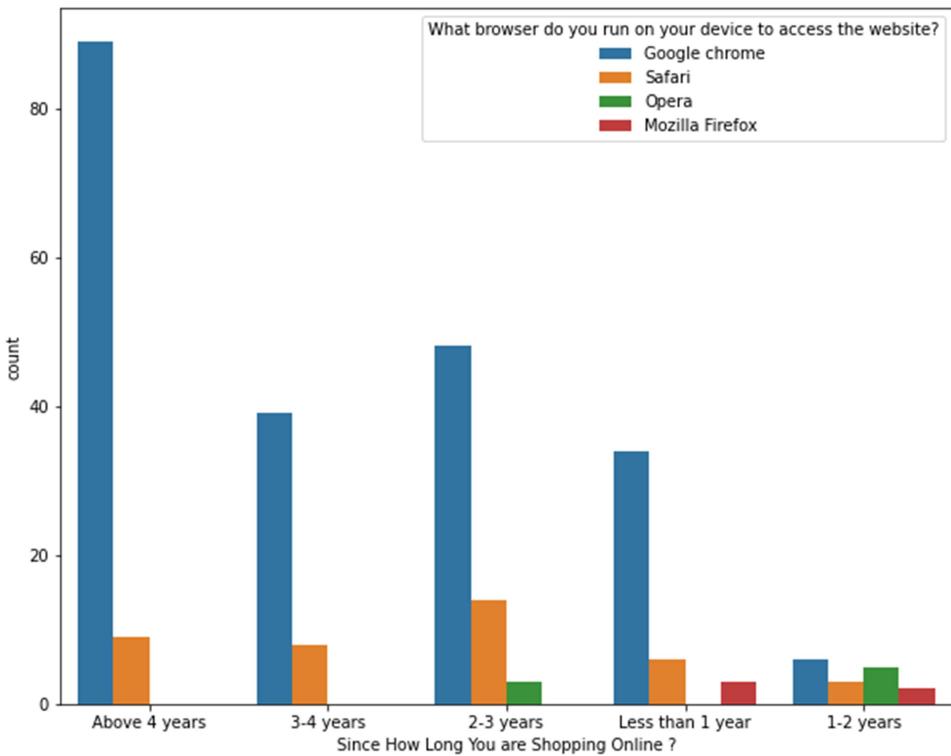
- ❖ Even though people who are shopping online for more than 3 years do not use the application rather use search engine and direct Url's in large number which indicates that online brands should update all their platforms rather than just application



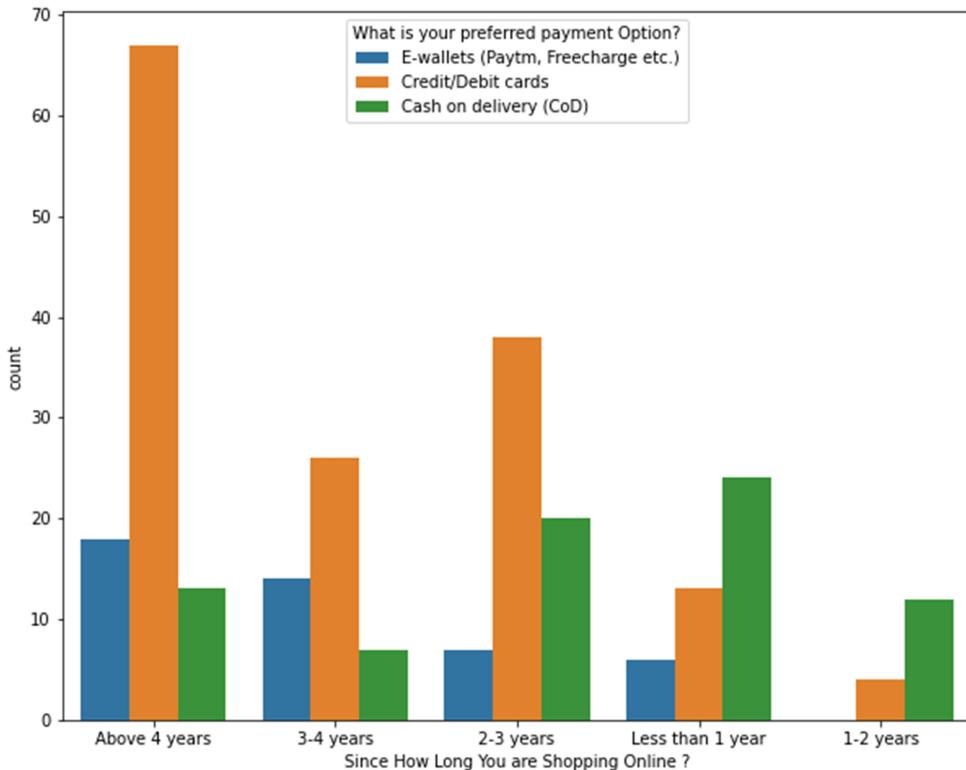
- ❖ Majority of online shoppers use **Mobile Internet** to access the internet while shopping online



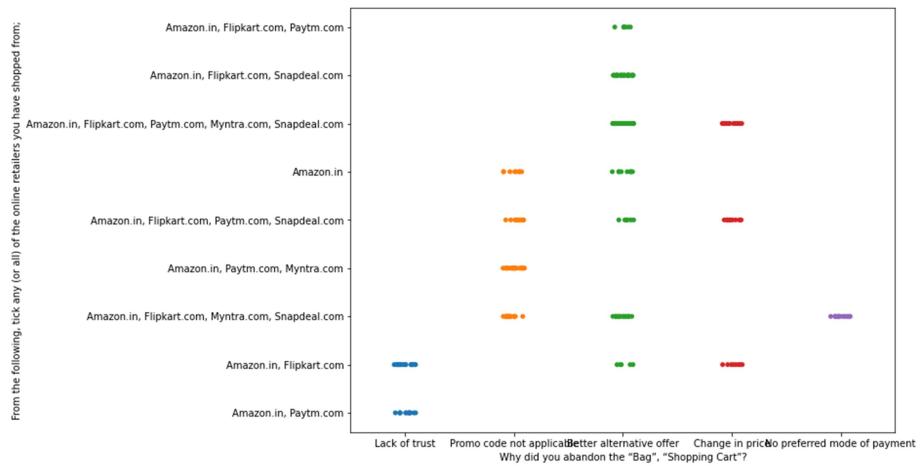
- ❖ **Smartphone** is the major device use to access the online shopping



- ❖ Majority of online shoppers use **Google Chrome browser** on their device to access the website

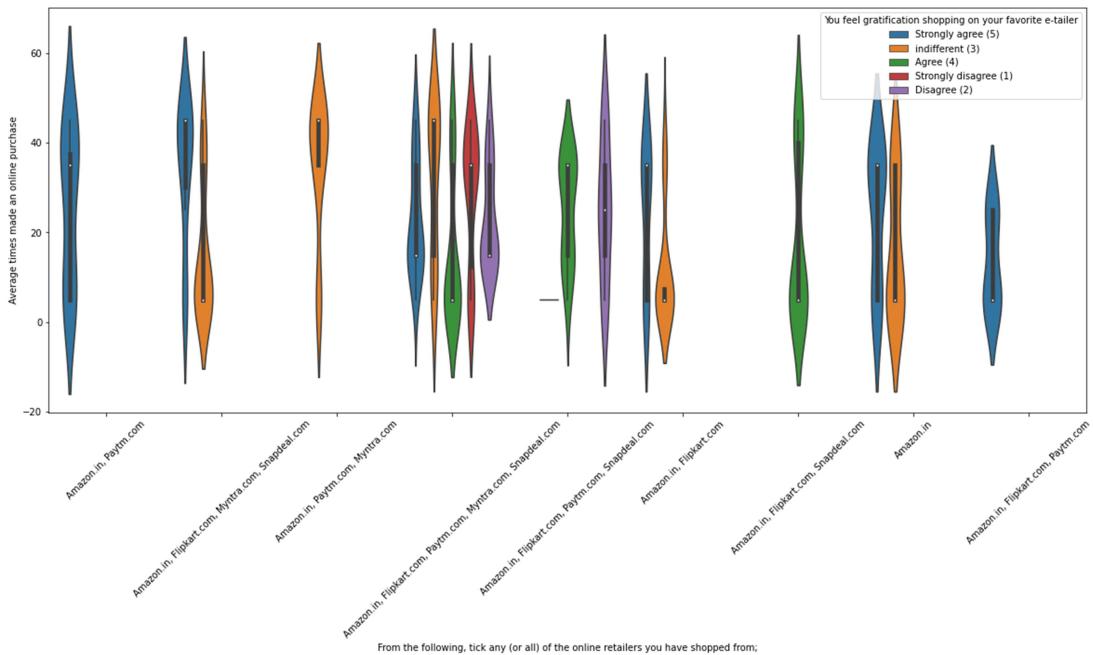


- ❖ Majority of online shoppers use **Credit/Debit cards** as their preferred payment option

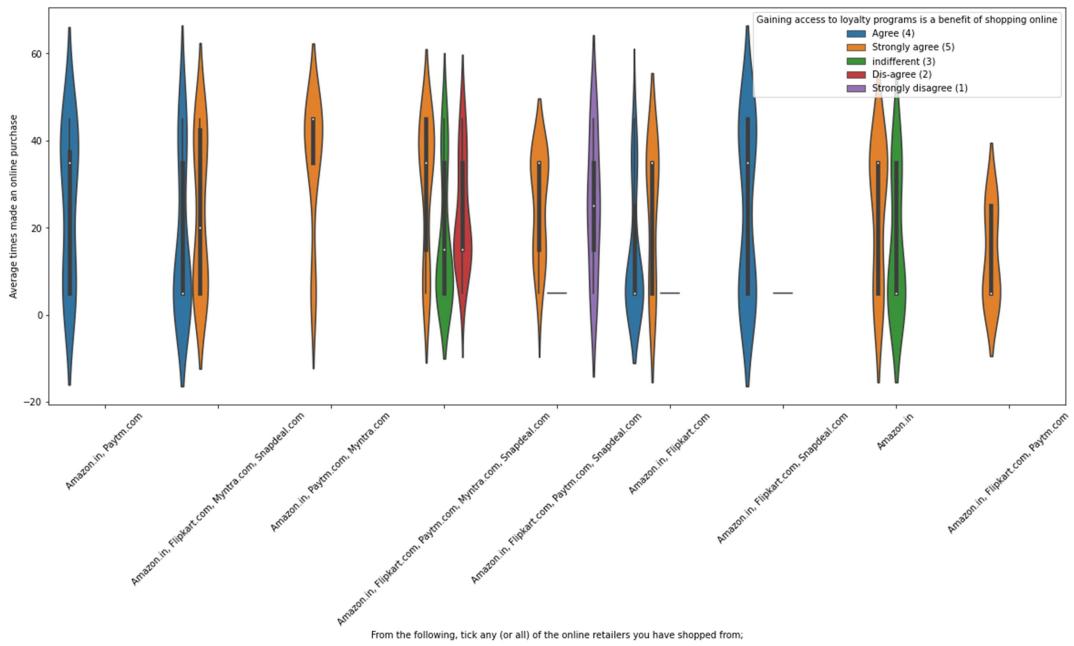


- We can clearly see that most of the time people abandon the bag because they get a better alternative offer or promo code not applicable
- There is also lack of trust seen in Amazon, Flipkart and Paytm by some people

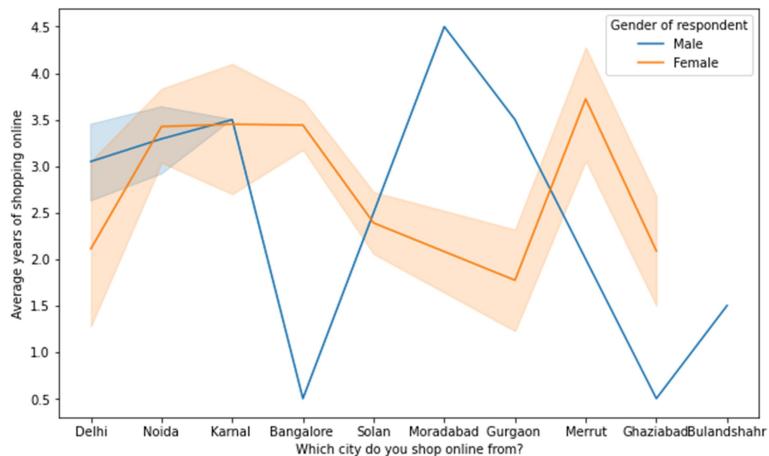
### **3. Multivariate Analysis:**



- Almost all the people who have shopped from Amazon, Flipkart and Paytm are satisfied. People who shop from all the online brands doesn't seem to be satisfied



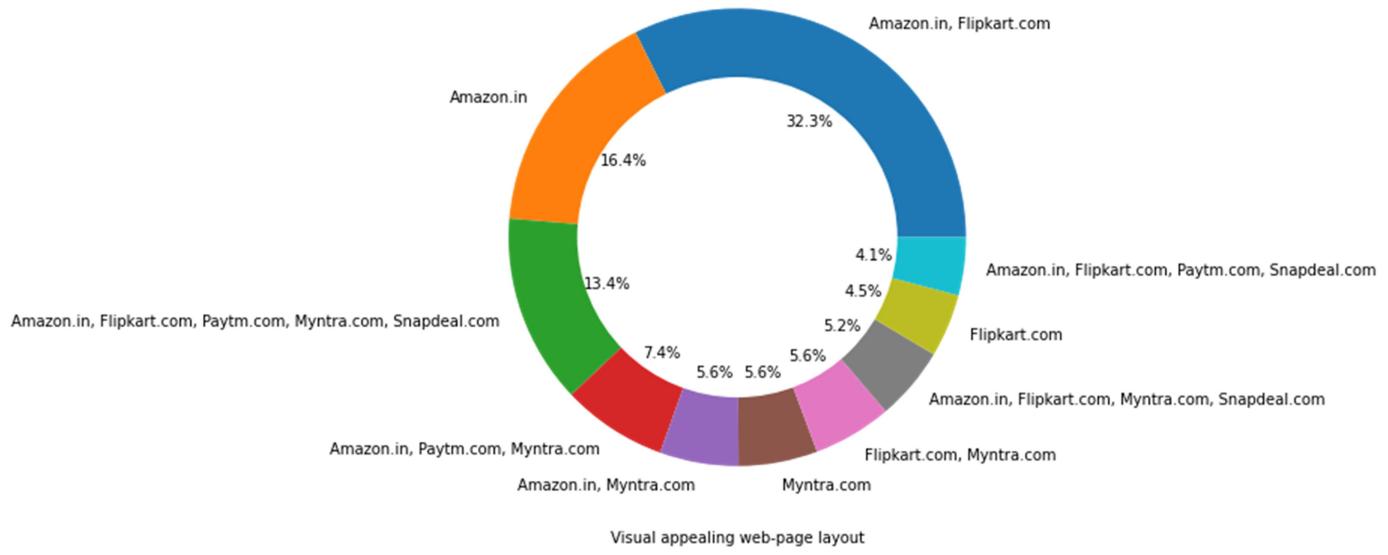
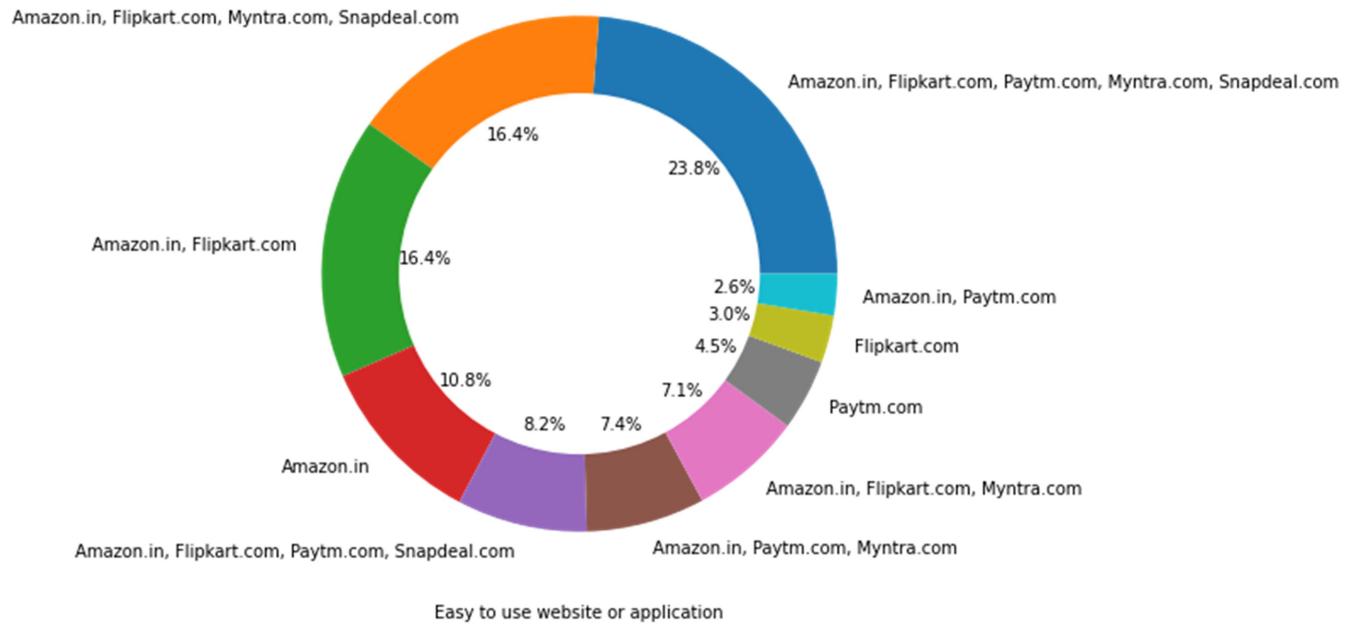
- ❖ People shopping from amazon and Paytm are getting benefits from the loyalty points, Flipkart and Snapdeal also seem to give such benefits but people who shop from almost everywhere disagree with this statement too

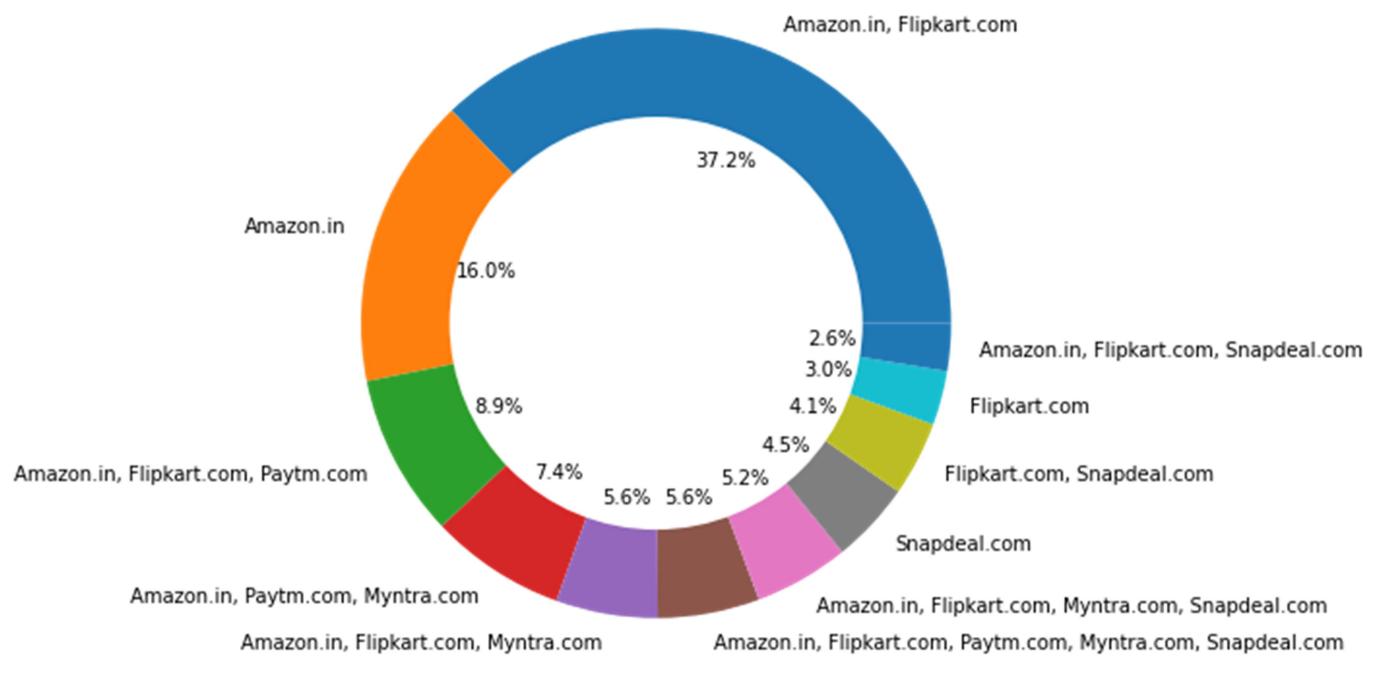
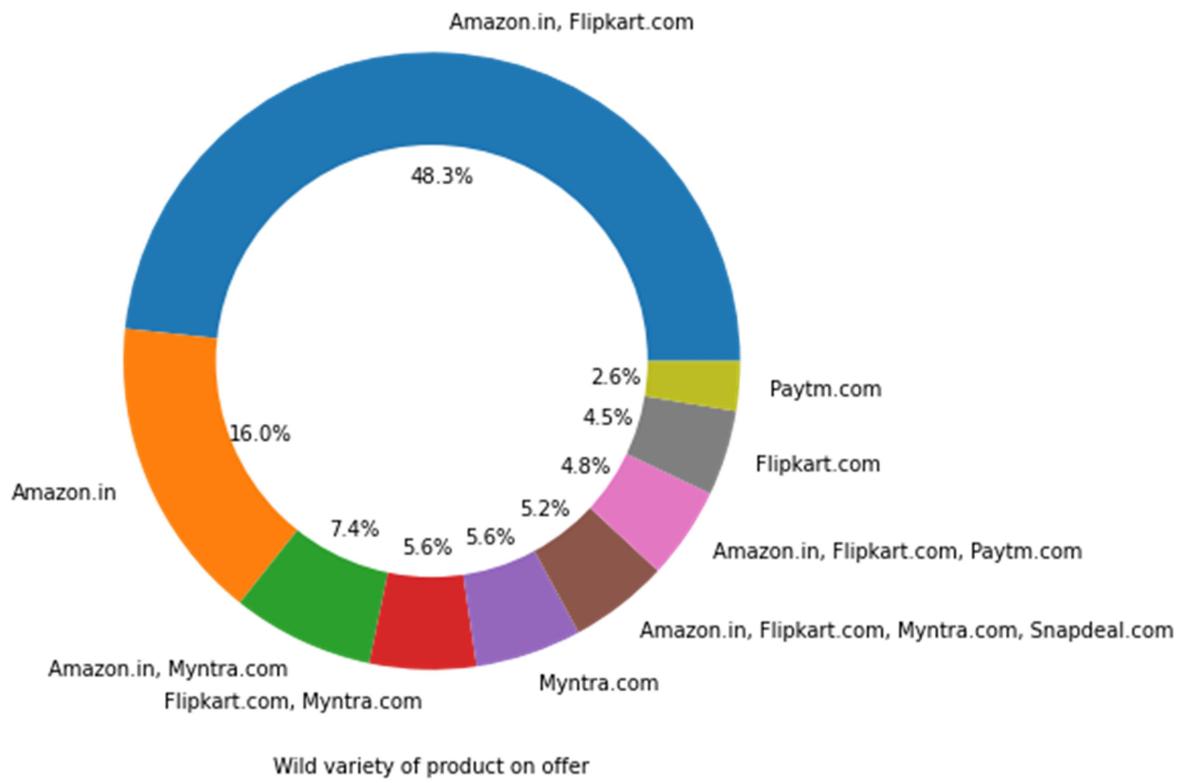


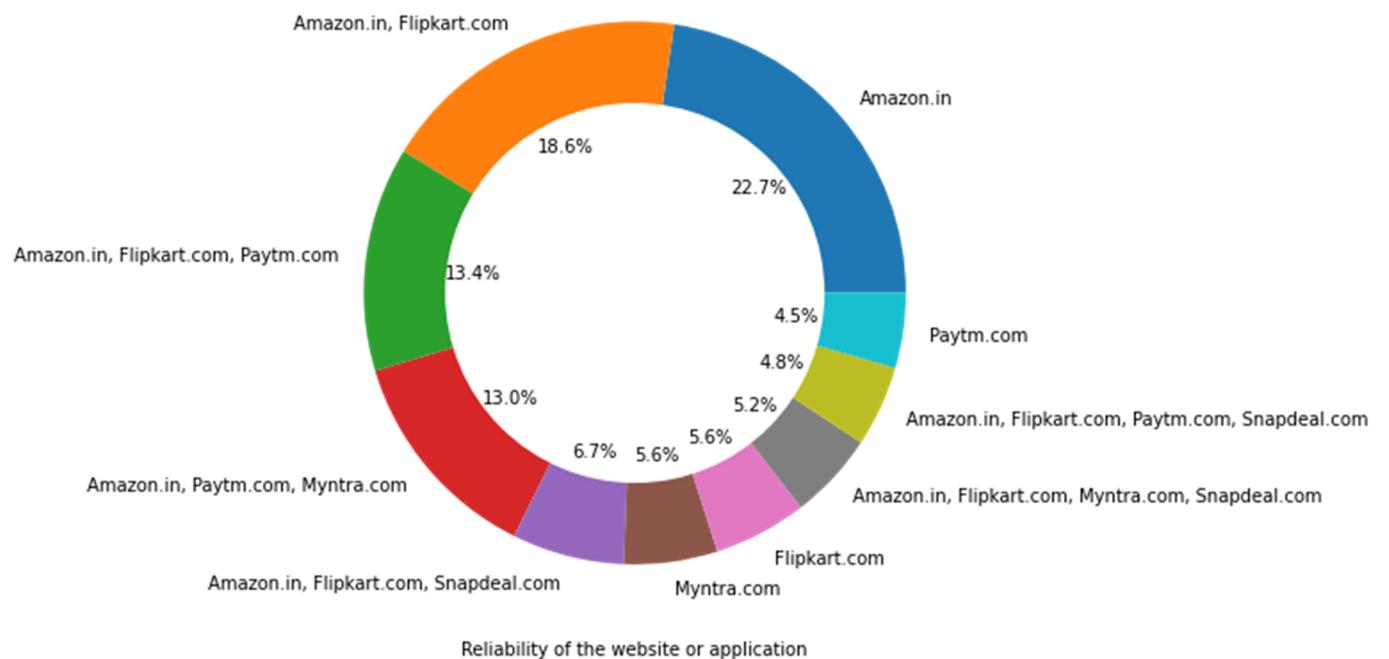
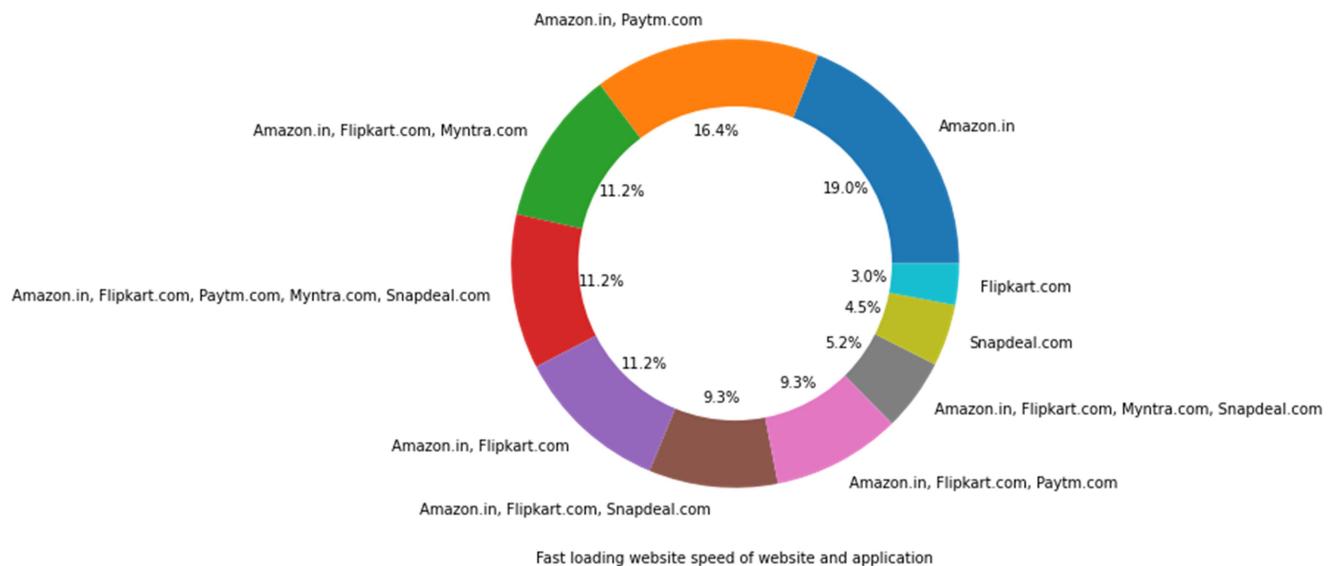
- ❖ In lines, we can see that **density of female customers is more than male**
- ❖ Men living in Bangalore and Ghaziabad shop have shopped online for less than 1 year
- ❖ Highest number of men shopping online belong from Delhi and Noida, while men from Moradabad have been shopping online for the longest
- ❖ Women from Meerut and Noida have shopped the longest

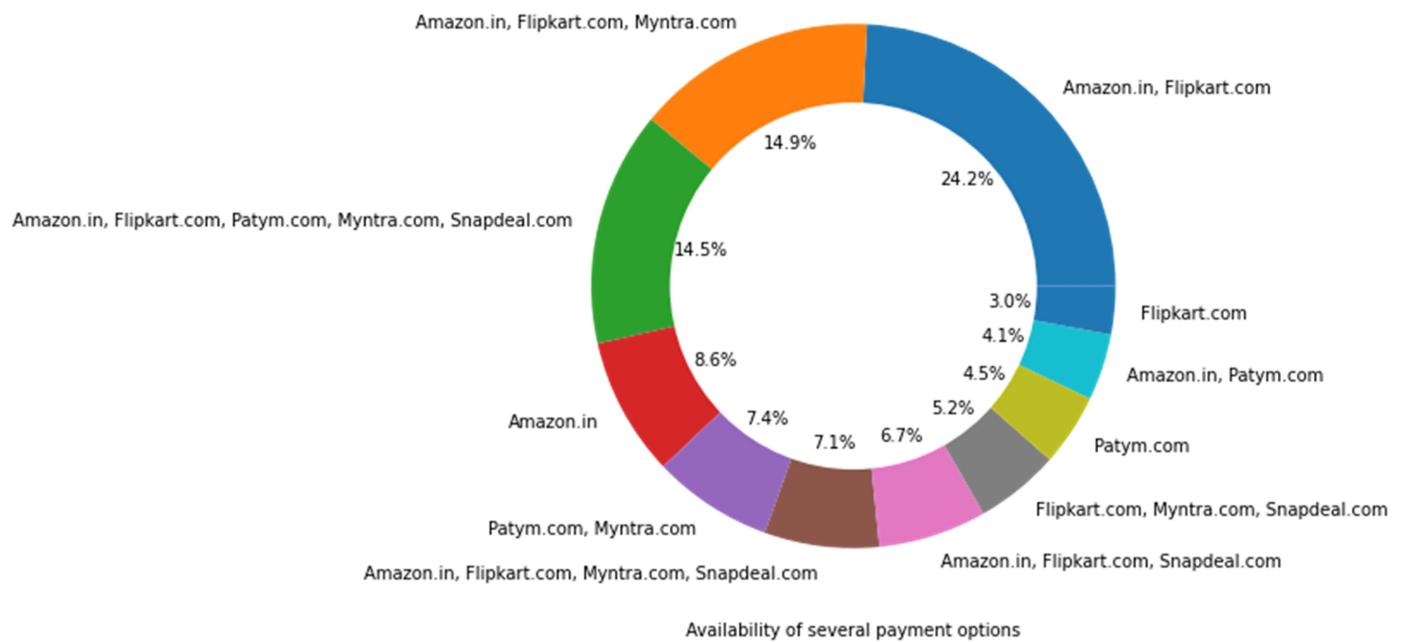
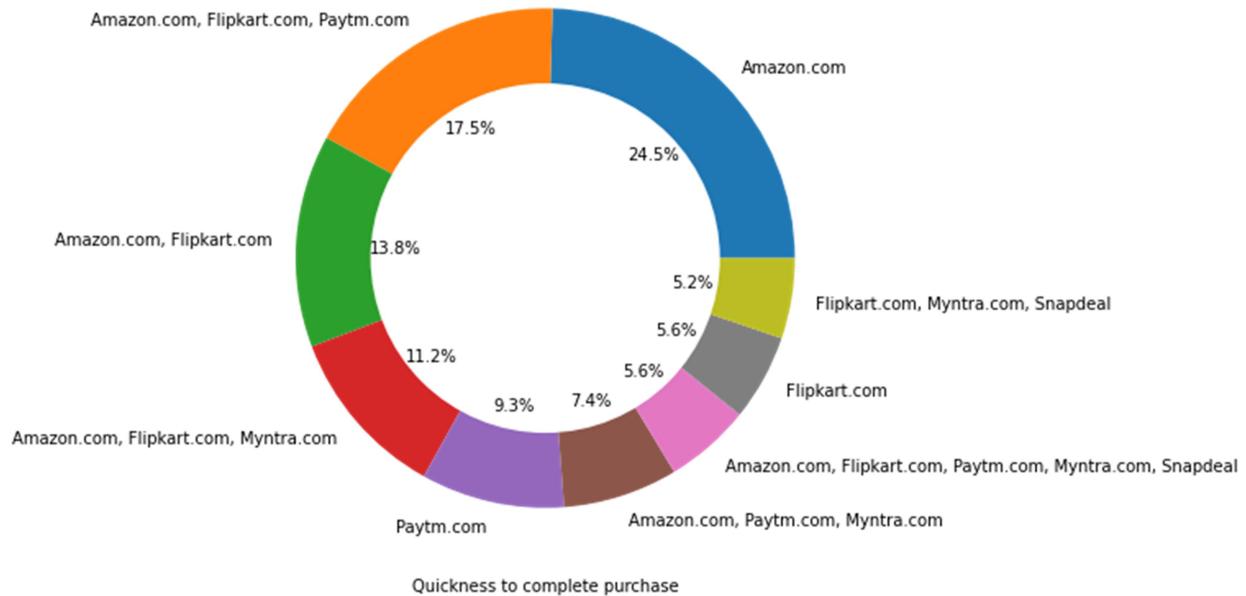
### **Brand Image:**

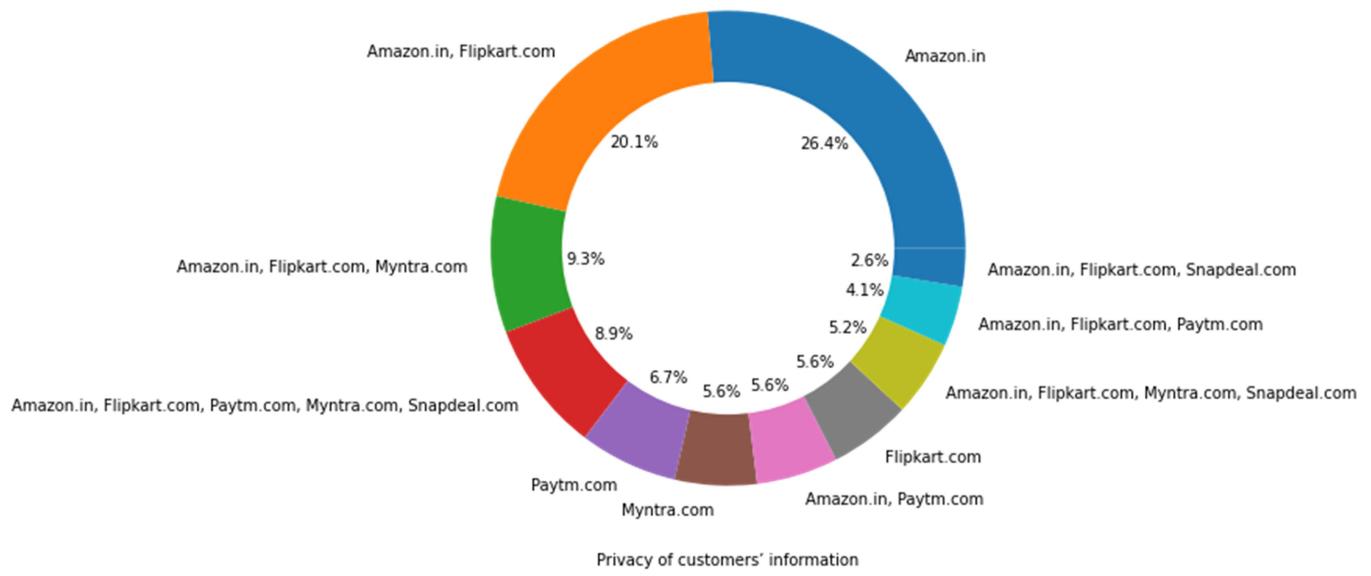
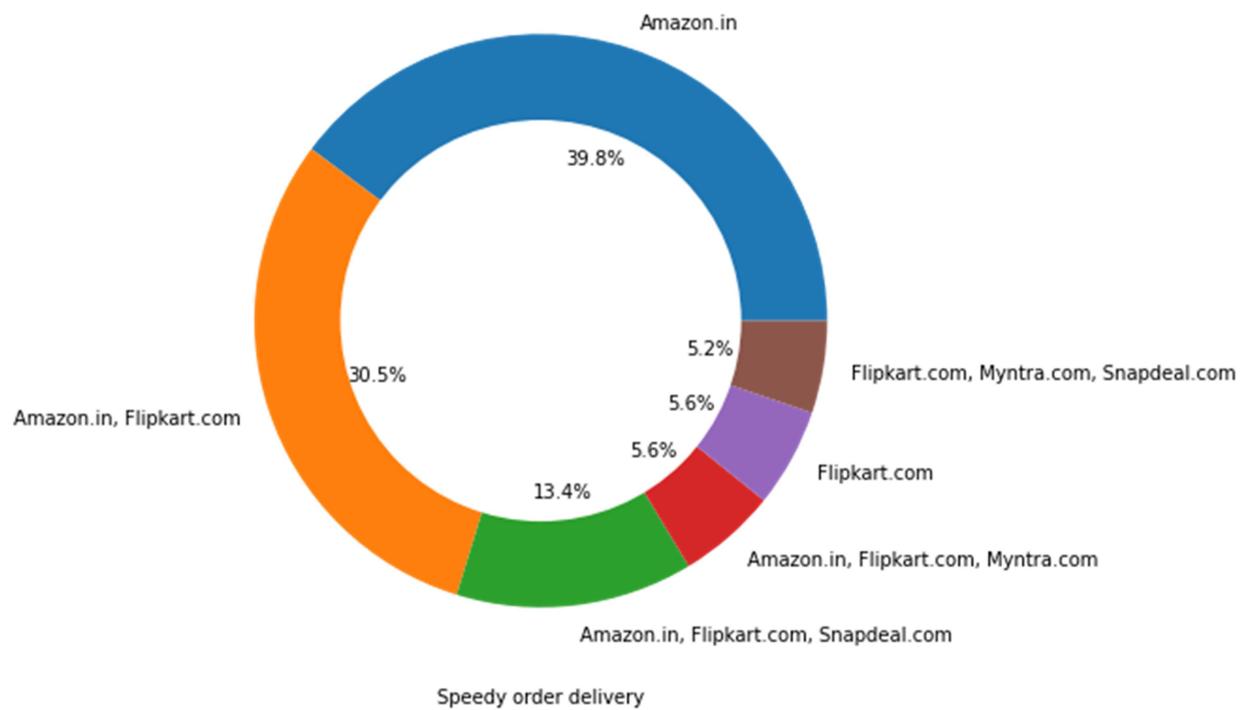
Brand image is the **customer's perception** of your brand based on their interactions



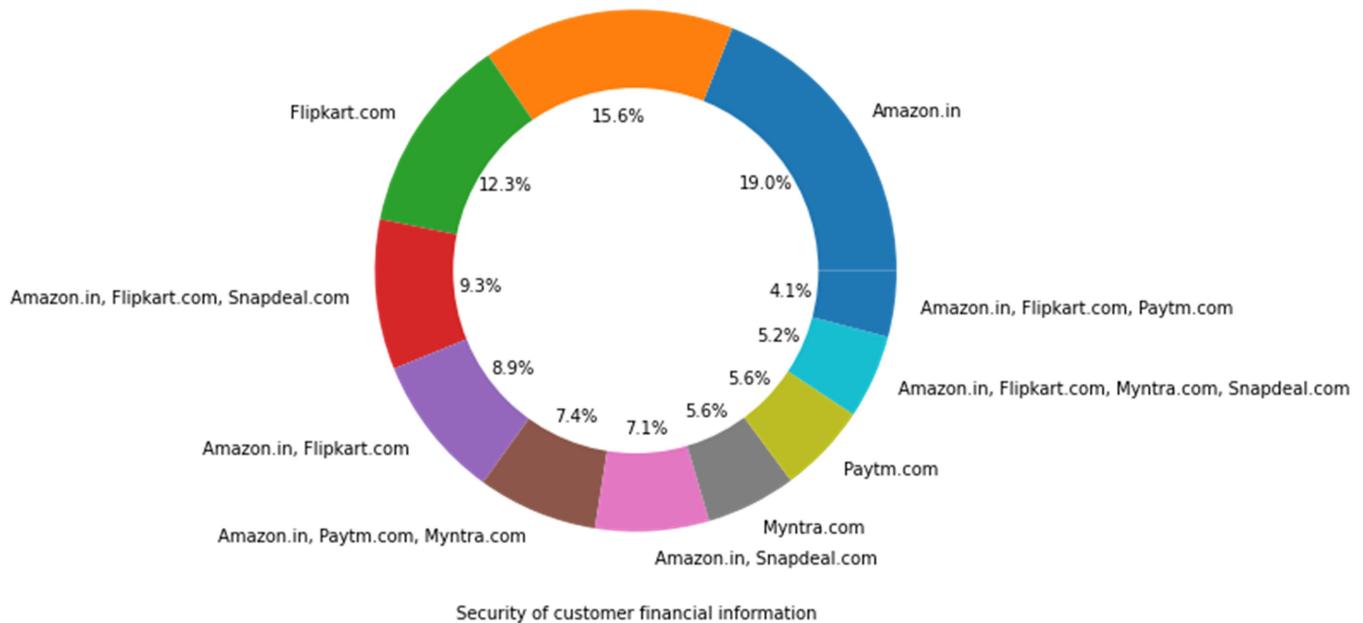








Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com



Amazon.in, Flipkart.com, Snapdeal.com

Amazon.in, Myntra.com

Amazon.in, Flipkart.com

Flipkart.com

Amazon.in, Flipkart.com, Myntra.com, Snapdeal.com

Amazon.in, Flipkart.com, Paytm.com

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

Myntra.com

Amazon.in

13.4%

13.0%

11.5%

10.0%

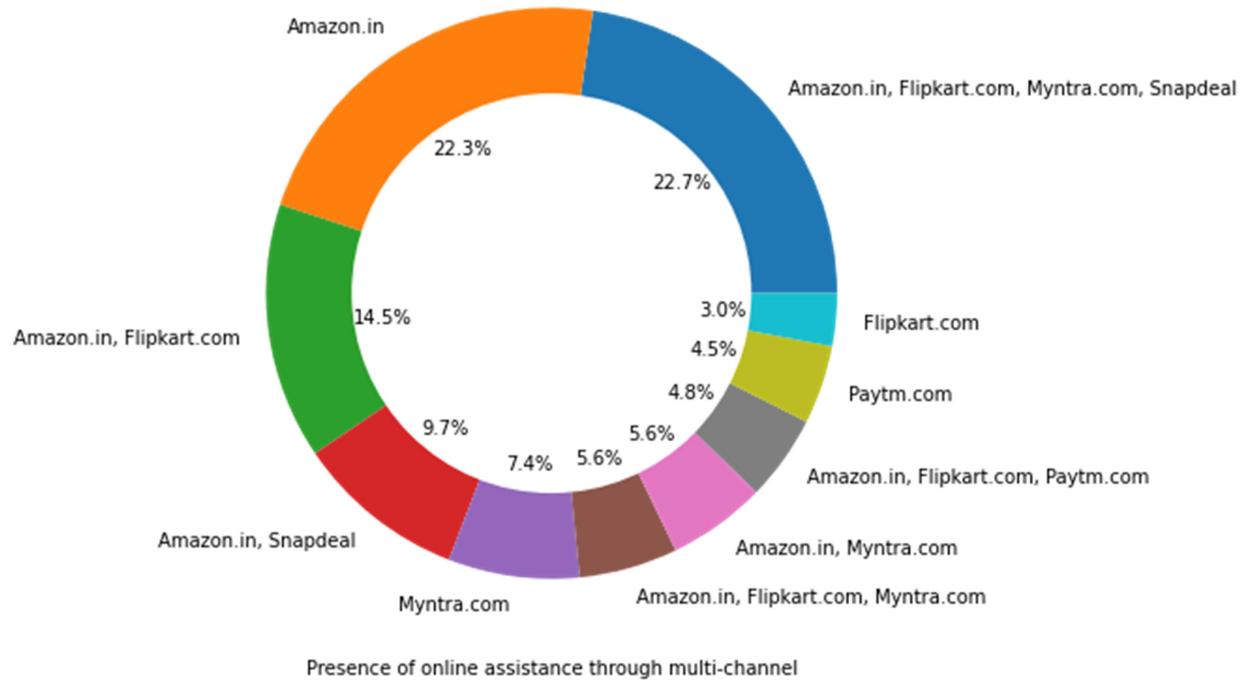
9.3%

4.1%

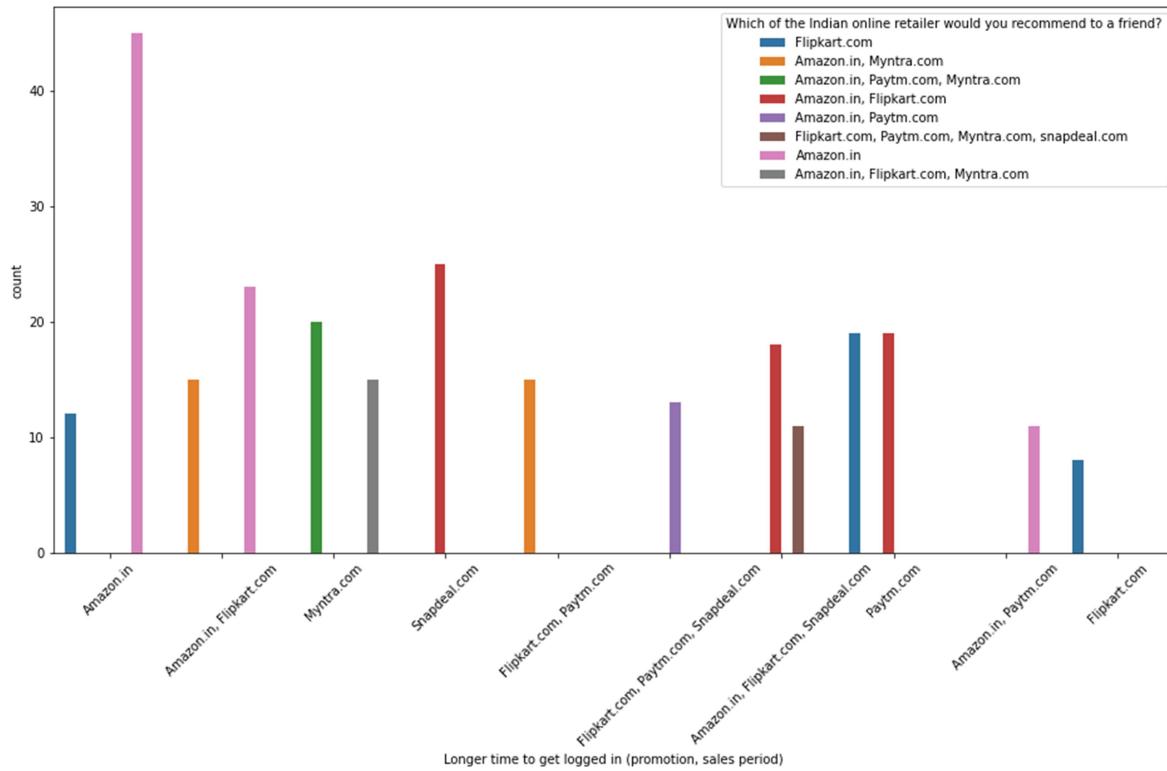
4.8%

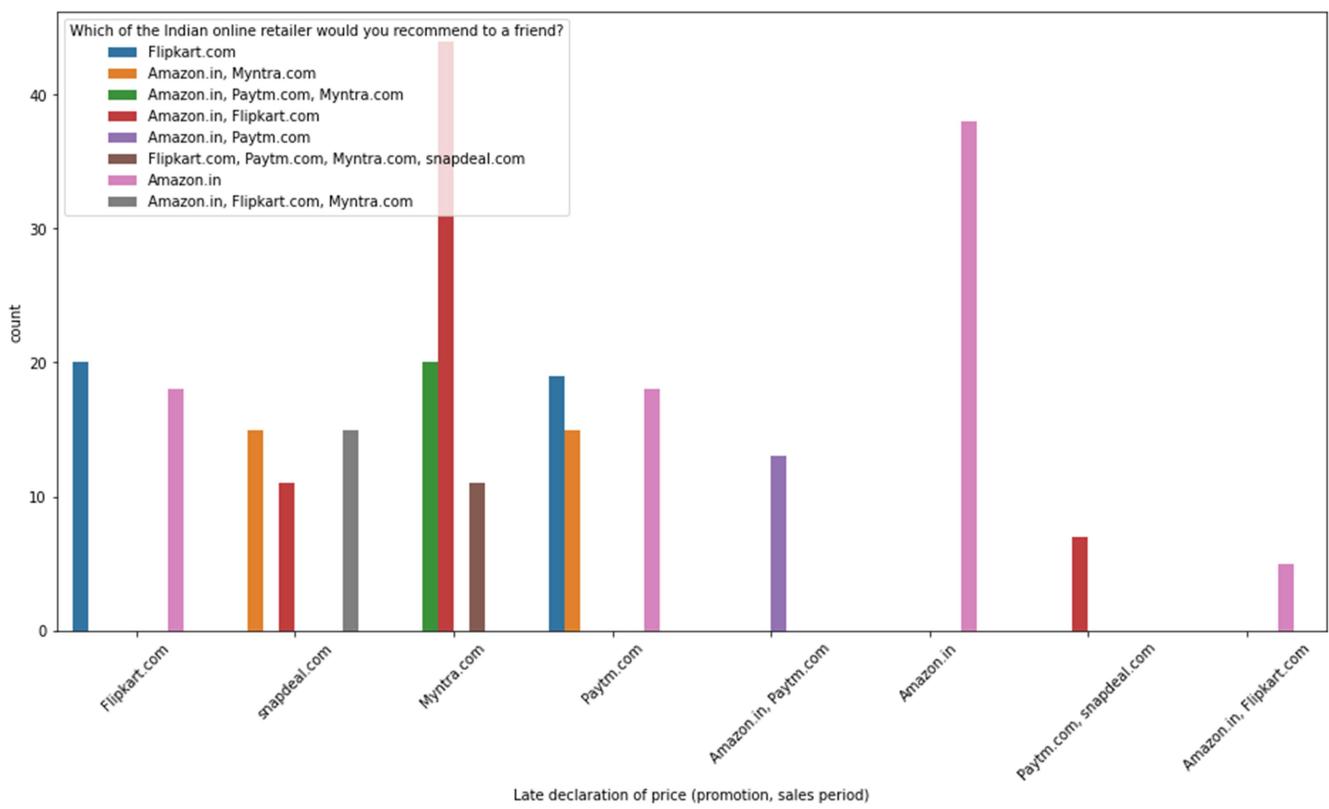
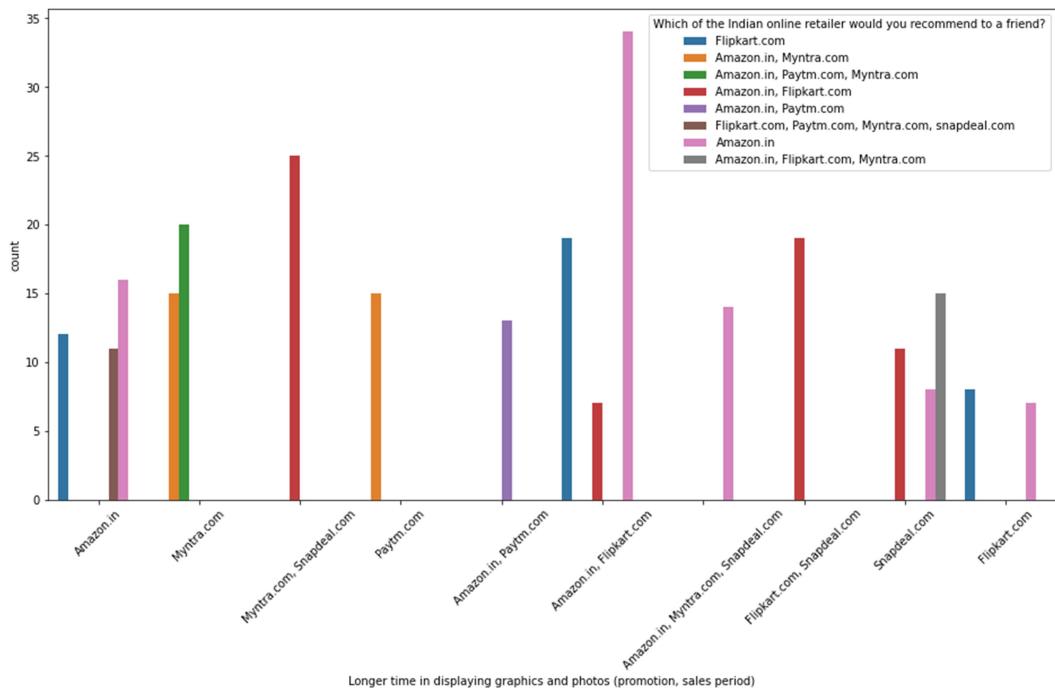
Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com

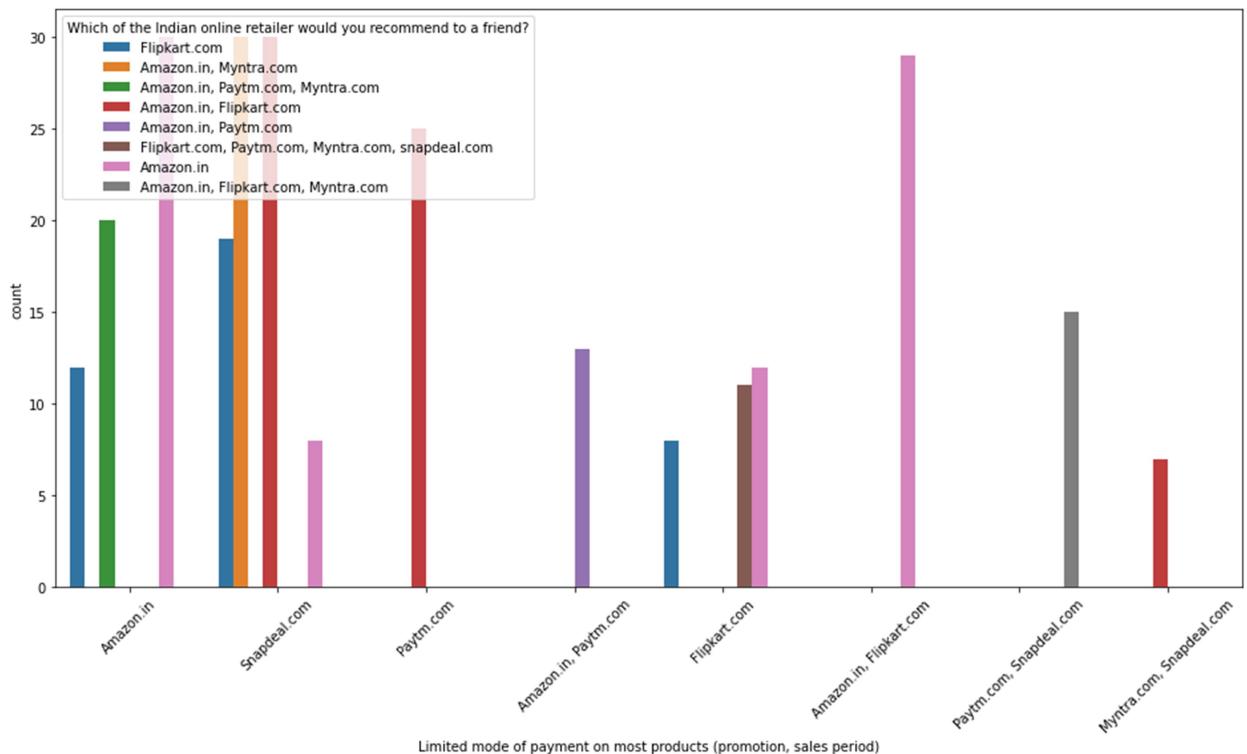
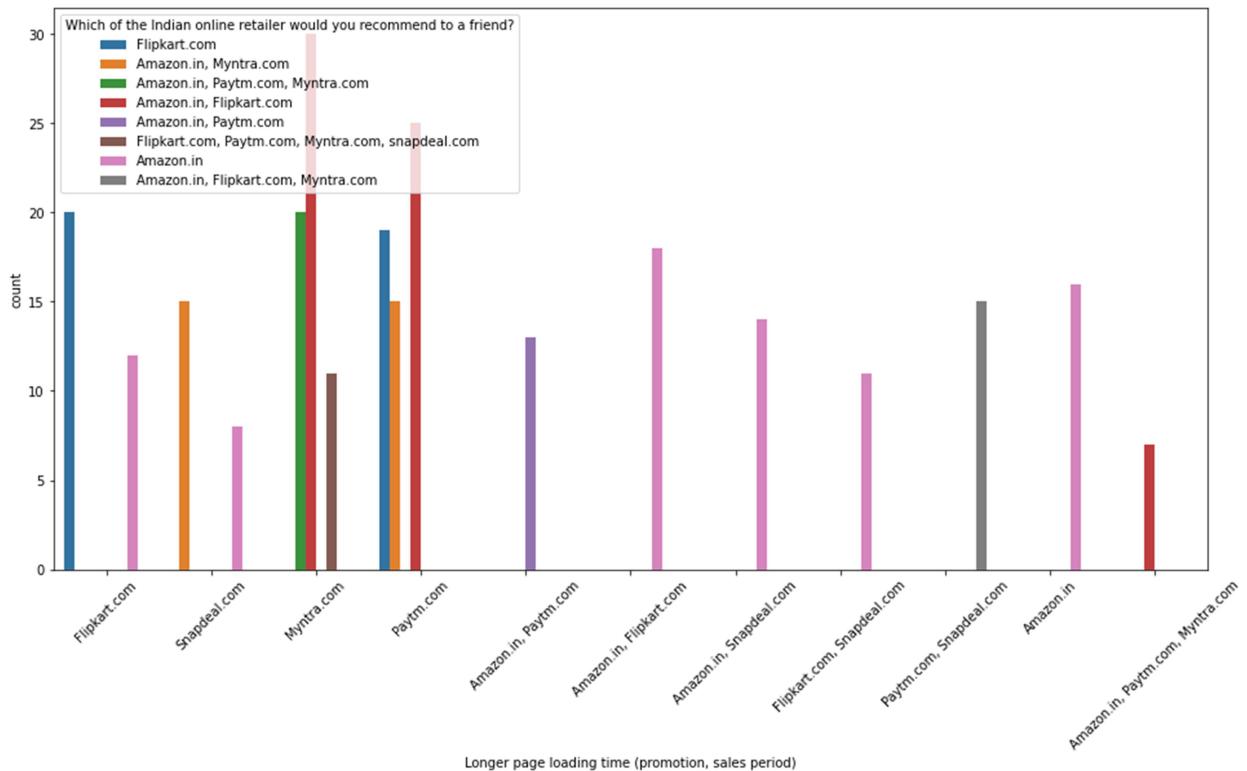
Perceived Trustworthiness

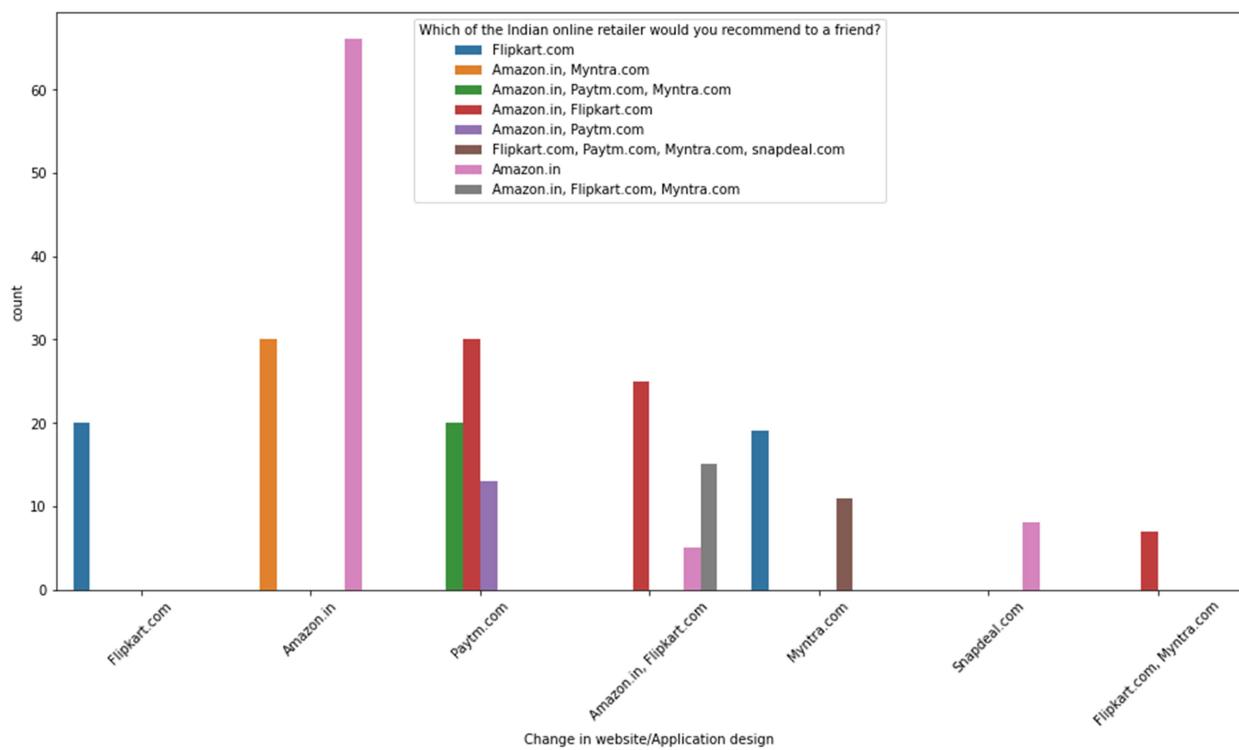
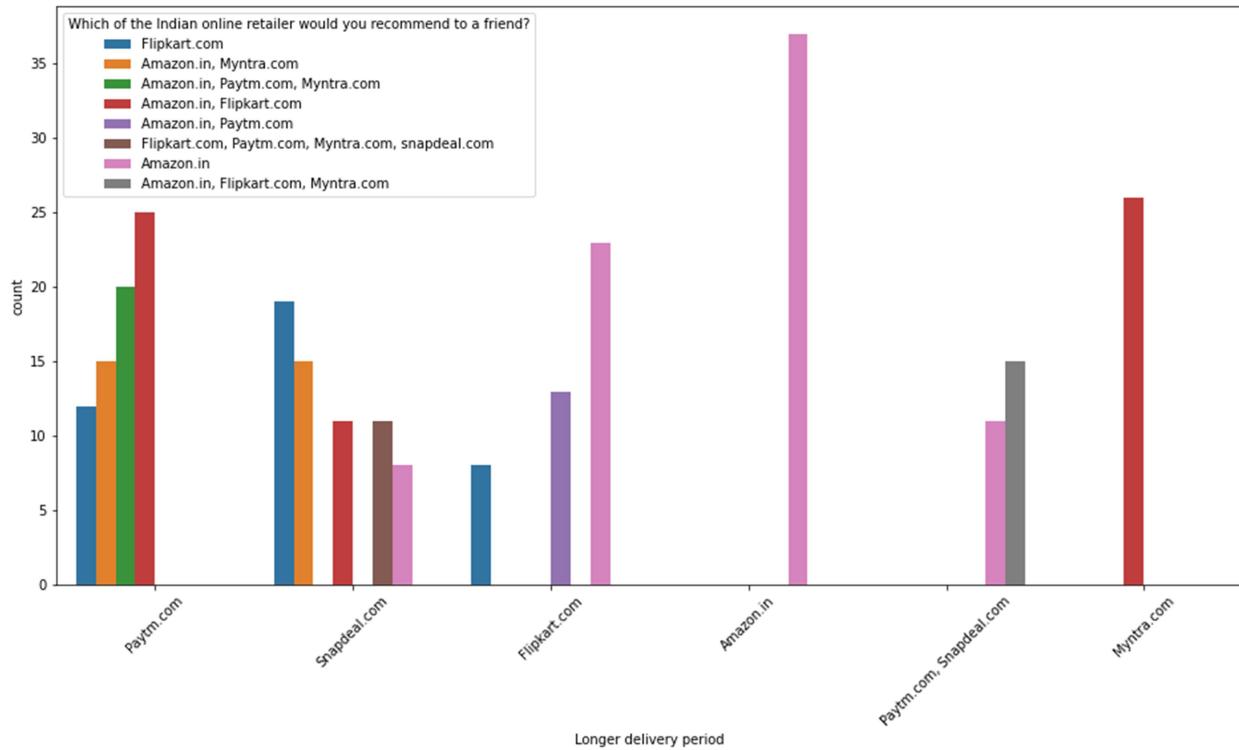


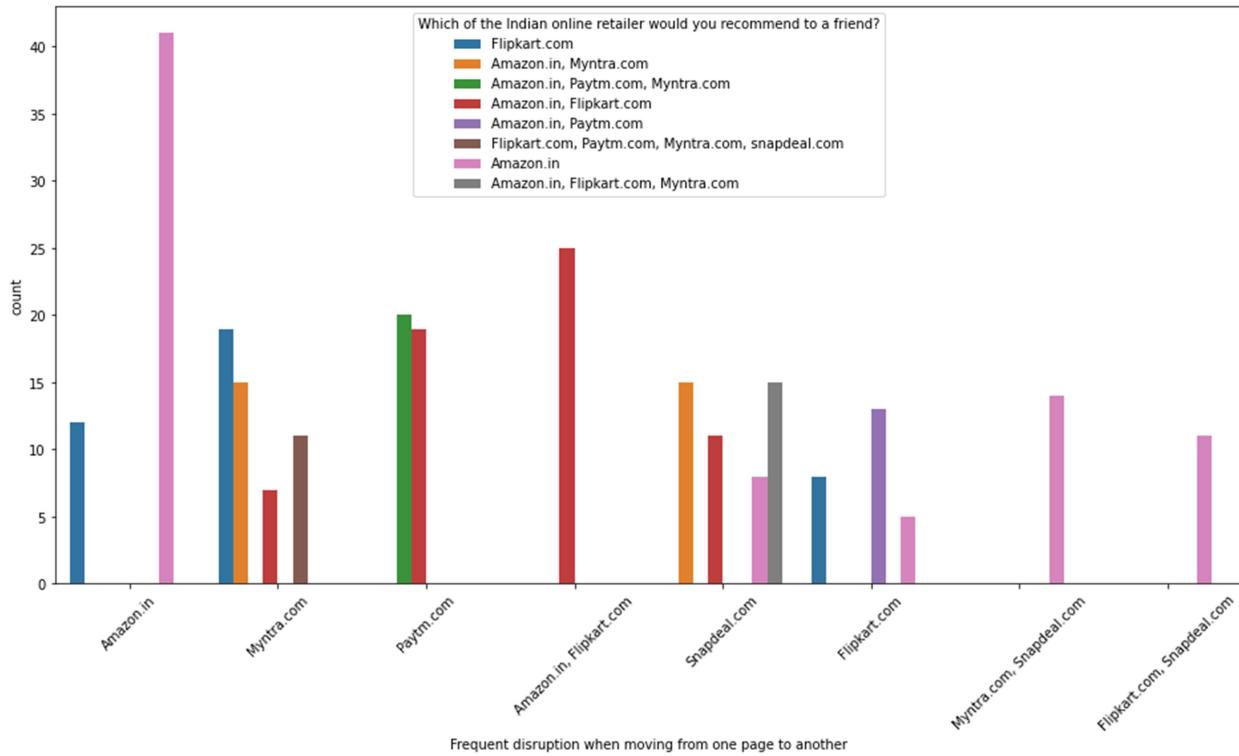
### Loyalty:











### Conclusion:

- **Amazon, Flipkart** have been had the highest votes for having all the positive points and have maintained a very good **brand image** followed by Paytm and the Myntra.
- Customers seem to be more loyal to **Amazon, Flipkart and Paytm** as even though many of them have given negative remarks about them still they would recommend these platforms to their friend