Customer retention case study

Introduction:

In today's competitive economy and its growing technological specialisation, acquisition, study and analysis of data are giving rise to new knowledge, referred to as "knowledge economy". Information technologies are not only a source of data but are, above all, an enabling factor for data analysis, making it possible to process large data collections and allow information to be extracted from them. Data has become a strategic asset for most organisations across multiple sectors, including those linked to business processes. All types of organisations benefit from the adoption of
new technologies and collection, management and analysis of data bring numerous benefits in terms of efficiency and competitive advantage. In fact, analysing large amounts of data can lead to improvements in decision-making processes, the achievement of pre-established corporate objectives and better business competitiveness

There are several areas in which organisations can adopt technologies that will support decision-making: artificial intelligence is one of the most innovative technologies that is widely used to assist organisations in business strategies, organisational aspects and people management. In recent years, attention has increasingly been paid to customer management and retention, since retaining the customer represent a main factor and a real competitive advantage for companies. After having been introduced to sales and marketing departments, artificial intelligence is also starting to guide customer-related decisions. The purpose is to support decisions that are based not on subjective aspects but on objective data analysis.

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.

The goal of this work is to analyse how objective factors influence customer attrition, in order to identify the main causes that contribute to a customer's decision to leave a online store, and to be able to make a model to predict whether a particular customer will leave the online store. So going further we have the detailed data analysis to give findings and conclusions.

Data and its Dataype:

Column Name	Data type	No. of unique values

Gender of respondent	Object	2
How old are you?	object	5
Which city do you shop online from?	object	11
What is the Pin Code of where you shop online from?	int64	39
Since How Long You are Shopping Online ?	object	5
How many times you have made an online purchase in the past year?	object	6
How do you access the internet while shopping on-line?	object	4
Which device do you use to access the online shopping?	object	4
What is the screen size of your mobile device?	object	4
What is the operating system (OS) of your device?	object	3
What browser do you run on your device to access the website?	object	4
Which channel did you follow to arrive at your favorite online store for the first time?	object	3
After first visit, how do you reach the online retail store?	object	5
How much time do you explore the e- retail store before making a purchase decision?	object	5
What is your preferred payment Option?	object	3
How frequently do you abandon (selecting an items and leaving without making payment) your shopping cart?	object	4
Why did you abandon the “Bag”, “Shopping Cart”?	object	5
The content on the website must be easy to read and understand	object	4
Information on similar product to the one highlighted is important for product comparison	object	4
Complete information on listed seller and product being offered is important for purchase decision.	object	5
All relevant information on listed products must be stated clearly	object	4
Ease of navigation in website	object	4
Loading and processing speed	object	5
User friendly Interface of the website	object	5
Convenient Payment methods	object	3

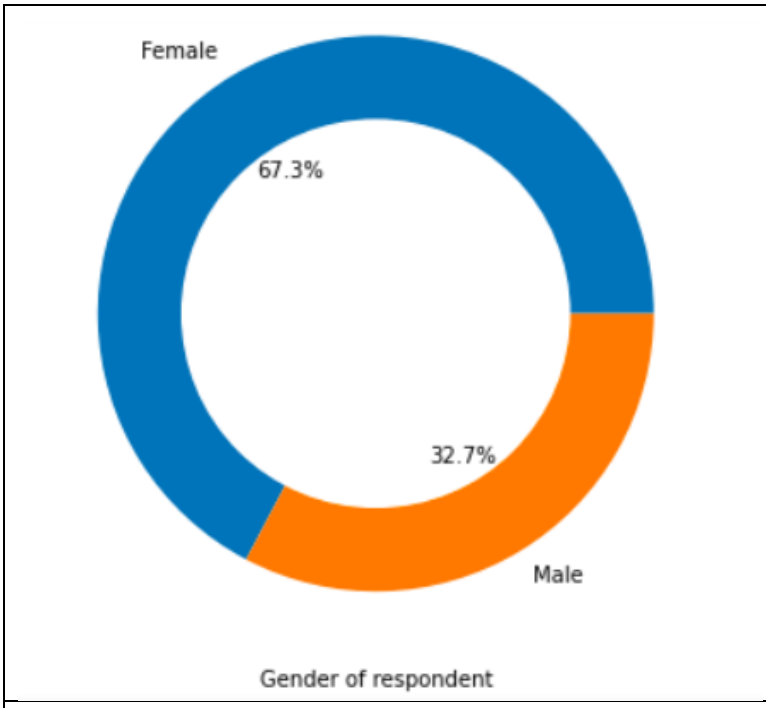
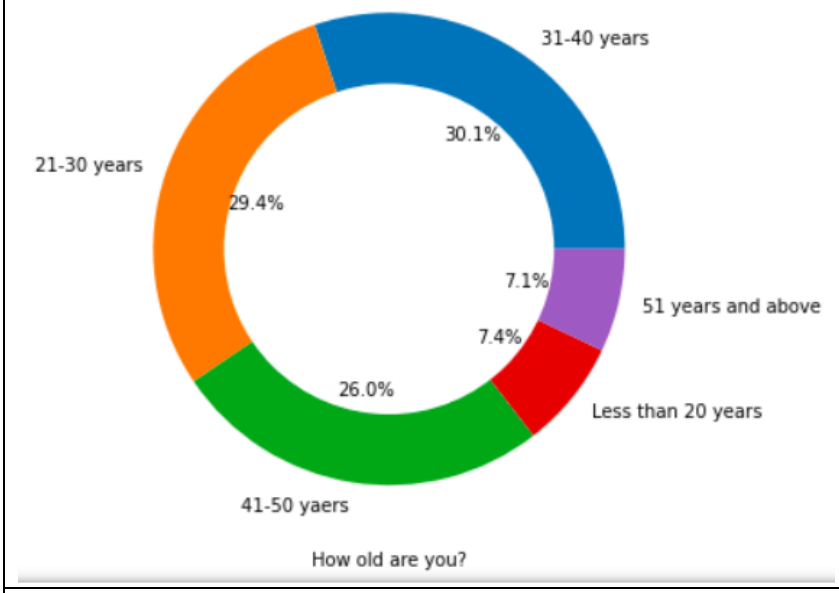
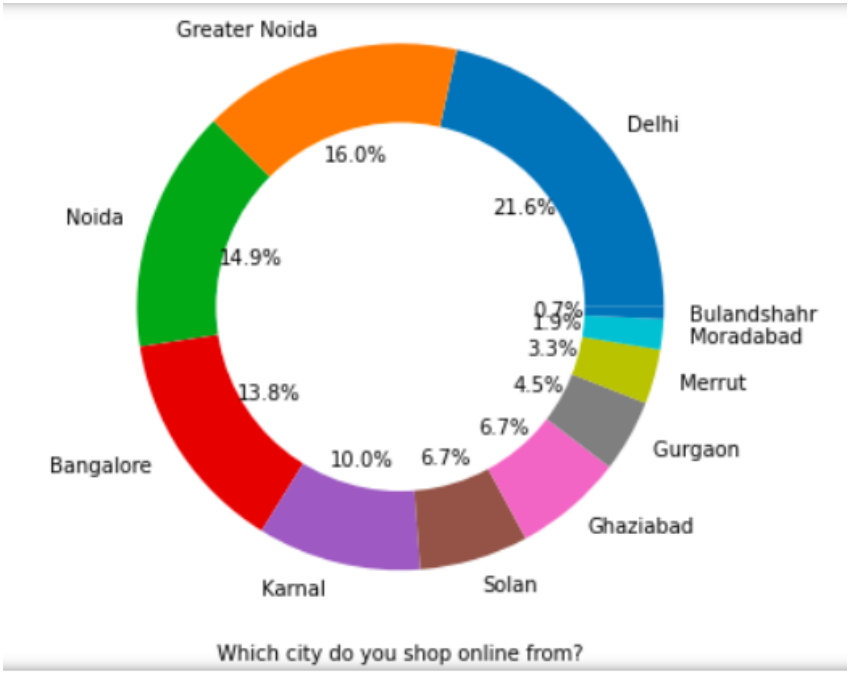
Trust that the online retail store will fulfill its part of the transaction at the stipulated time	object	4
Empathy (readiness to assist with queries) towards the customers	object	4
Being able to guarantee the privacy of the customer	object	3
Responsiveness, availability of several communication channels (email, online rep, twitter, phone etc.)	object	4
Online shopping gives monetary benefit and discounts	object	5
Enjoyment is derived from shopping online	object	5
Shopping online is convenient and flexible	object	4
Return and replacement policy of the e-tailer is important for purchase decision	object	3
Gaining access to loyalty programs is a benefit of shopping online	object	5
Displaying quality Information on the website improves satisfaction of customers	object	3
User derive satisfaction while shopping on a good quality website or application	object	3
Net Benefit derived from shopping online can lead to users satisfaction	object	4
User satisfaction cannot exist without trust	object	5
Offering a wide variety of listed product in several category	object	4
Provision of complete and relevant product information	object	4
Monetary savings	object	4
The Convenience of patronizing the online retailer	object	3
Shopping on the website gives you the sense of adventure	object	5
Shopping on your preferred e-tailer enhances your social status	object	5
You feel gratification shopping on your favorite e-tailer	object	5
Shopping on the website helps you fulfill certain roles	object	5
Getting value for money spent	object	3
From the following, tick any (or all) of the online retailers you have shopped from;	object	9
Easy to use website or application	object	10
Visual appealing web-page layout	object	10
Wild variety of product on offer	object	9

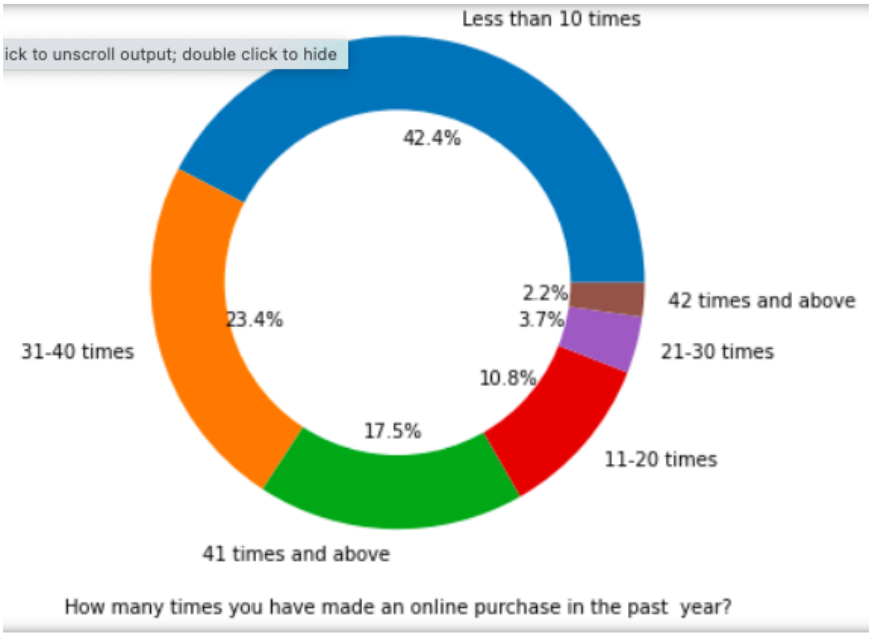
Complete, relevant description information of products	object	11
Fast loading website speed of website and application	object	10
Reliability of the website or application	object	10
Quickness to complete purchase	object	9
Availability of several payment options	object	11
Speedy order delivery	object	6
Privacy of customers' information	object	11
Security of customer financial information	object	11
Perceived Trustworthiness	object	9
Presence of online assistance through multi-channel	object	10
Longer time to get logged in (promotion, sales period)	object	10
Longer time in displaying graphics and photos (promotion, sales period)	object	10
Late declaration of price (promotion, sales period)	object	8
Longer page loading time (promotion, sales period)	object	11
Limited mode of payment on most products (promotion, sales period)	object	8
Longer delivery period	object	6
Change in website/Application design	object	7
Frequent disruption when moving from one page to another	object	8
Website is as efficient as before	object	8
Which of the Indian online retailer would you recommend to a friend?	object	8

Shape of data: (269, 71)

Univariate Analysis:

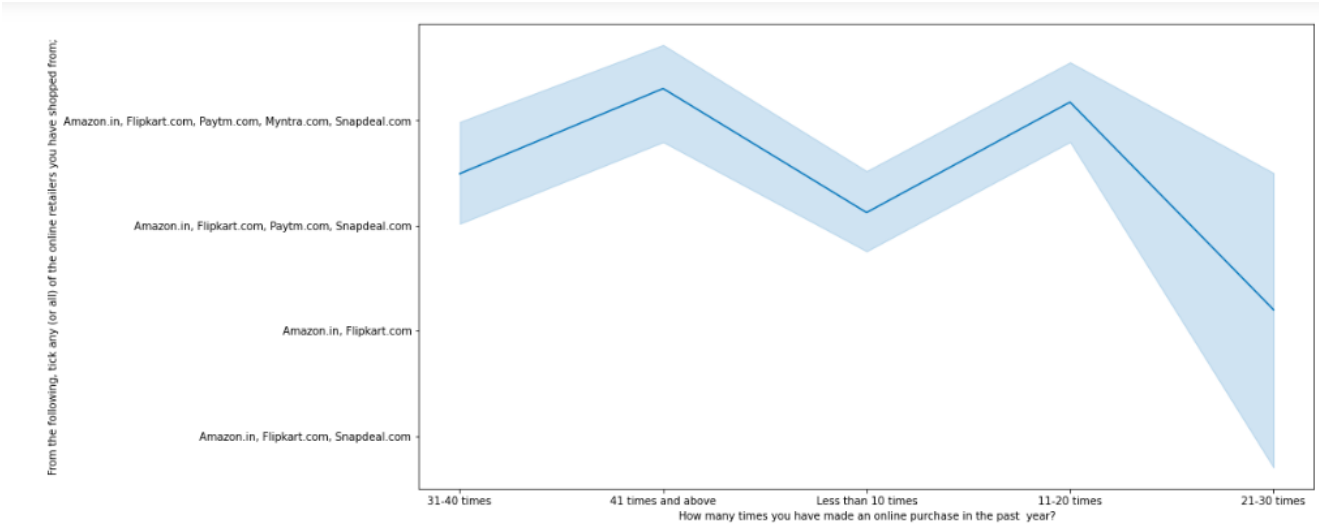
Pie Chart	**Analysis**

	We have gender as: 67.3% females 32.7% Males
	We have people's age as: 7.4% in range of 0-20 yrs 29.4% in range of 21-30 yrs 30.1% in range of 31-40 yrs 26.0% in range of 41-50 yrs 7.1% in range of 51 yrs and abov
	We have people in cities as: 16.0% in Greater Noida 21.6% in Delhi 0.7% in Bulandshahr 1.9% in Moradabad 3.3% in Meerut 4.5% in Gurgaon 6.7% in Ghaziabad 6.7% in Solan 10.0% in Karnal 13.0% in Bangalore 14.9% in Noida

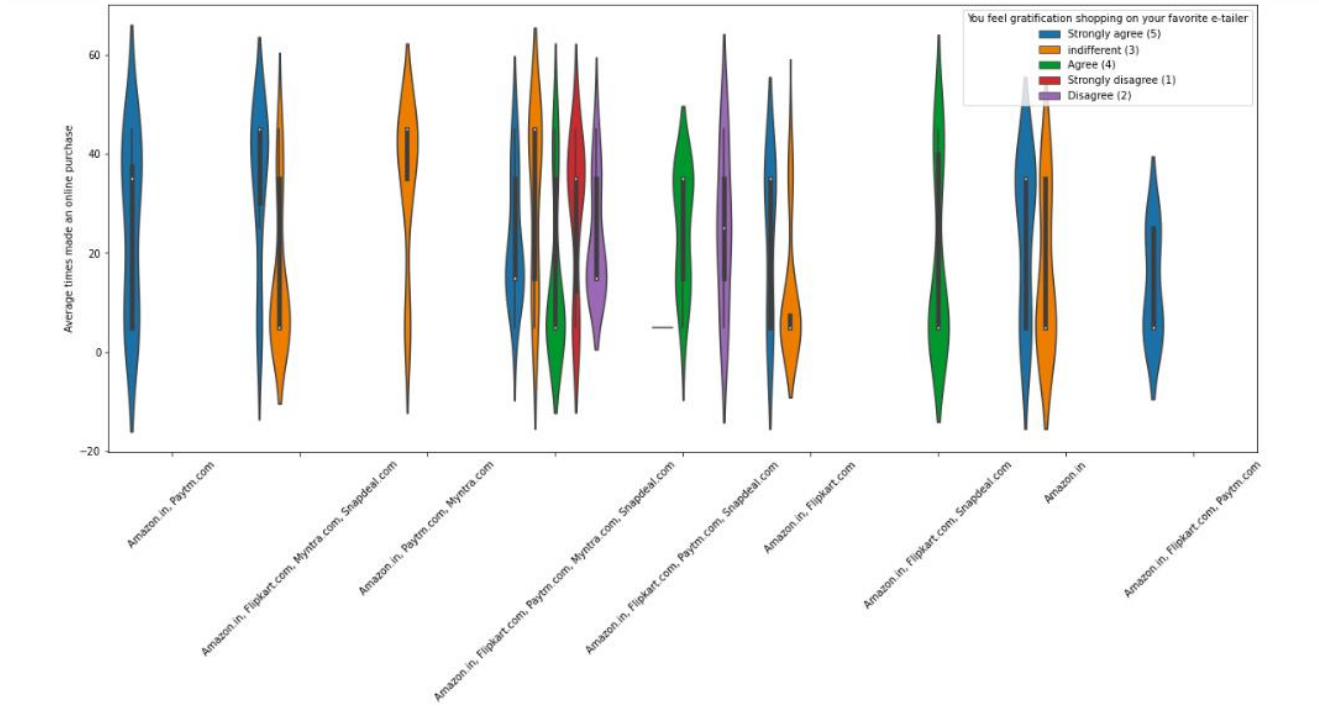
	We have online shopping experience as: 16.0% of 1 yrs and less 5.9% of 1-2 yrs 24.2% of 2-3 yrs 17.5% of 3-4 yrs 36.4% of 4 yrs and above
	No. of times shopped online in last year: 42.4% less than 10 times 10.8% 11-20 times 3.7% 21-30 times 23.4% 31-40 times 2.2% 42 times and above 17.5% 41 times and above

Conclusion: There is double the number of women than men who have taken this survey. -Most of the people are in their 30's followed by 20's, teenagers and senior citizen are the least in number. -Most of the people belong from delhi, noida and banglore, ambiguity can also be seen as noida has two categories (noida and grater noida) which need to be handled -Most of the people shopping online have been shopping from a long time. -Majority of people shop online 10 times a year, amiguity can also be seen for range 42 times and above which needs to be handled.

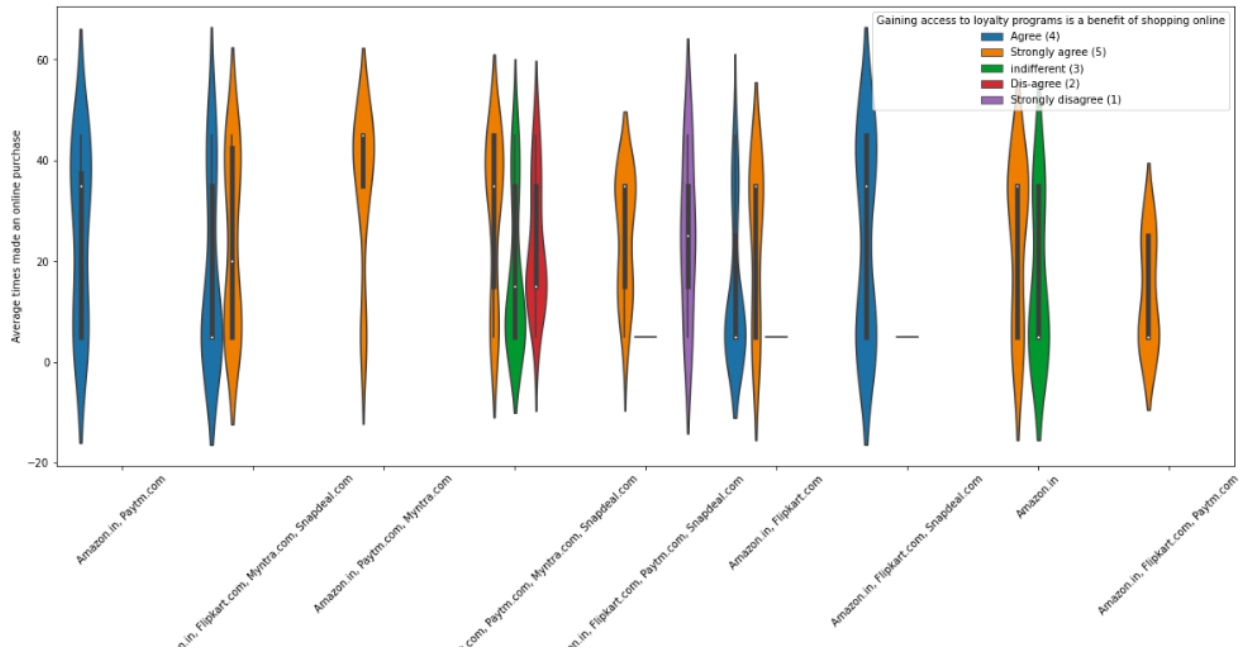
Analysis on the basis of Various following factors
Intention of Repeat purchase:



Conclusion: Heavy shoppers who shop more than 41 times a year shop from all the online brands, some of the people who shop for 32-40 and less than 10 times a year seem to exclude myntra. People shop from Amazon and flipkart whatever be the case.

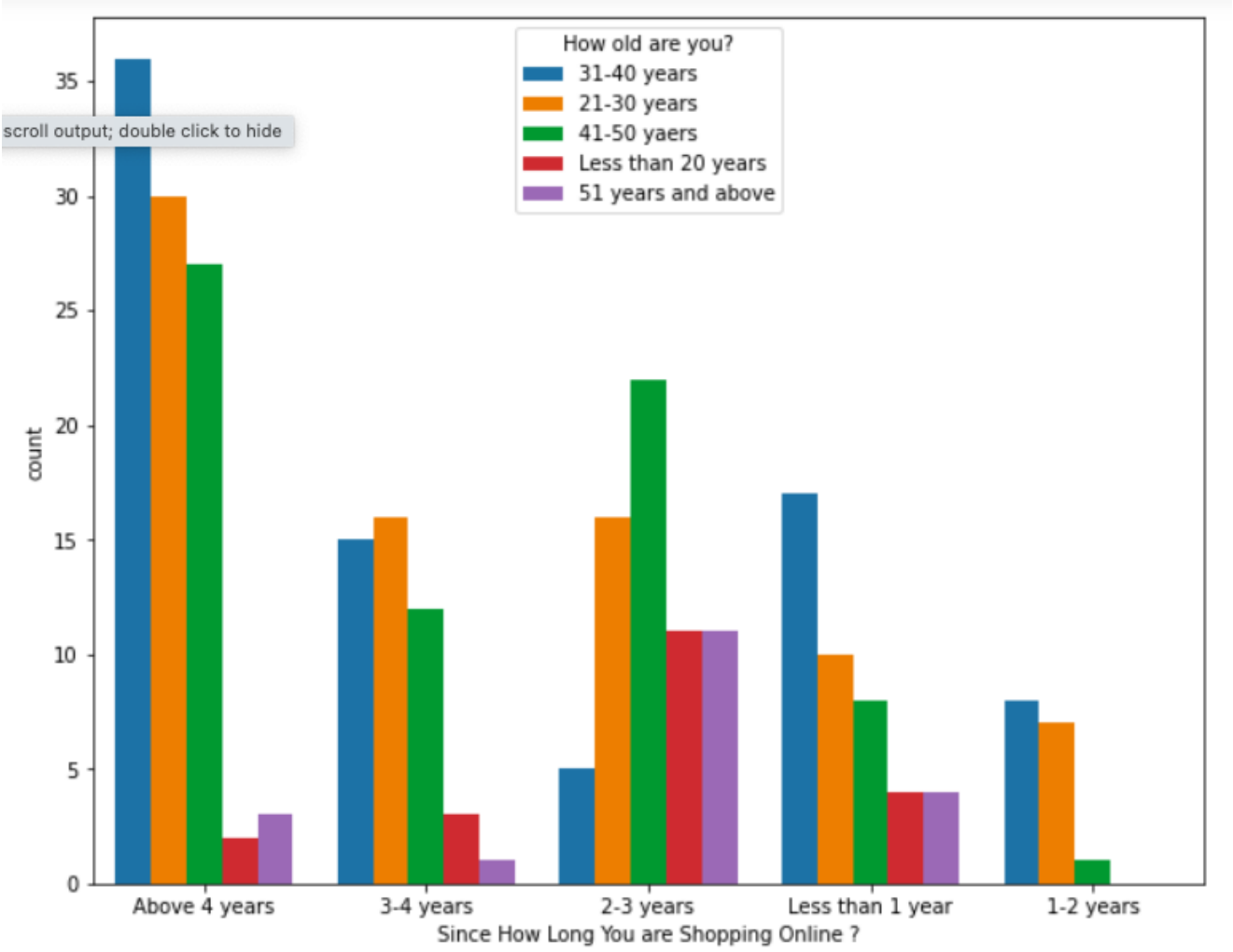


Conclusion: Almost all the people who have shopped from amazon, flipkart and paytm are satisfied. People who shop from a more number of online brands dosent seem to be satisfied.

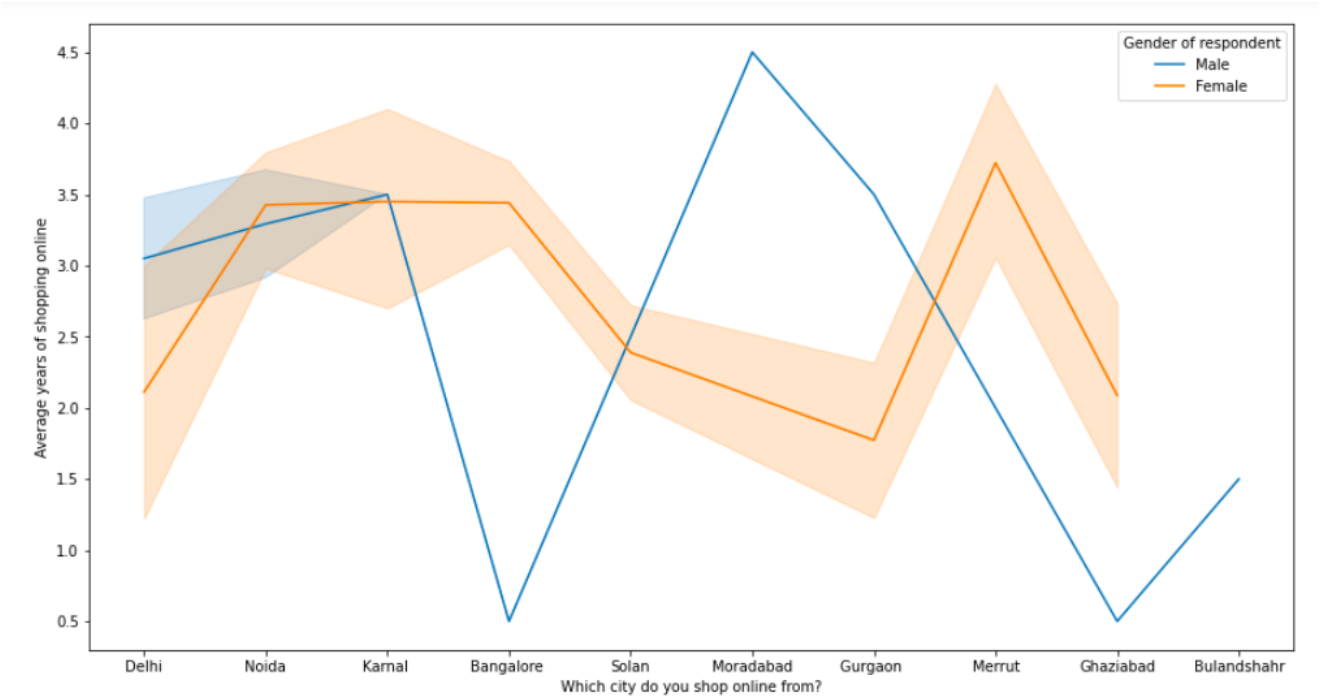


Conclusion: People shopping from amazon and paytm are getting benefits from the loyalty points, flipkart and sanpdeal also seem to give such benefits but people who shop from almost everywhere disagree with this statement too

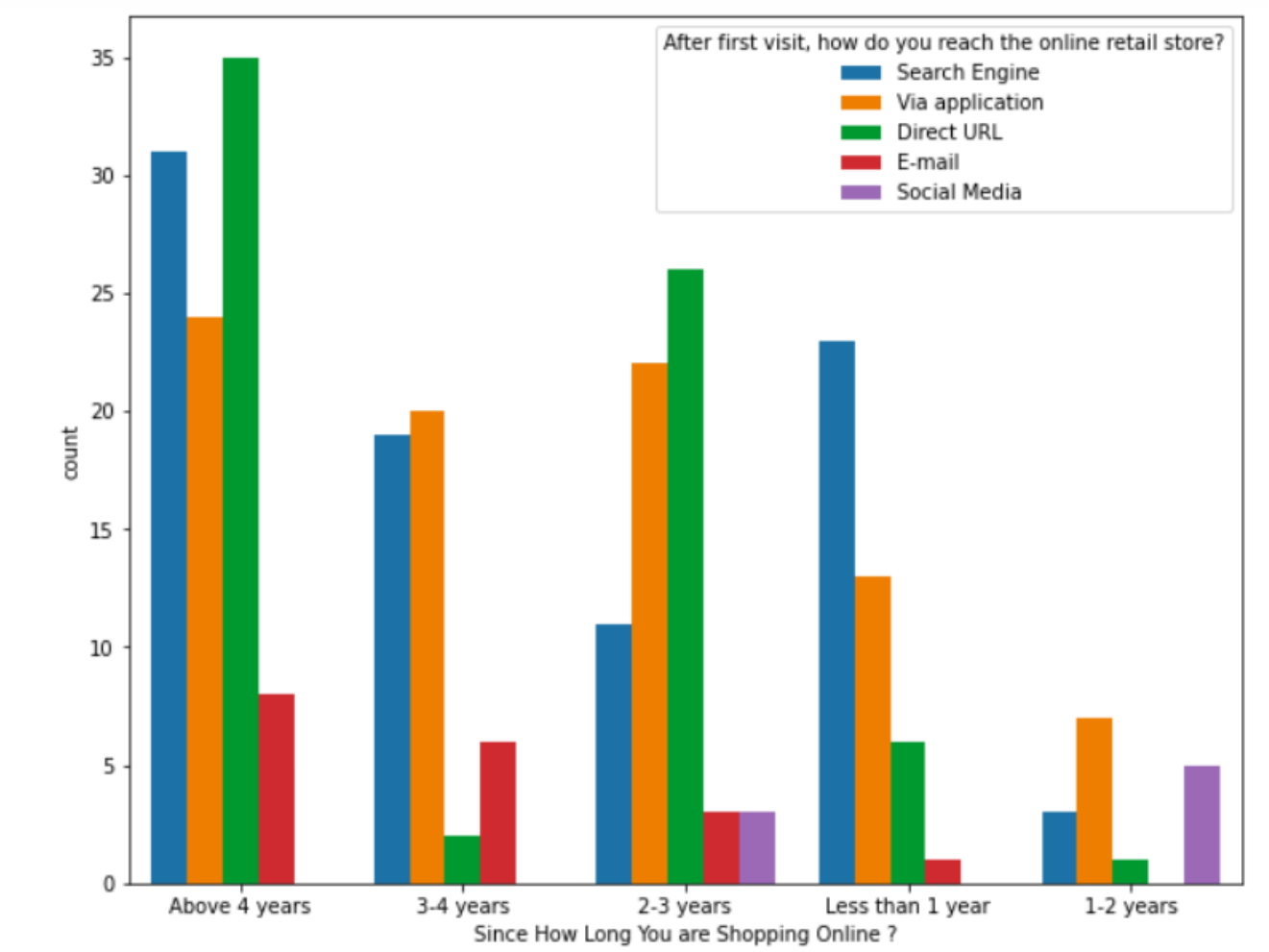
Online Retailing:



Conclusion: 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.

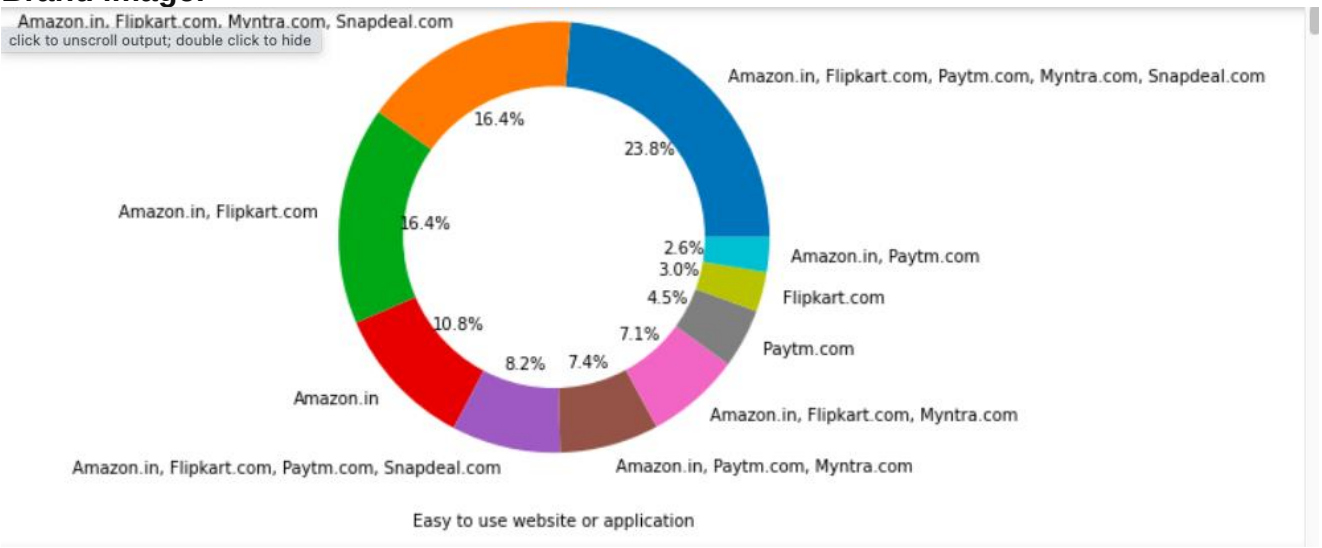


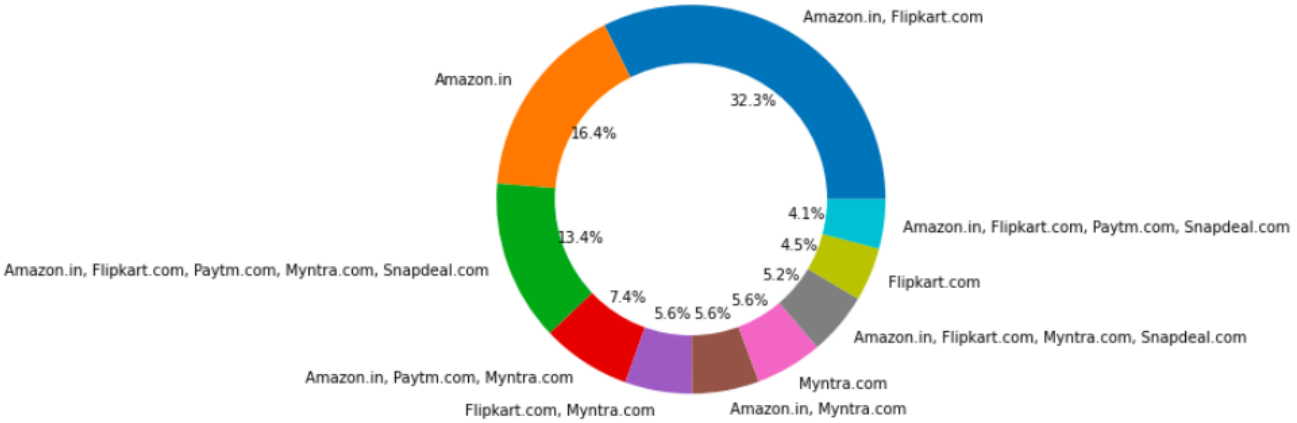
Conclusion: In lines, we can see that density of female customers is more than male. Men living in banglore and ghaziabad shop have shopped online for less than 1 year. Highest number of men shopping online belong from delhi and noida, while men from moradabad have been shopping online for the longest. Women from meerut and noida have shopped the longest.



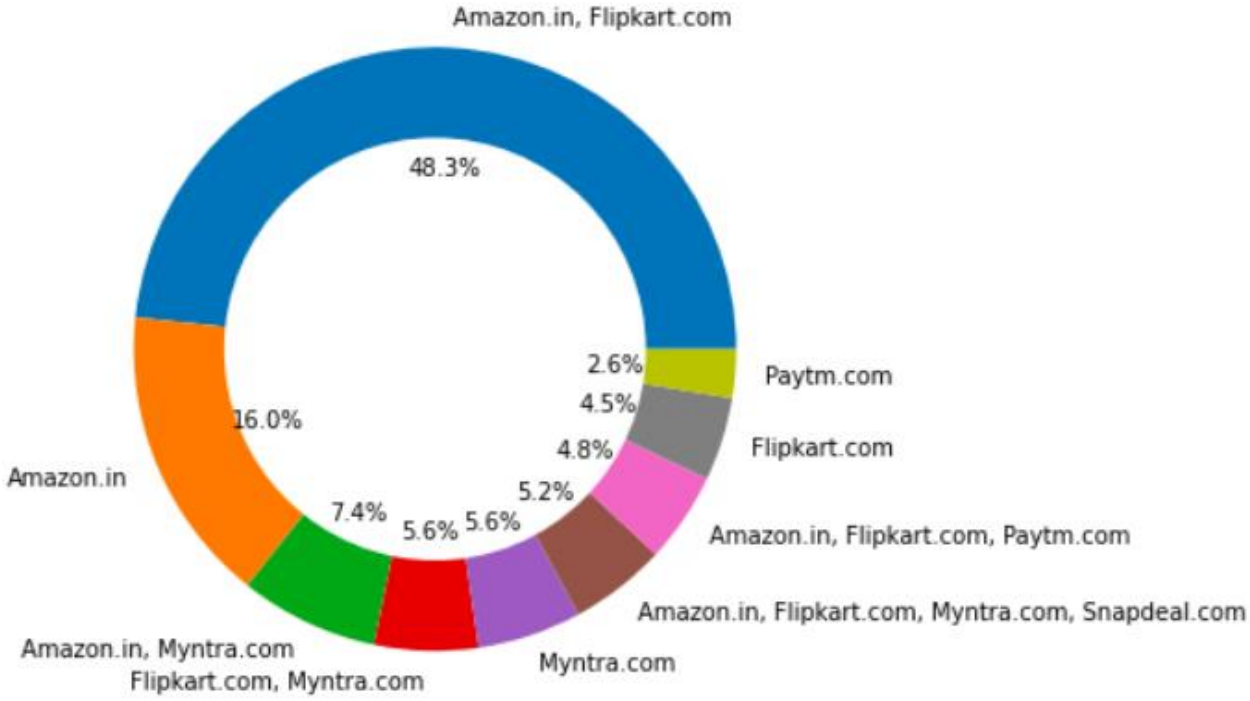
Conclusion: Even though people who are shopping online for more than 3 years donot use the application rather use search engine and direct url's in large number which indicates that online brands should update all their platforms rather than just application.

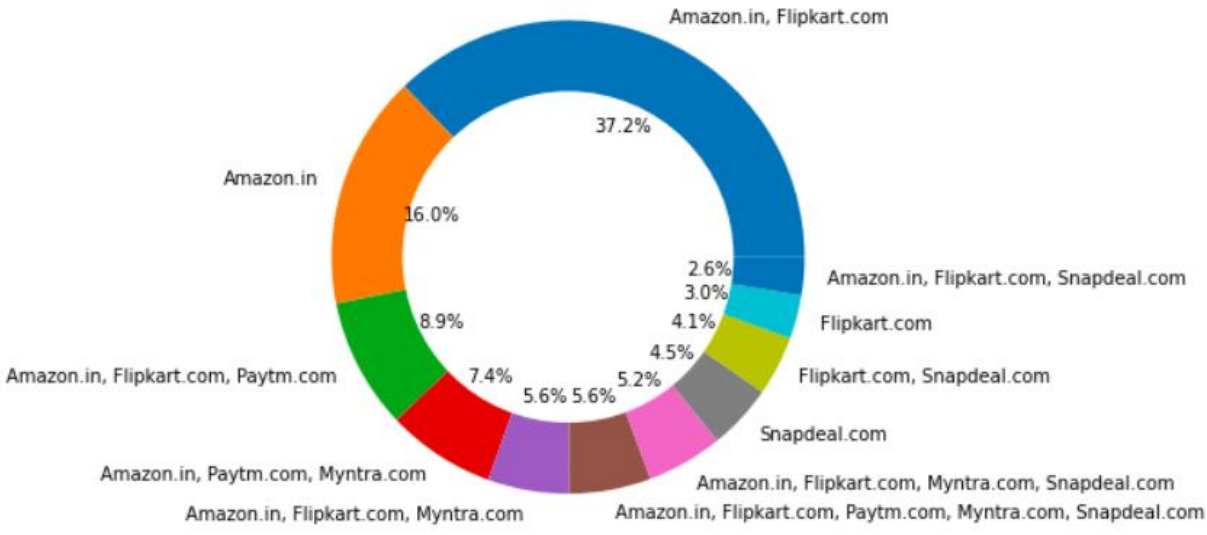
Brand image:



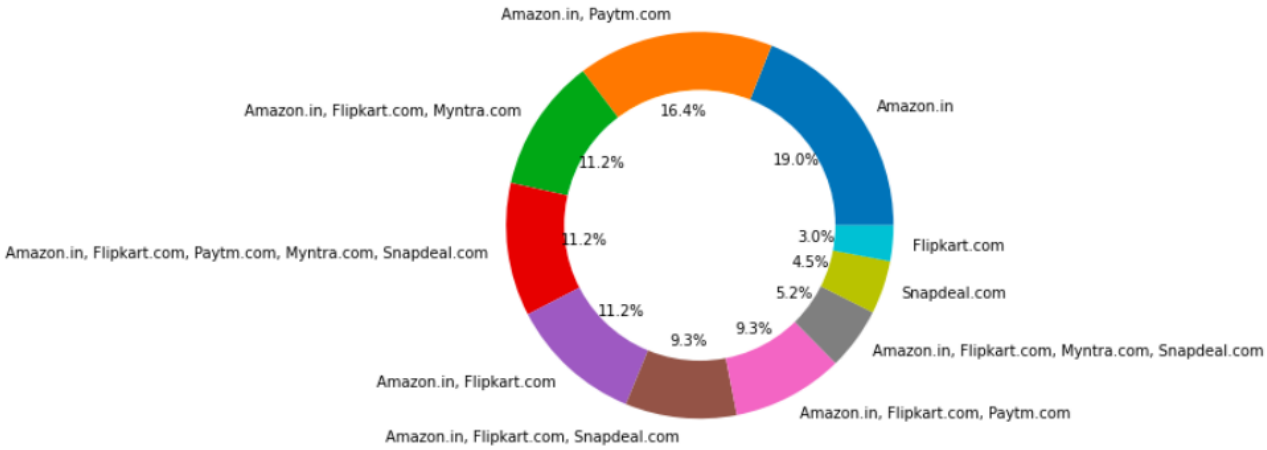


Visual appealing web-page layout

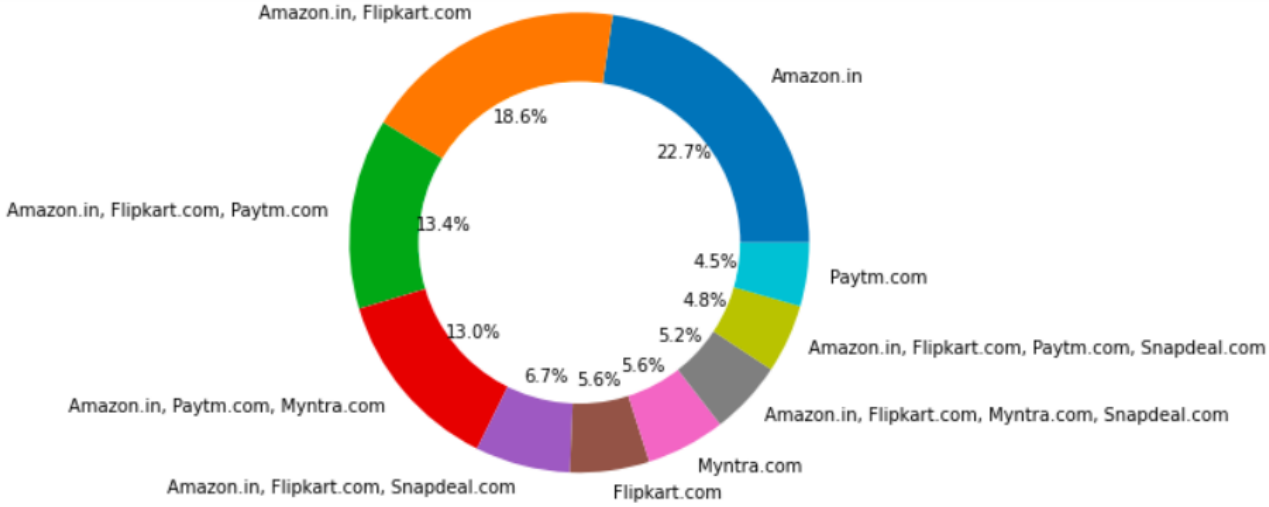




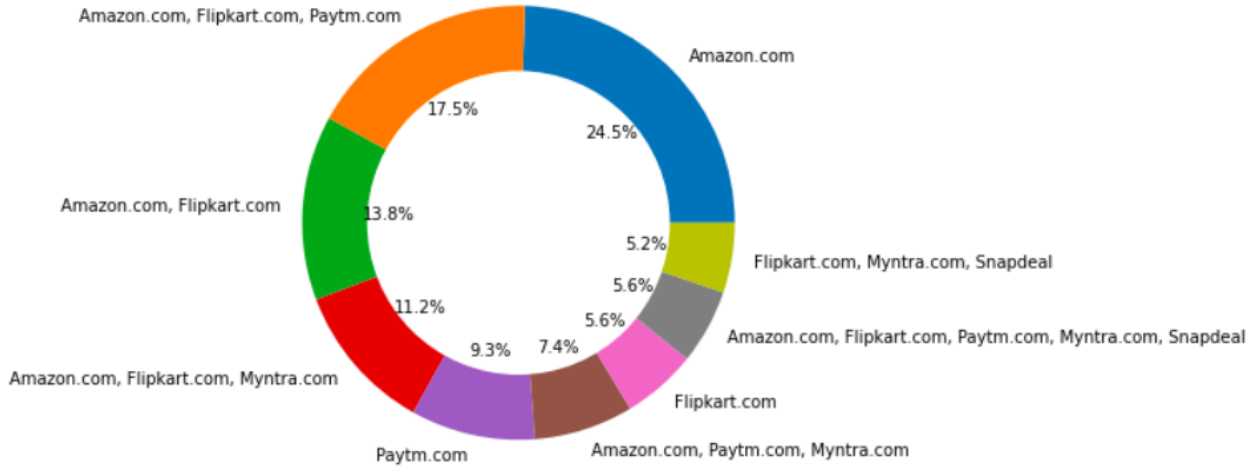
Complete, relevant description information of products



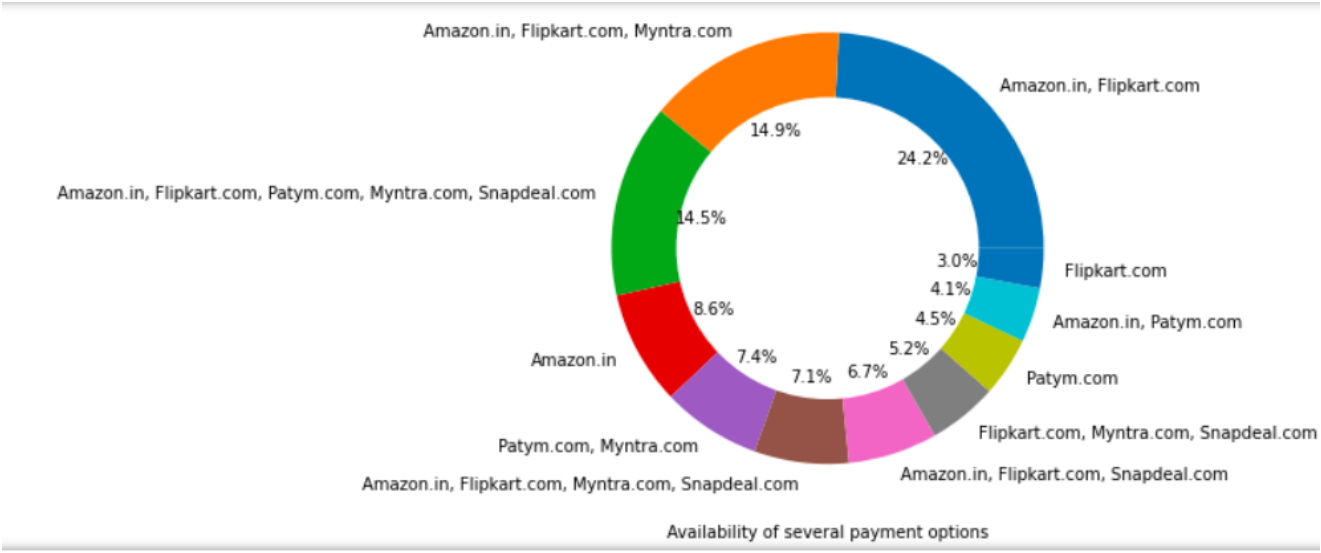
Fast loading website speed of website and application



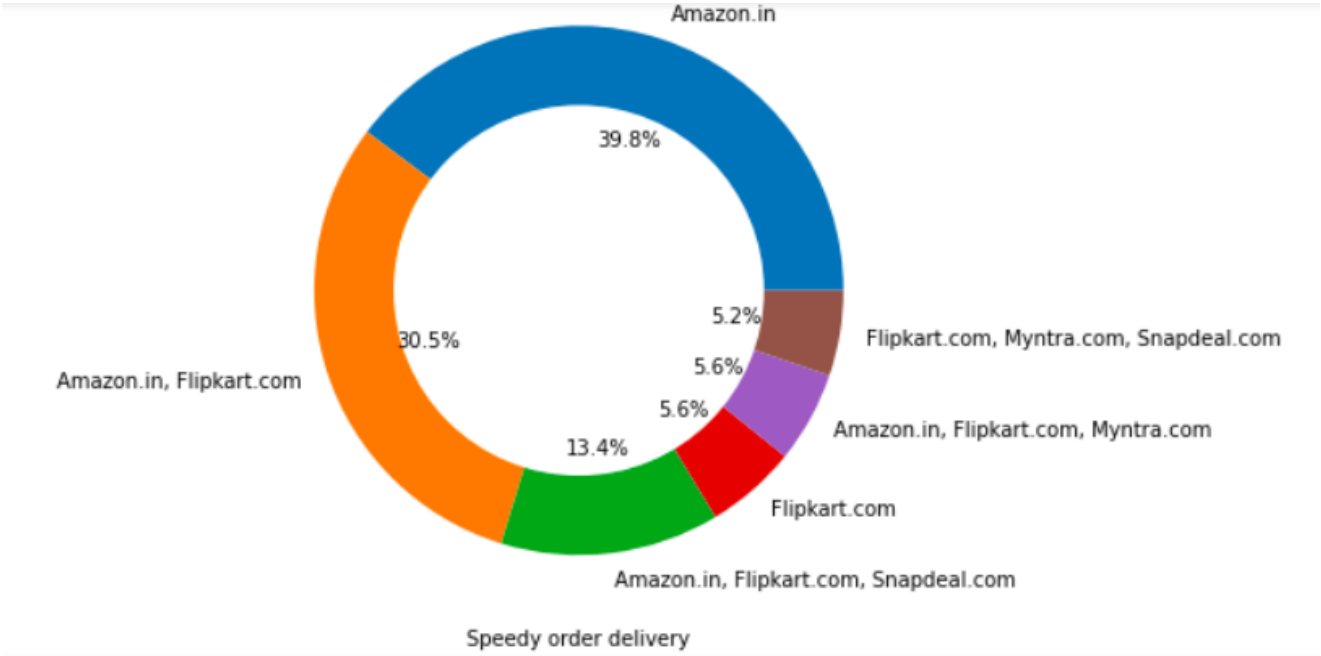
Reliability of the website or application



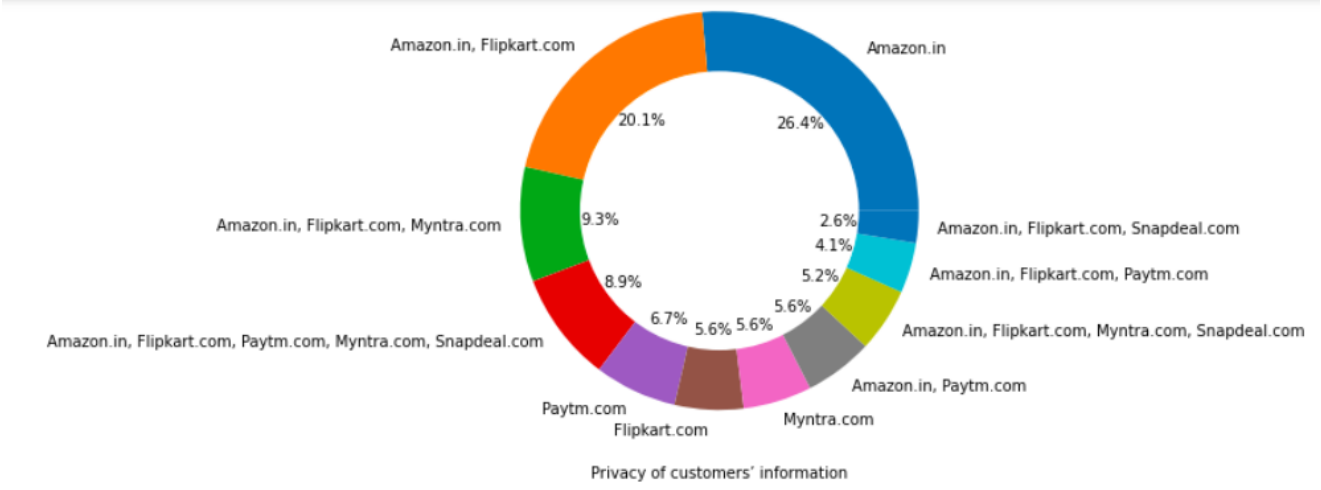
Quickness to complete purchase



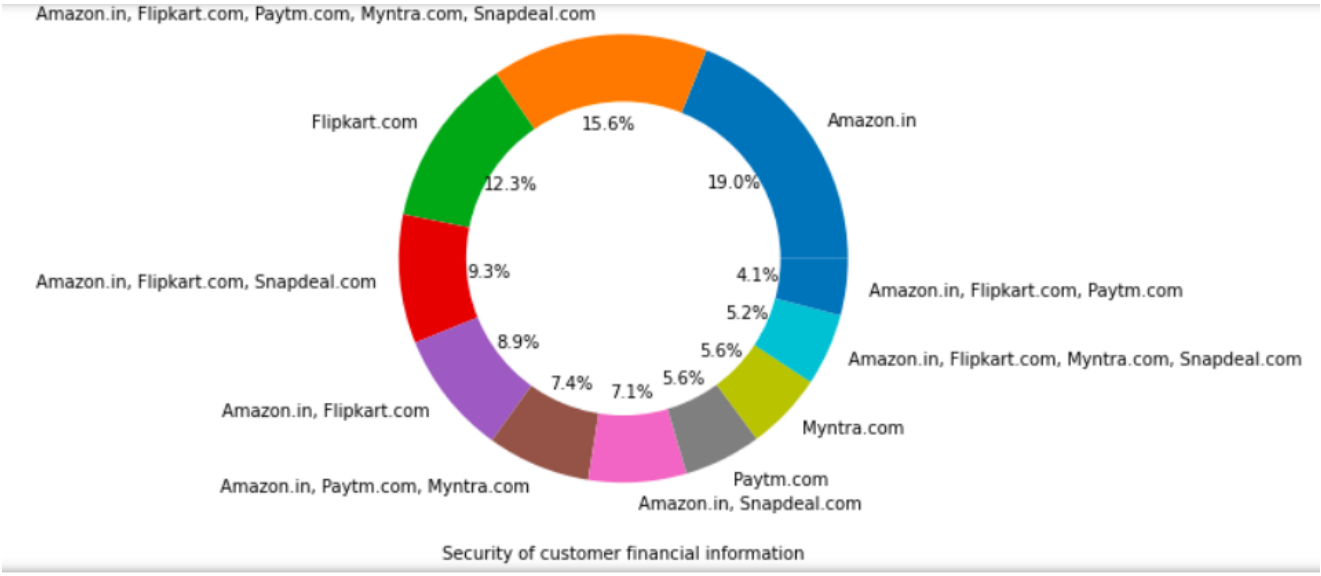
Availability of several payment options

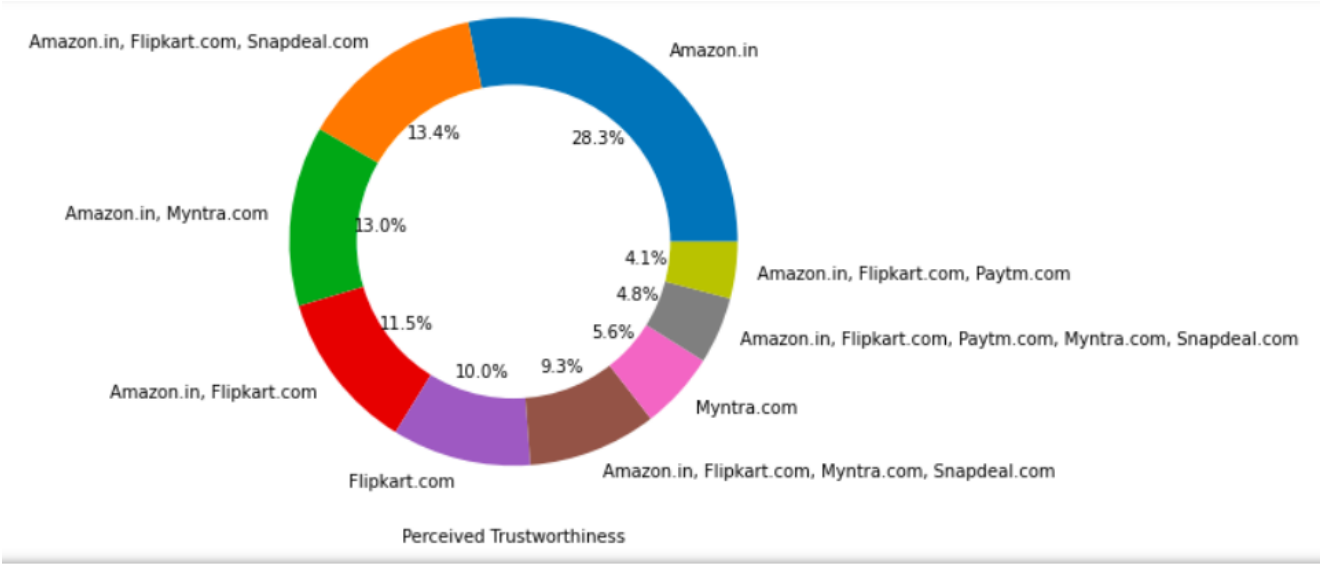


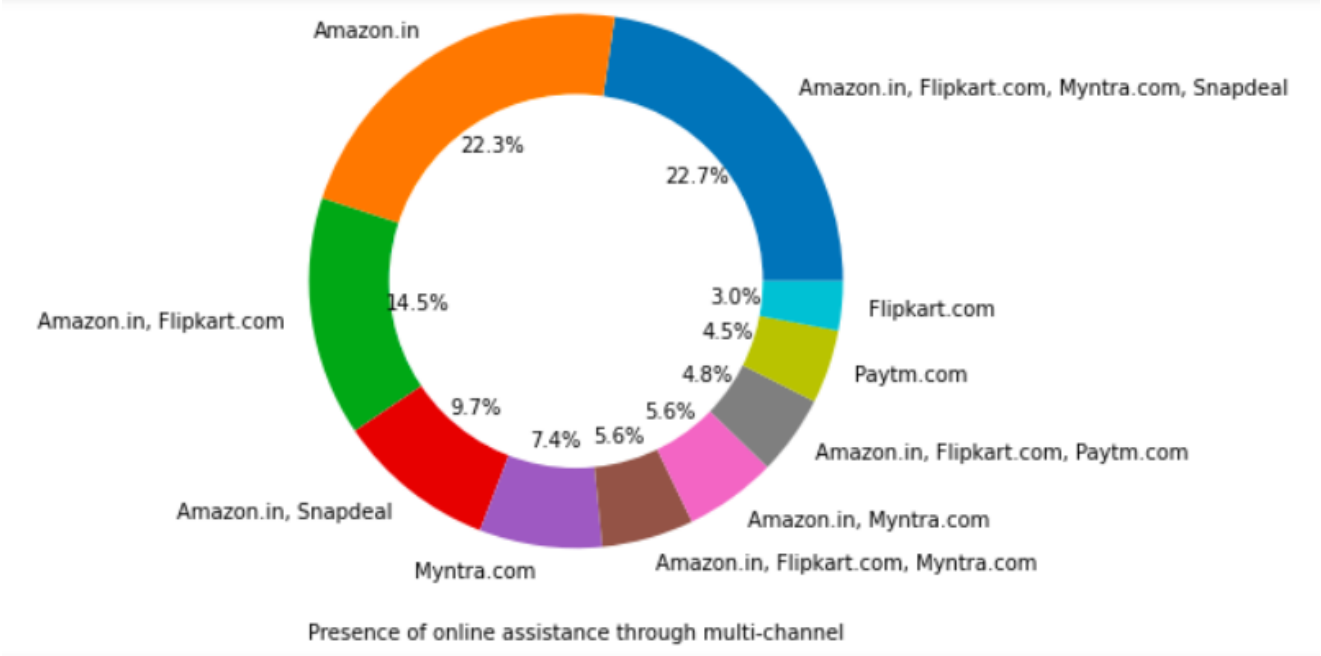
Speedy order delivery



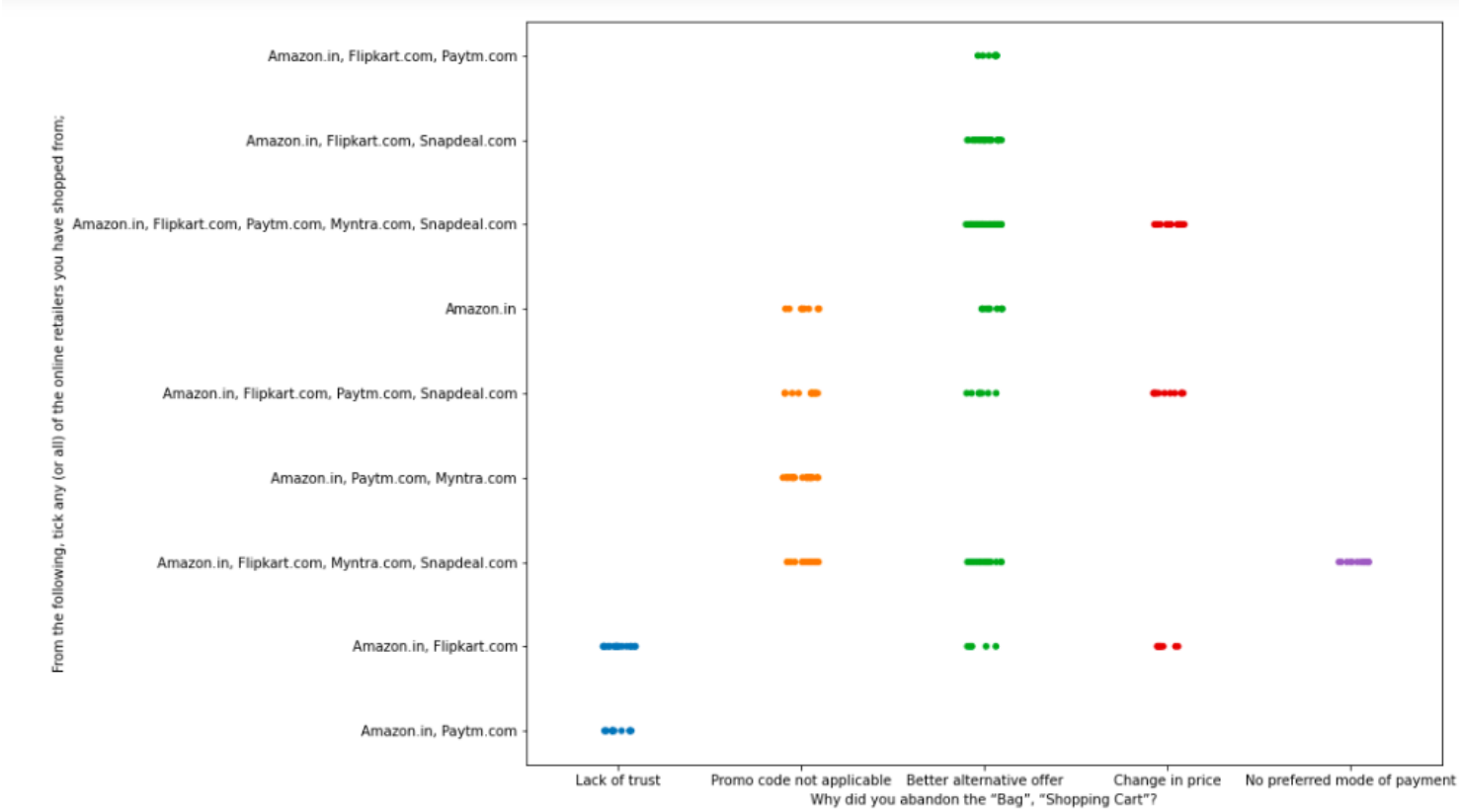
Privacy of customers' information





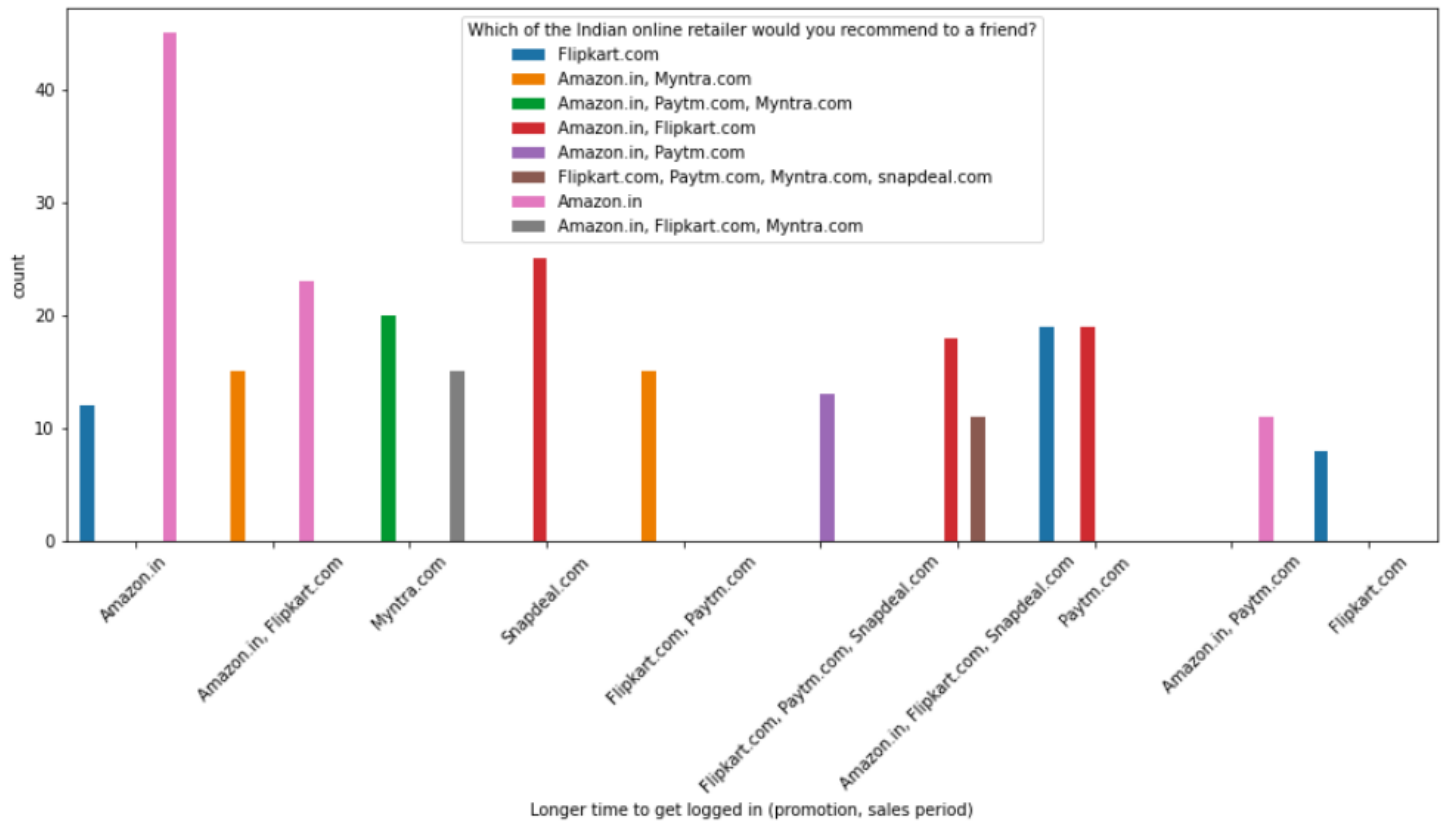


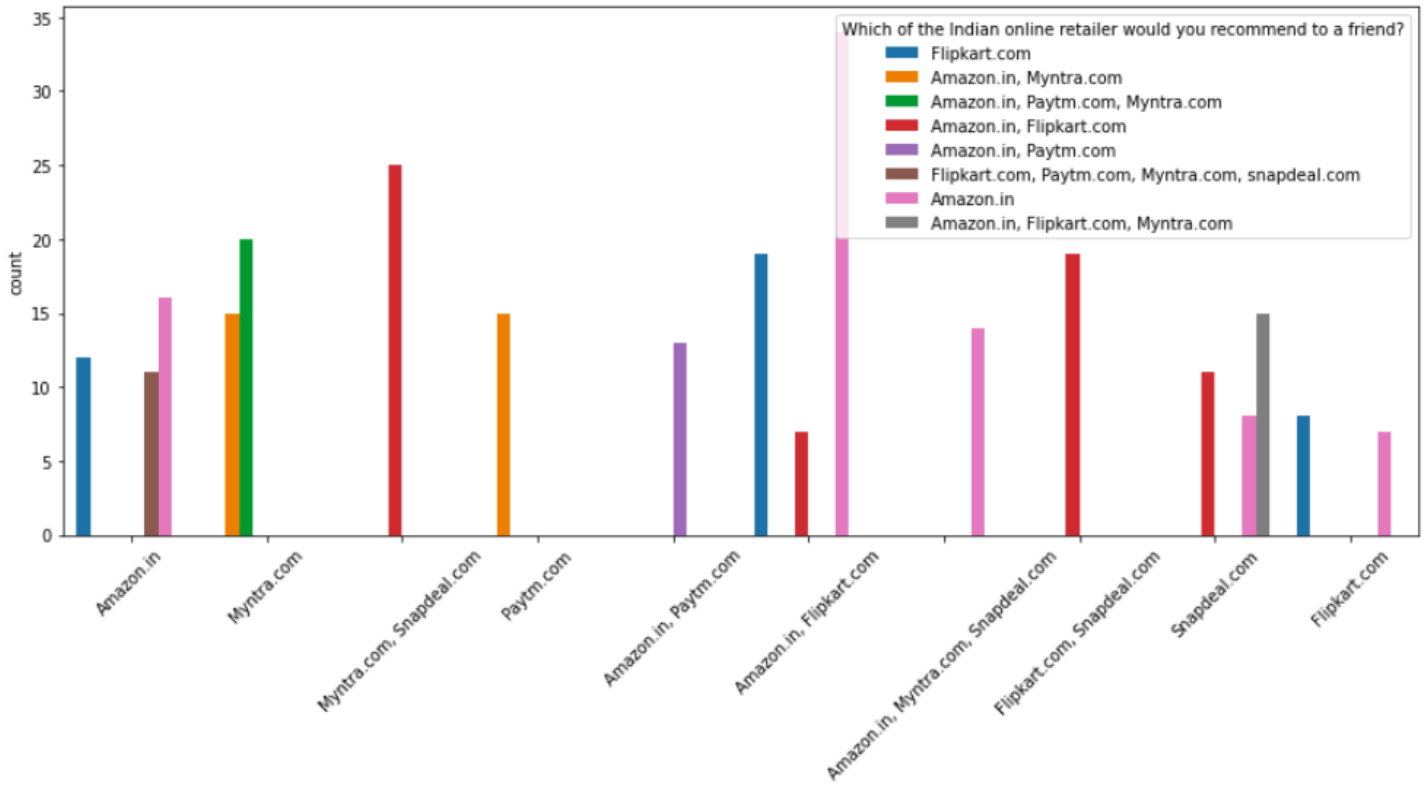
Conclusion: Amazon, Flipkart have been had the highest votes for having all the positive points and have maintained a very good brand image followed by paytm and the myntra.



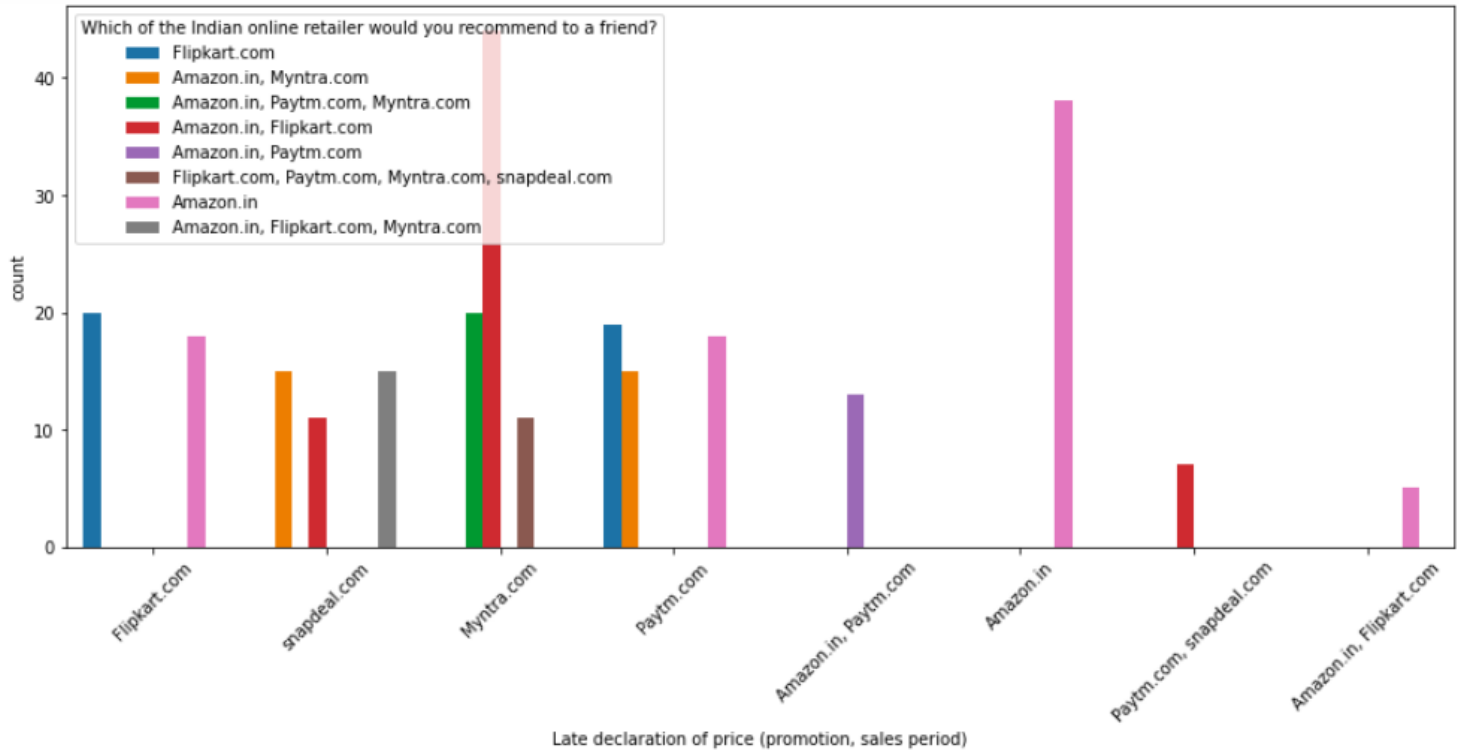
Conclusion: We can clearly see that most of the time people abandon the bag is beacuse they get a better alternative offer or promo code not applicable. There is also lack of trust seen in amazon, flipkart and paytm by some people.

Loyalty(Loyal customers are those who keep using the same brand even if it is not good as other brands)

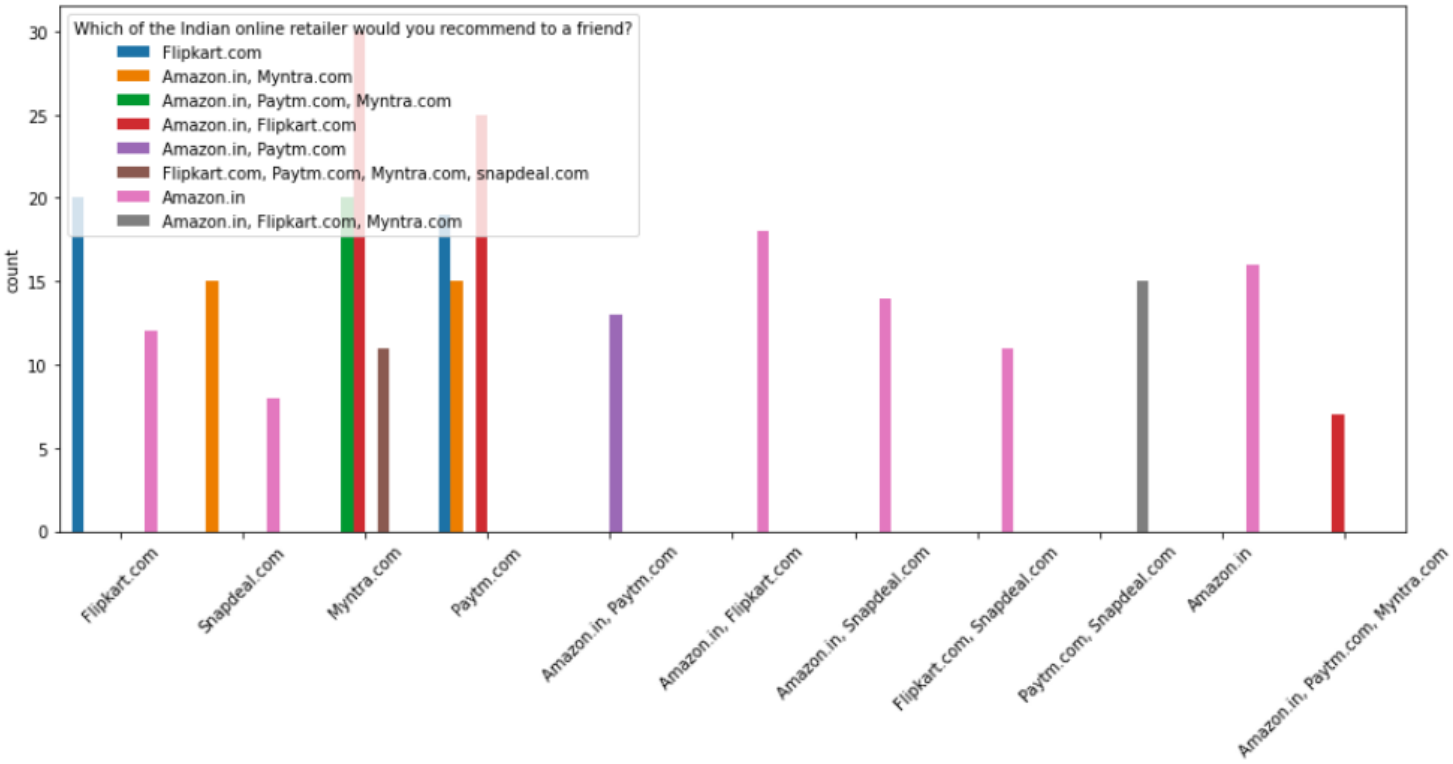




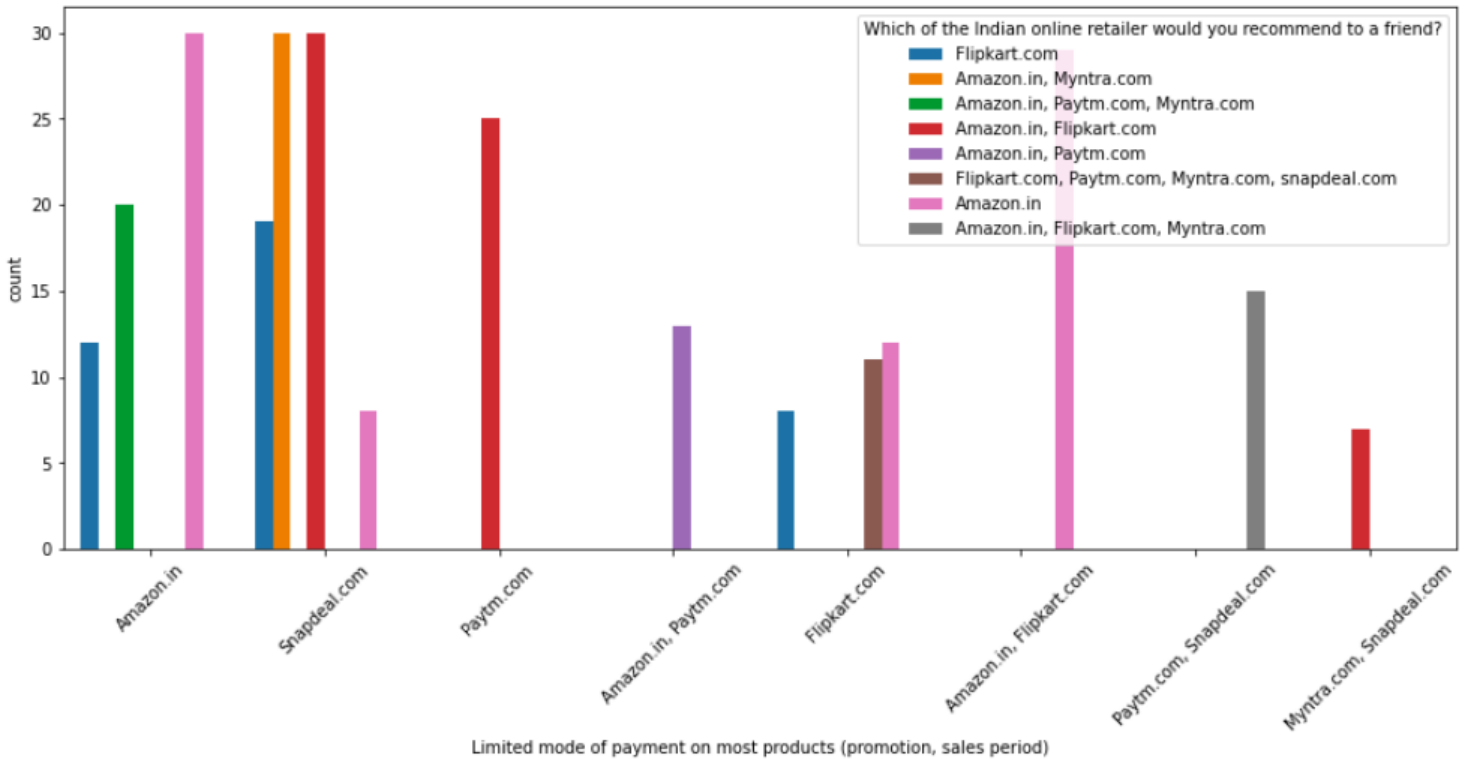
Longer time in displaying graphics and photos (promotion, sales period)



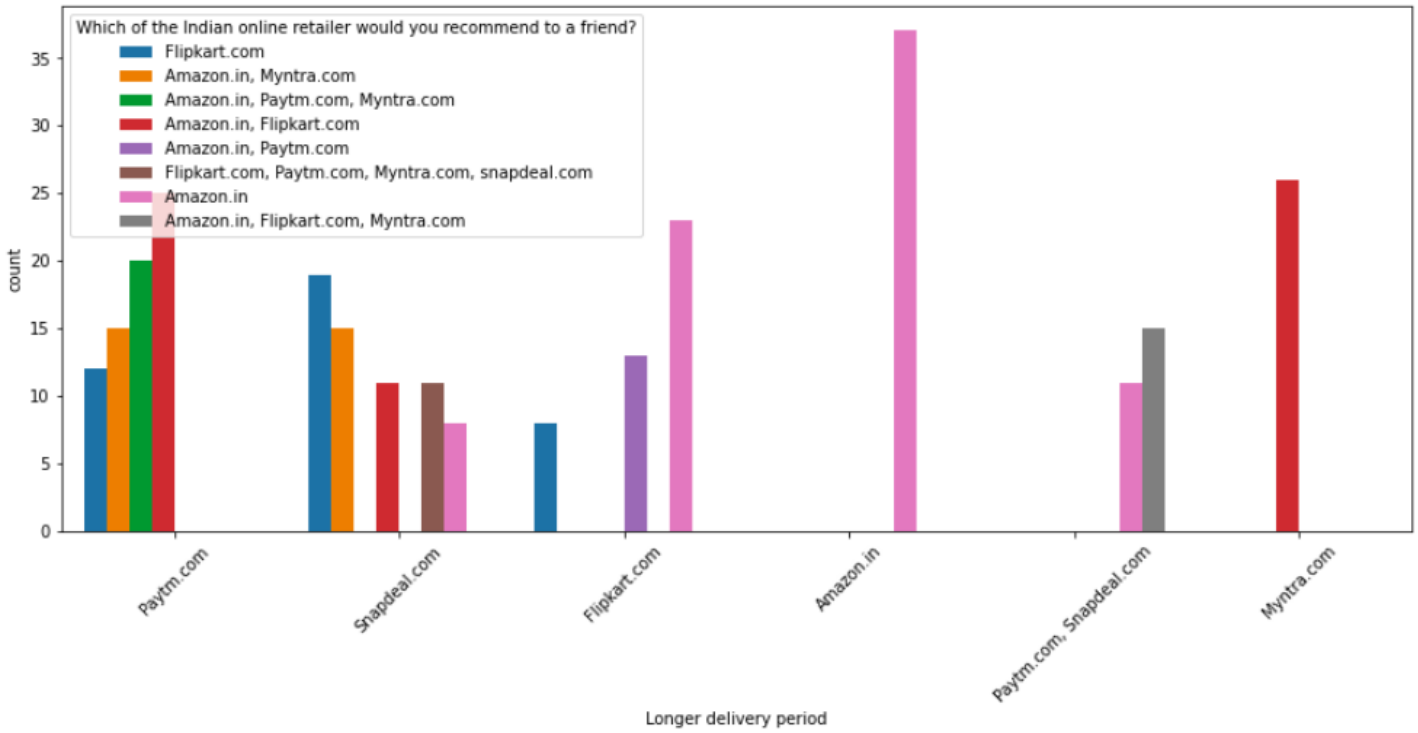
Late declaration of price (promotion, sales period)



Longer page loading time (promotion, sales period)



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


Which of the Indian online retailer would you recommend to a friend?
Flipkart.com
Amazon.in, Myntra.com
Amazon.in, Paytm.com, Myntra.com
Amazon.in, Flipkart.com
Amazon.in, Paytm.com
Flipkart.com, Paytm.com, Myntra.com, snapdeal.com
Amazon.in
Amazon.in, Flipkart.com, Myntra.com
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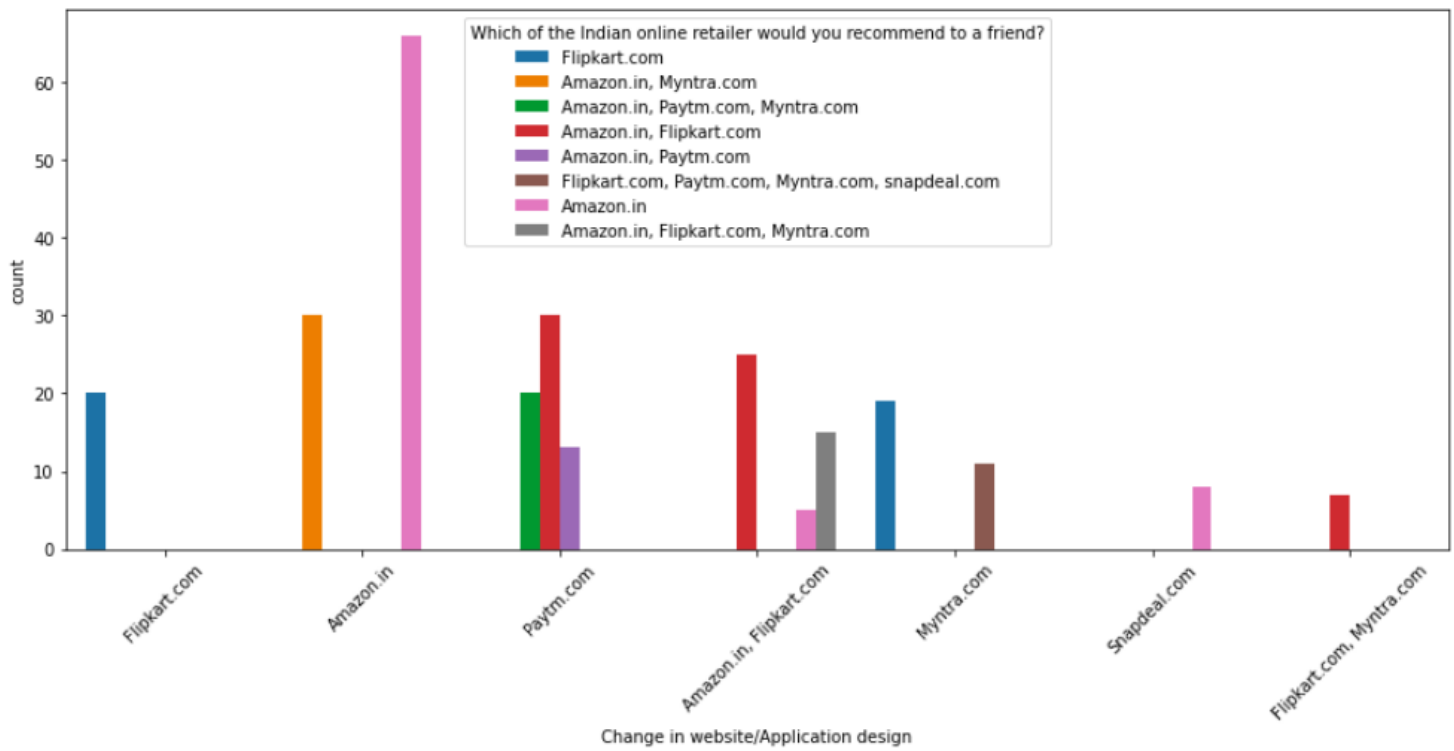
Paytm.com
Snapdeal.com
Flipkart.com
Amazon.in
Paytm.com, Snapdeal.com
Myntra.com
Longer delivery period


Which of the Indian online retailer would you recommend to a friend?
Flipkart.com
Amazon.in, Myntra.com
Amazon.in, Paytm.com, Myntra.com
Amazon.in, Flipkart.com
Amazon.in, Paytm.com
Flipkart.com, Paytm.com, Myntra.com, snapdeal.com
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Amazon.in, Flipkart.com, Myntra.com
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Amazon.in
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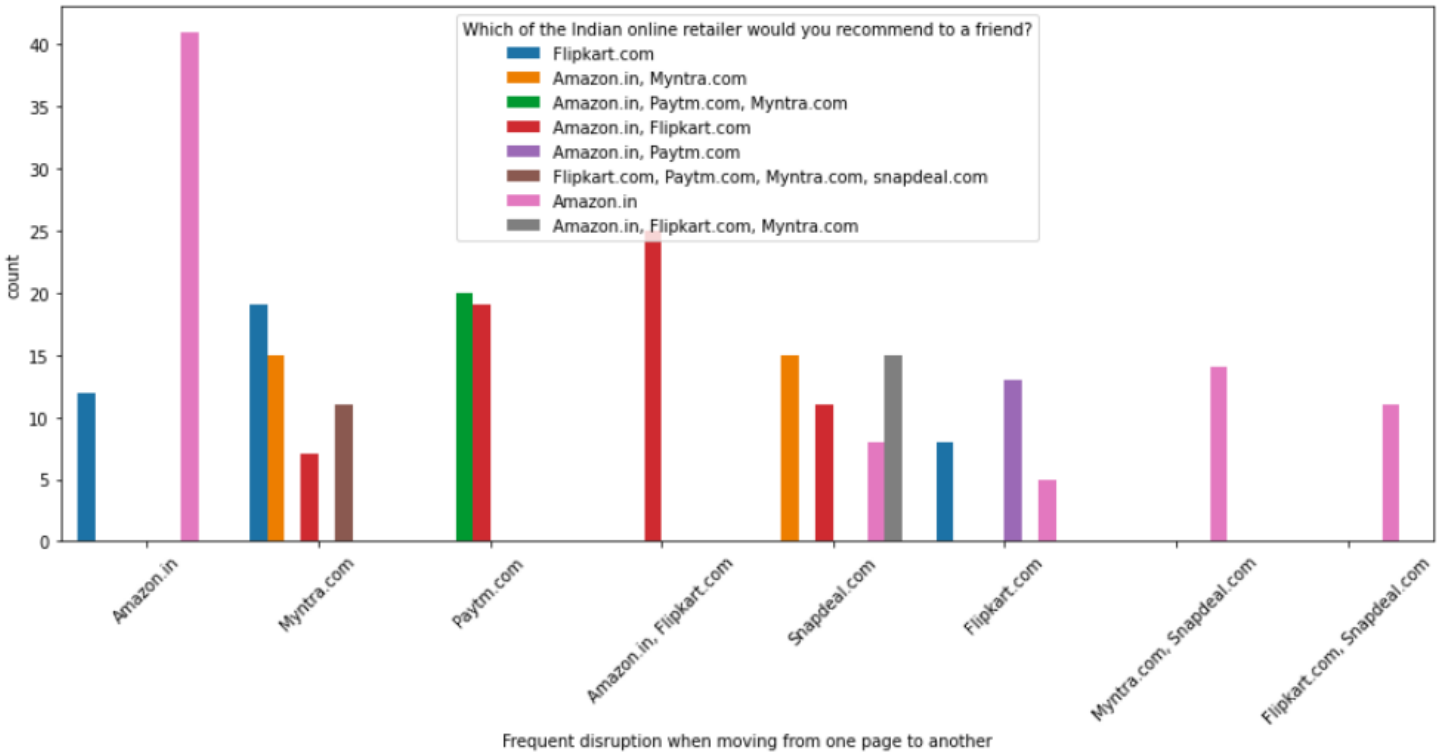
Myntra.com
Snapdeal.com
Flipkart.com, Myntra.com
Change in website/Application design



Conclusion: 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.

From all the above studies we will be able to create a perfect model on which data can be trained and values can be pridicted.