

E-retail factors for customer activation and retention:

A case study from Indian e-commerce customers

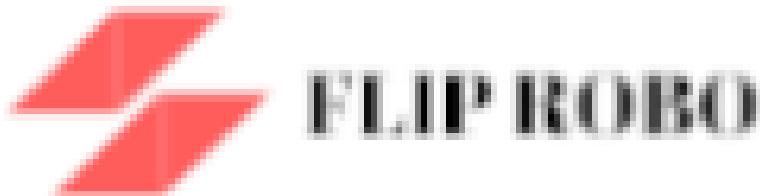
Submitted by

Steffin Varghese

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My thanks and appreciations also go to my tutors, support staff, and all DataTrained data scientists for assisting me in the development of the project, as well as others who have volunteered to assist me with their skills.

Review of Literature

The factors seem to be more important influencing the satisfaction and trust of the consumer. For online retailers it is important to keep the consumer satisfied and this can be influenced by the delivery on time at requested place fulfill. Also, the online retailer influence the trust, consumer have with them Trust can be influenced by interactivity, both trust and satisfaction influence loyalty. The results support the attitude structure. (P. Phani Bhaskar^{*1}, D. Prasanna Kumar², 2016).

Loyalty programs impact customers using financial and psychological factors to maintain long-term loyalty. Furthermore, loyalty programs should include financial as well as affective components as only financial incentives don't guarantee a long-term relationship. (Magdalena Hofman-Kohlmeyer, 2016).

Based on the discussion above the following conclusion can be drawn concerning the customer retention in E-commerce environment. The factors have positive impact on customer retention - reliability, reliability, responsiveness, contact points, convenience, merchandising, site design, security, serviceability, contact interactivity, customization, care and community. (Qu Feihua, 2011).

The study has found that clear state of return policy, quality guarantee and refund policy. are important for the customers while making a online purchase. These are useful findings which organized e-commerce websites need to keep in mind while conducting their business through websites. E-commerce websites must be convenient for customers to find what they want complexity in using a website may lead customers in switching over to another websites. The study also points out serviceability and web design factor while trading through online. E-commerce websites should ensure about Prompt delivery, complaint handling and good packaging. Because this factor is considered as a significant factor in retaining customers. They should ensure about website designs, easy navigation, updated information and easy to recall in order to avoid discomfort (Gayathri Kumaran, 2020).

Introduction

Definition

Customer retention refers to the activities and actions companies and organizations take to reduce the number of customer defections. The goal of customer retention programs is to help companies retain as many customers as possible, often through customer loyalty and brand loyalty initiatives. It is important to remember that customer retention begins with the first contact a customer has with a company and continues throughout the entire lifetime of the relationship. (ngdata)

Customer Retention

Customer retention refers to a company's ability to keep paying customers over a given amount of time. It is essential for every expanding business since it evaluates how well they serve existing consumers while also attracting new ones. Customer retention is commonly thought to be significant merely because it minimizes the number of customers you lose. A solid retention plan, on the other hand, can help you grow your business immensely by producing loyal clients and creating long-term customer connections.

E-Commerce Customer Retention

Competition forces eCommerce businesses to rise above mediocrity and achieve elite status. 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. eCommerce enterprises not only need to continuously upgrade their technology, but also must provide consistent experiences to users across devices.

Customer Retention Rate

Customer retention rate refers to the number of customers a business can retain over time.

More people loyal to your brand = more repeat customers.

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.

Interpretation of Problem Statement

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 aim of the case study is to analyze the collected data, to give findings and conclusions which would enable the e-tailers to identify the challenges and ways to improve the quality of online stores and enhance repeat purchase intention (loyalty) of customers.

EDA Steps

1. Loading the dataset
2. Analyzing the shape (rows and columns) and type of data.
3. Checking for missing values in dataset.
4. Data Visualization.
5. Statistical Summary of data (Describe of data.)
6. Correlation of variables in data.
7. Findings and Conclusion.

Loading the data.

There are two sheets (one is detailed) and second is encoded in the excel file.

ds = Detailed Dataset

dse = Encoded dataset

We have renamed the column names of both normal data and encoded data for ease of convenience.

Analyzing the shape and type of data.

Shape of data

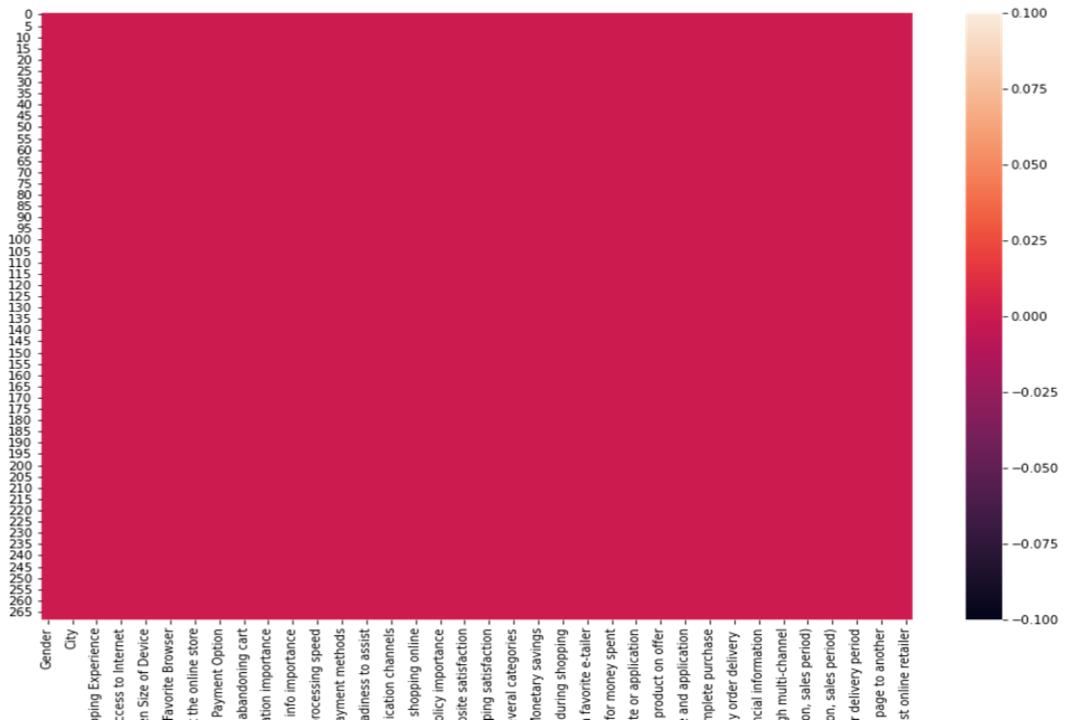
We have 269 rows and 71 columns in the dataset.

Type of data.

All the columns except column 'Pin Code' is having object type of data. These are categorical in nature. The column 'Pin Code' is having integer type of data.

The column 'Mode of access to Internet' is having same category 'Mobile Internet' as two different categories. So, we have renamed the same categories to group them as one category.

Checking for missing values.

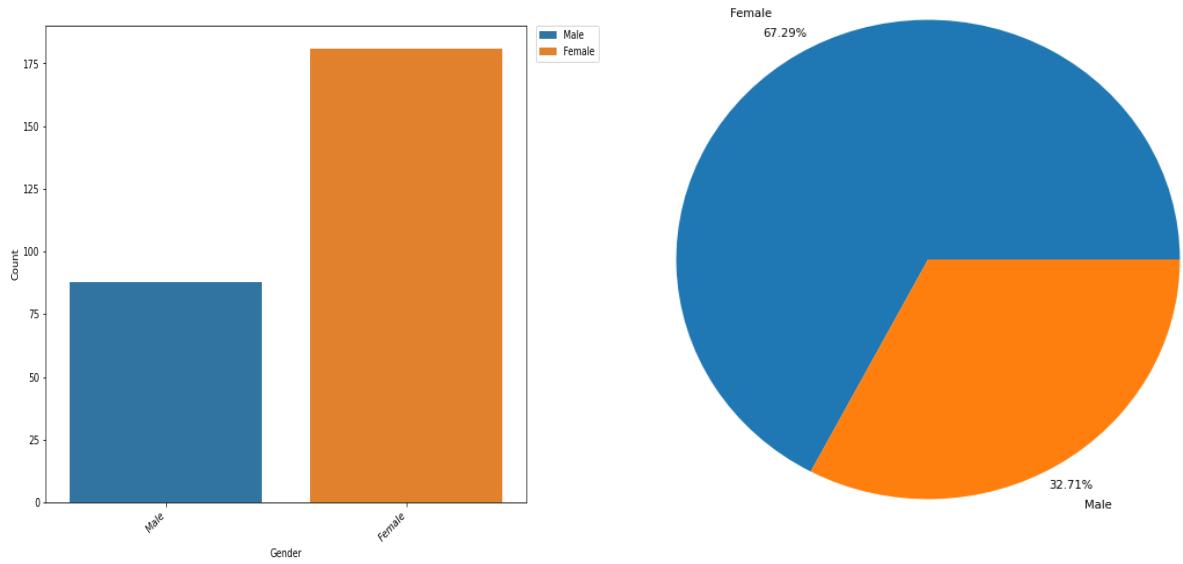


There are no missing values in the dataset.

Data Visualization

We have created a user defined function 'plot' that can plot count of values in each columns, countplot and a pie chart. Since the data is categorical in nature(except Pin Code), we have used countplot. Pie chart will help us to understand the proportion of values compared to the total population in percent (%).

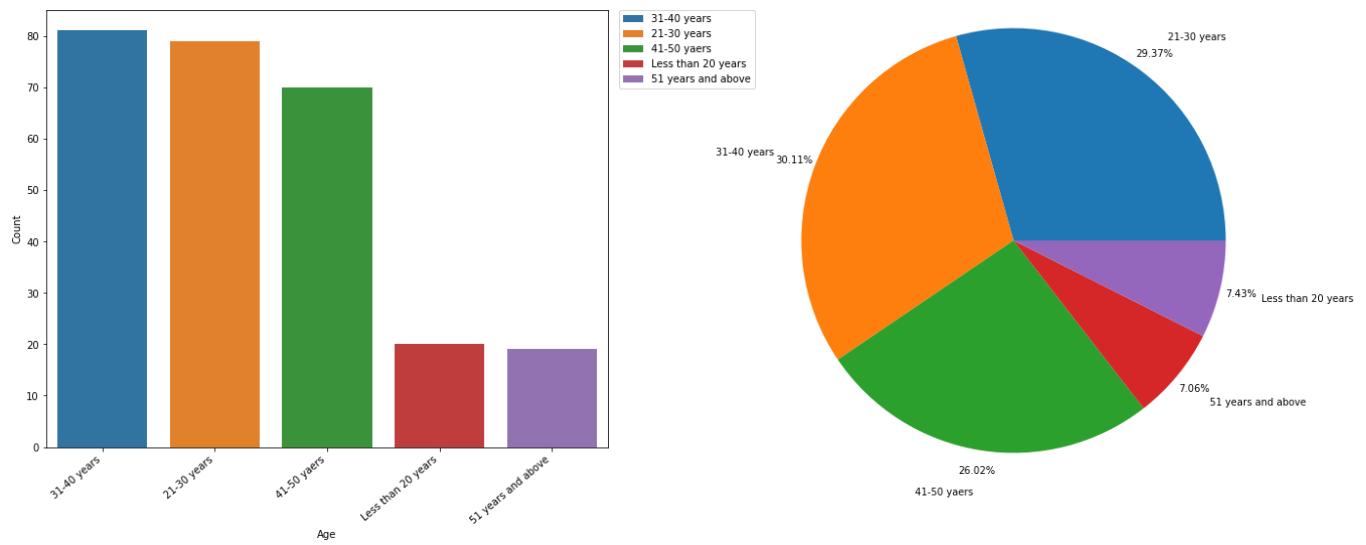
Analysis of data based on Gender



Findings:

1. In the given survey dataset, out of 269 observations 181 were from females and 88 from males.
2. 67.29% population of the dataset are female customers and remaining 32.71% are male customers.
3. As per the given dataset, female customers are shopping more on E-Commerce platforms. Since they consist of the majority of the market, it is better to give much more importance on products and services which are useful for female customers. Retaining this female customer is a priority for every e-commerce retailer.
4. Even though the market consists more female customers, 32.71% of male customers are shopping from online retailers. So E-Commerce retailers can concentrate on products and services which are convenient for male customers to bring more customers from offline to online market.

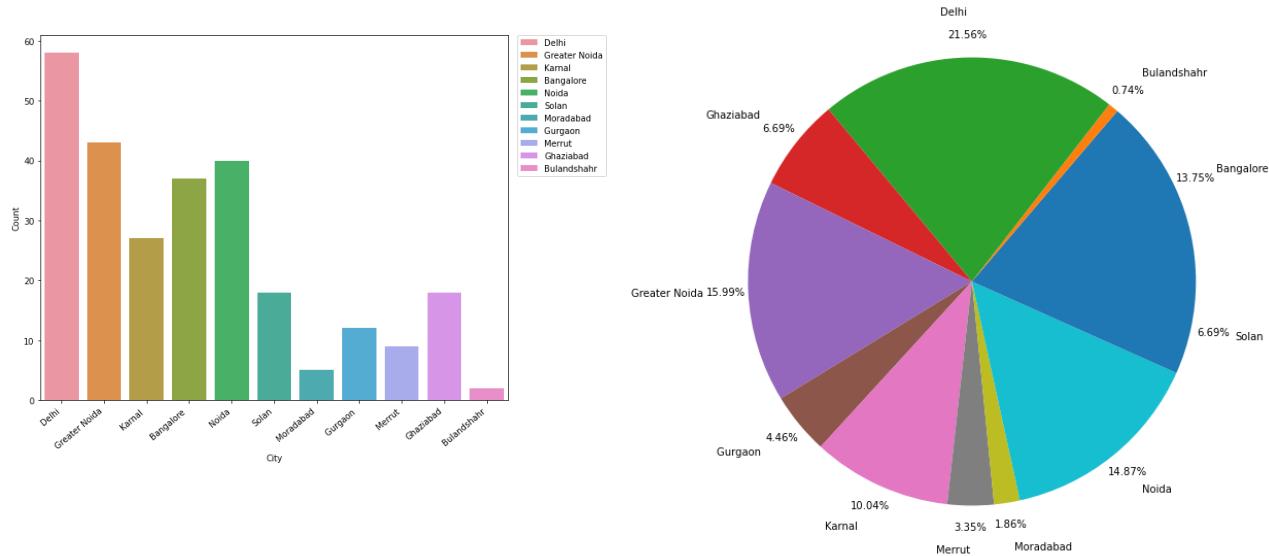
Analysis of data based on Age



Findings:

1. Customers belonging to the age between 31-40 years are having highest shopping from e-commerce platforms with 30.11% of the market. Customers belonging to the age between 21-30 years and 41-50 years are the next major shoppers from e-retailers with 29.37% and 26.02%. Customers who are below the age of 20 years and above the age of 51 years are the ones who least shop from the e-commerce platforms.
2. 85.51% of the customers are between the age of 21-50 years. So, the e-retailers should always give prioritize the needs of customers belonging to this age category. This will help in retaining the repeat purchase customers as these are the customers having the necessity and the financial ability to make the purchases.
3. Even though the customers belonging to the age below 20 years are less, e-retailers should concentrate on them as they are the future customers. Also, the customers above the age of 51 years are focused more on utilitarian value. So, providing quality product and convenient services to this age category customers will help to build loyal customers as they will not look for other options.

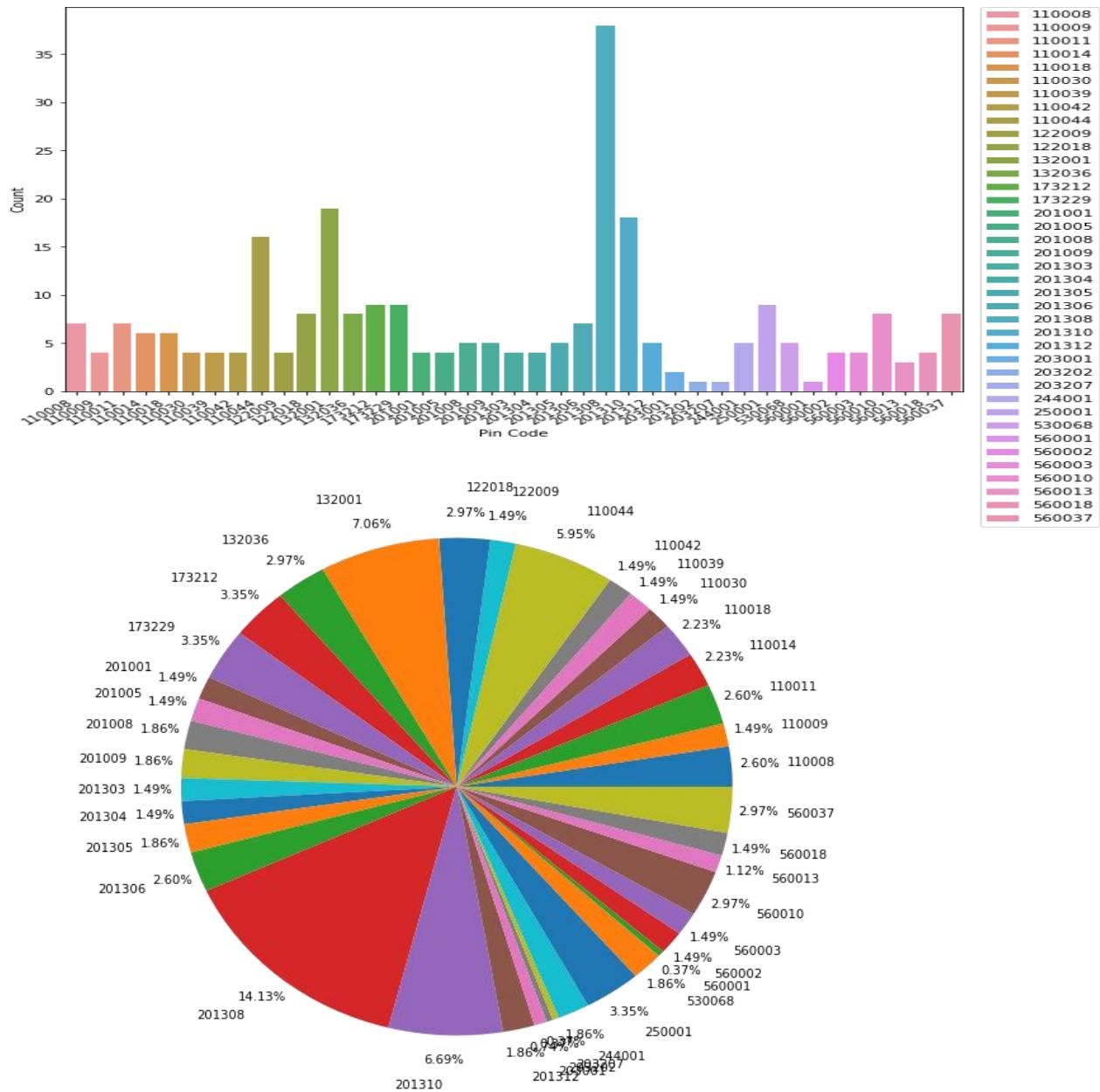
Analysis based on City



Findings:

- Based on the city, most of the customers are from Delhi, Greater Noida, Noida and Bangalore with 66.17% of the whole population. Rest of the cities are belonging to the 33.83% of the population. There are moderate customers from Karnal, Ghaziabad and Solan. Customers from Gurgaon, Merrut, Moradabad and Bulandshahr are the least online shoppers.
- Majority of the users are from the metro cities and urban areas. Customers from these cities are proficient with technology and ecommerce compared to the customers from rural area. Also, they have the smart devices, internet connection and other amenities for ease access to the online e-retailers. This is a competitive market segment as most of the e-retailers will try to capture this market to maintain a stability in the number of repeat purchase customers.
- E-retailers can focus on the customers from the city having least numbers to gain new customers as the technology is advancing, these cities are having potential future customers. Availability of products and services to these cities will help to capture the market.

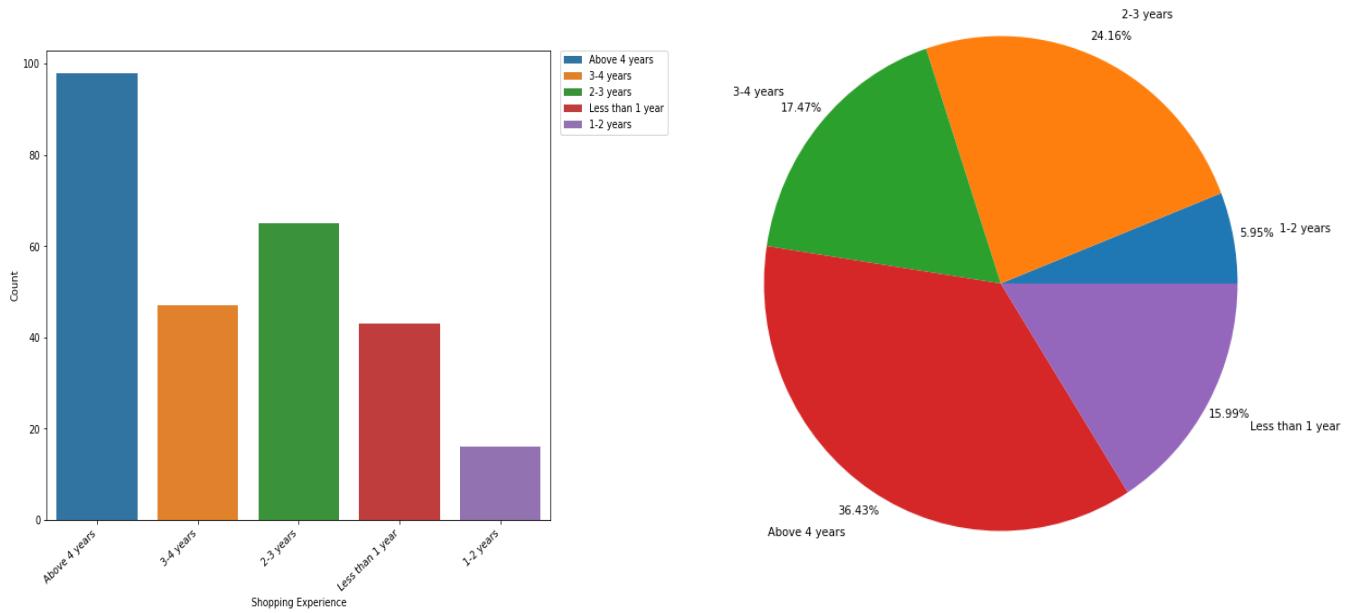
Analysis based on Pin Code



Findings:

1. The top four pin codes having the highest number of customers are from Greater Noida(201308), Karnal(132001), Noida(201310) and Delhi(110044). This will help the e-retailers to study about the segmentation of customers based on where exactly they are located. This will help to provide more products and services based on the specific location after identifying their needs and wants.

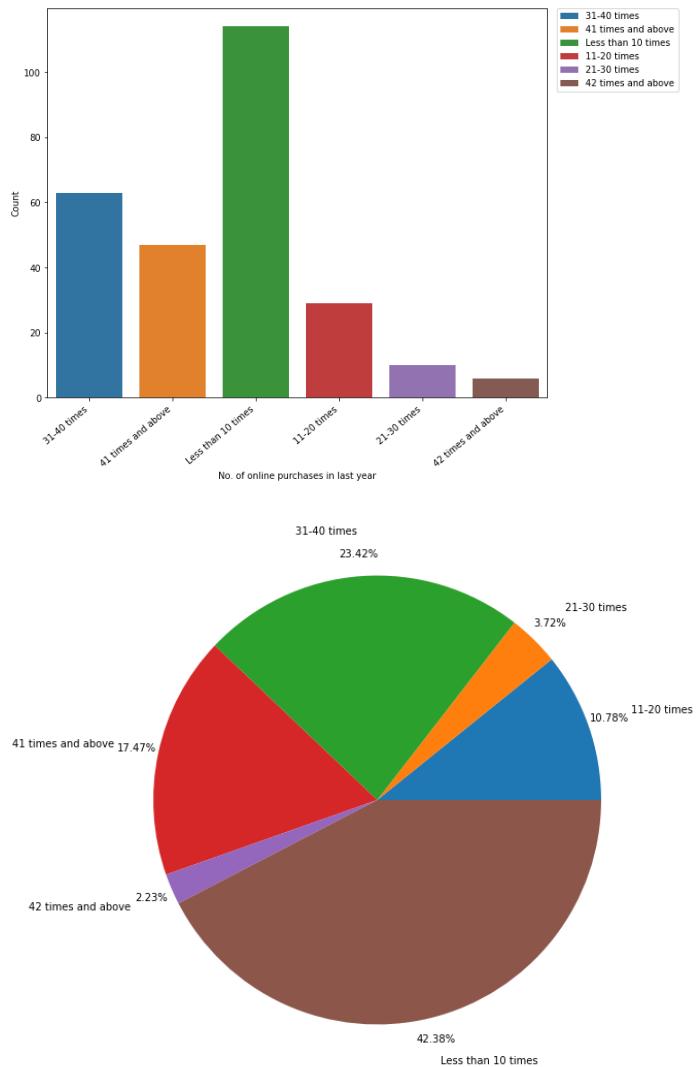
Analysis of data based on Shopping Experience



Findings:

1. 36.43% of the customers are having more than 4-year experience in online shopping. Customers having 3-4 years and 2-3 years' experience in shopping, consists of 17.47% and 24.16% of the market, respectively. Only 5.95% of the population are having a shopping experience of 1-2 years. 15.99% of customers are having less than 1 year experience in online shopping.
2. This shows that most of the customers who have participated in the survey have more than 2 years' experience in online shopping. So, 78.06% of the market are having good knowledge about the online shopping platforms and they have provided their feedback according to their years of experience in this sector. This is one of the good signs that stats majority of the data collected are from customers who are having good experience and knowledge in the e-commerce sector according to their shopping experience.

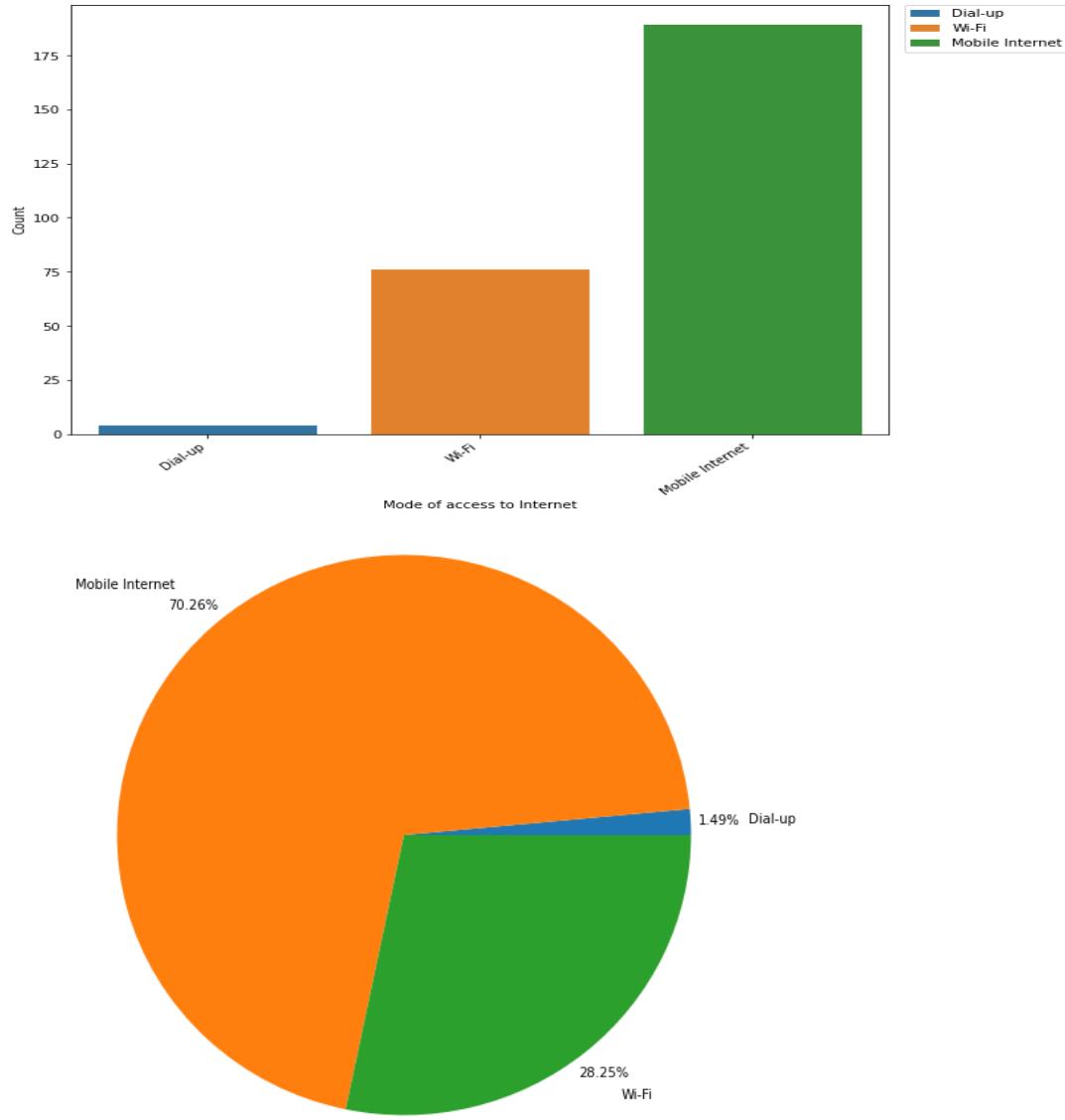
Analysis of data based on no. of online purchases in last year



Findings:

1. Around 42.38% of the customers made less than 10 purchases in the previous year. 23.42% customers have made purchases between 31 to 40 times, 17.47% of customers have made more than 41 purchases and 10.78% of customers have made 11 to 20 purchases in last year.
2. Only a few numbers of customers have made purchases above 42 times in last year with 2.23% of market and with 21 to 30 purchases in last year with 3.72% of the population.

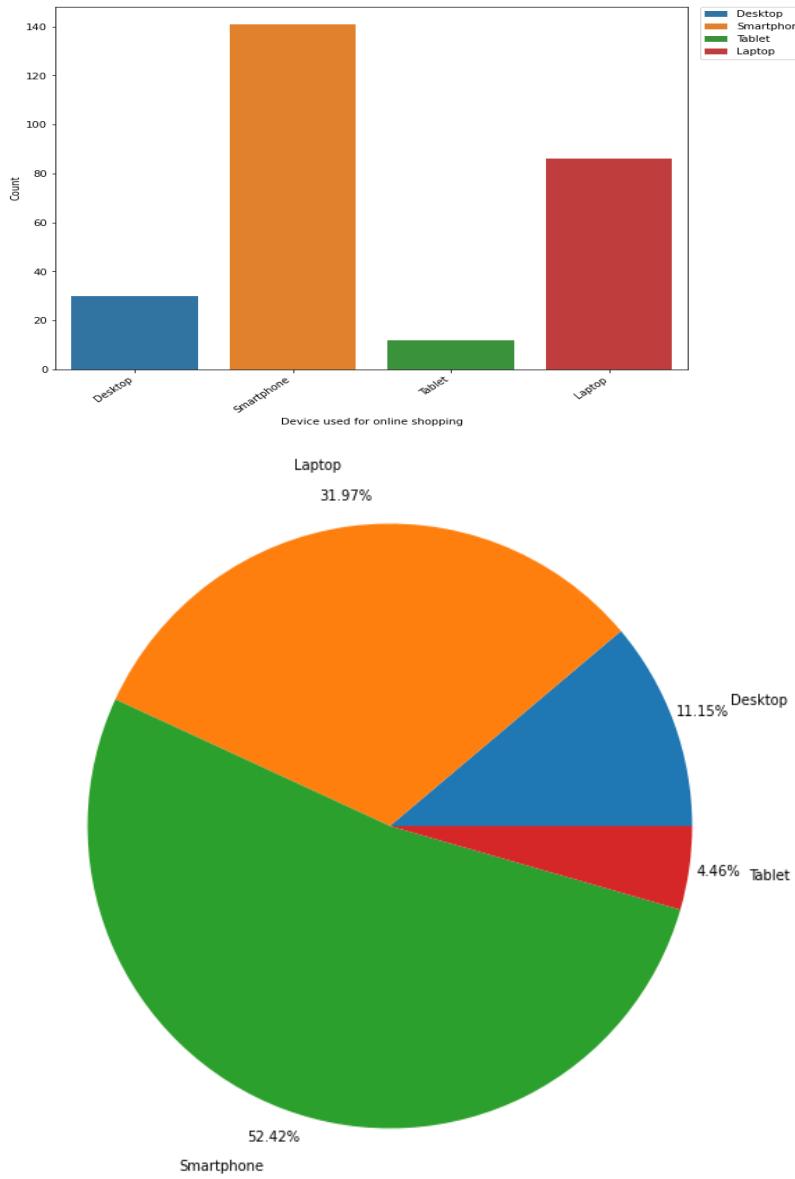
Analysis of data based on mode of access to Internet



Findings:

1. Most of the customers are having mobile as an access to internet. - 70.26%.
2. The number of customers having Wi-Fi as an access to internet is 76 which is 28.25% of the market. The number of customers using Dial-up is 4 which consists only 1.49% of the whole customers.

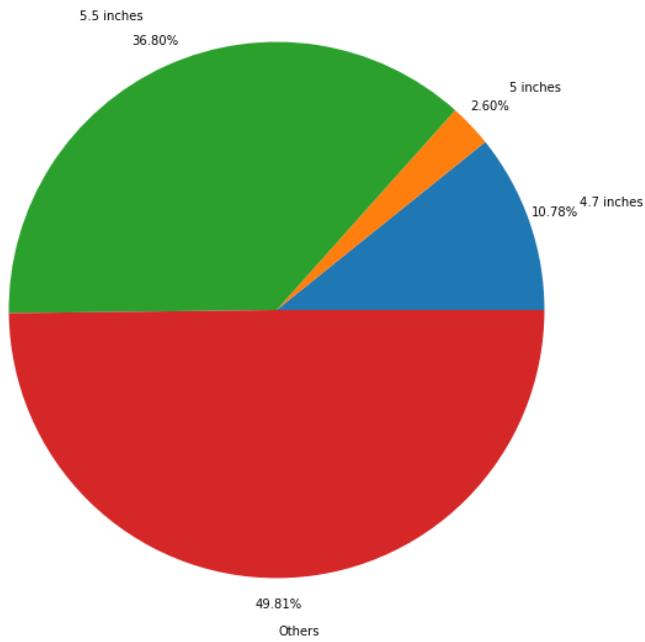
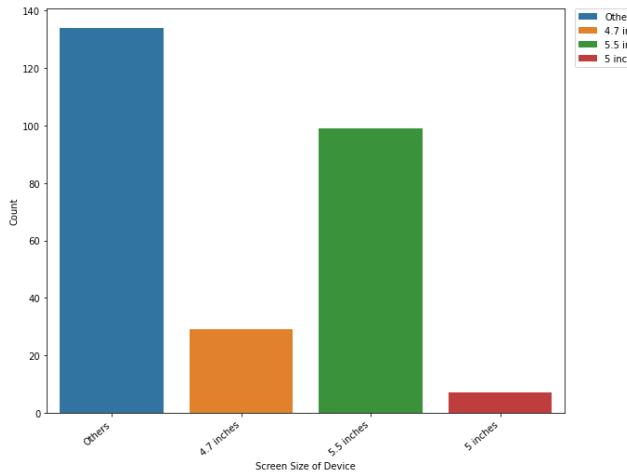
Analysis of data based on device used for online shopping



Findings:

1. The number of customers who are shopping online using smartphone is 141 which is 52.42% of the total customers. Least number of customers have used Tablet to shop online (12) which is 4.46% of the market.
2. The number of customers who are shopping online using laptop is 86 which consists of 31.97% of the total customers and the number of customers who are using desktop for online shopping is 30 which consists of 11.15% of the market.

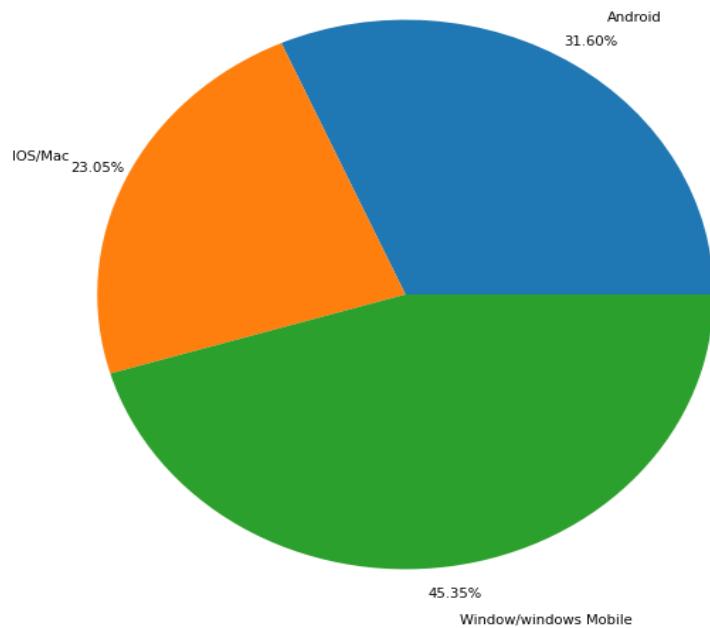
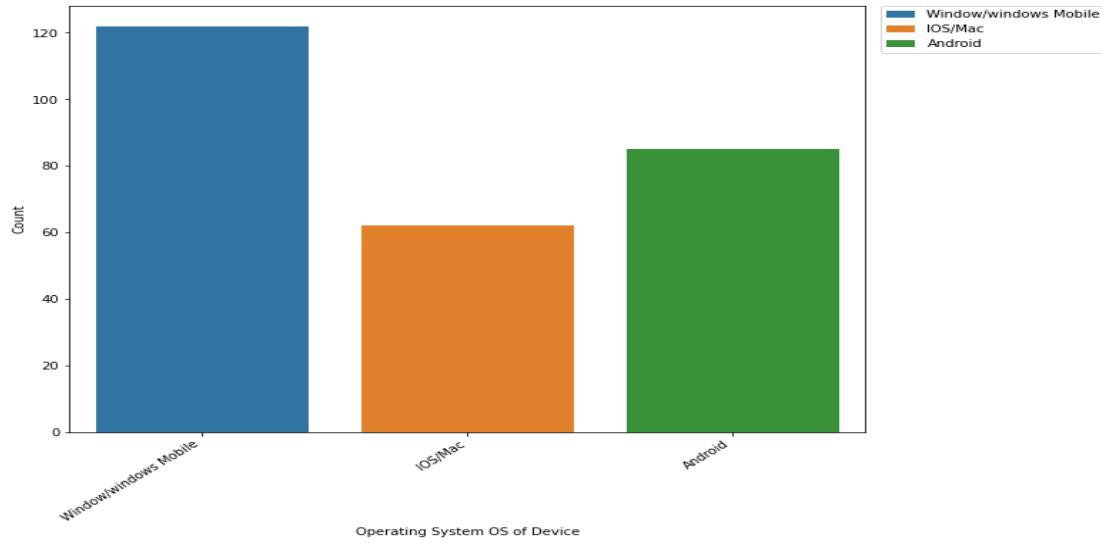
Analysis of data based on screen size of device



Findings:

1. 36.80% of the customers are having smartphone with 5.5 inches screen size. The bigger the screen size, the better they will be able to see the products clearly on online platforms. 10.78% of the customers are having smartphones with a screen size of 4.7 inches.
2. Only 2.60% of the customers are having 5 inch screen size for their smartphone.

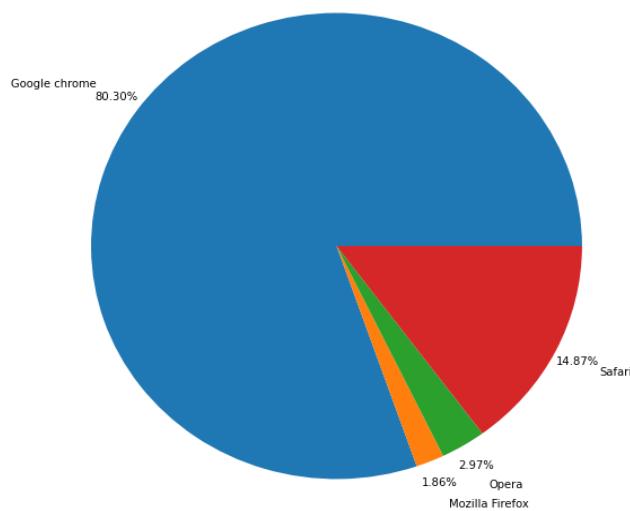
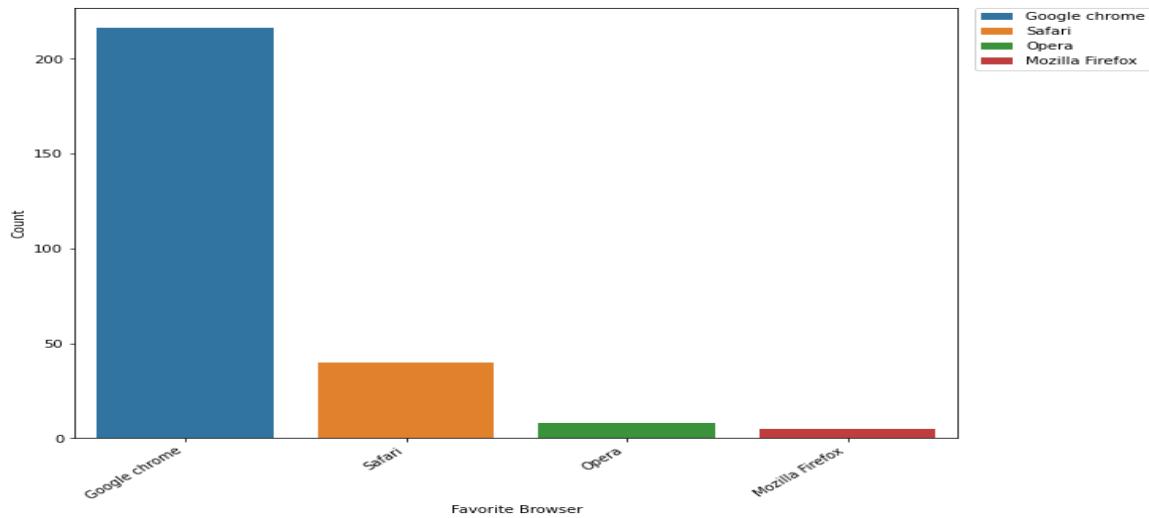
Analysis of data based on operating system of device



Findings:

1. Most of the customers are using Windows operating system (122) with 45.35% of the total customers. The least number of customers are using Mac/iOS operating system (62) consisting 23.05% of the total customers.
2. The number of customers using Android operating system is 85 which consists of 31.60% of total customers.

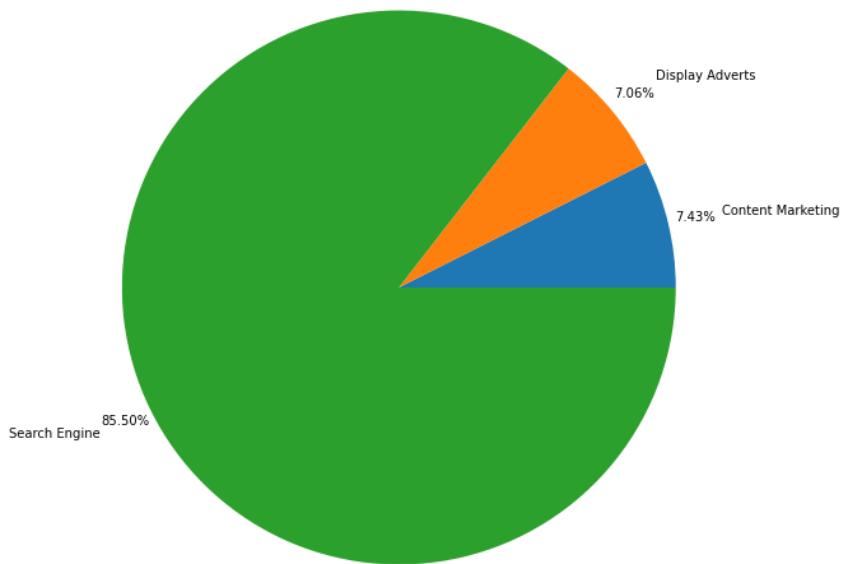
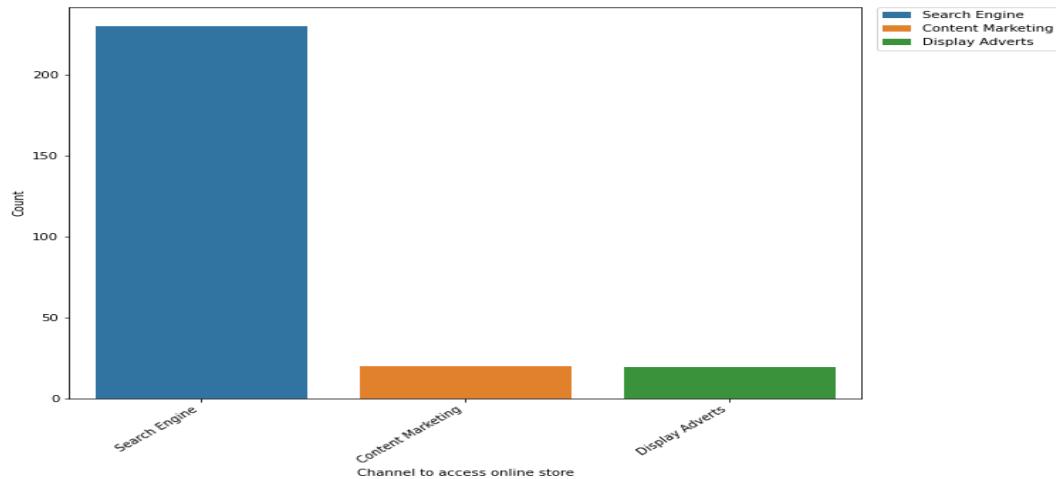
Analysis of data based on favorite browser



Findings:

1. Most number of customers prefer Google Chrome as preferred browser for online shopping(216) which occupies 80.30% of the total customers. The least preferred browser for online shopping by customers is Mozilla Firefox(5) which consists of 1.86% of the total customers.
2. The number of customers using Safari as browser to shop online is 40 which consists of 14.87% of the total customers and the number of customers using Opera as browser to shop online is 8 which consists of 2.97% of the total customers.

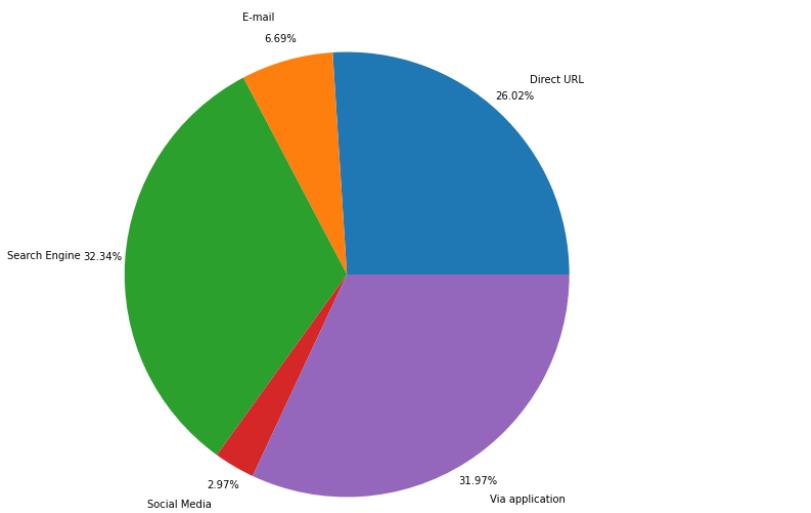
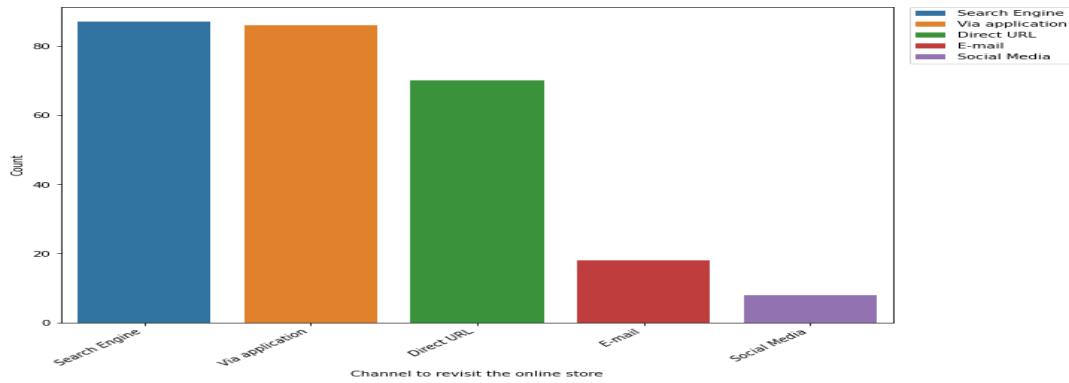
Analysis of data based on channel to access online store



Findings:

1. Most of the customers are preferring Search Engines to access online stores (230) which occupies 85.50% of the total customers. Least number of customers are accessing online stores using display adverts (19) which consists of 7.06% of the total customers.
2. The number of customers accessing online stores using content marketing is 20 which consists of 7.43% of the total customers.

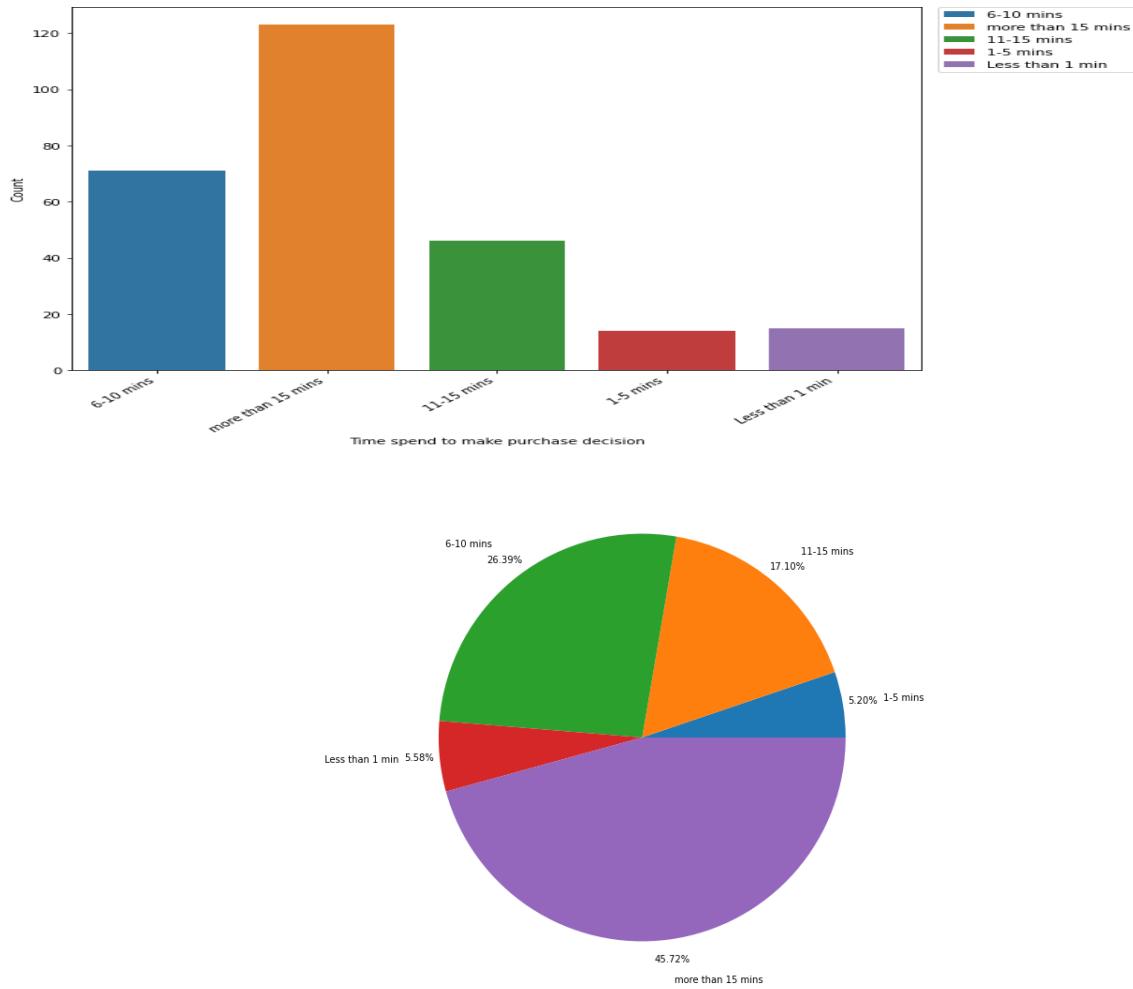
Analysis of data based on channel to revisit the online store



Findings:

1. Most of the customers use search engines to revisit the online store (87). Second most number of customers use application to revisit the online store(86). The number of customers using direct URL for revisiting the online store is 70.
2. Least number of customers are using social media as a channel to revisit the online store which is only 8 customers. The number of customers revisiting online store using email is 18.

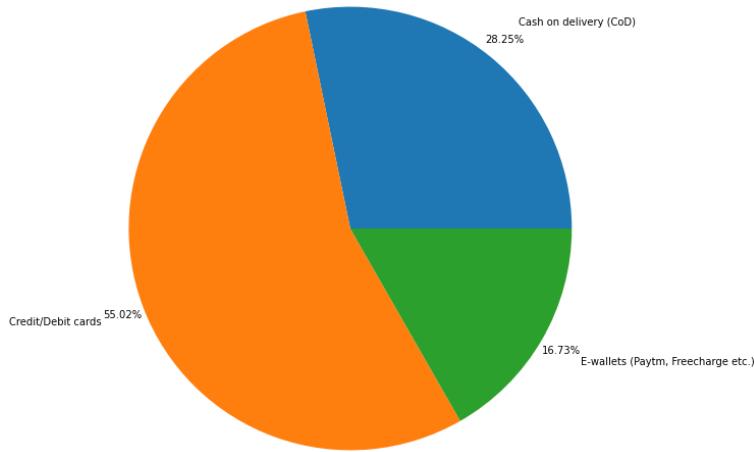
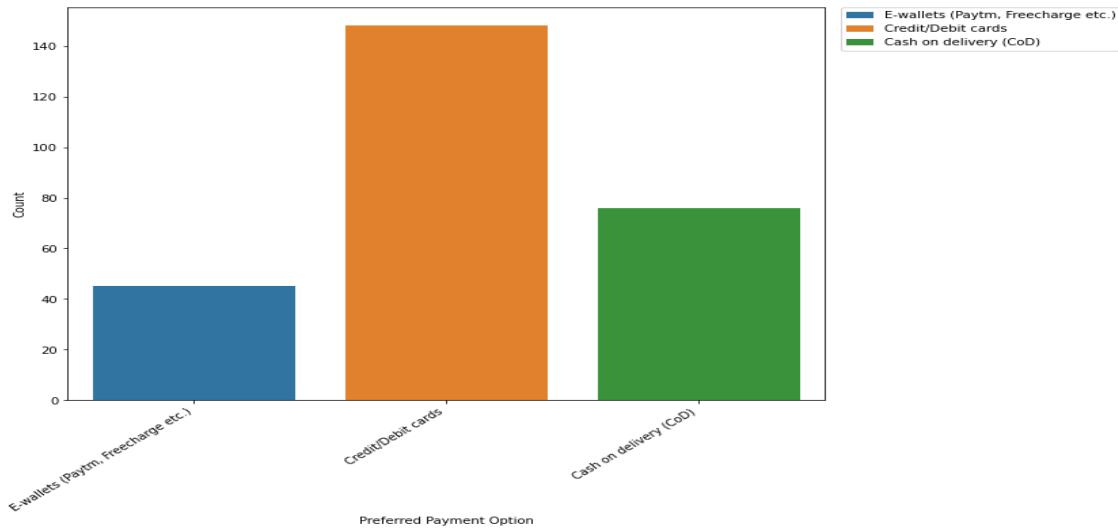
Analysis of data based on time spend to make purchase decision



Findings:

1. The number of customers taking more than 15 minutes to make the purchase decision is higher among the category which is 123 customers and consists of 45.72% of the total customers. The number of customers taking time between 6 to 10 minutes is 71 which consists of 26.39% of total customers. The number of customers taking 11 to 15 mins to make purchase decision is 46 which occupies 17.10% of the total customers.
2. The least number of customers takes 1 to 5 minutes to make purchase decision (14). The number of customers taking less than 1 minute to make purchase decision is 15.

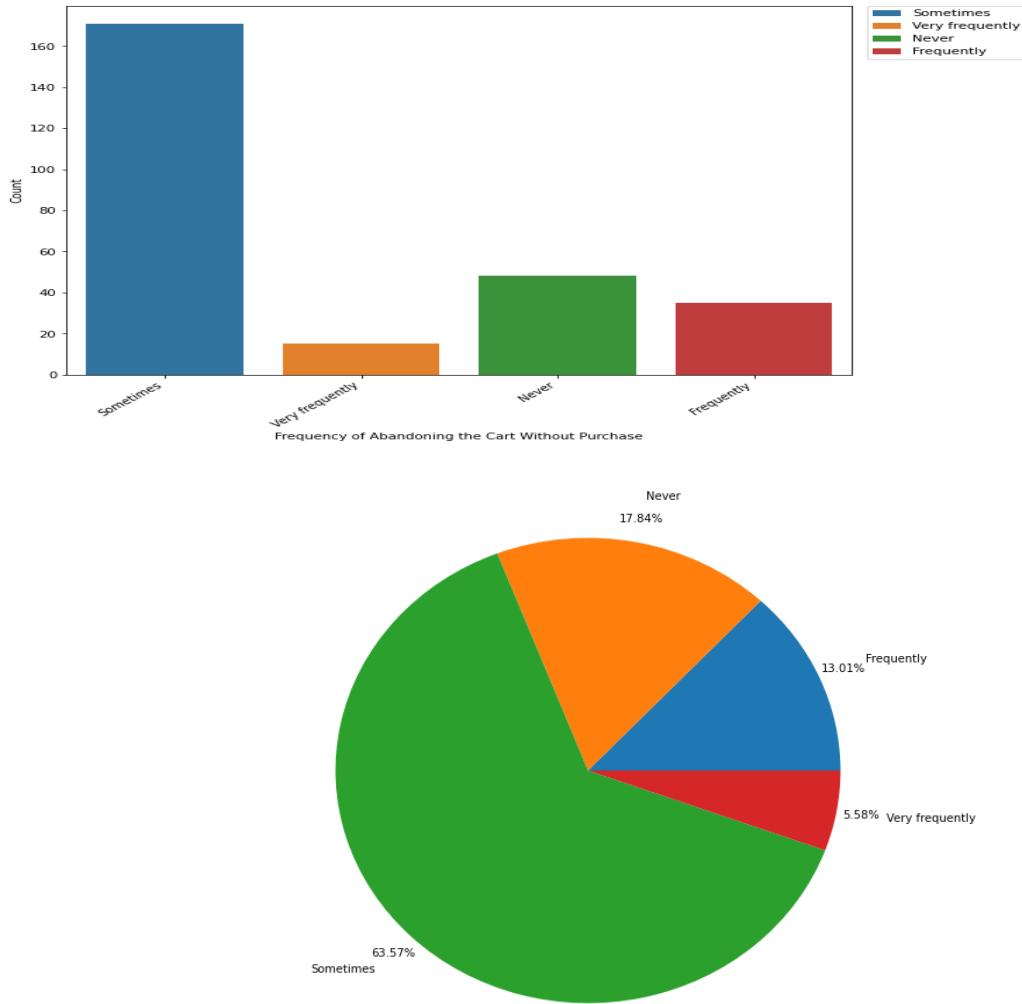
Analysis of data based on preferred payment option



Findings:

1. Most of the customers prefer credit/debit card as payment method for their online shopping (148) which consists of 55.02% of the total customers.
2. The least number of customers prefer E-wallets (Paytm, Freecharge etc.) as payment method which is only 45 customers. The number of customers preferring Cash on Delivery (CoD) is 76 which consists 28.25% of total customers.

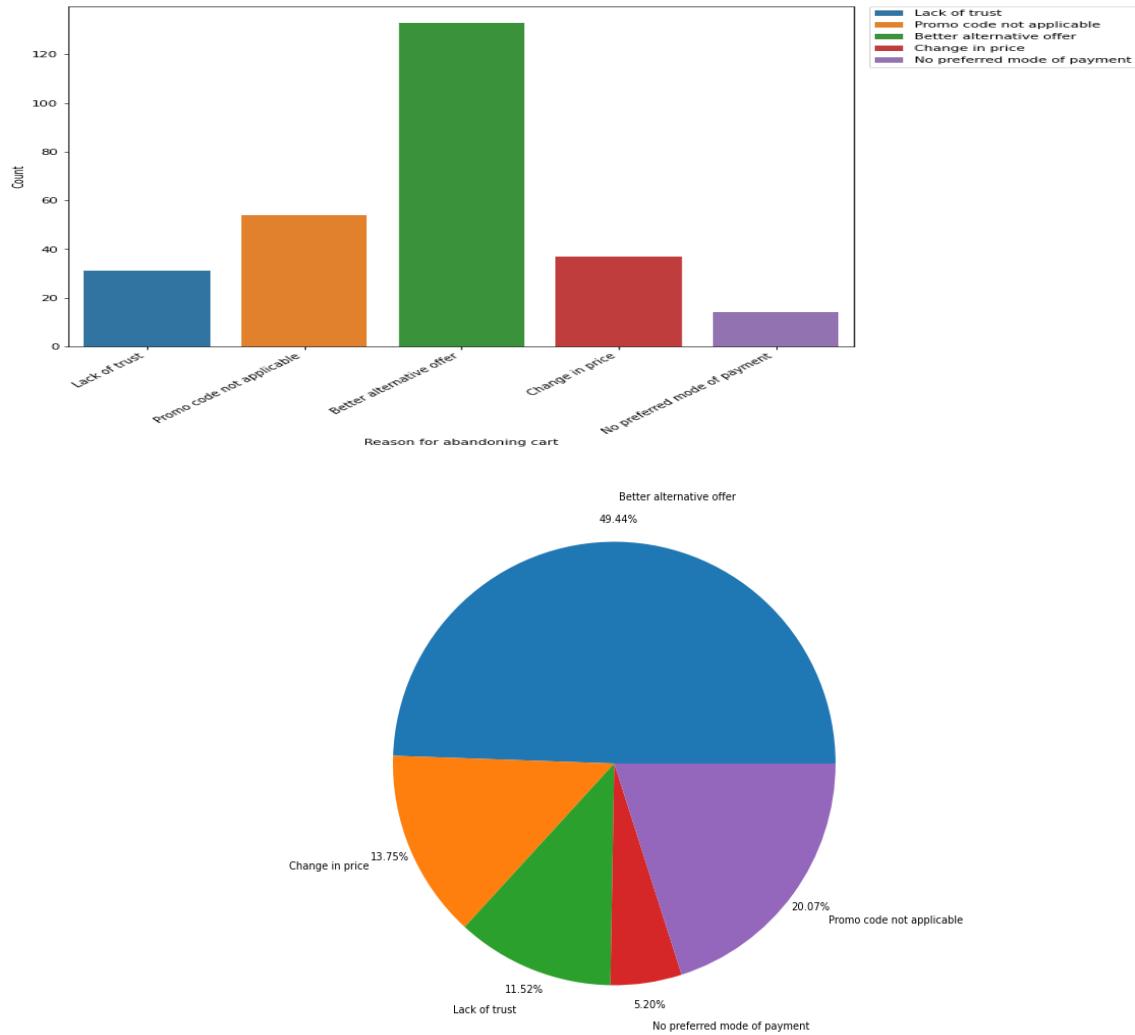
Analysis of data based on frequency of abandoning the cart without purchase



Findings:

1. Customers who abandon the cart sometimes while shopping online is 171 which includes 63.57% of the total customers.
2. Customers who abandon the cart very frequently are least among all customers, which is 15. (5.58% of the total customers).
3. The number of customers who never abandon the cart while shopping online is 48, which occupies 17.84% of the total customers. The number of customers who frequently abandon the cart is 35 which consists of 13.01% of the total customers.

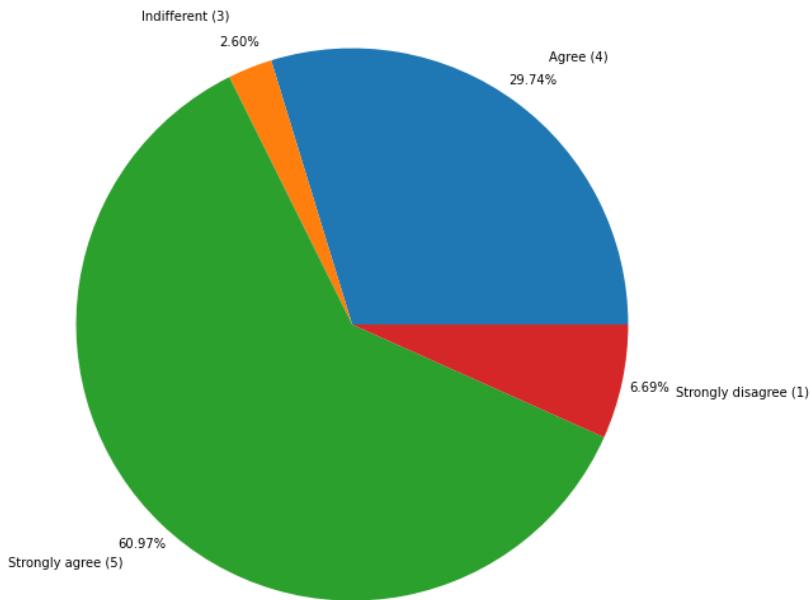
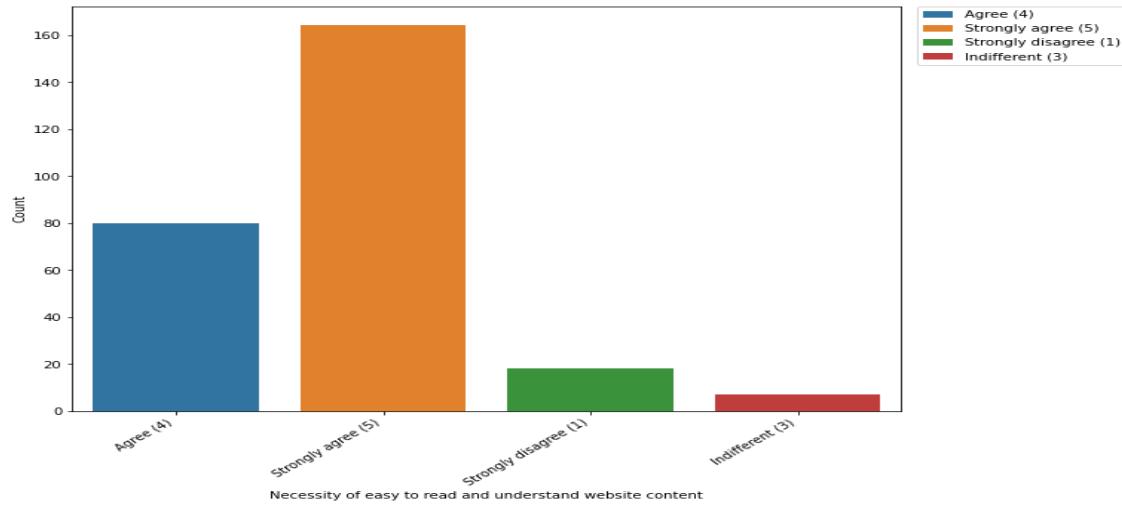
Analysis of data based on reason for abandoning cart



Findings:

1. Most number of customers are abandoning the cart because they found a better alternative offer (133). Only few customers are abandoning the cart because of unavailability of preferred payment mode (14).
2. The number of customers abandoning cart because of promo code not applicable is 54 and number of customers abandoning cart because of change in price is 37, but there are customers who abandon the cart because of lack of trust (31).

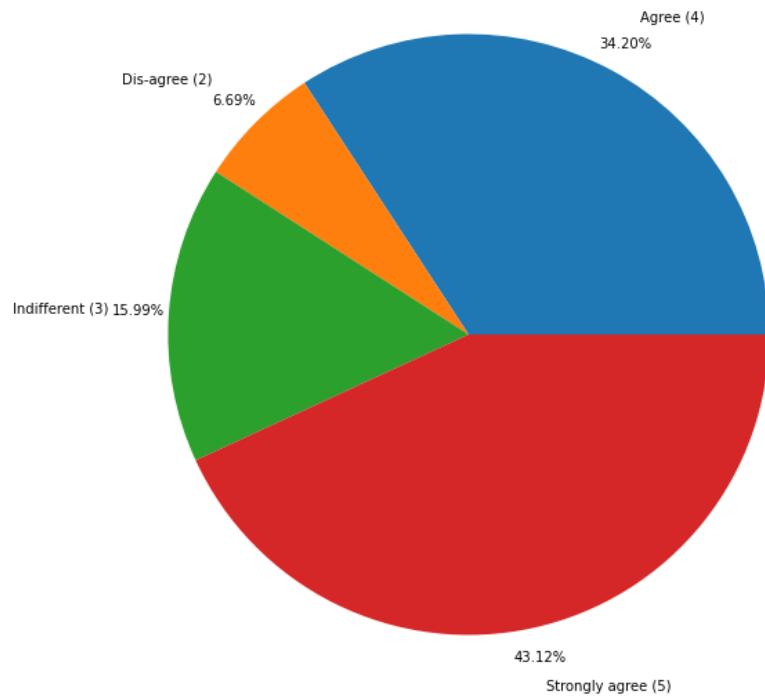
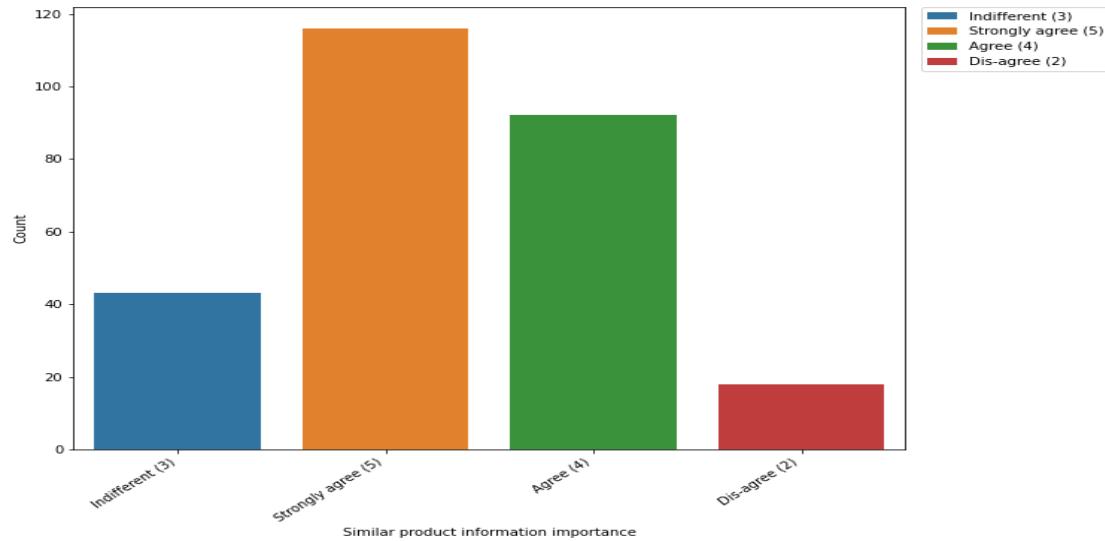
Analysis of data based on necessity of easy to read and understand website content



Findings:

Most number of customers prefer easy to read and understand the website content (164). Least number of customers are having indifferent opinion about the ease to read and understand the website content.

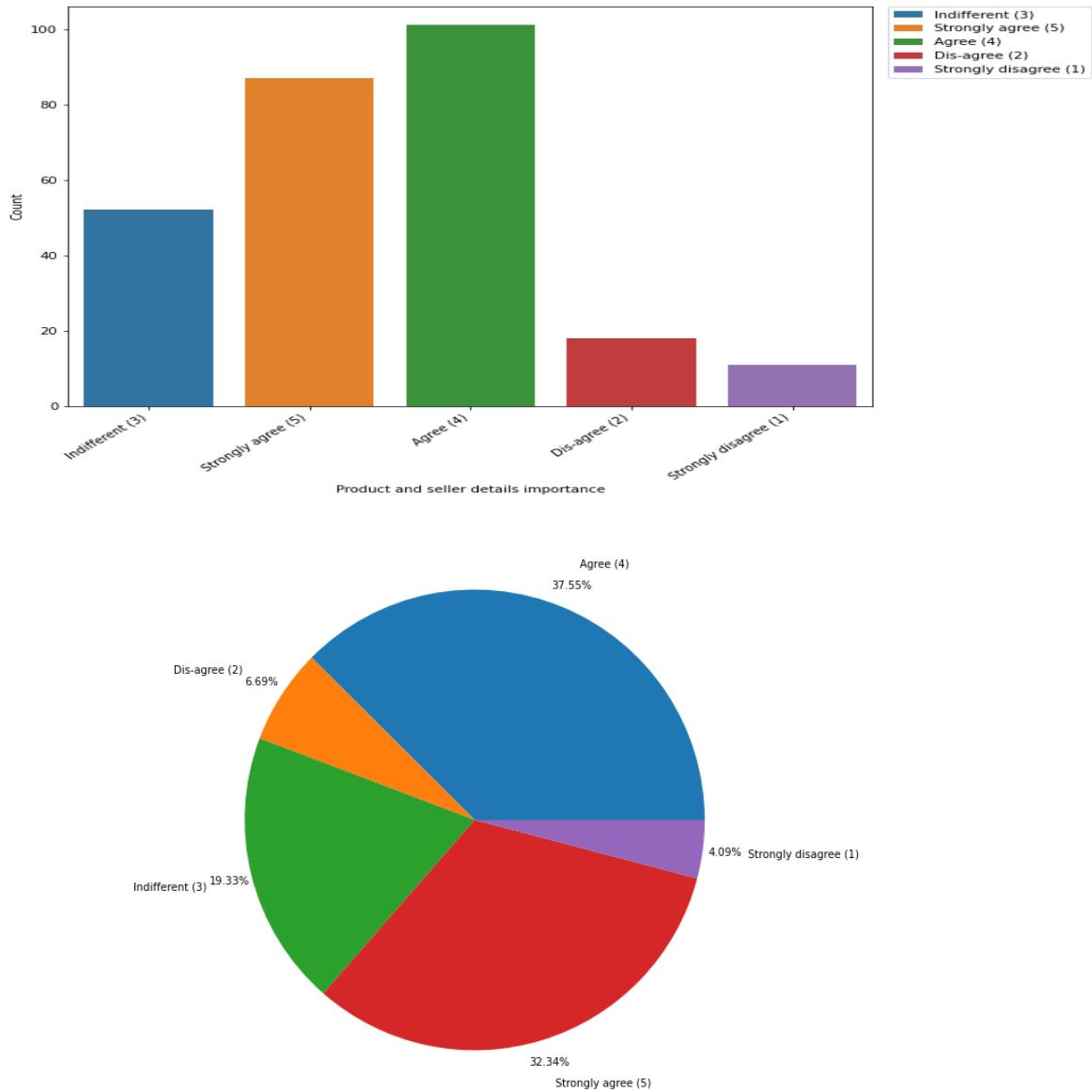
Analysis of data based on similar product information importance



Findings:

Most of the customers prefer to see similar product information on the website (116) while 18 customers didn't prefer to see similar product information on the website.

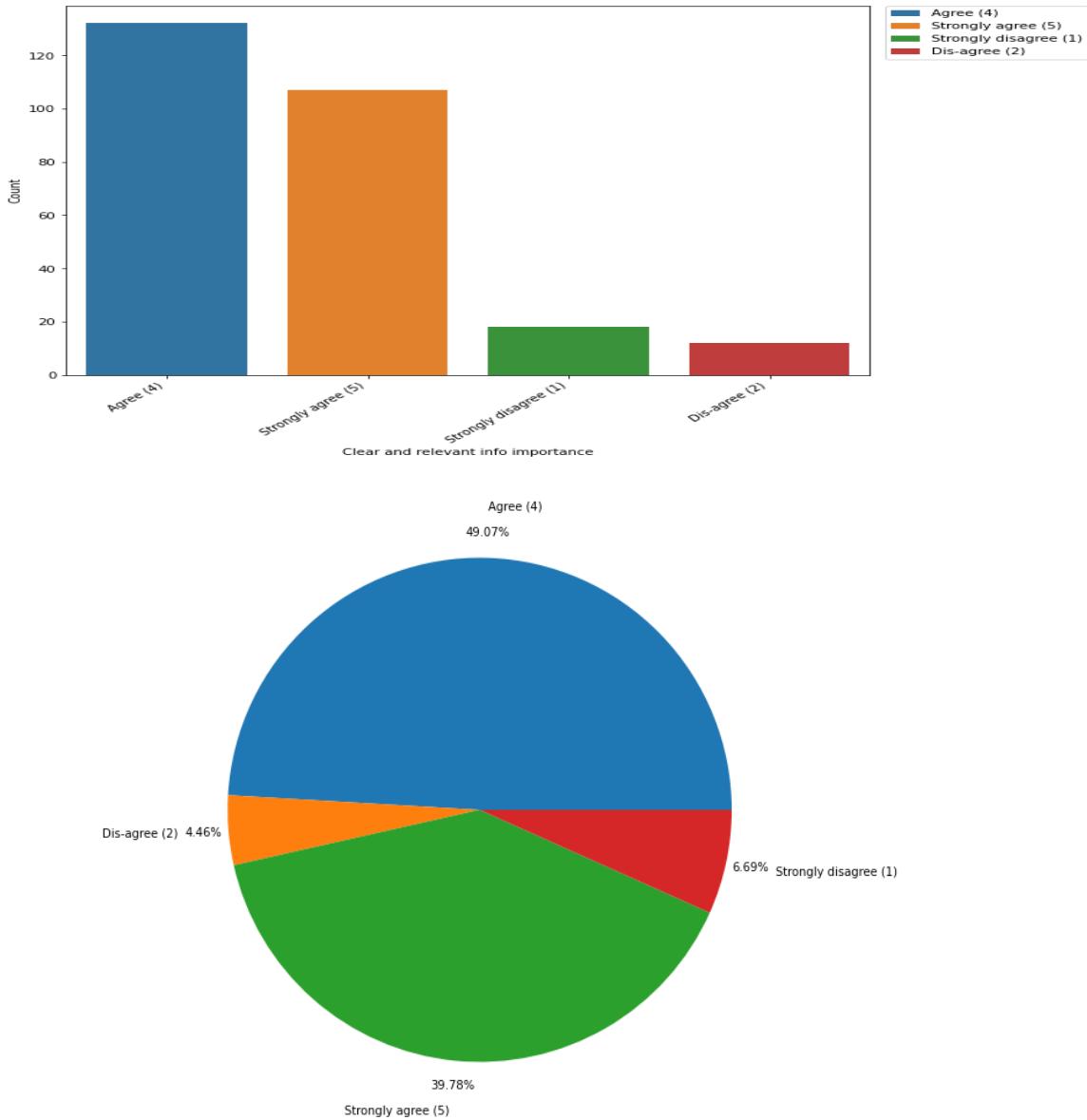
Analysis of data based on product and seller details importance



Findings:

1. The customers who are strongly agreeing to see product and seller details on website is 87. The number of customers who are agreeing (which is the most among the group) to see product and seller details on the website is 101.
2. 29(Dis-agree - 18, Strongly disagree - 11) customers prefer not to see product and seller information on the website.

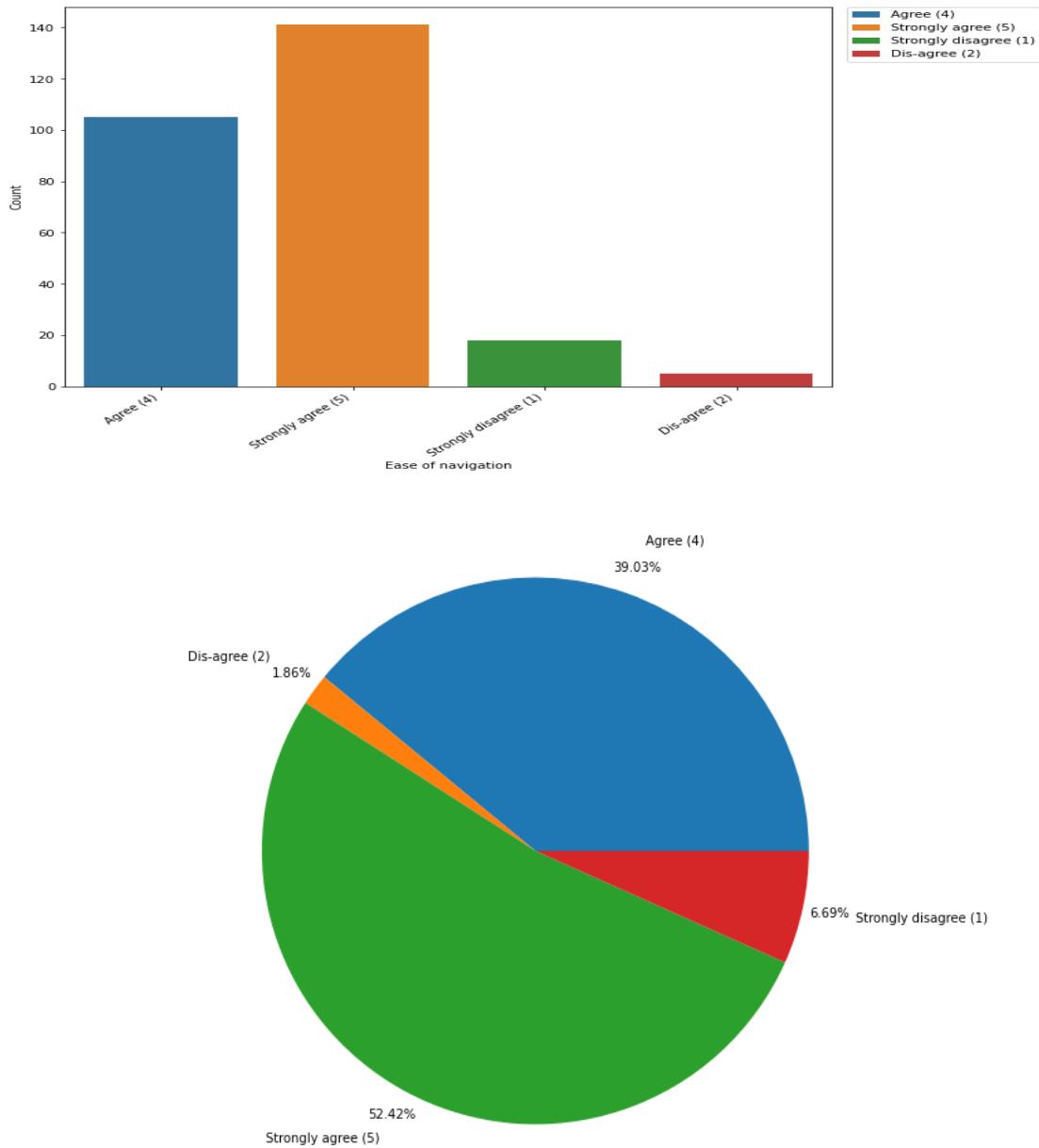
Analysis of data based on clear and relevant info importance



Findings:

1. The number of customers who find it important to show clear and relevant info on the website is 239(Agree - 132, Strongly Agree - 107). This would easily help them to make purchase decision.
2. The number of customers who don't find it relevant to show clear and relevant info on the shopping website is 30(Strongly Disagree - 18, Disagree - 12).

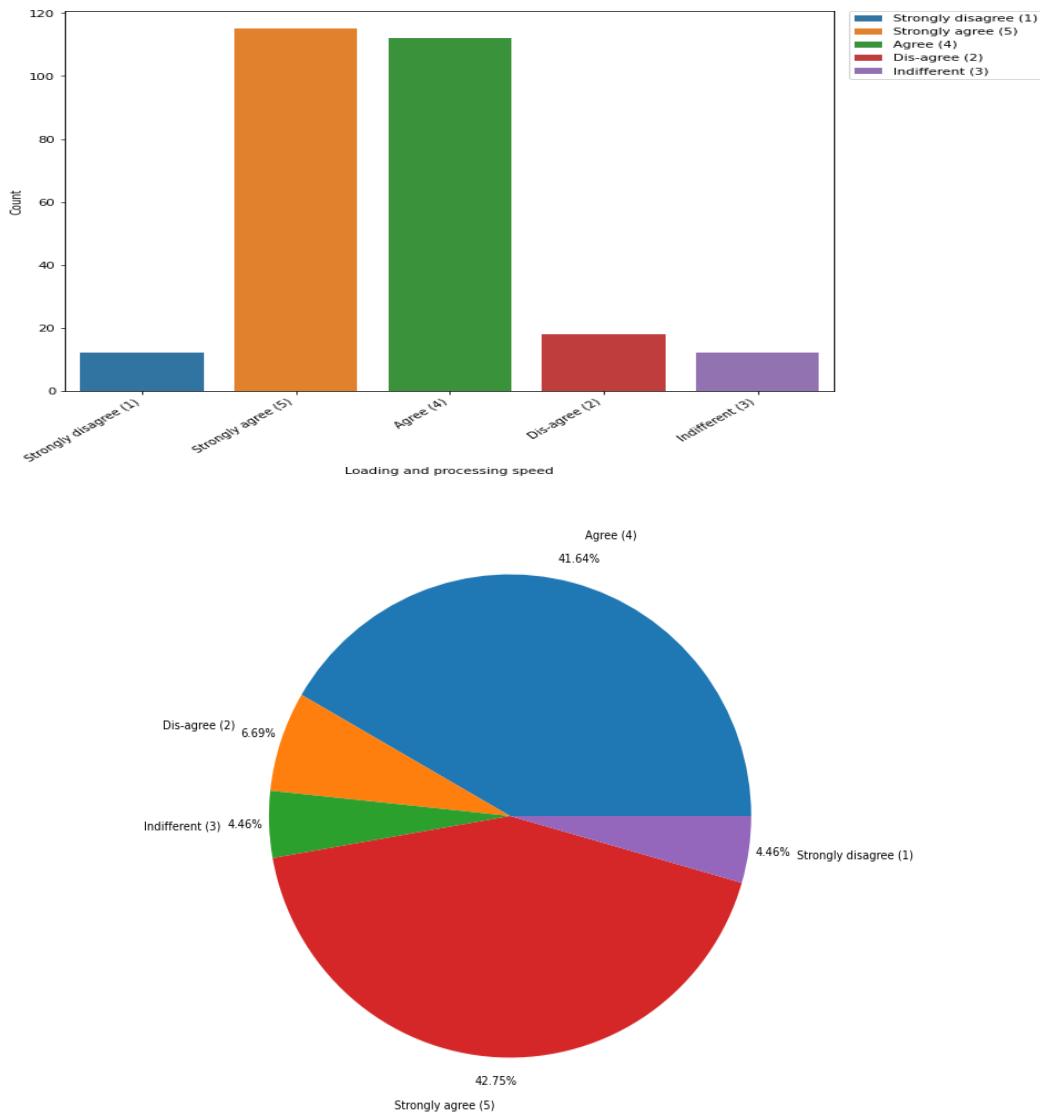
Analysis of data based on ease of navigation



Findings:

1. The number of customers who prefer easy navigations on website is 246(Strongly Agree - 141, Agree - 105). This consists of around 91.43% of the total customers.
2. The number of customers who don't prefer easy navigations on website is 23(Strongly Disagree - 18, Disagree - 5).

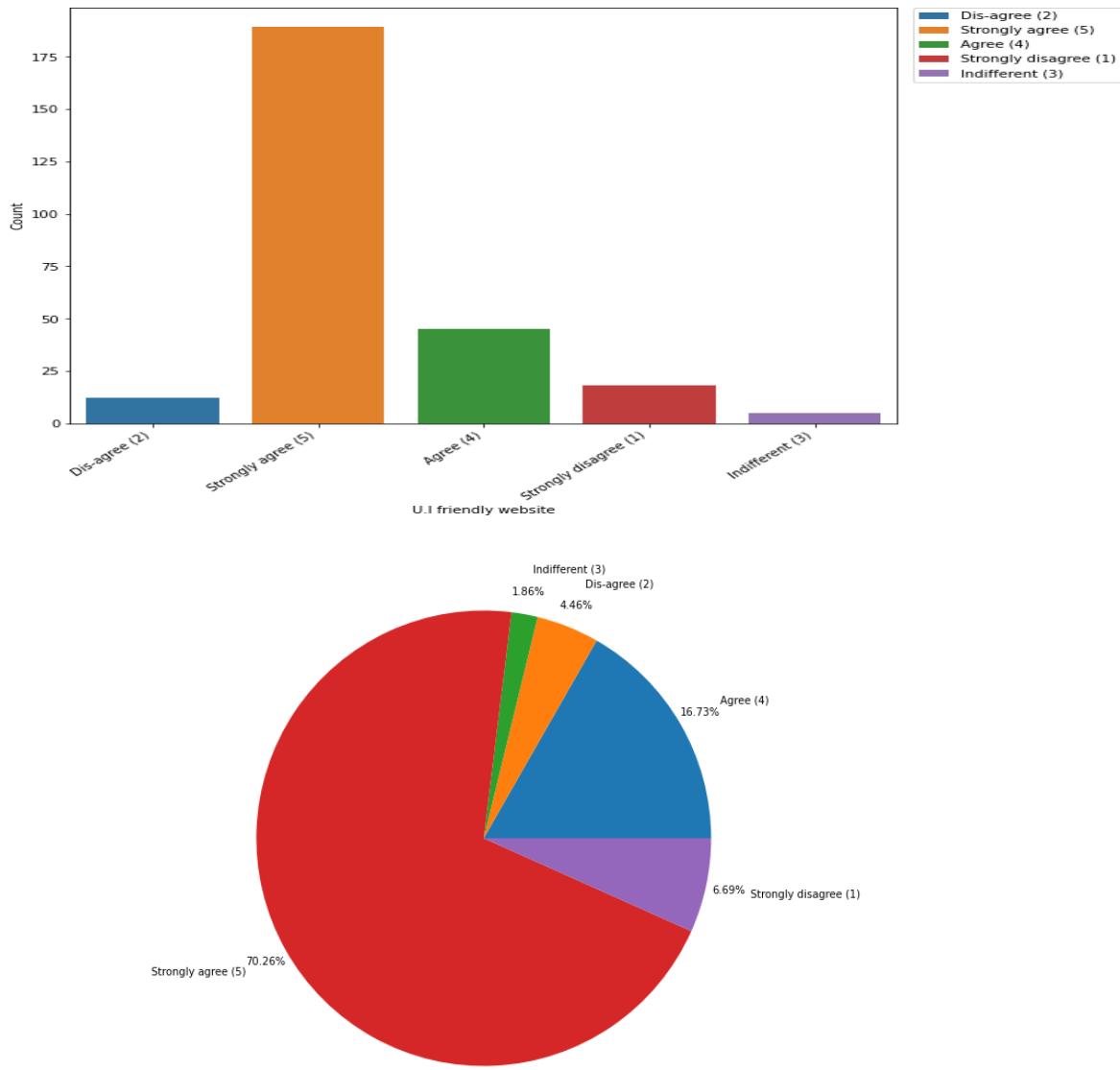
Analysis of data based on loading and processing speed



Findings:

1. Most of the customers prefer fast loading and processing of the webpage contents (Strongly Agree - 115, Agree - 112).
2. The number of customers who don't find it important about the loading and processing speed of the webpage content is 30(Strongly disagree - 12, Disagree - 18). 18 Customers are having indifferent opinion on loading and processing of the webpage content.

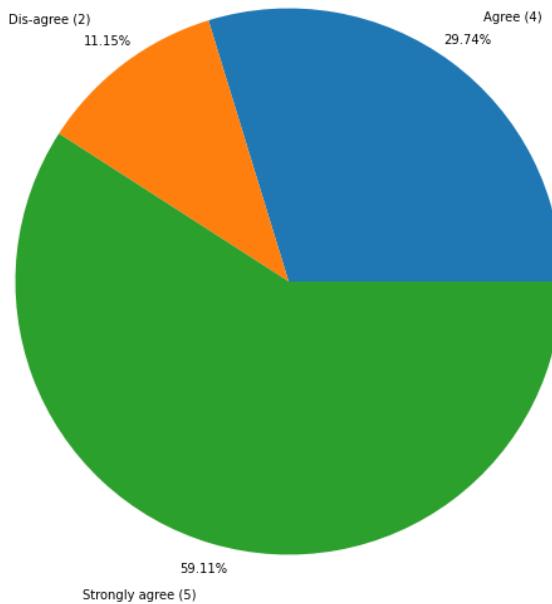
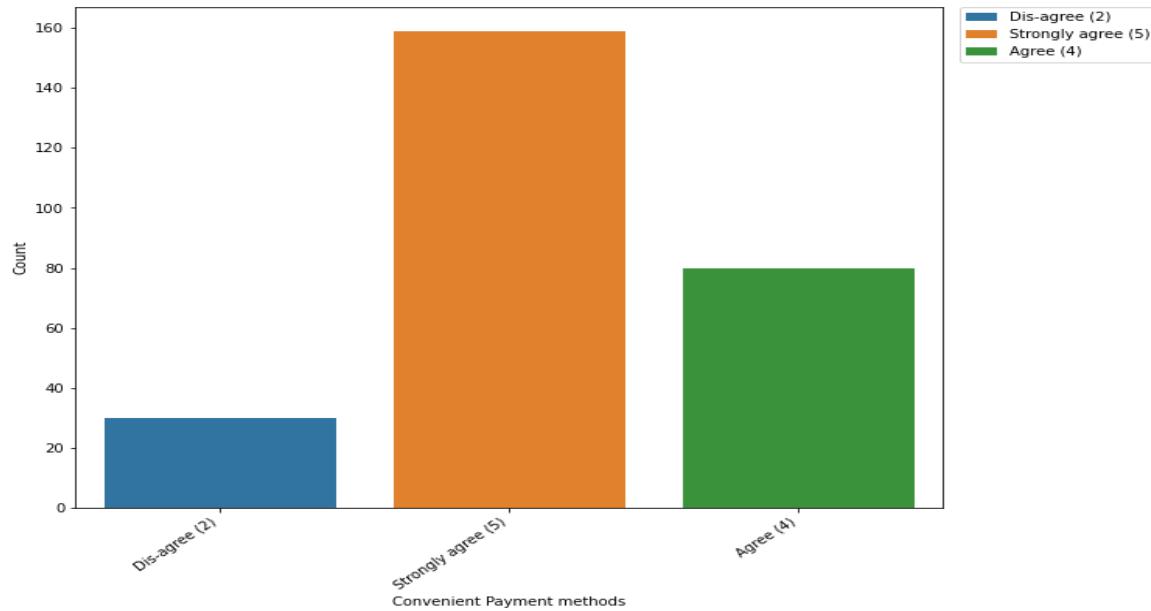
Analysis of data based on U.I friendly website



Findings:

1. Most of the customers prefer user friendly website for online shopping (Strongly Agree - 189, Agree - 45). Only 11.15% of the customers don't give much importance to the website being user-friendly (Disagree - 12, Strongly disagree - 18).
2. 5 customers are having indifferent opinion regarding the website being user-friendly cause it may differ according to various factors like, purpose, stage of purchase, website type etc.

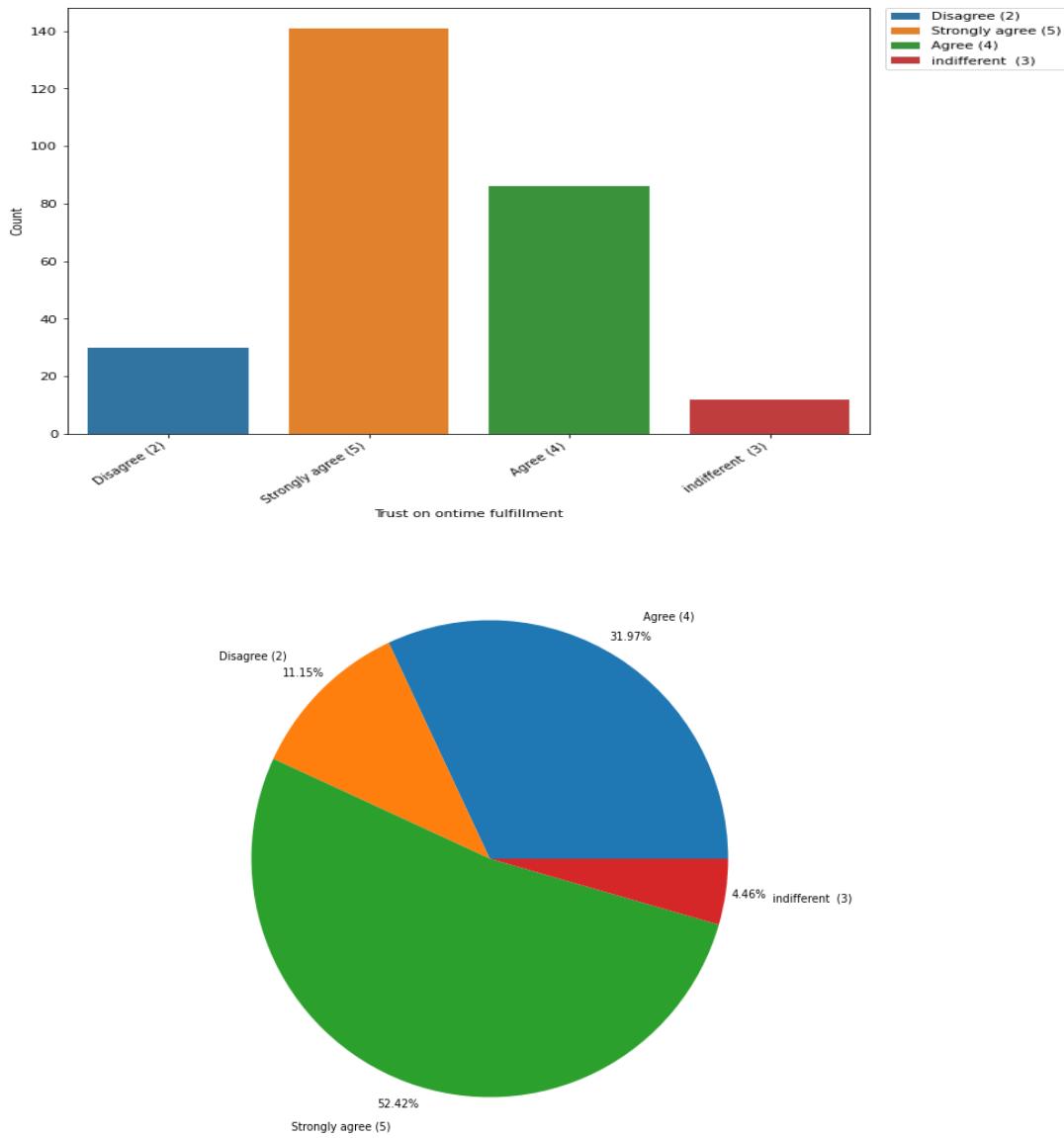
Analysis of data based on convenient payment methods



Findings:

1. 88.85% of the total customers prefer convenient payment method for shopping online from a website (Strongly Agree - 159, Agree - 80).
2. Only 11.15% of the population don't have preference for convenient payment method (Dis-agree - 30).

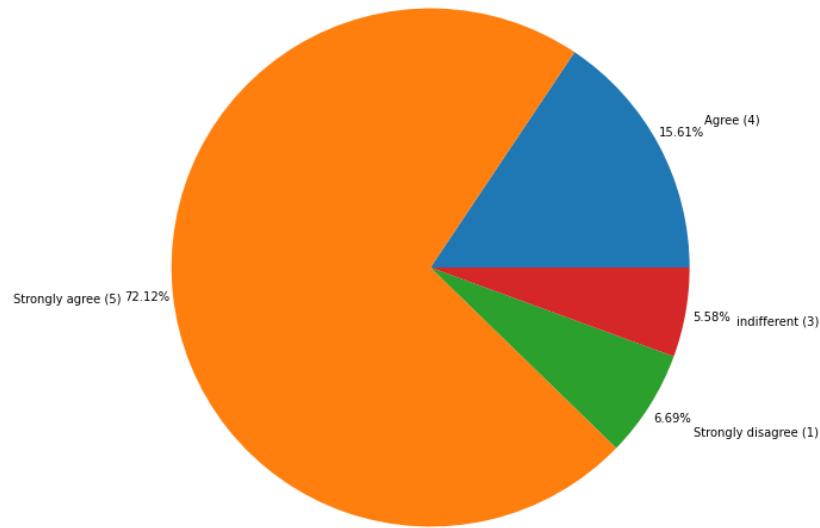
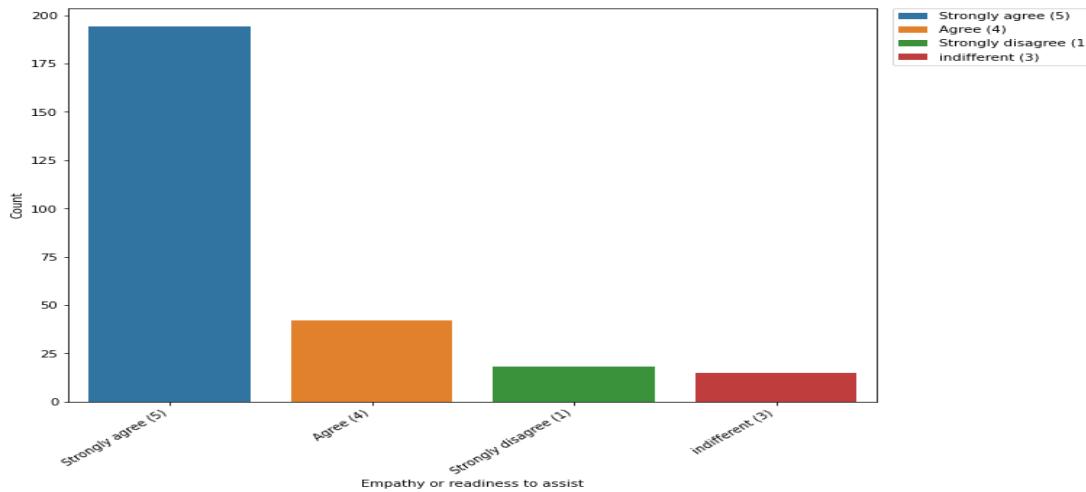
Analysis of data based on trust on ontine fulfillment



Findings:

1. Most of the customers like to have on time fulfillment for online shopping which consists of 84.39% of the total customers (Strongly Agree - 141, Agree - 86).
2. 11.15% of the customers don't give much importance to on time fulfillment (Disagree - 30).
3. 4.46% of the customers are having indifferent opinion on time fulfillment for online shopping.

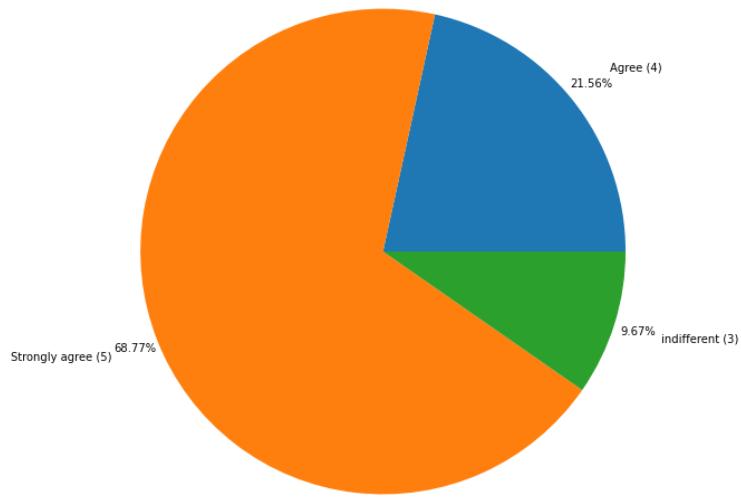
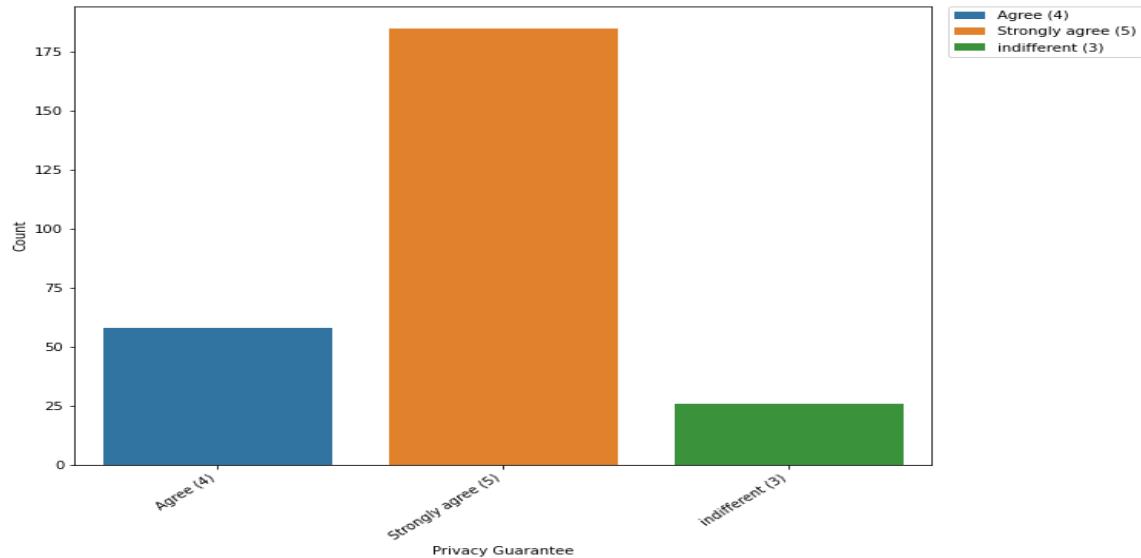
Analysis of data based on empathy or readiness to assist



Findings:

1. Customers who prefer online stores on their empathy or readiness to assist consists of 87.73% of total customers (Strongly Agree - 194, Agree - 42).
2. Only 6.69% of the customers don't give much importance to the assisting mentality of the service or support team of online store (Strongly Disagree - 18). 15 customers are having indifferent opinions since it may differ according to their purpose of shopping, things they shop online etc.

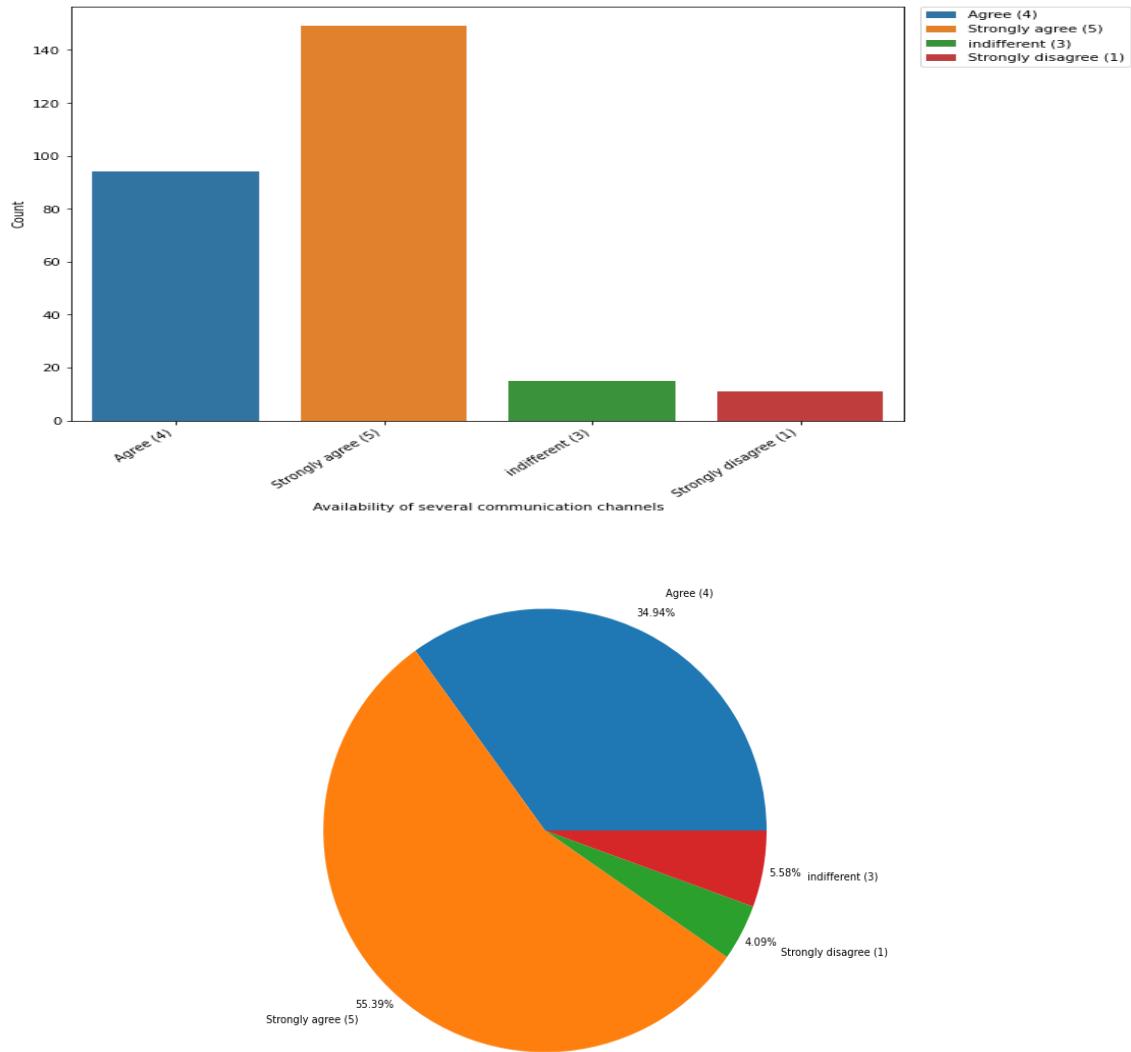
Analysis of data based on privacy guarantee



Findings:

1. 90.33% of the customers prefer guaranteed privacy on online shopping websites. (Strongly Agree - 185, Agree - 58).
2. Only 9.67% of the customers are having indifference opinion on privacy guarantee provided by the online stores.

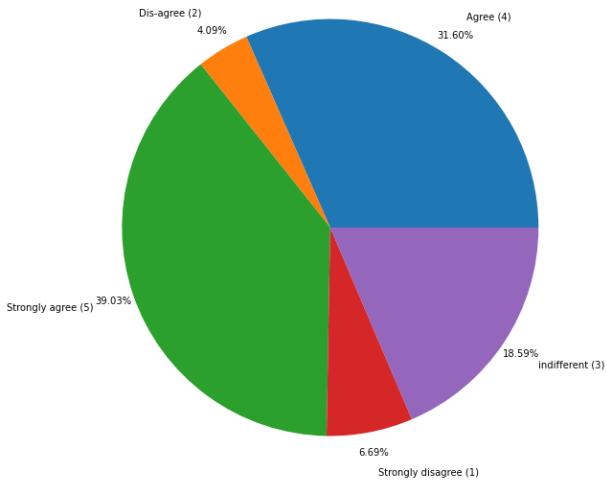
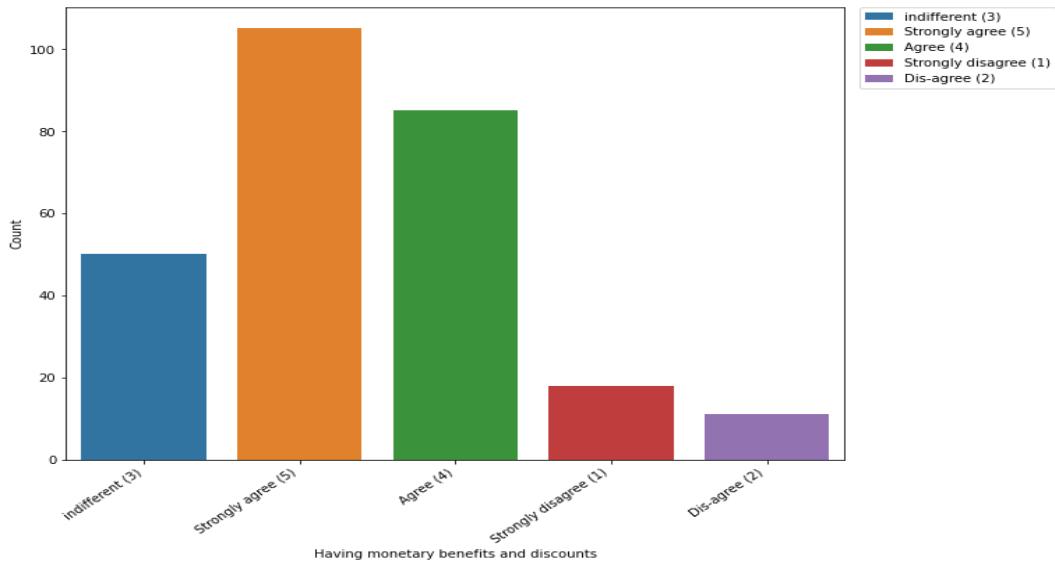
Analysis of data based on availability of several communication channels



Findings:

1. Most of the customers prefer multiple communication channel for an online store which consists of 90.33% of total customers (Strongly Agree - 149, Agree - 94).
2. Only 4.09% of the customers don't give much importance to the availability of multiple channels of communication for an online store (Strongly Disagree - 11). The number of customers having indifferent opinion about the availability of multiple channels of communication is 15.

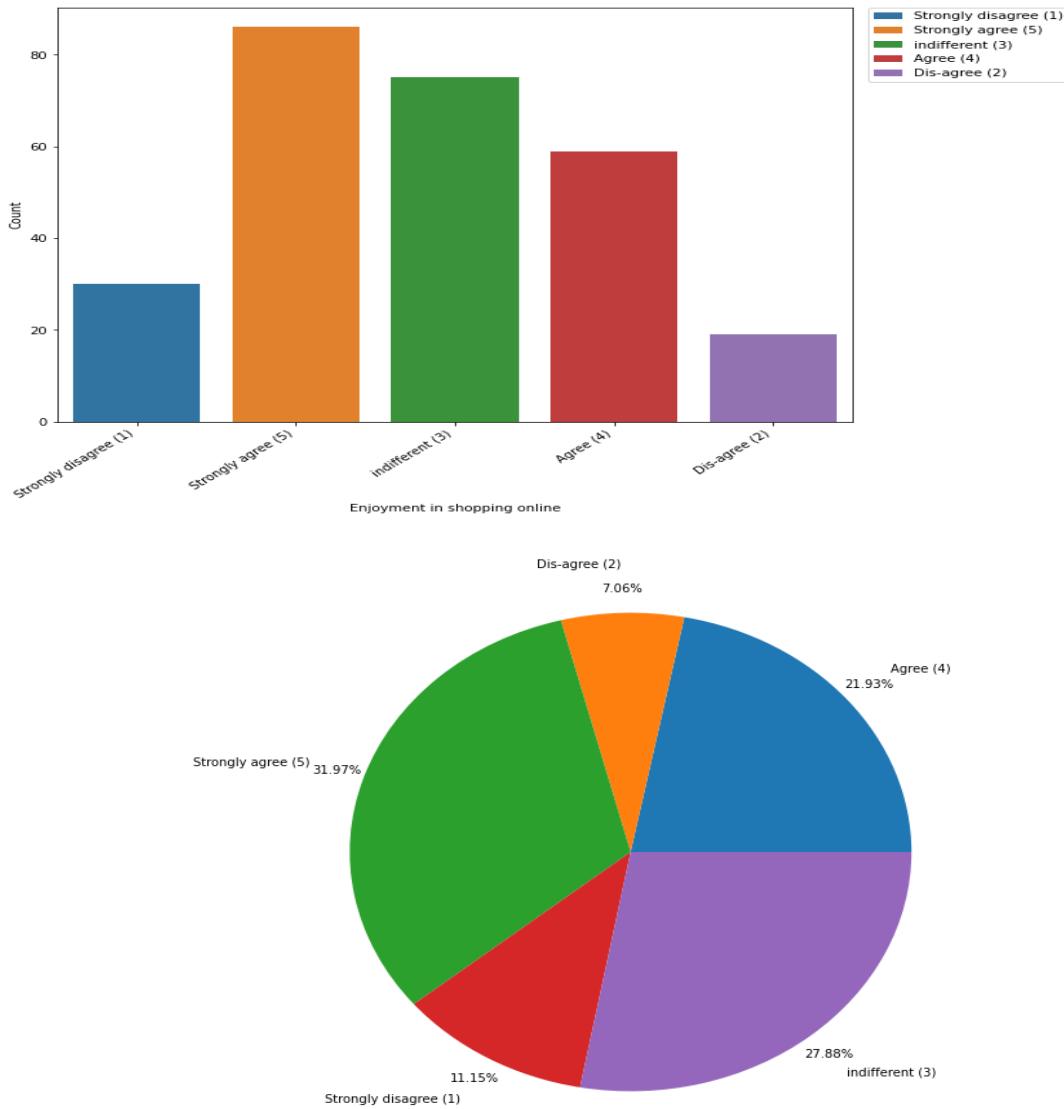
Analysis of data based on having monetary benefits and discounts



Findings:

1. 70.63% of the customers like to have monetary benefits and discounts when then shop online from an online store (Strongly Agree - 105, Agree - 85).
2. 10.78% of the customers don't give much importance to the monetary benefits and discounts provided by the online stores while shopping online. (Strongly Disagree - 18, Disagree - 11). 50 Customers are having indifferent opinion on online stores providing monetary benefits and discounts during online shopping.

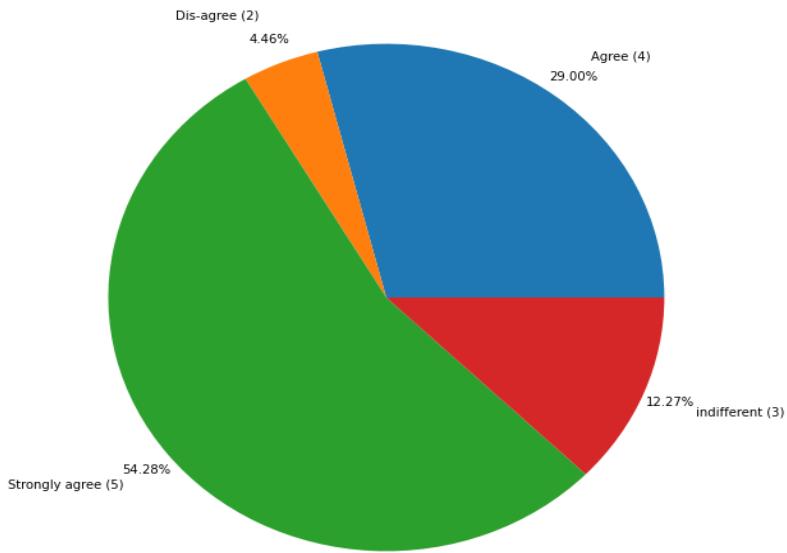
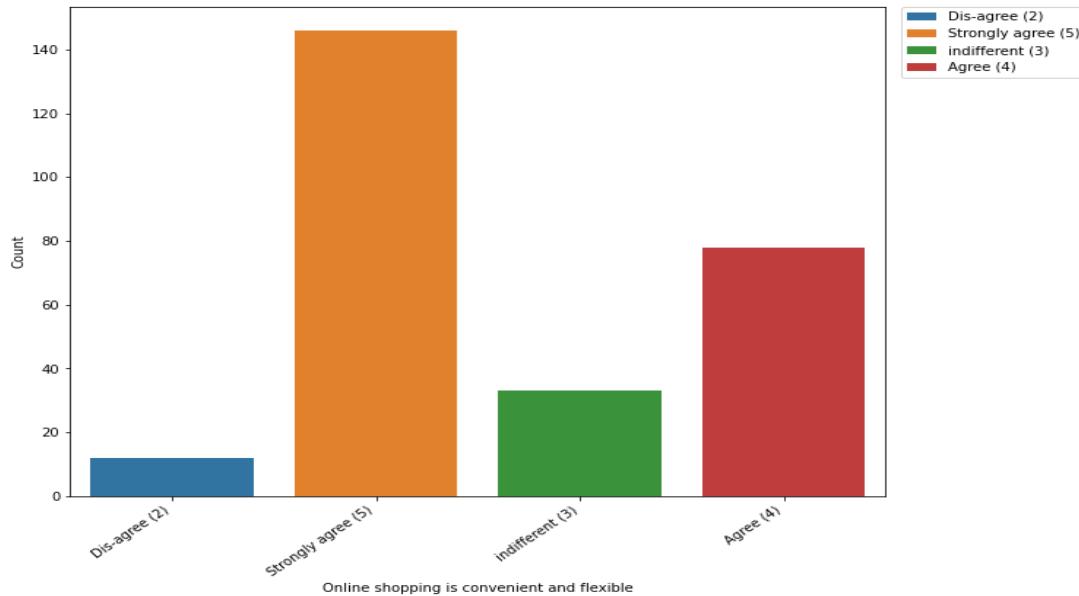
Analysis of data based on enjoyment in shopping online



Findings:

1. 86 customers are strongly agreeing to online stores should give much importance to enjoyment of a customer during online shopping. 59 Customers are just agreeing to this opinion.
2. 75 customers are having indifferent opinion about the importance of enjoyment in online shopping from an online store.
3. 18.21% of the customers are not giving much importance to the enjoyment during online shopping (Strongly Disagree - 30, Disagree - 19).

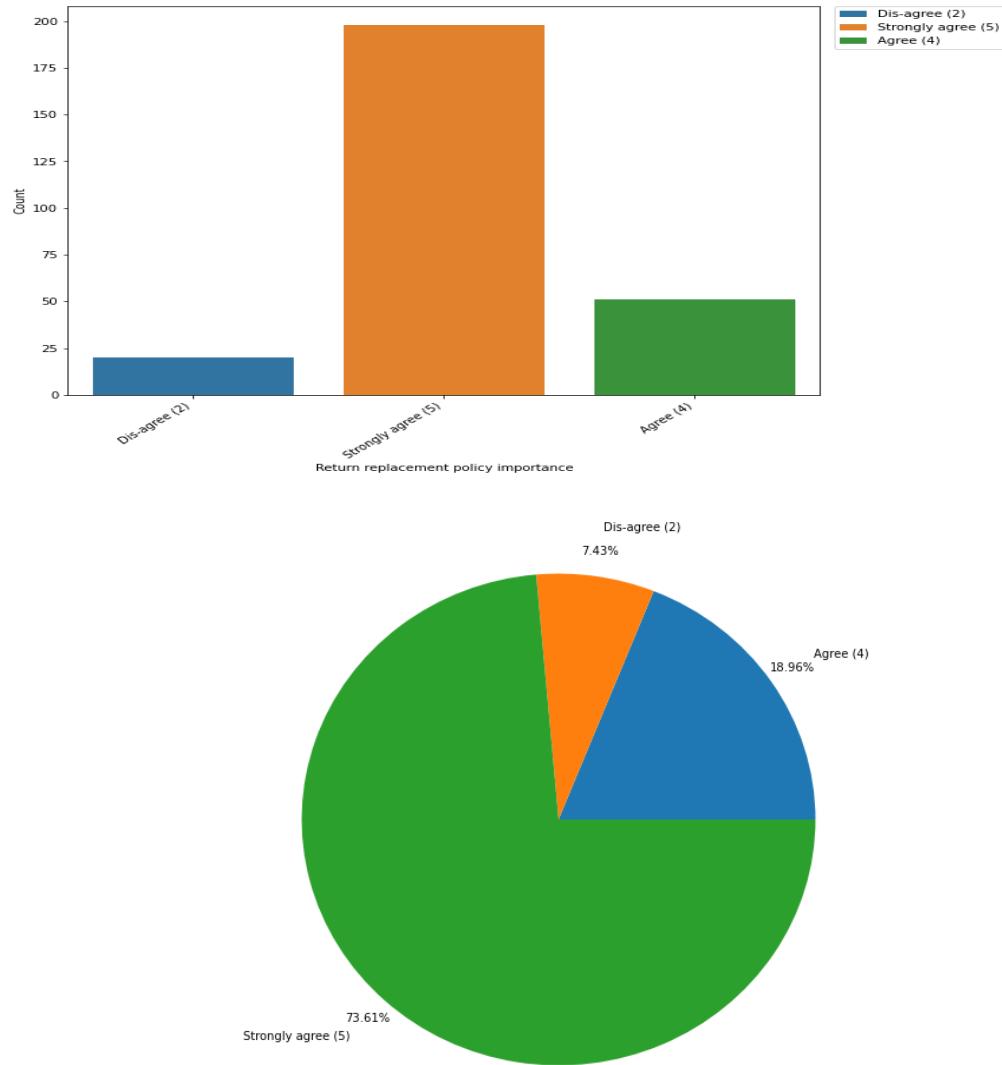
Analysis of data based on convenient and flexible



Findings:

1. 83.28% of the customers consider online shopping is convenient and flexible (Strongly Agree - 146, Agree - 78).
2. Only 4.46% of the customers is not agreeing to the opinion of online shpping is convenient and flexible (Disagree - 12). 12.27% of customers are having indifferent opinion (33 customers).

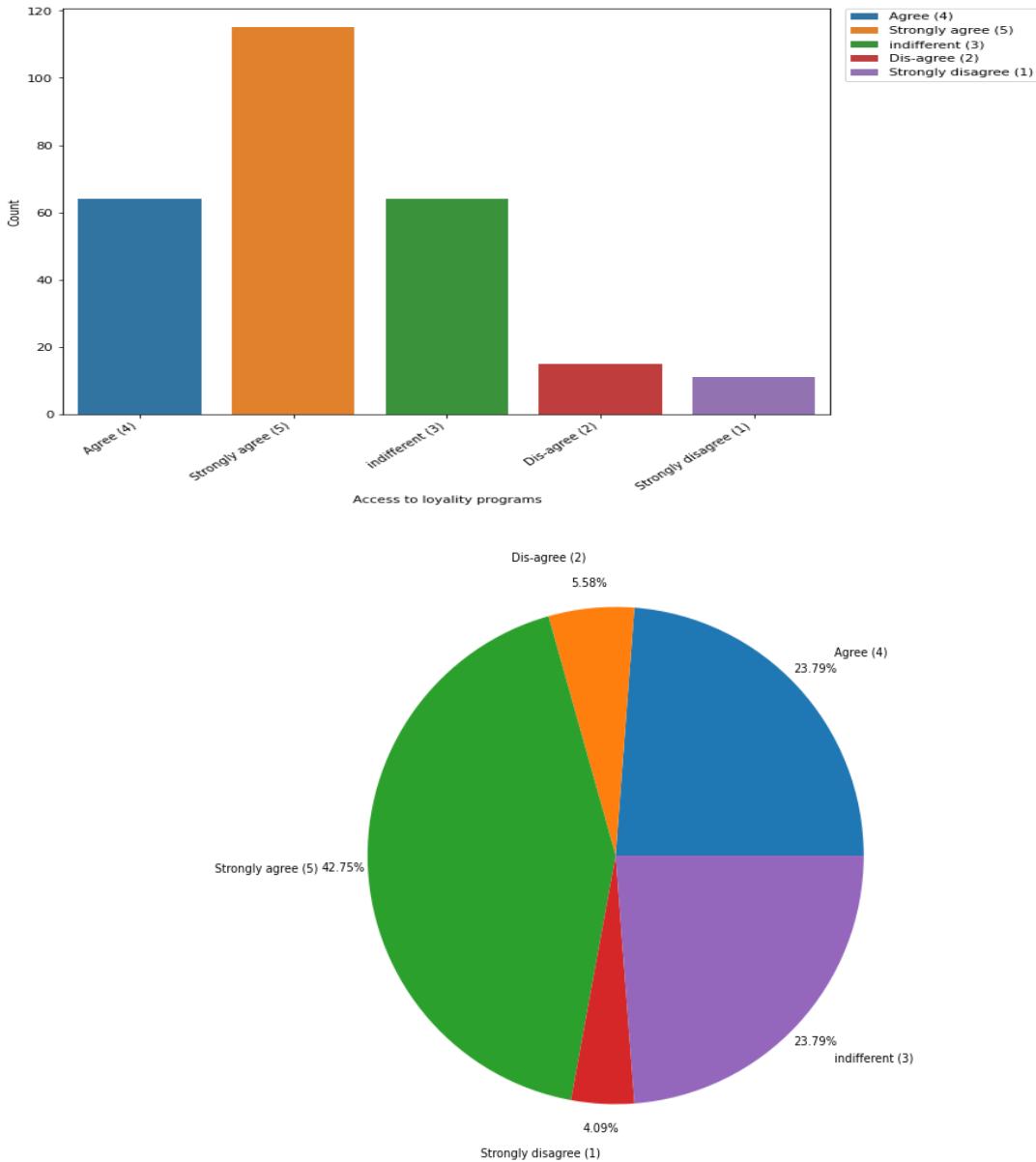
Analysis of data based on return replacement policy importance



Findings:

1. 92.57% of customers give much importance to return and replacement policy of an online store (Strongly Agree - 198, Agree - 51). Because the products are not analyzed by the physical appearances and quality and products may not be the same as on images when they arrive.
2. 7.43% of the customers are not giving much importance to return and replacement policy of an online store while shopping online. (Disagree - 20).

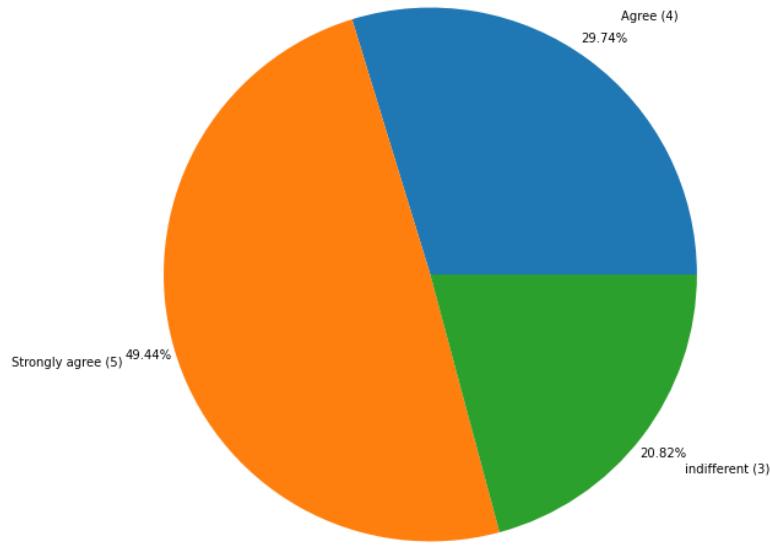
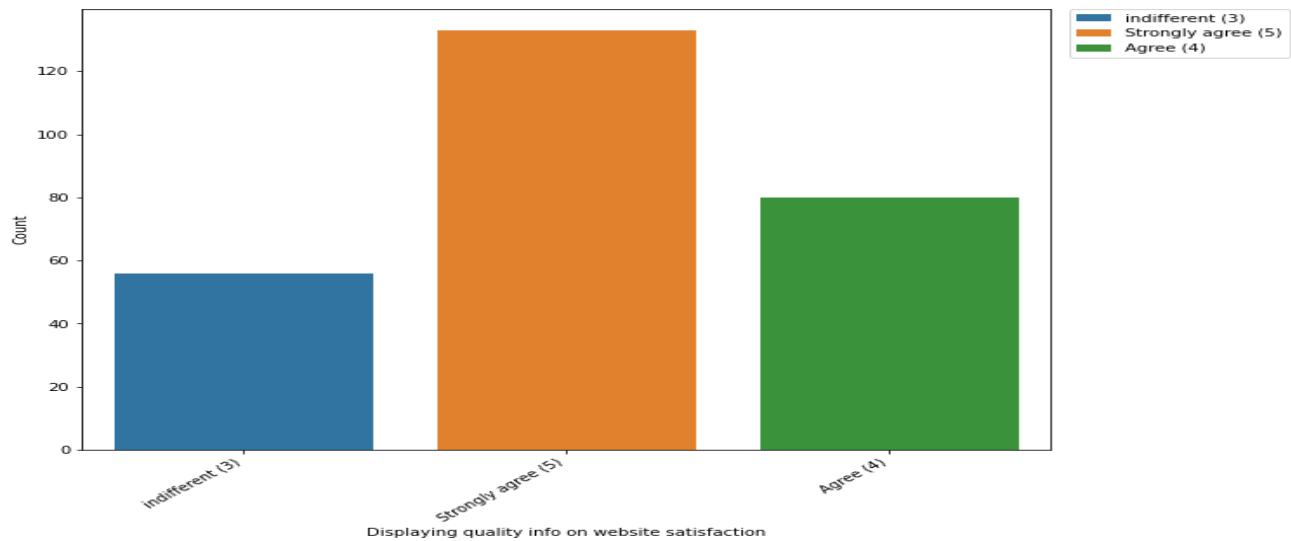
Analysis of data based on access to loyalty programs



Findings:

1. 66.54% of the customers would like to have access to loyalty programs when they shop from an online store. (Strongly Agree - 115, Agree - 64).
2. 9.67% of the customers don't give much importance to having access to loyalty programs when they shop from an online store. (Strongly Disagree - 11, Disagree - 15). 64 customers having indifferent opinion on having access to loyalty programs on online shopping.

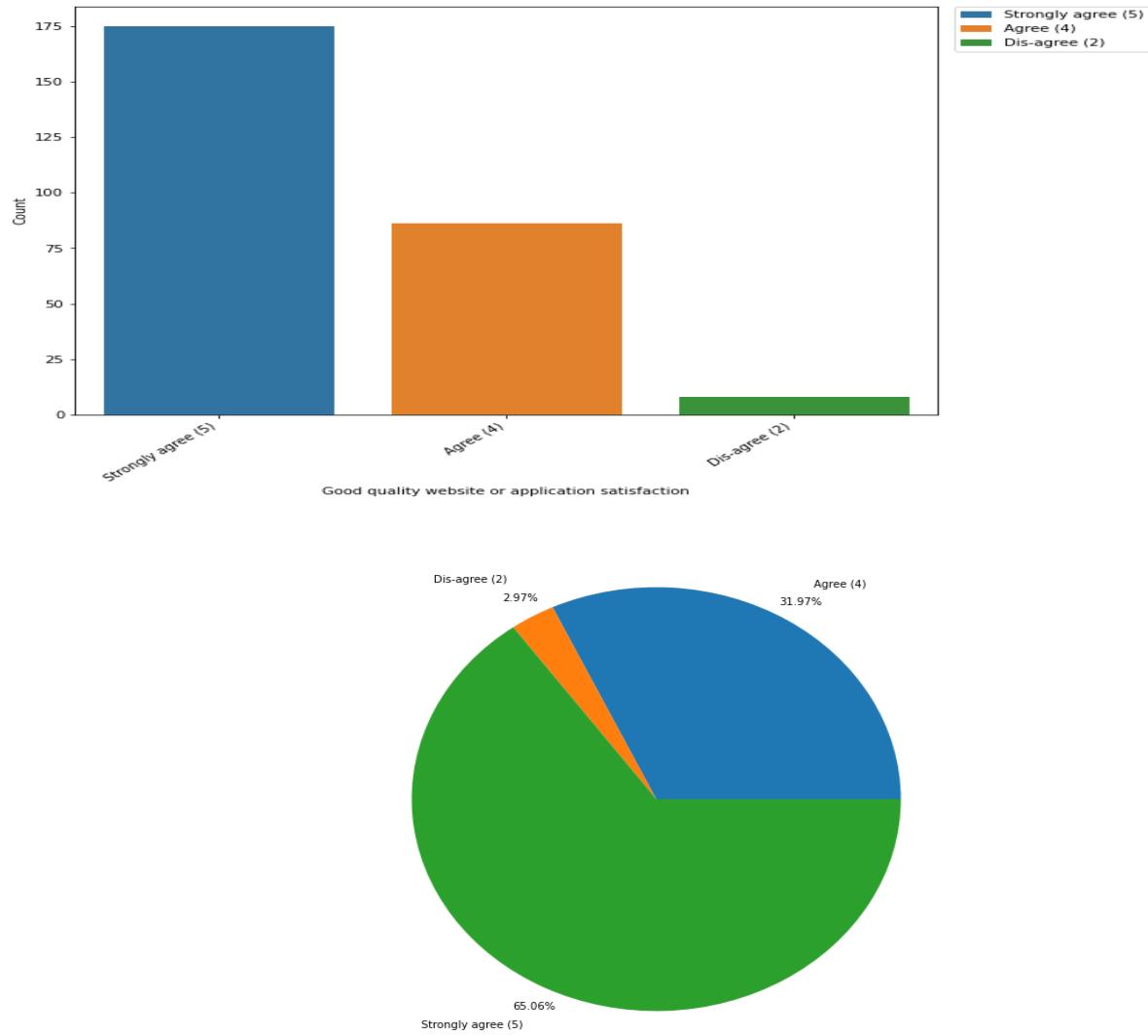
Analysis of data based on displaying quality info on website satisfaction



Findings:

1. 79.18% of customers are being satisfied if quality information is provided on the website (Strongly Agree - 133, Agree - 80).
2. 20.82% of customers are having indifferent opinion on satisfaction on the quality information provided on the website for online shopping (56 customers).

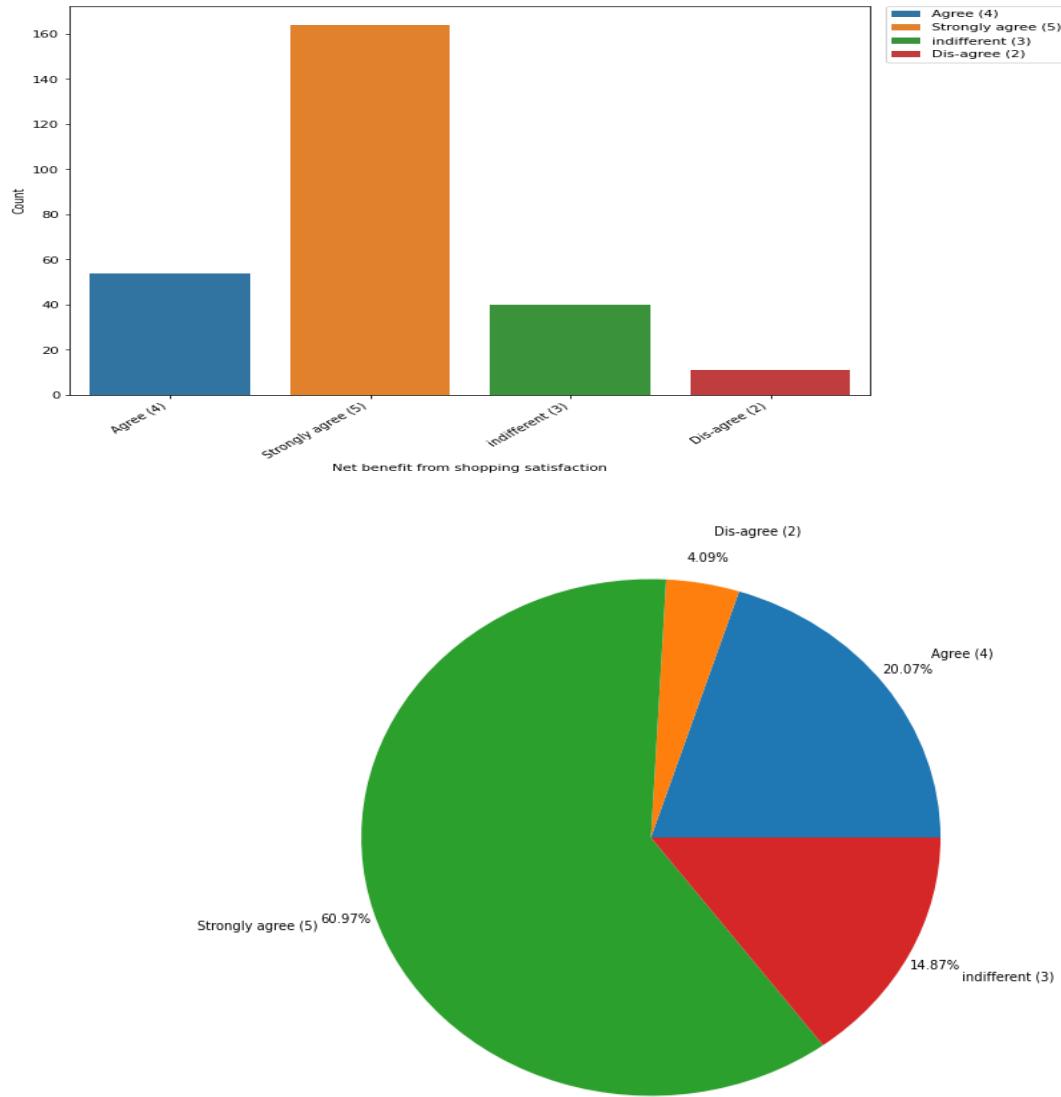
Analysis of data based on good quality website or application satisfaction



Findings:

1. 97.03% of customers are satisfied if the online store is having quality website or application (Strongly Agree - 175, Agree - 86).
2. Only 8 customers are not much satisfied if the online store has quality website or application.

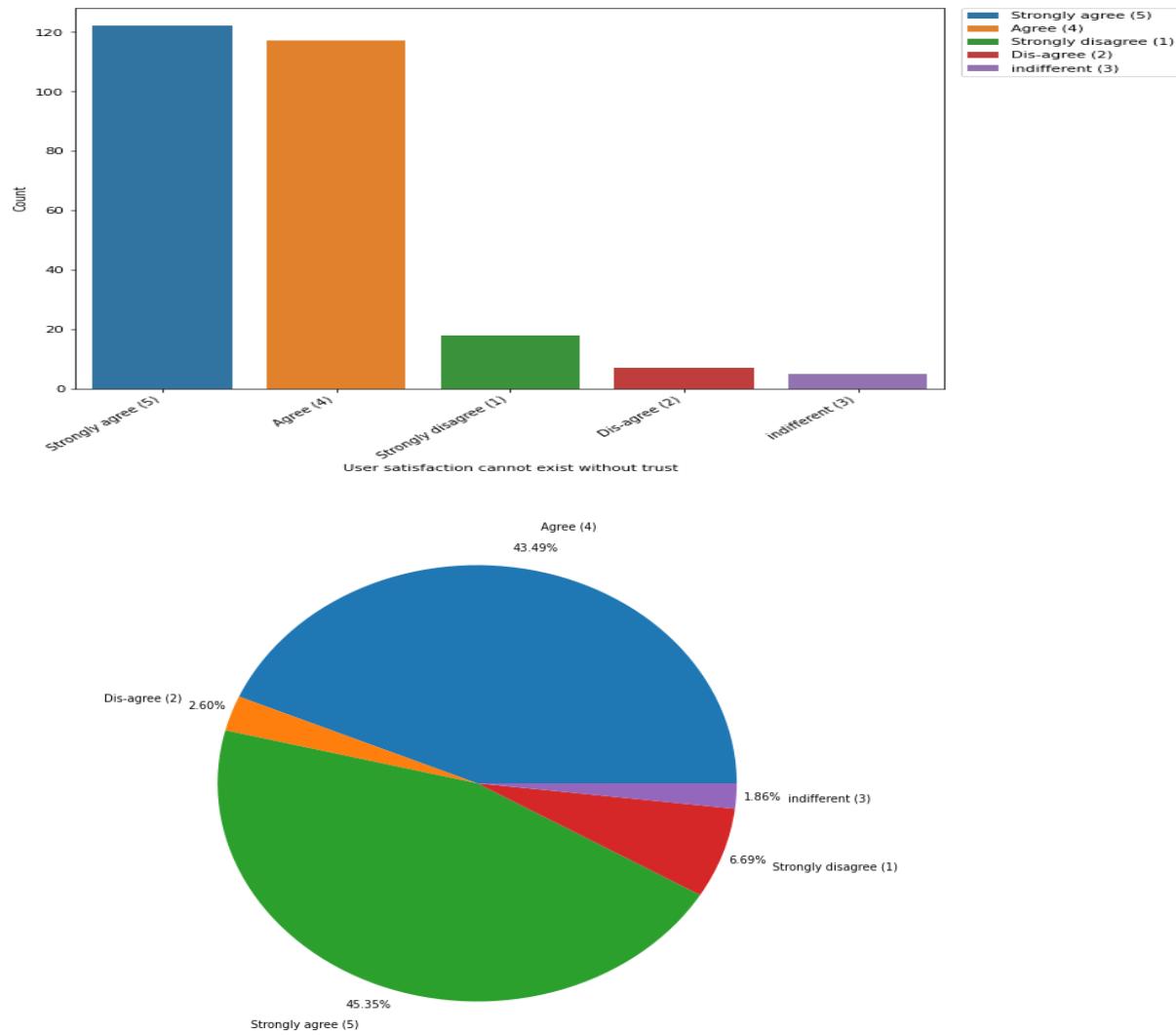
Analysis of data based on net benefit from shopping satisfaction



Findings:

1. 81.04% of the customers are being satisfied from the net benefits they are getting from the online shopping (Strongly Agree - 164, Agree - 54).
2. Only 4.09% of the customers are disagreeing with the opinion on satisfaction based on the net benefits from online shopping (11 customers). 14.87% of the customers are having indifferent opinion on being satisfied from the net benefits on online shopping (40 Customers).

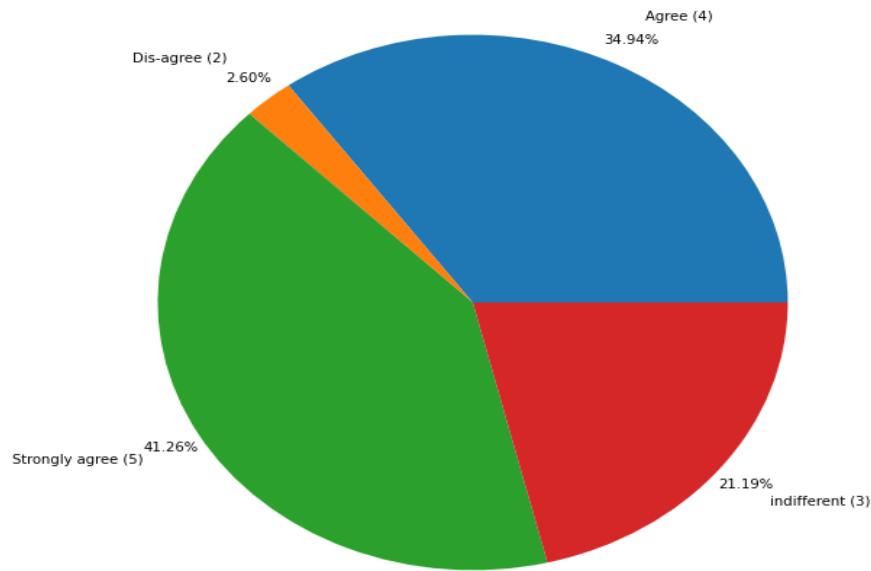
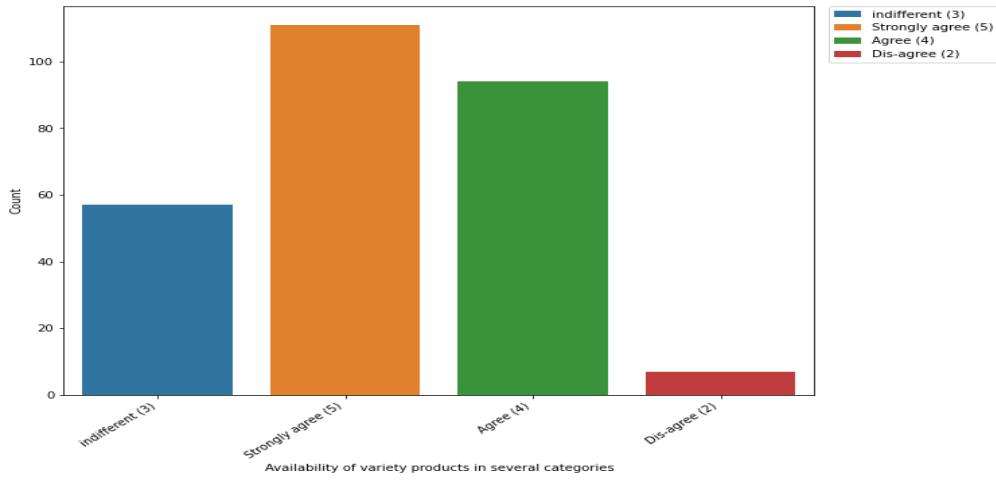
Analysis of data based on user satisfaction cannot exist without trust



Findings:

1. 88.84% of the customers believe that user satisfaction cannot exist without trust during online shopping. (Strongly Agree - 122, Agree - 117).
2. 9.29% of customers are not agreeing to the opinion, 'user satisfaction cannot exist without trust'.(Strongly Disagree - 18, Disagree - 7).
3. 5 Customers are having indifferent opinion on user satisfaction cannot exist without trust.

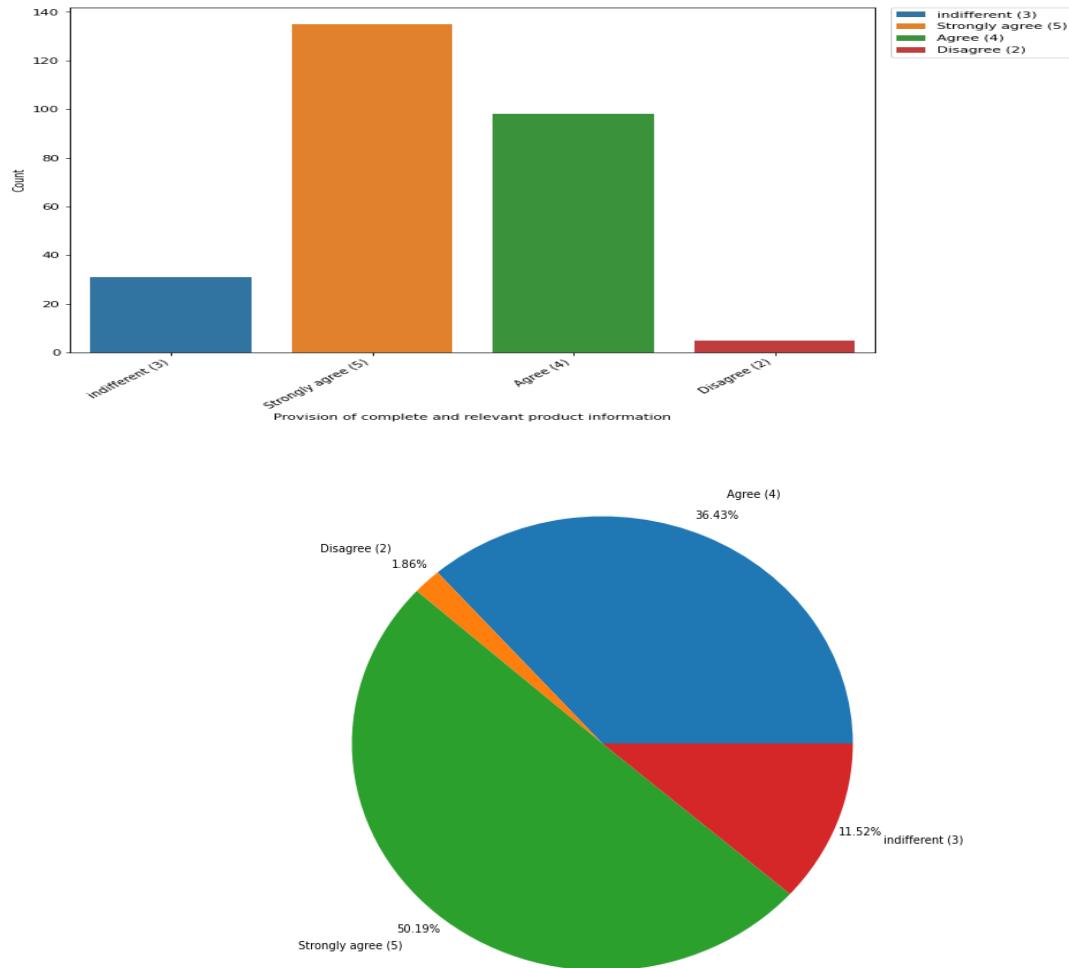
Analysis of data based on availability of variety products in several categories



Findings:

1. Most of the customers prefer availability of variety products in several categories (Strongly Agree - 111, Agree - 94).
2. 7 customers disagreeing with the availability of variety products in several categories on online stores.

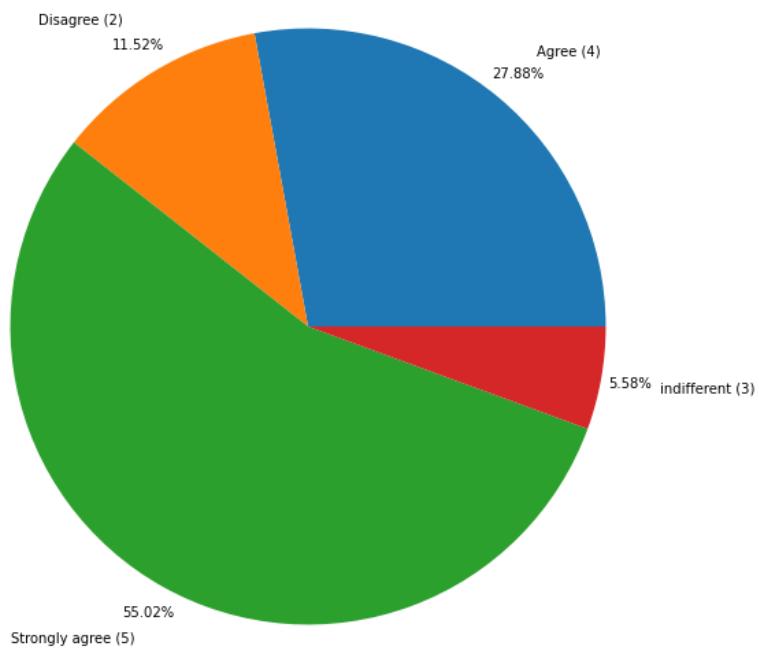
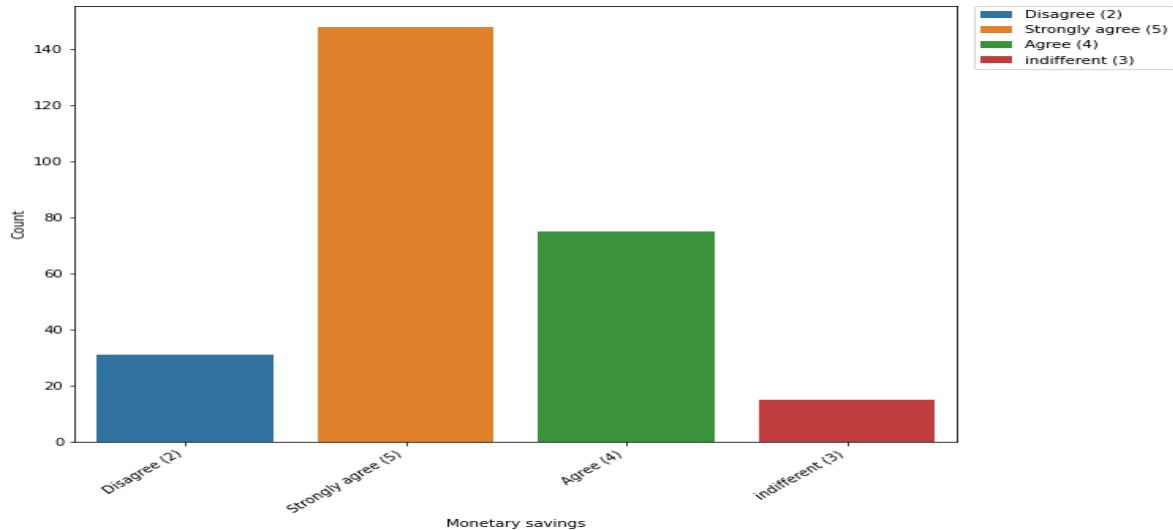
Analysis of data based on provision of complete and relevant product information



Findings:

1. 86.62% of customers would like to have provisions to access complete and relevant information of product on online store websites/applications.(Strongly Agree - 135, Agree - 98).
2. 5 customers don't give much importance to online stores having provisions to complete and relevant information on products on their website/applications.
11.52% of customers are having indifference opinion on online stores having provisions to complete and relevant information on products on their websites/applications.

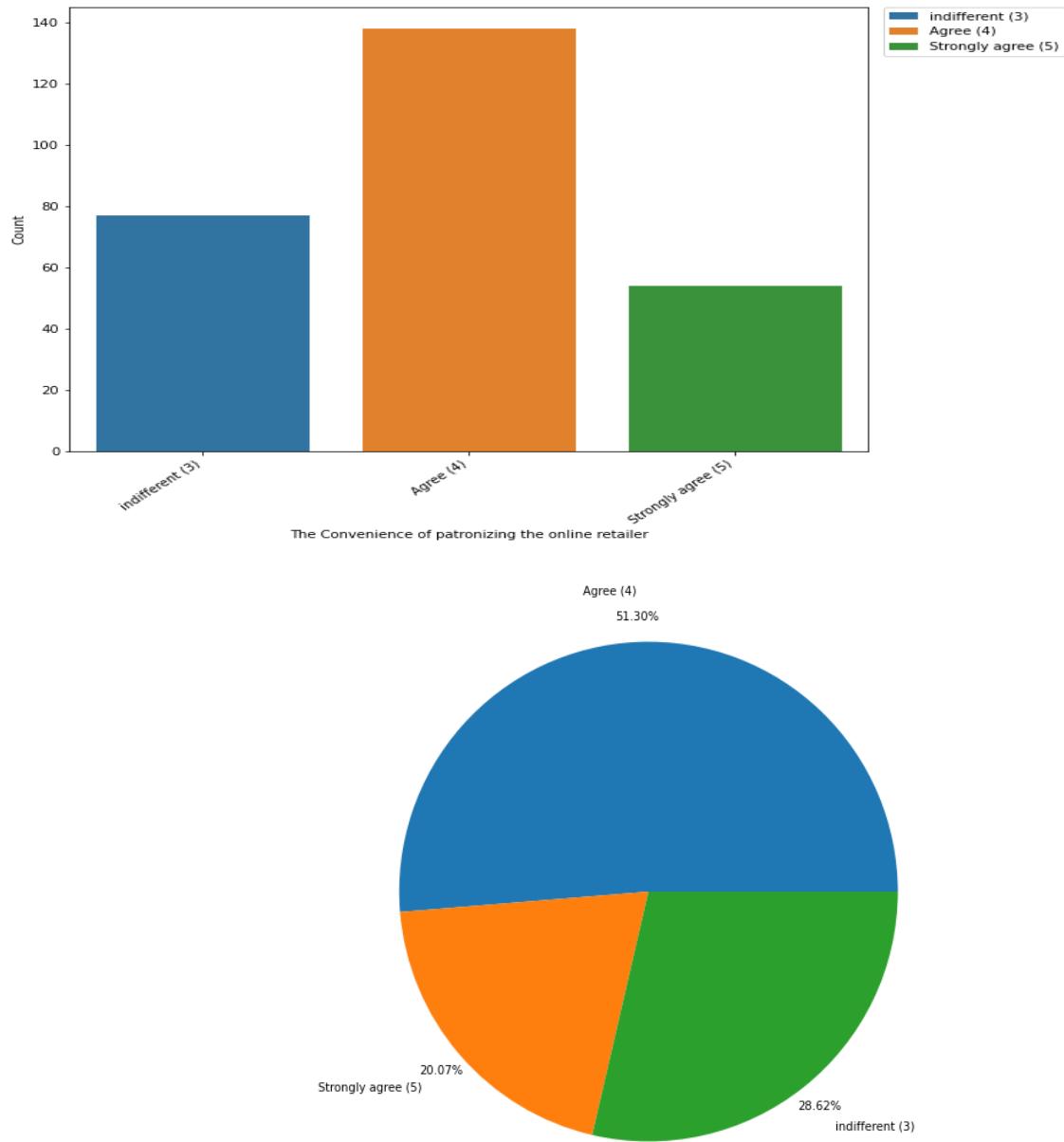
Analysis of data based on monetary savings



Findings:

1. 82.9% of customers preferring online stores for monetary benefits (Strongly Agree - 148, Agree - 75).
2. 31 Customers (11.52%) are disagreeing to the opinion on preferring online stores for monetary benefits. 5.58% of customers are having indifferent opinion.

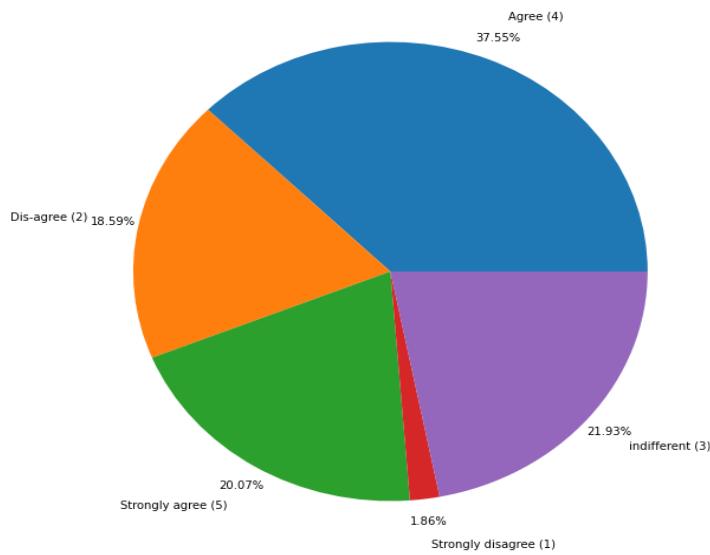
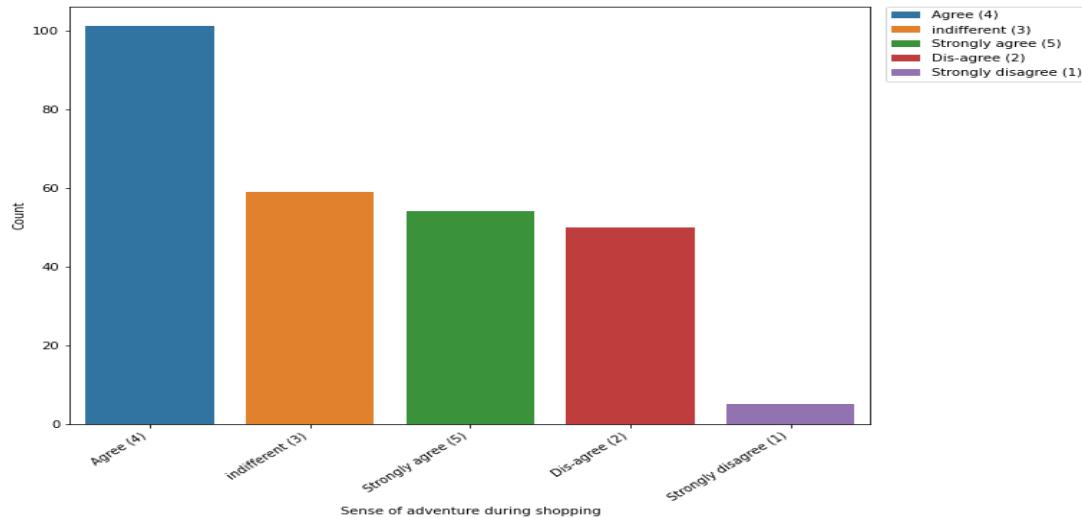
Analysis of data based on the convenience of patronizing the online retailer



Findings:

51.30% of customers are agreeing to convenience on patronizing online retailer and 20.07% of customers strongly agreeing to this opinion. But 28.62% of customers are having indifferent opinion on convenience on patronizing online retailers.

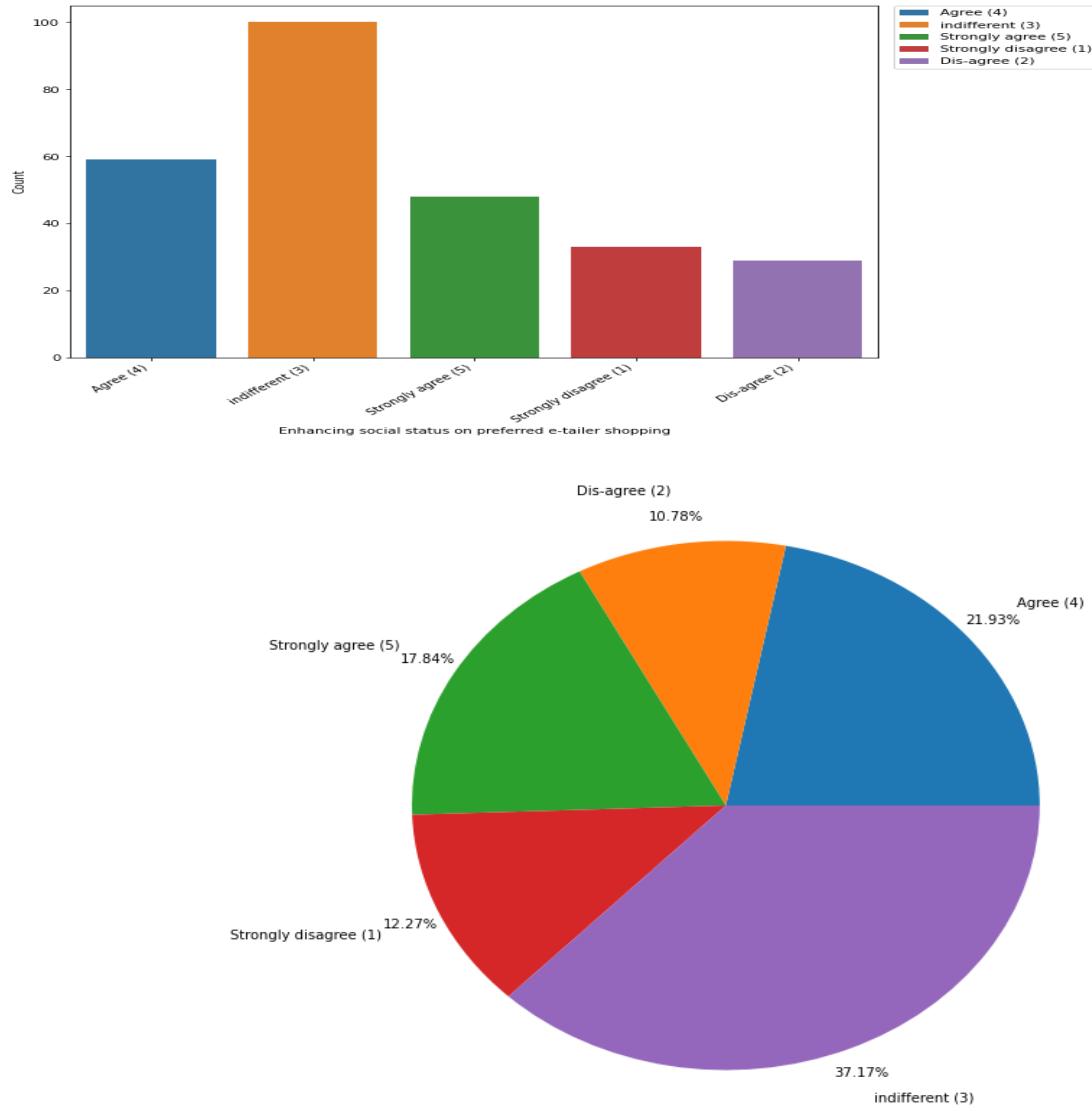
Analysis of data based on sense of adventure during shopping



Findings:

1. 57.62% of customers would like to have a sense of adventure during online shopping(Strongly Agree - 54, Agree - 101).
2. But 20.45% of customers disagree with the opinion of having a sense of adventure during online shopping.(Strongly Disagree - 5, Disagree - 50).
3. 21.93% of customers are having indifference for the opinion of having sense of adventure during online shopping.

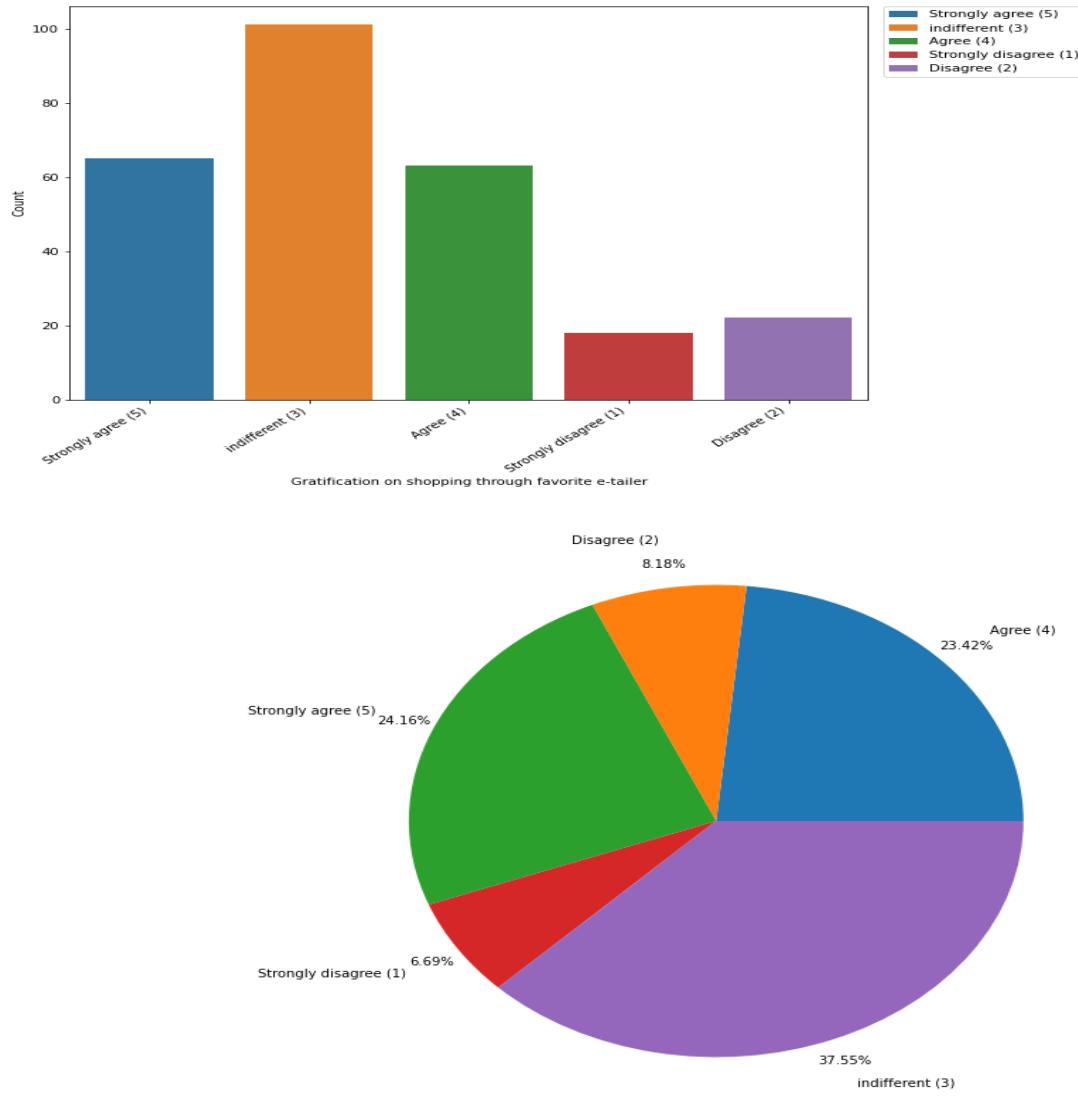
Analysis of data based on enhancing social status on preferred e-tailer shopping



Findings:

1. 39.77% of customers are having the belief that their social status is enhanced when they shop from the preferred e-tailer. (Strongly Agree - 48, Agree - 59. While 100 customers are having indifference to this opinion.
2. 23.05% of customers are not agreeing to the opinion that shopping online from preferred e-tailer would enhance the social status (Disagree - 29, Strongly Disagree - 33).

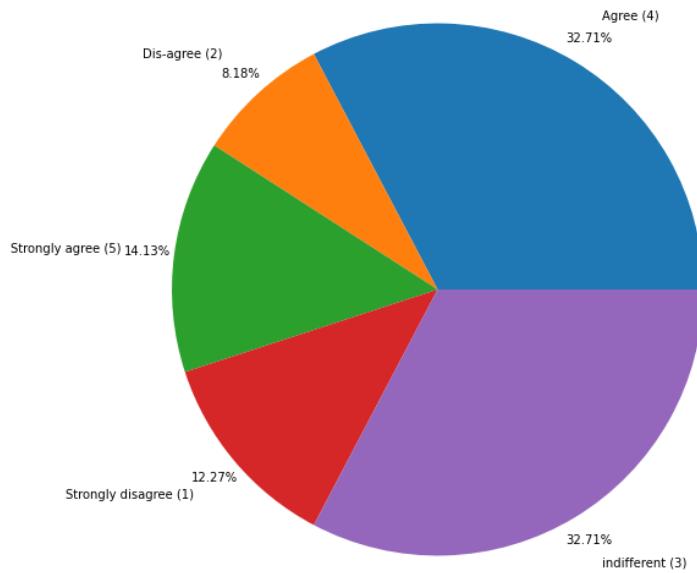
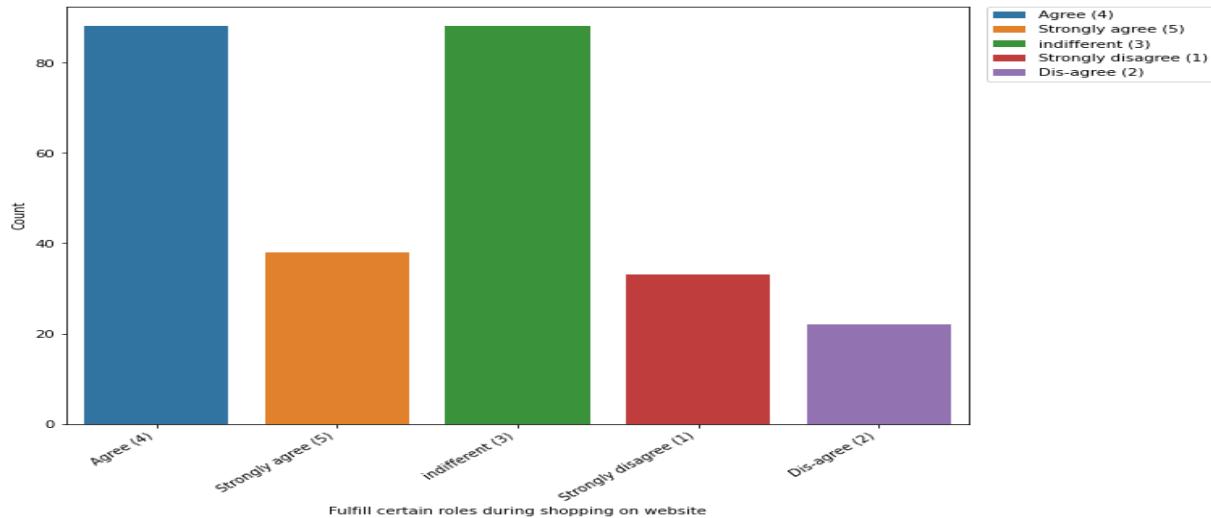
Analysis of data based on gratification on shopping through favorite e-tailer



Findings:

1. 101 customers are having indifference on opinion that online shopping from favorite e-tailer would enhance gratification. But 47.58% of the customers believe this opinion is true that they would feel gratification when they shop online from favorite e-tailer (Strongly Agree - 65, Agree - 63).
2. 14.87% of customers are not agreeing to this opinion (Disagree - 22, Strongly Disagree - 18).

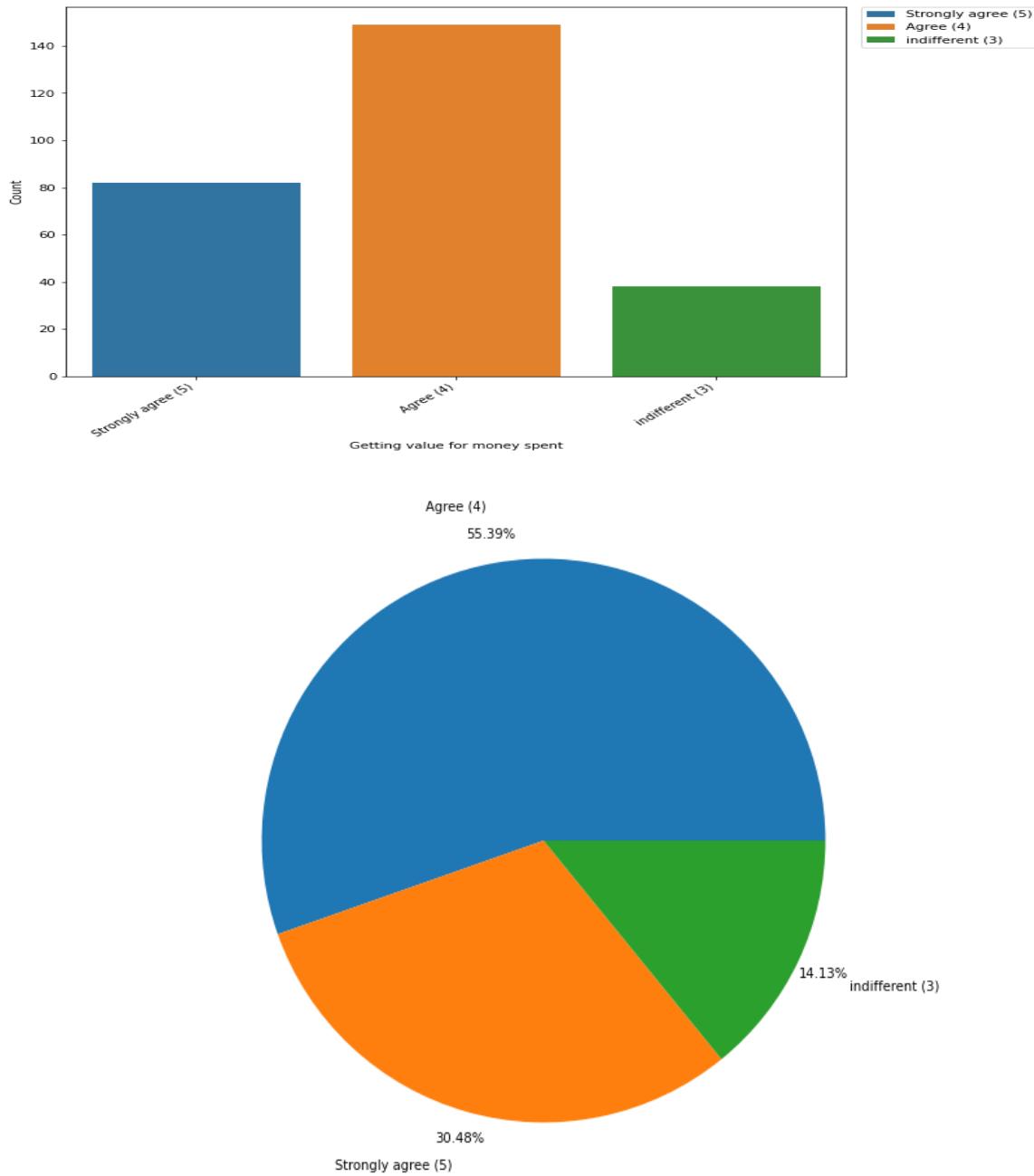
Analysis of data based on fulfill certain roles during shopping on website



Findings:

1. 46.84% of customers believe that they can fulfill certain roles when they shop online (Strongly Agree - 38, Agree - 88). While 88 customers are having indifference to this opinion.
2. 20.45% of customers are not agreeing to the opinion that online shopping would fulfill certain roles.

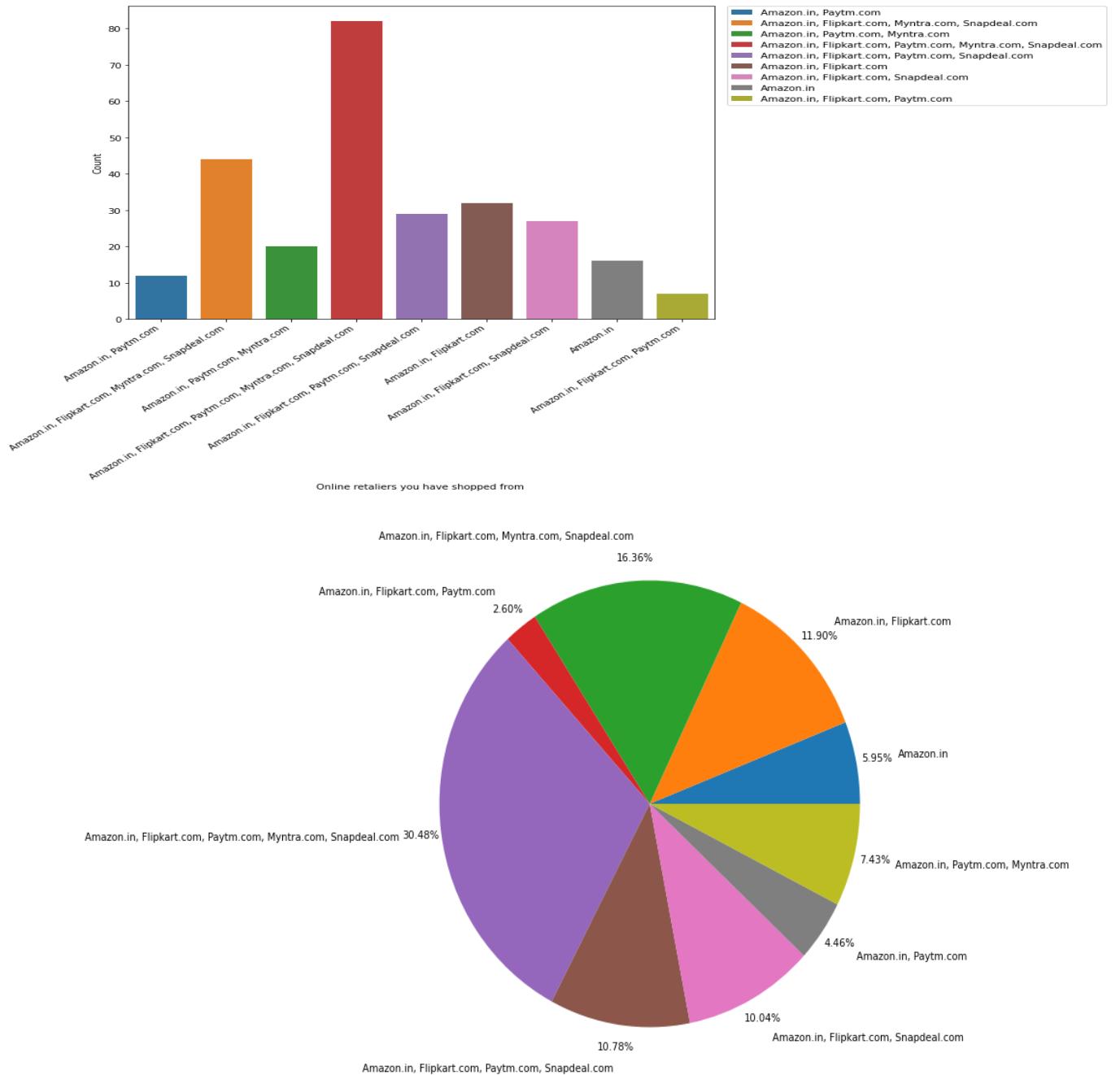
Analysis of data based on getting value for money spent



Findings:

1. 85.87% of customers believe they are getting value for money spent on online shopping. (Strongly Agree - 82, Agree - 149).
2. 14.13% of customers are having indifference to this opinion (38 customers).

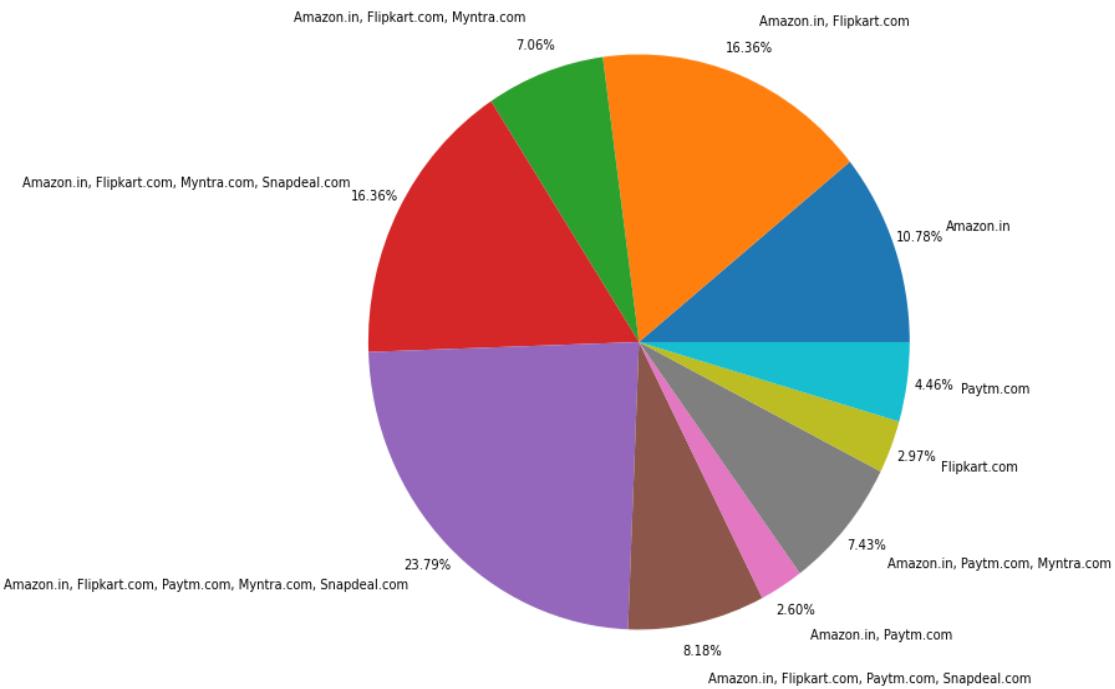
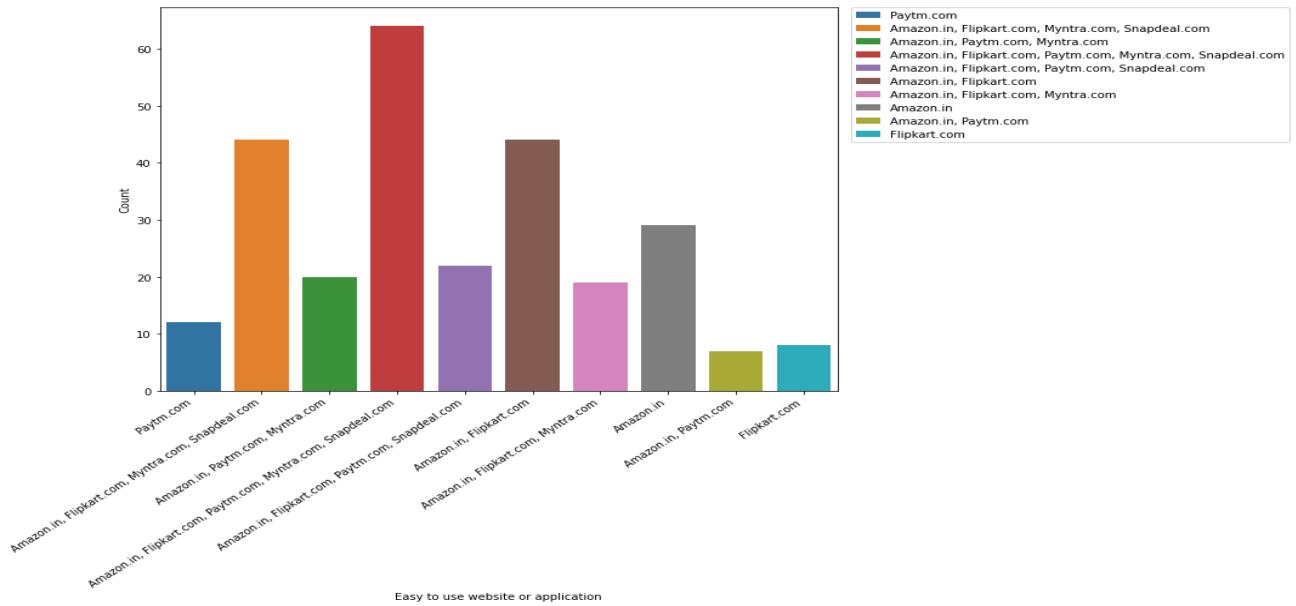
Analysis of data based on online retailers you have shopped from



Findings:

Most of the customers have shopped from major online e-tailers (Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com)

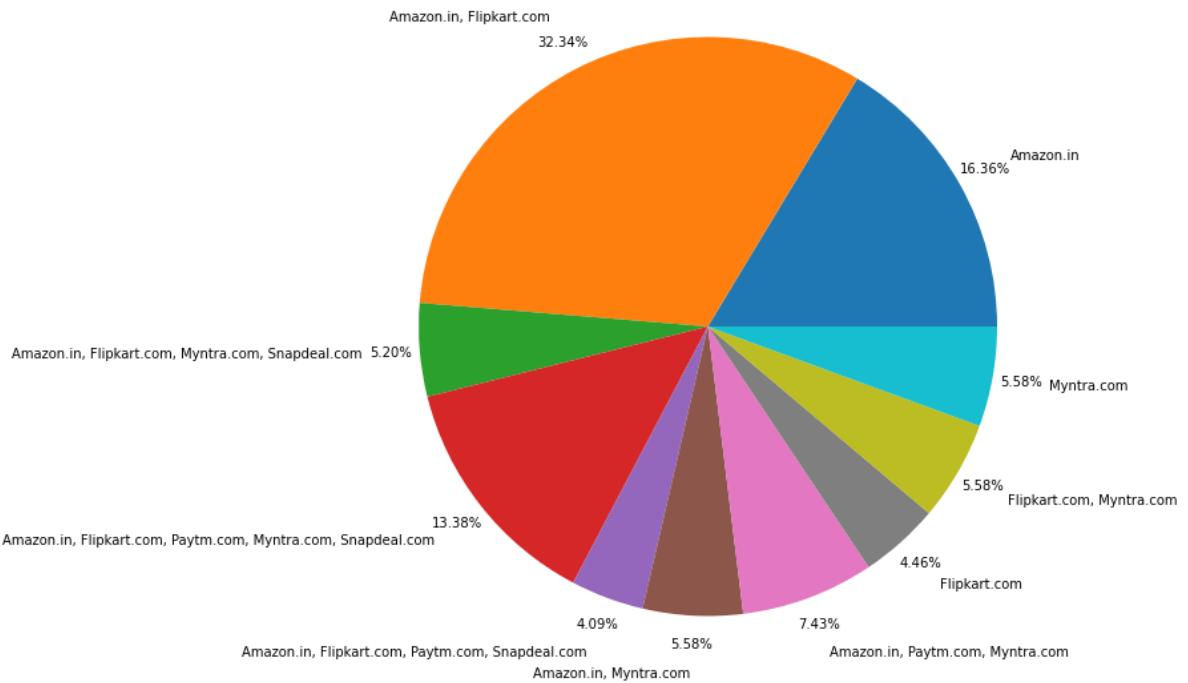
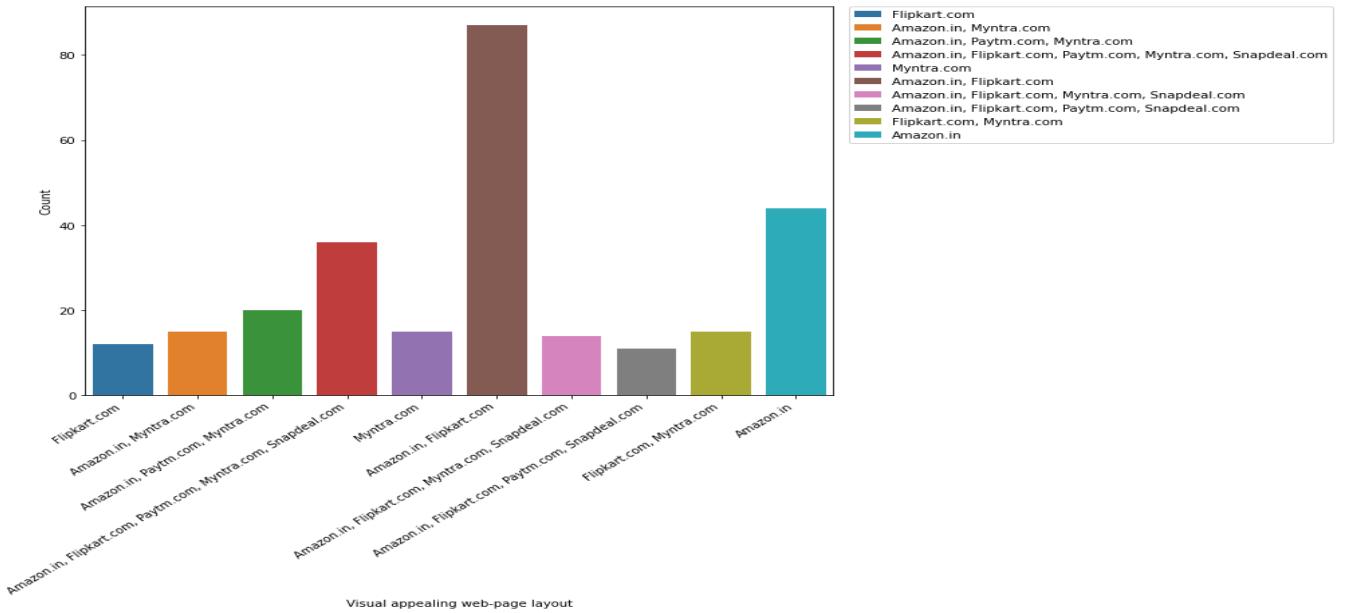
Analysis of data based on easy-to-use website or application



Findings:

Most of the users believe that Flipkart.com and Amazon.in are having easy to use website and application for online shopping.

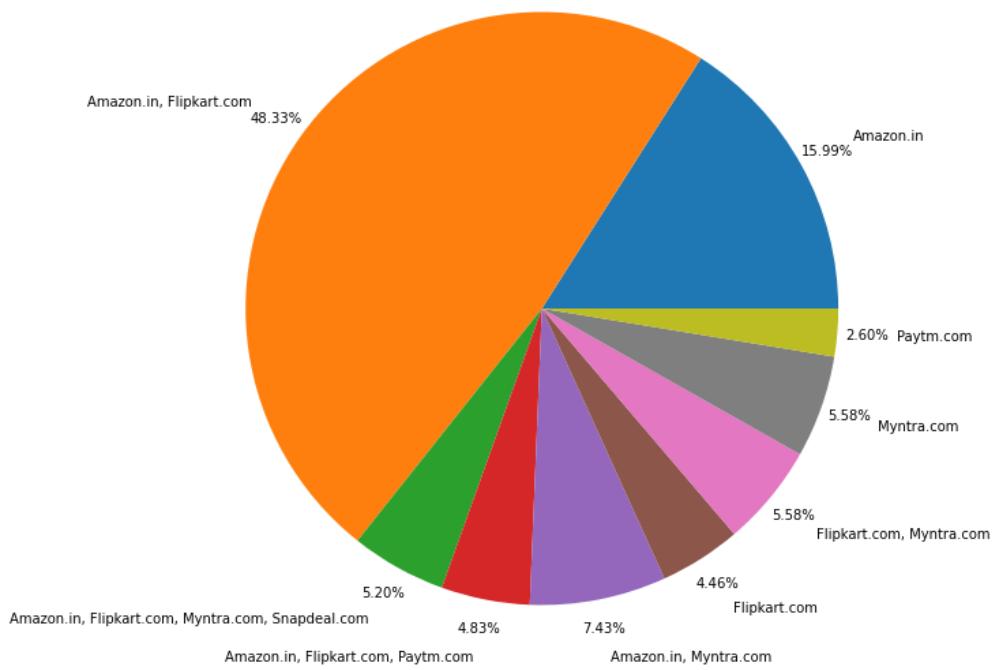
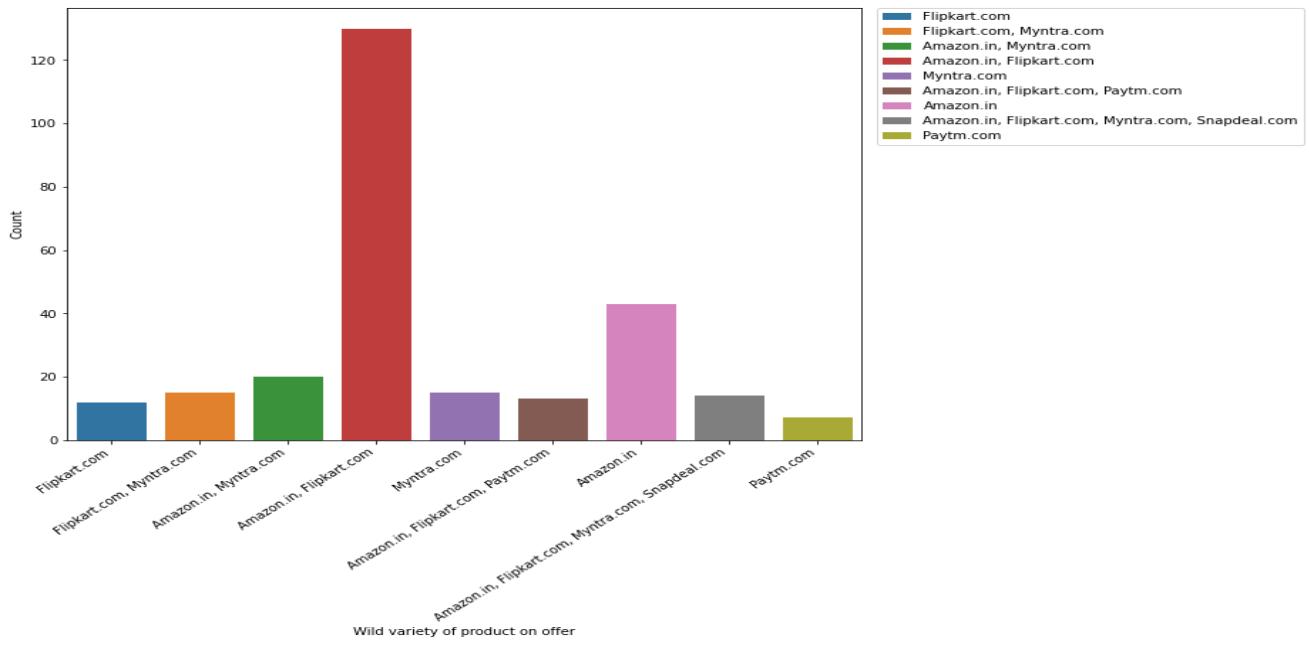
Analysis of data based on visual appealing web-page layout



Findings:

Most of the customers says Amazon.in and Flipkart.com are having visually appealing web-page layout.

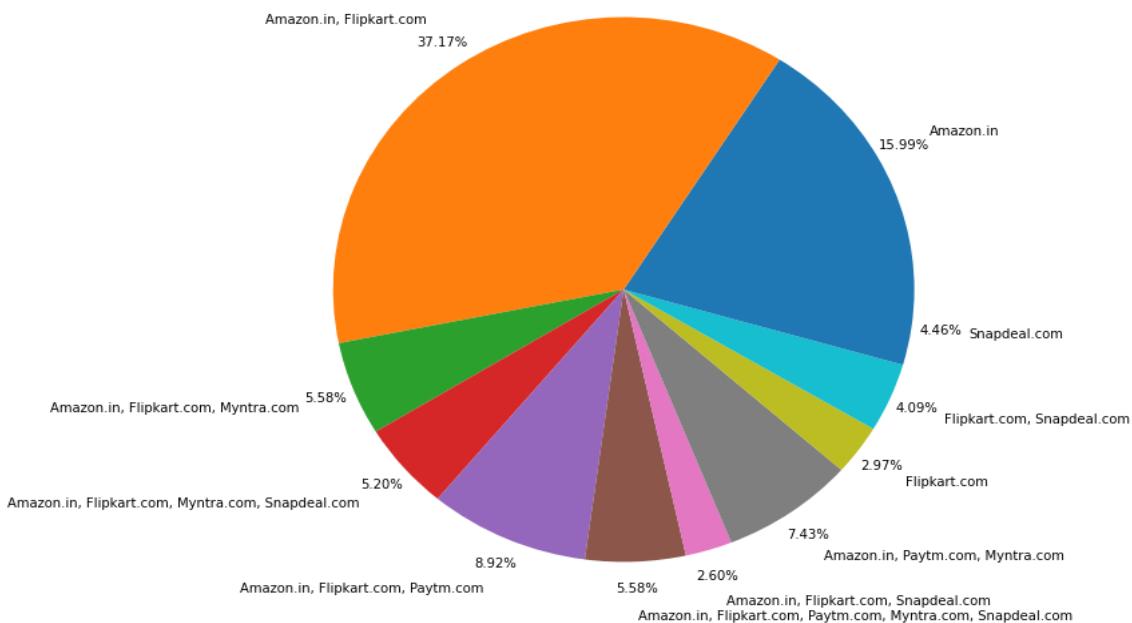
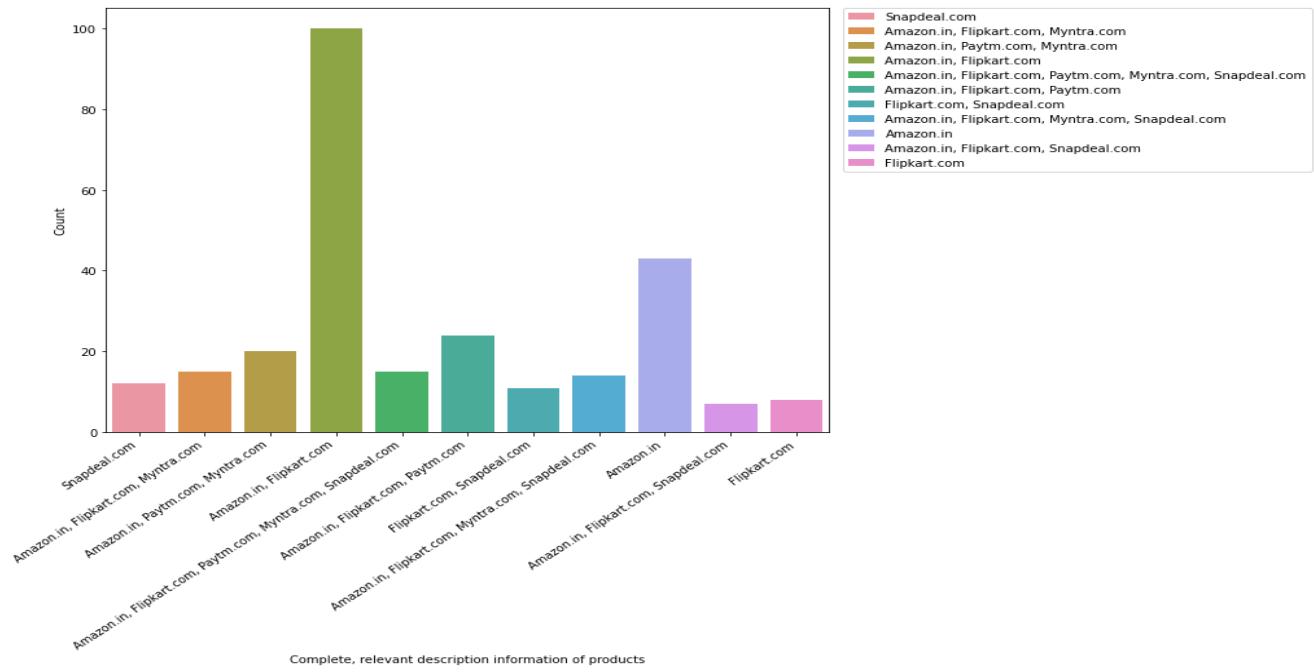
Analysis of data based on wild variety of product on offer



Findings:

Most of the customers are having the opinion that Amazon.in and Flipkart.com are having the variety of categories for products which are available on offers.

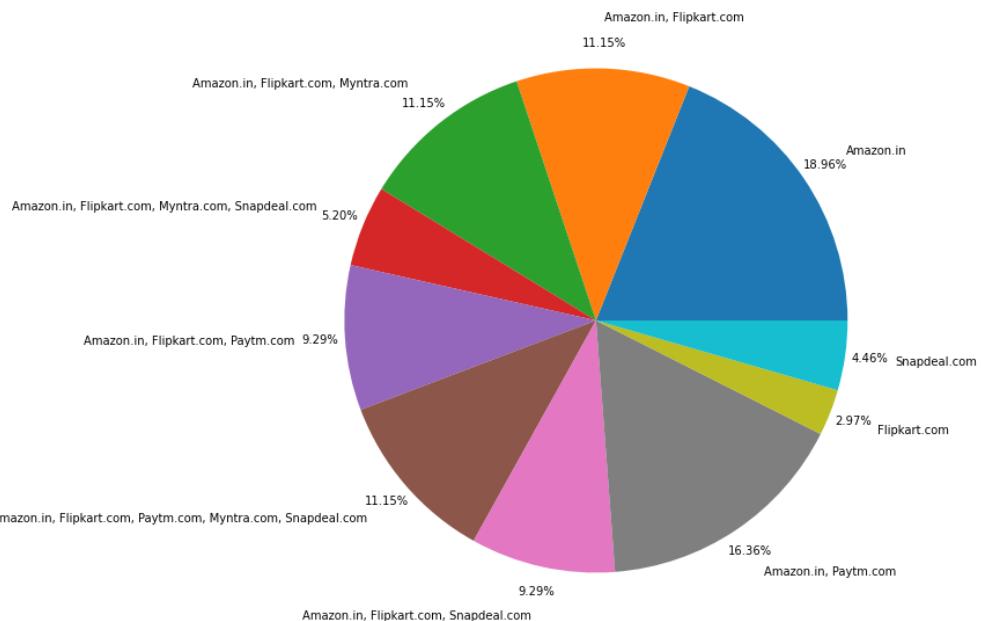
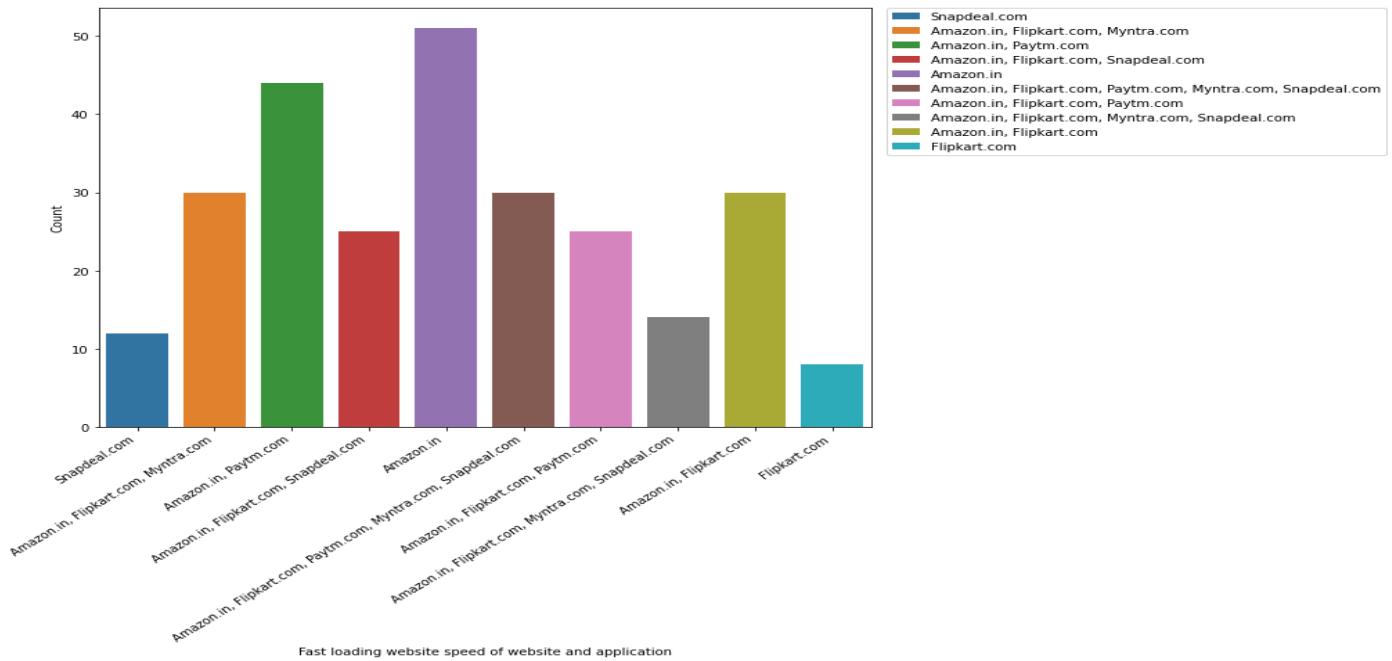
Analysis of data based on complete, relevant description information of products



Findings:

Most of the users says Amazon.in provides complete and relevant information on products. Second most e-tailer is Flipkart.com.

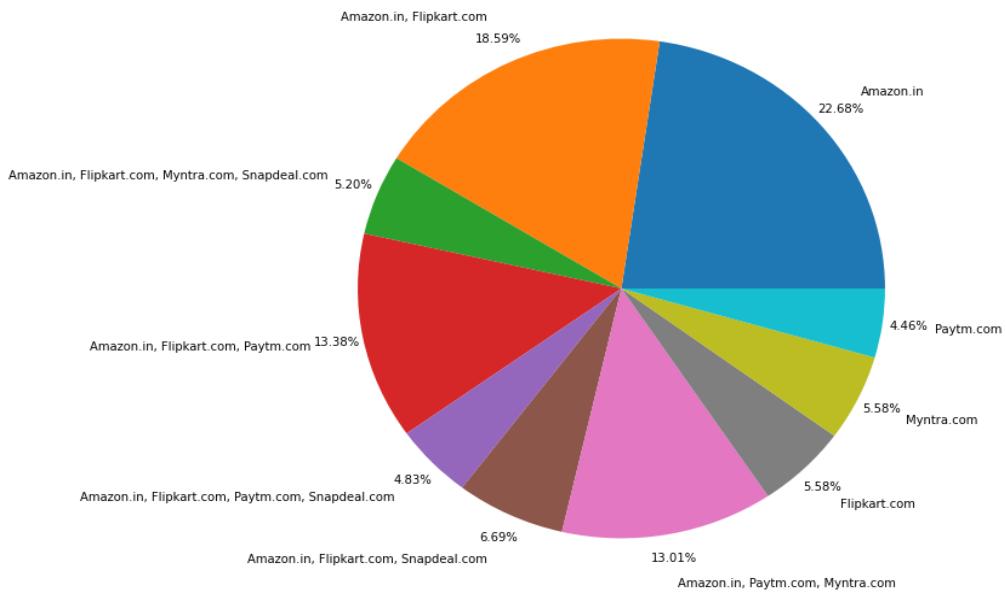
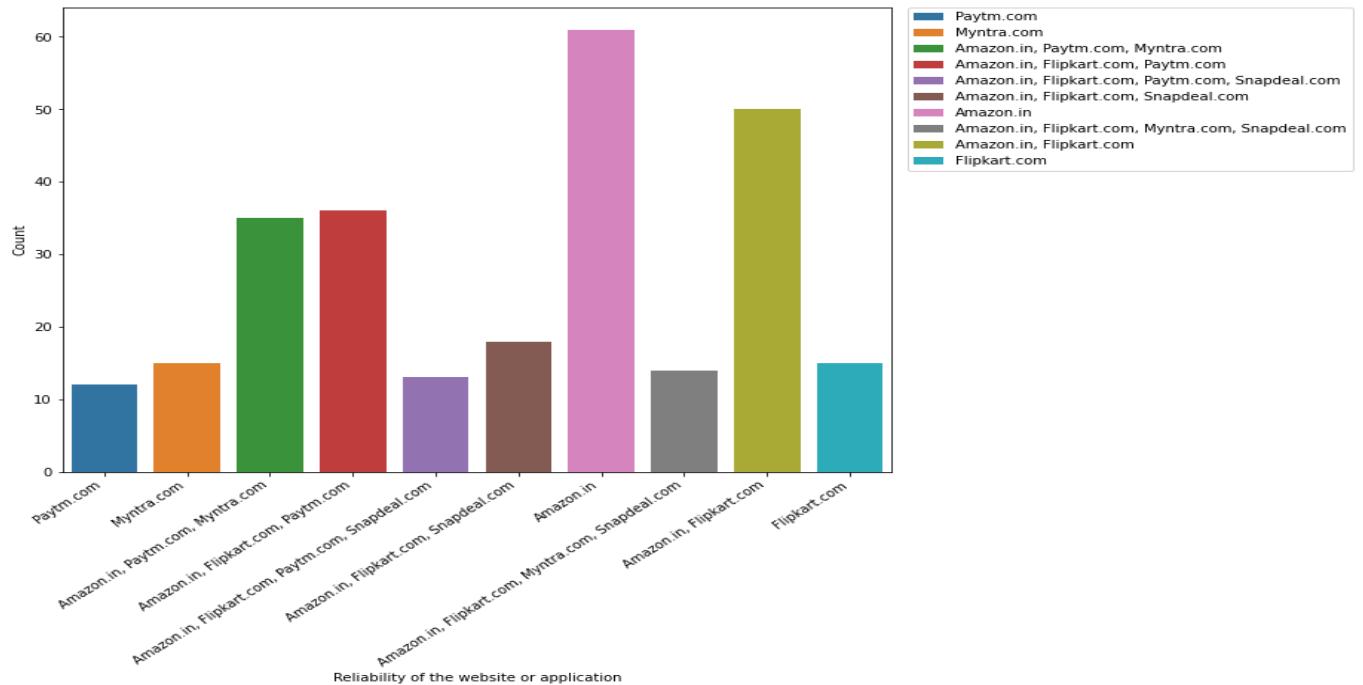
Analysis of data based on fast loading website speed of website and application



Findings:

Most of the users have rated Amazon.in is having fastest loading speed on website and application. Second highest e-tailer with fast loading speed for website and application is Paytm.com

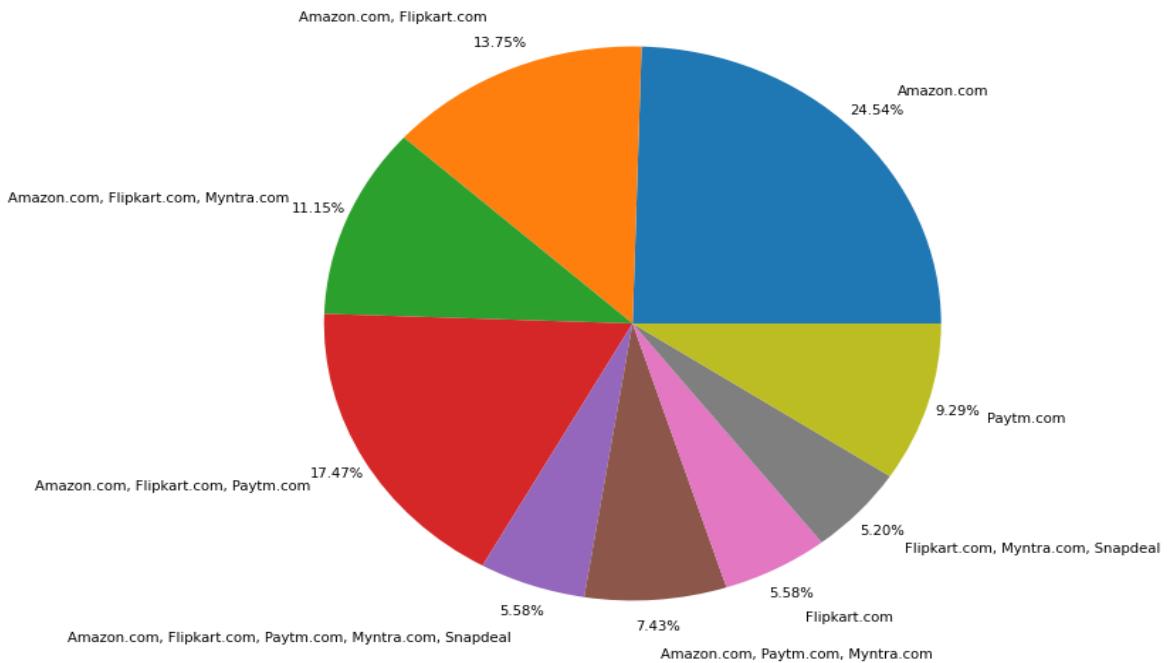
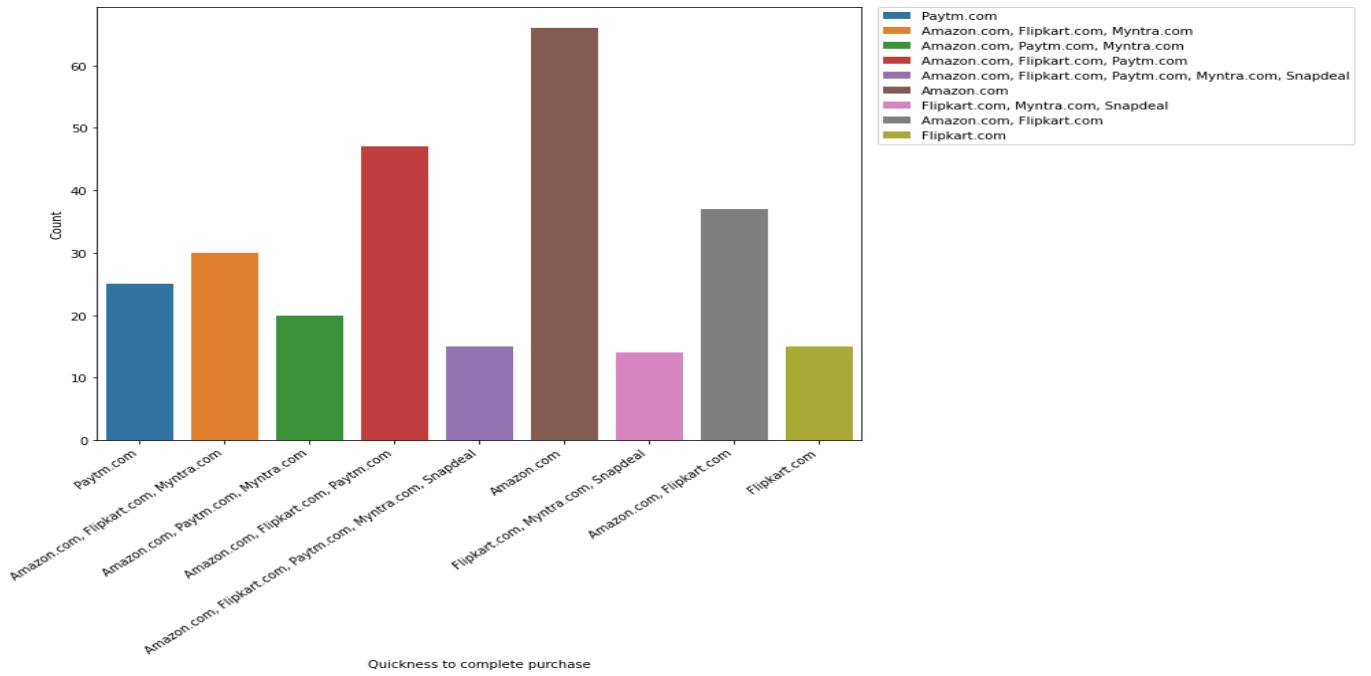
Analysis of data based on reliability of the website or application



Findings:

Most of the customers says Amazon.in is having a reliable website and application. Second most rated e-tailer is Flipkart.com

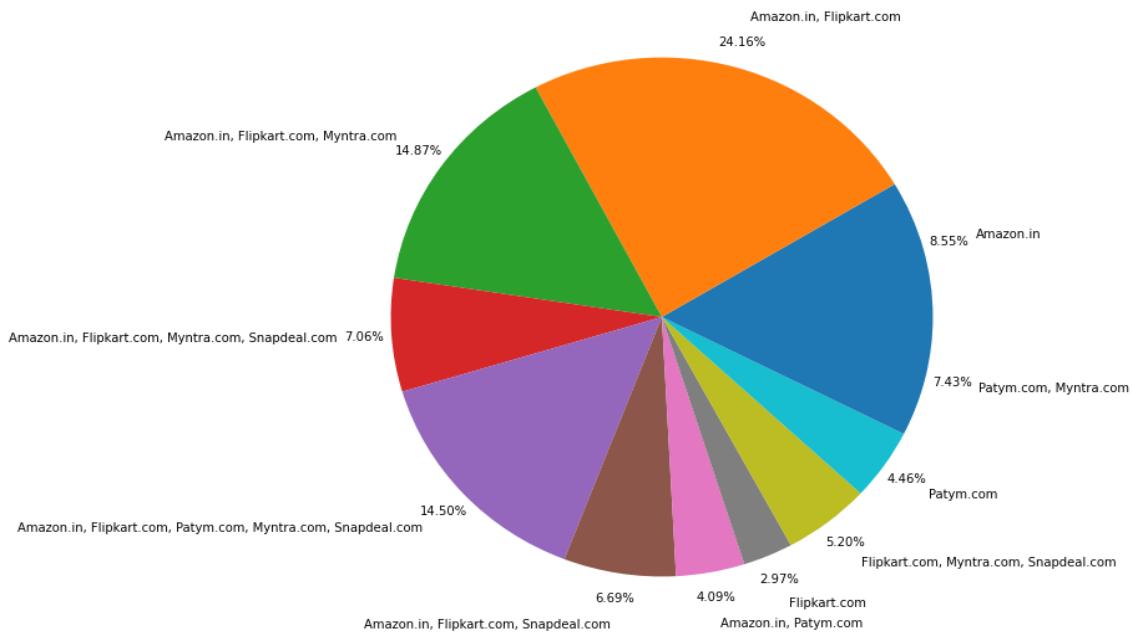
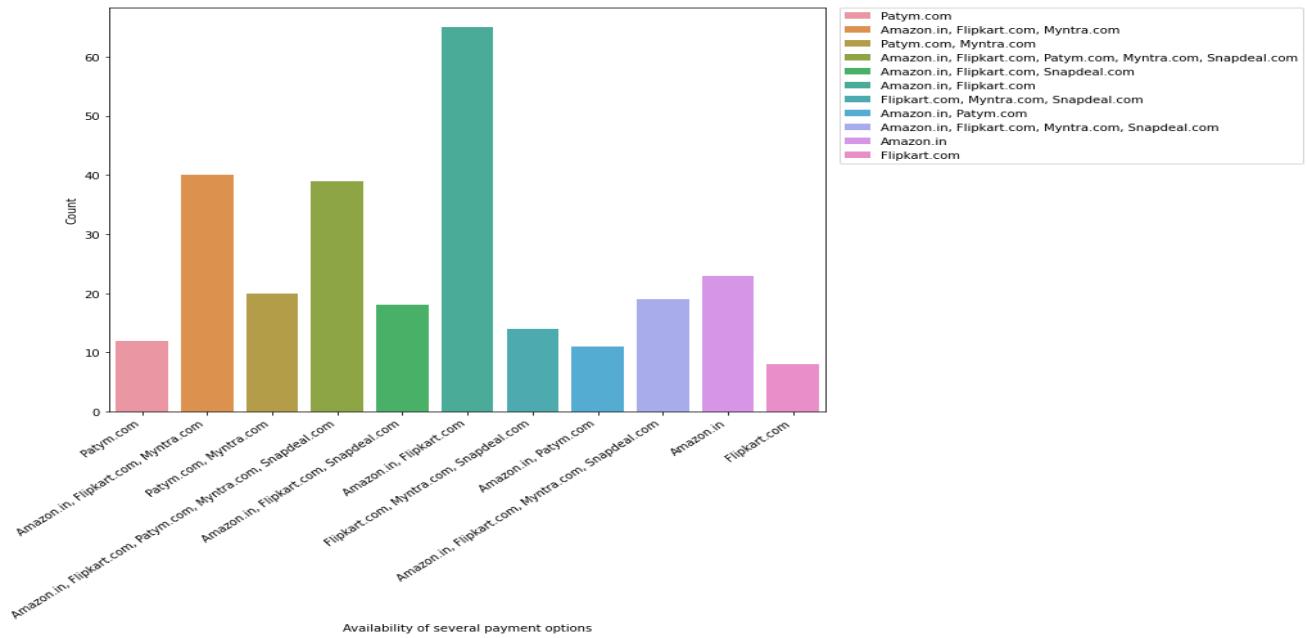
Analysis of data based on quickness to complete purchase



Findings:

Most customers have rated Amazon.com is the online store where they can quickly complete the purchase.

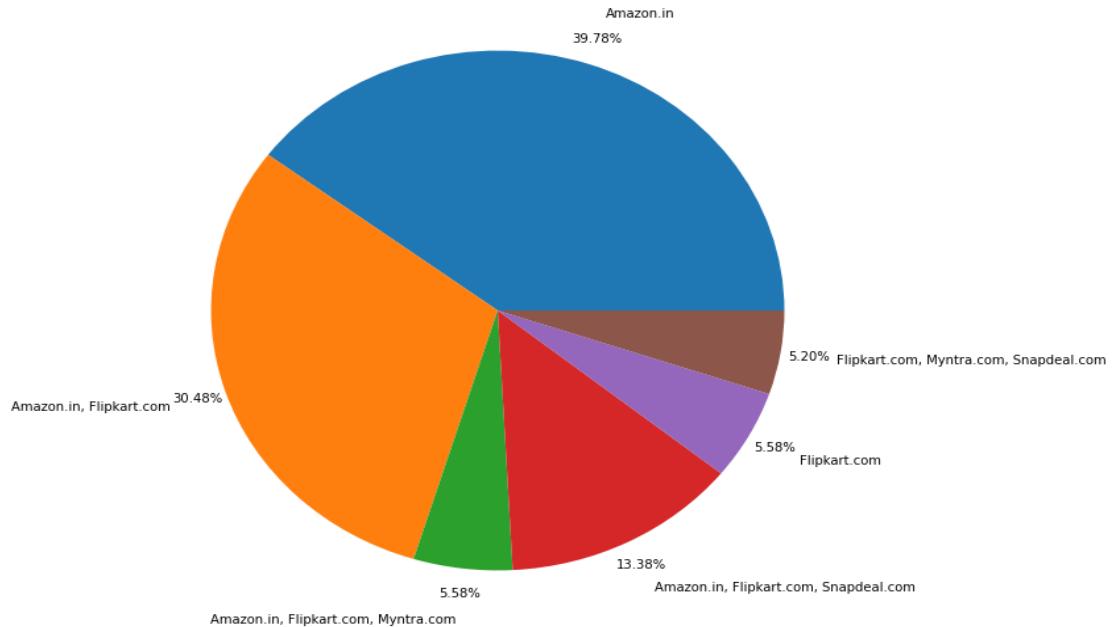
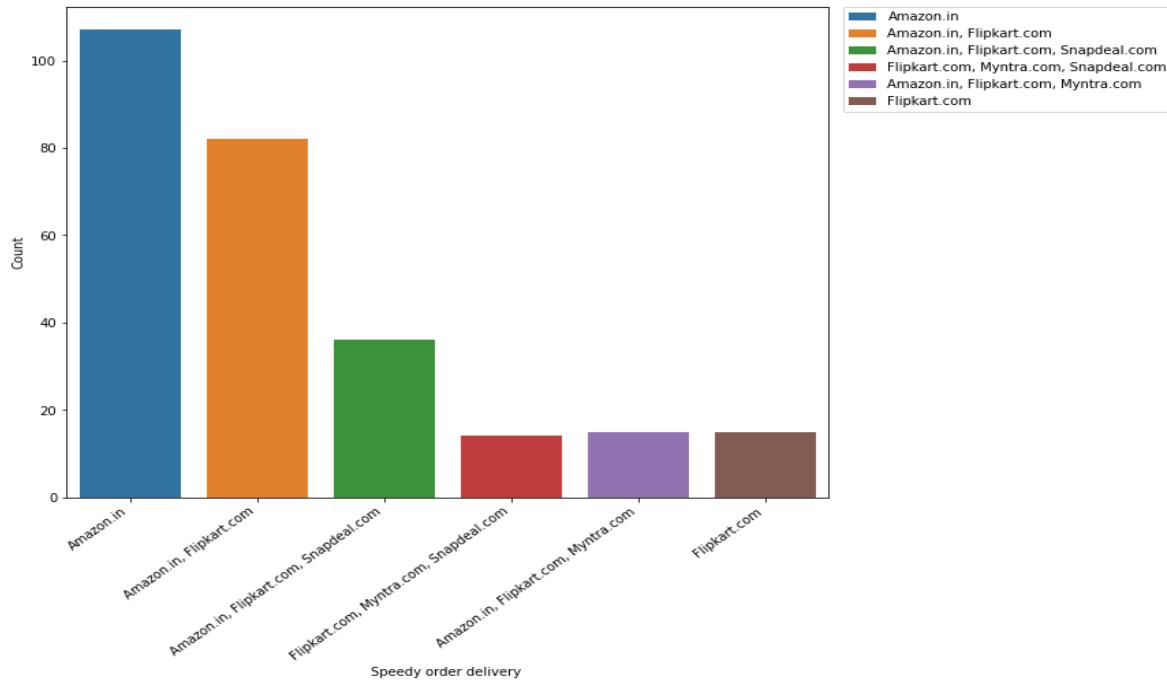
Analysis of data based on availability of several payment options



Findings:

Most of the customers are having the opinion Amazon.in and Flipkart.com are having several payment methods

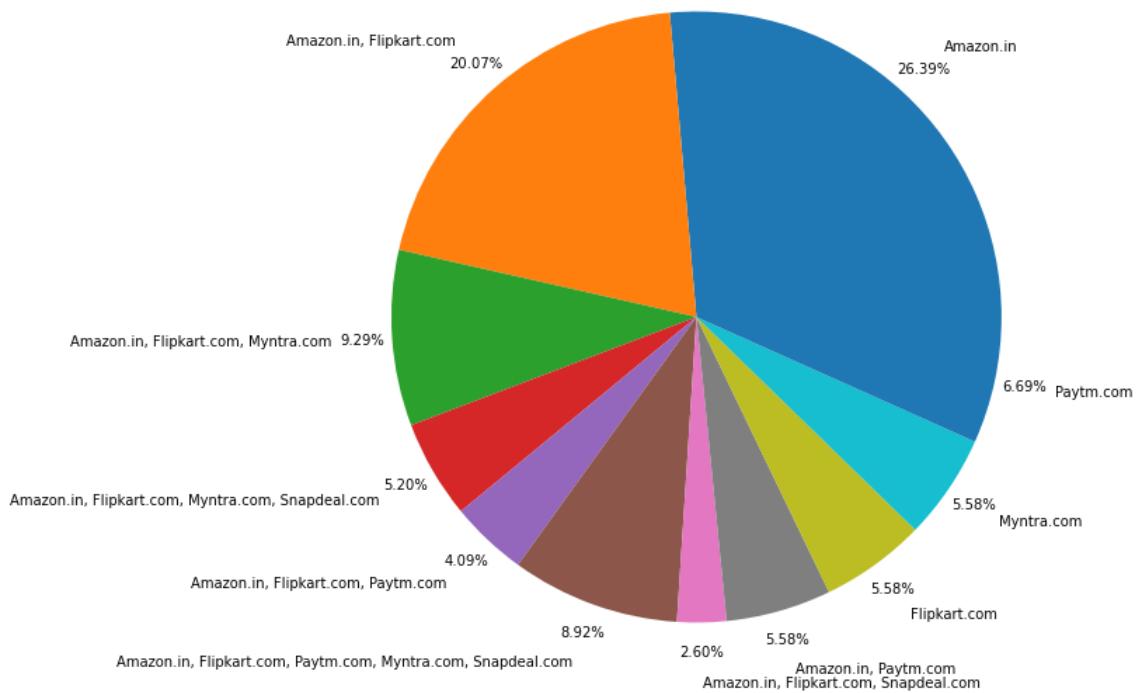
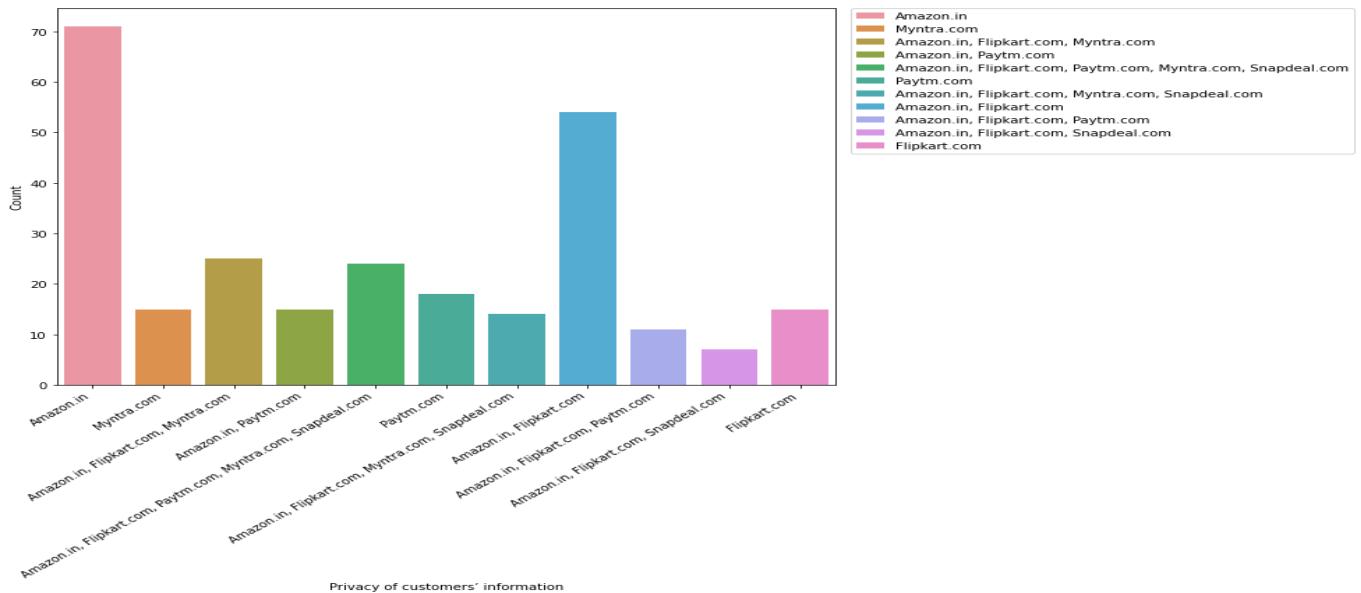
Analysis of data based on speedy order delivery



Findings:

Most of the customers have rated Amazon.in as the e-tailer with speedy order delivery compared to other e-tailers. Second most rated e-tailer for speedy delivery of orders is Flipkart.com

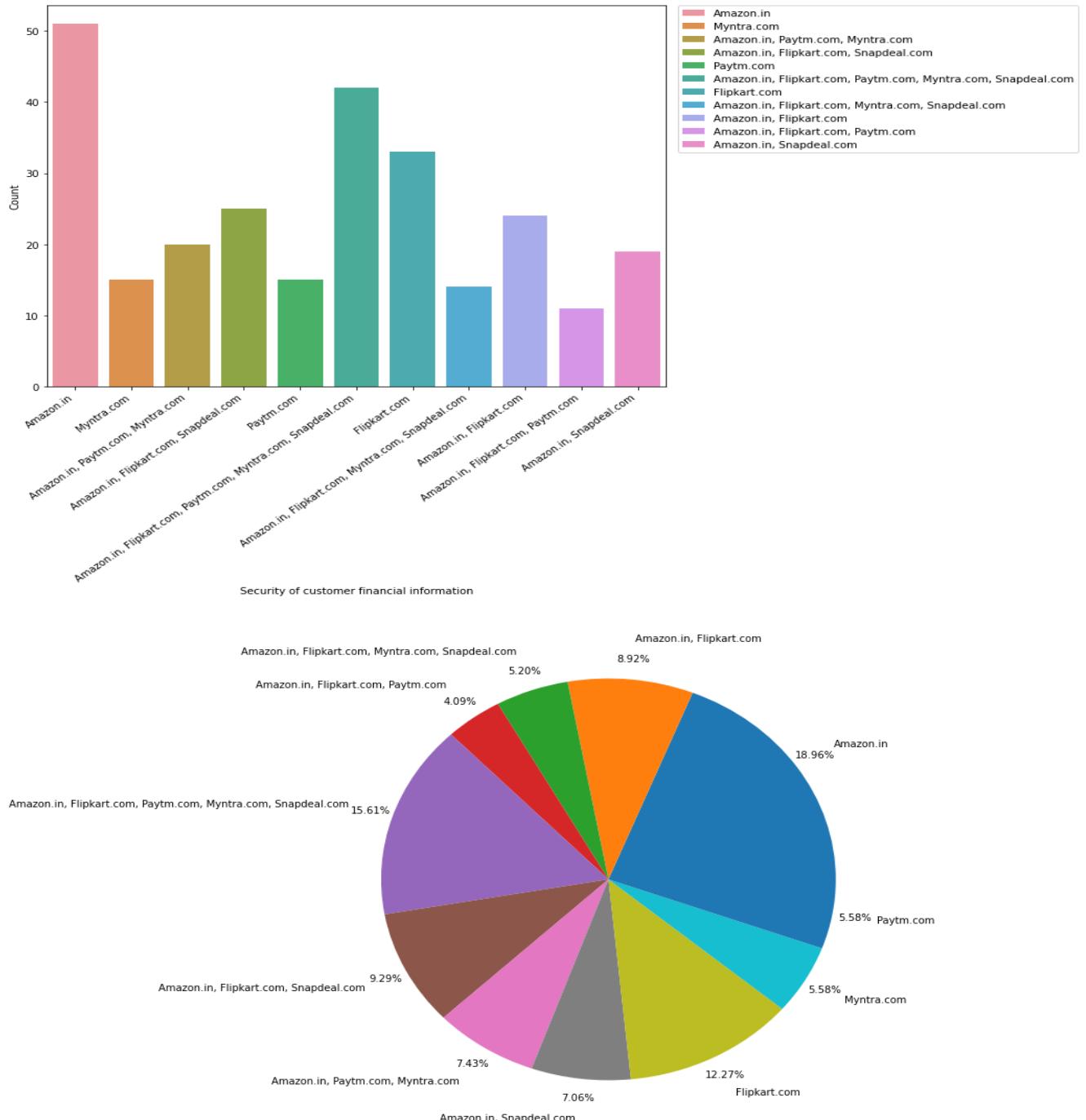
Analysis of data based on privacy of customers' information



Findings:

Most of the customers believe that Amazon.in is the e-tailer that provides maximum privacy on customer information.

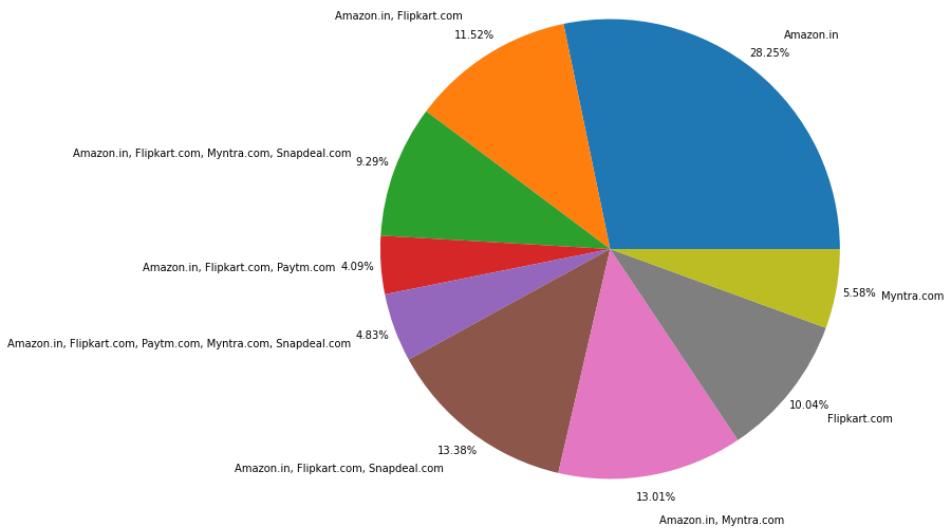
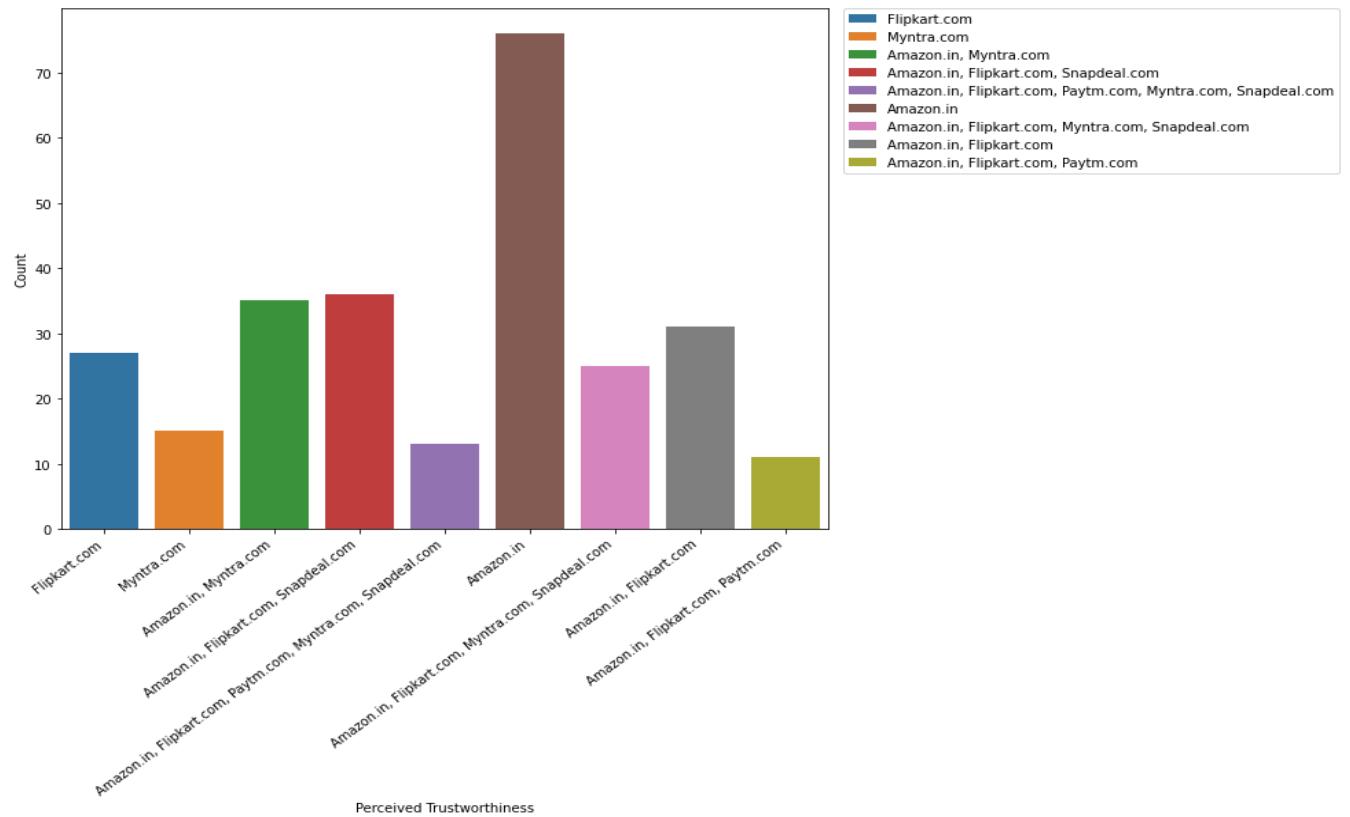
Analysis of data based on security of customer financial information



Findings:

Most of the customers have rated Amazon.in and Flipkart for having highest security for customers' financial information.

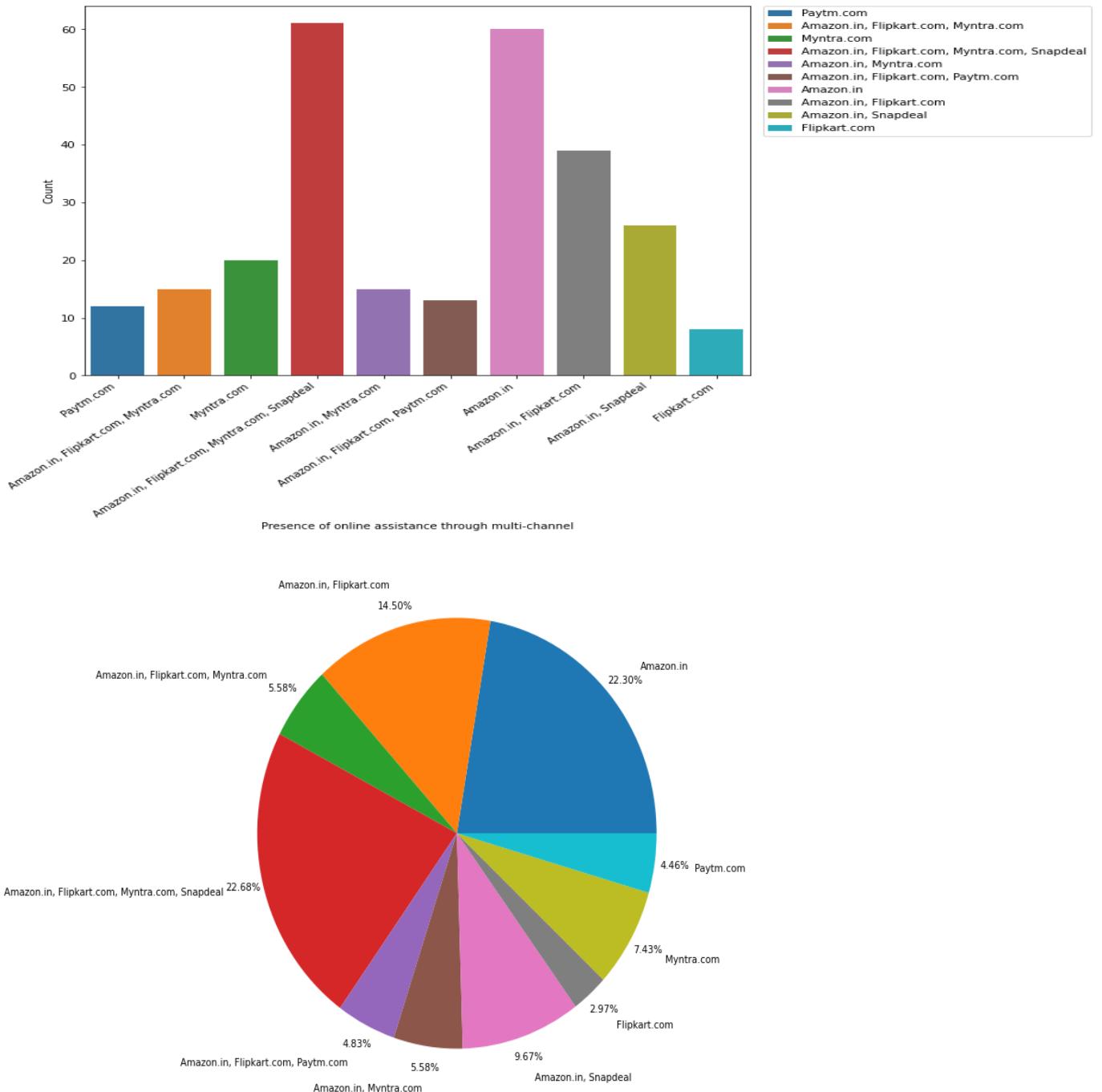
Analysis of data based on perceived trustworthiness



Findings:

Most of the customers have rated Amazon.in as most trustable e-tailers compared to all other e-tailers.

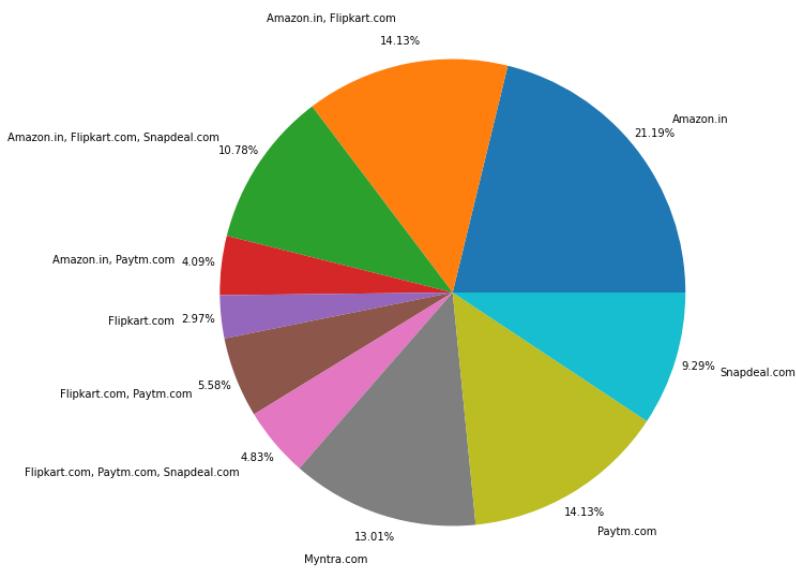
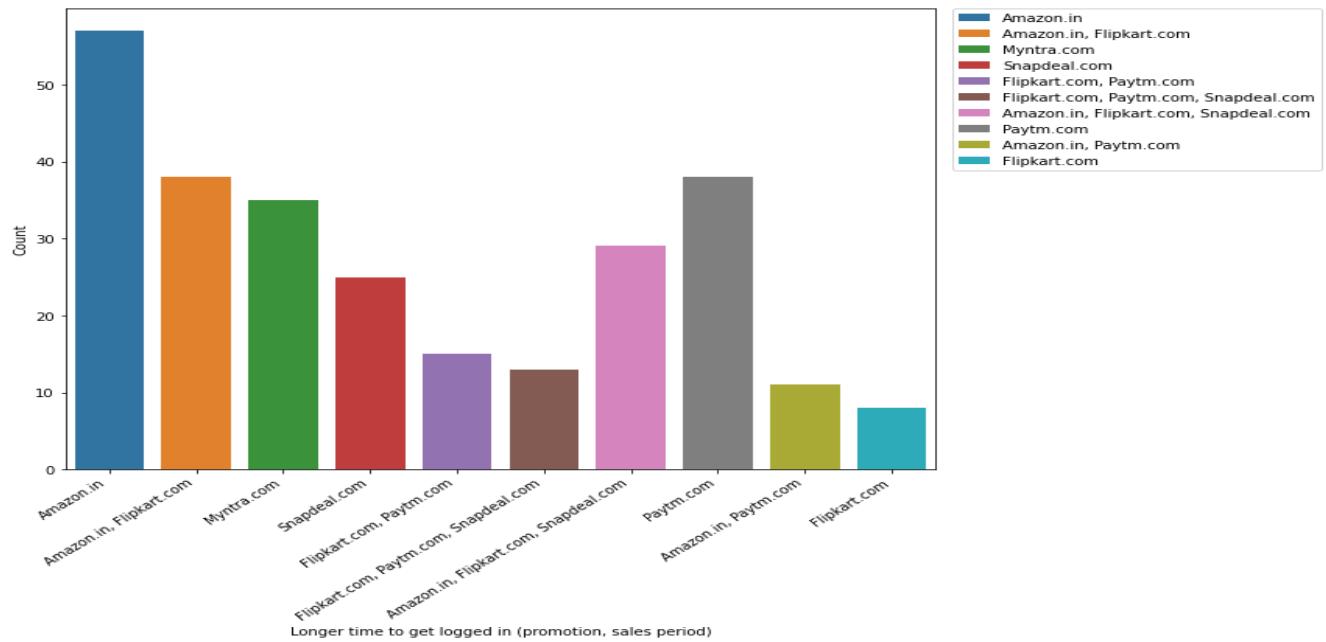
Analysis of data based on presence of online assistance through multi-channel



Findings:

Most of the customers says Amazon.in is having multiple channels for online assistance.

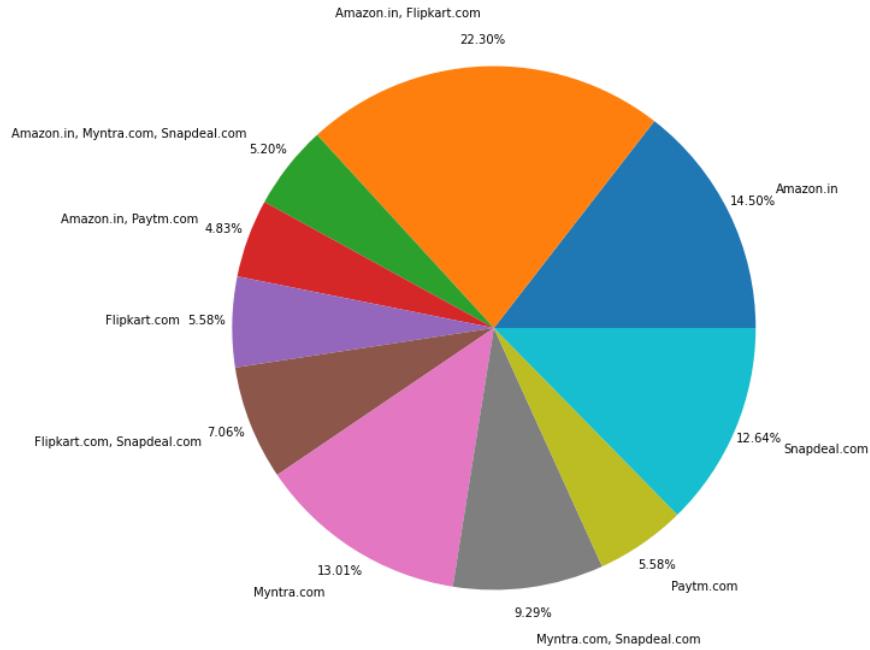
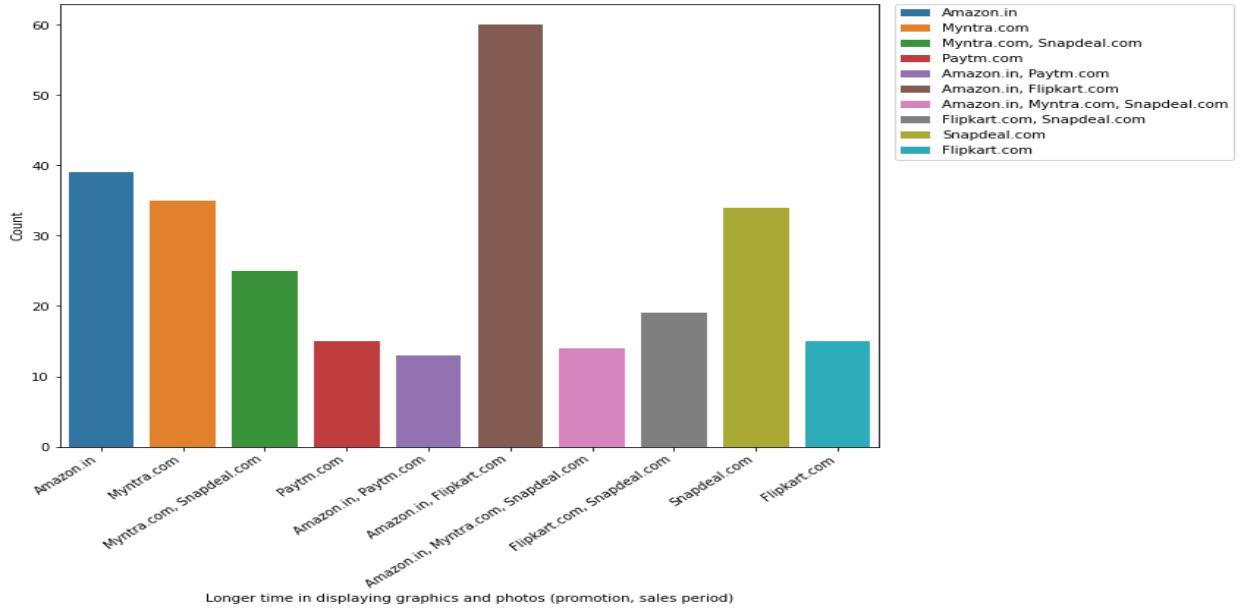
Analysis of data based on longer time to get logged in (promotion, sales period)



Findings:

Most of the customers have rated Amazon.in would take much more time to log in during promotion and sales period. Second most rated e-tailer is Paytm.com

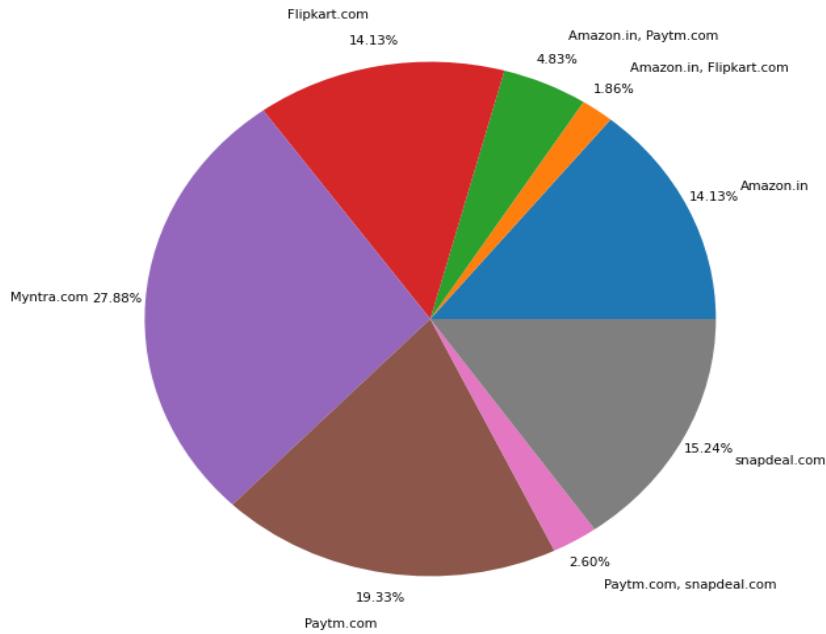
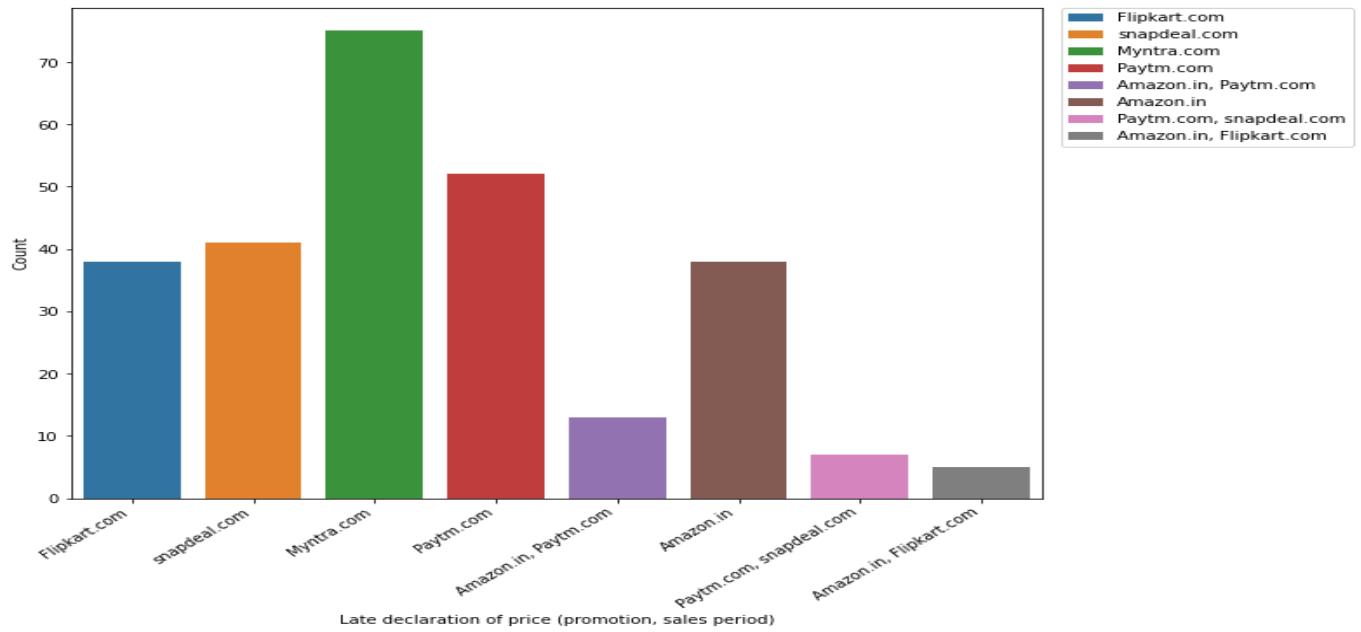
Analysis of data based on longer time in displaying graphics and photos (promotion, sales period)



Findings:

Most of the customer says Amaon.in takes more time to display images and graphical contents during promotion and sales period.

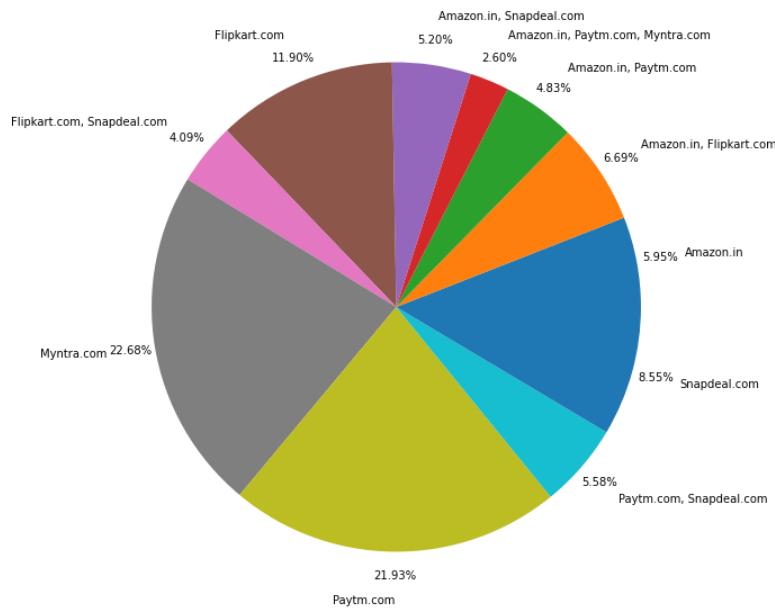
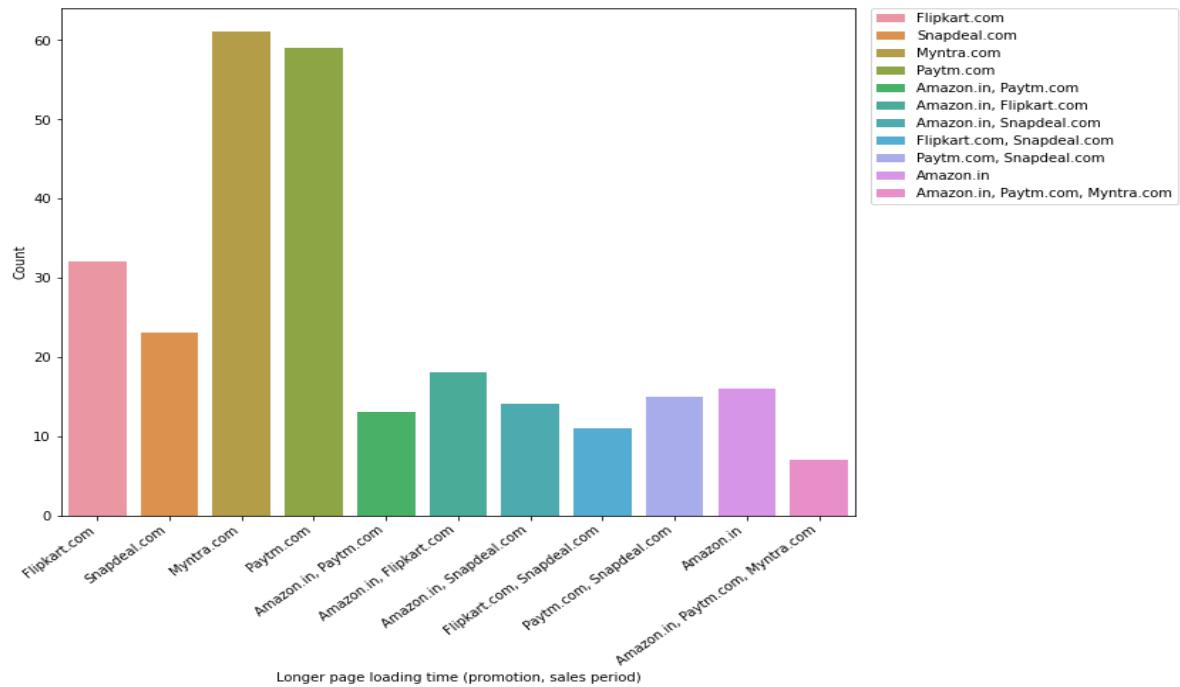
Analysis of data based on late declaration of price (promotion, sales period)



Findings:

Most of the customers have rated Paytm.com as the e-tailer whose website or application take longer page loading time during promotion or sale period.

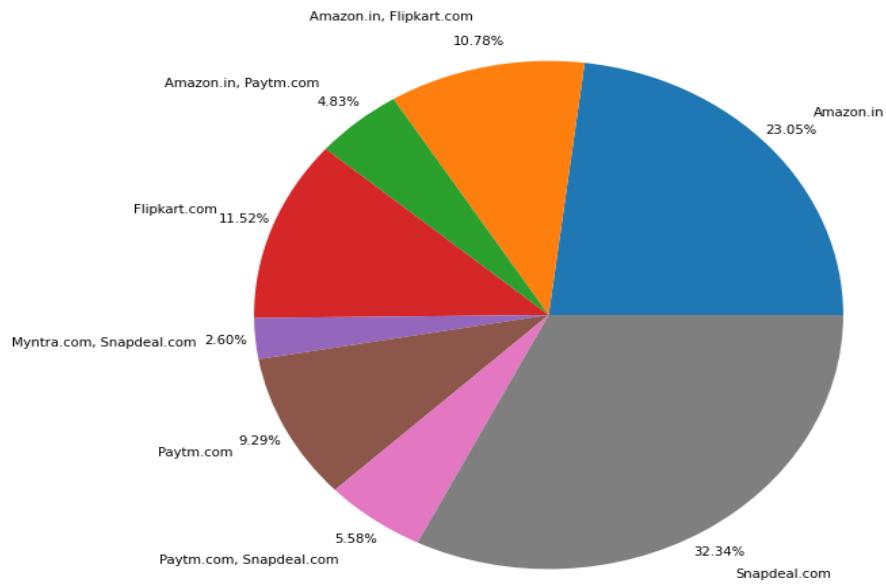
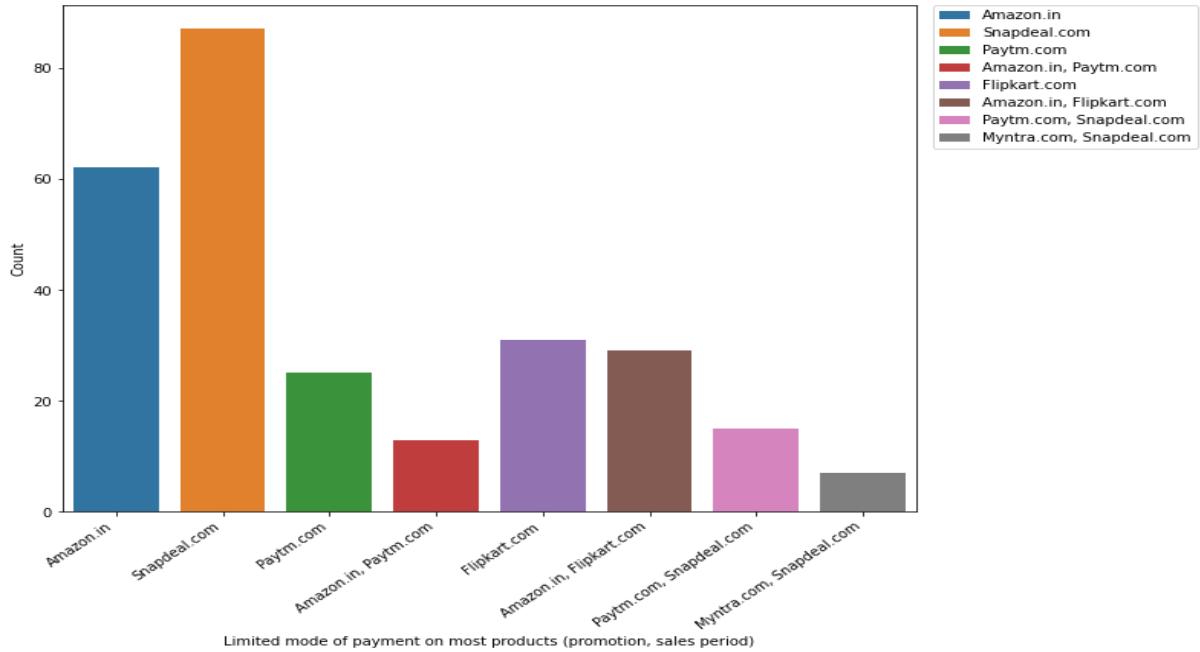
Analysis of data based on longer page loading time (promotion, sales period)



Findings:

Most of the customers have rated Paytm.com as the e-tailer whose website or application take longer page loading time during promotion or sale period.

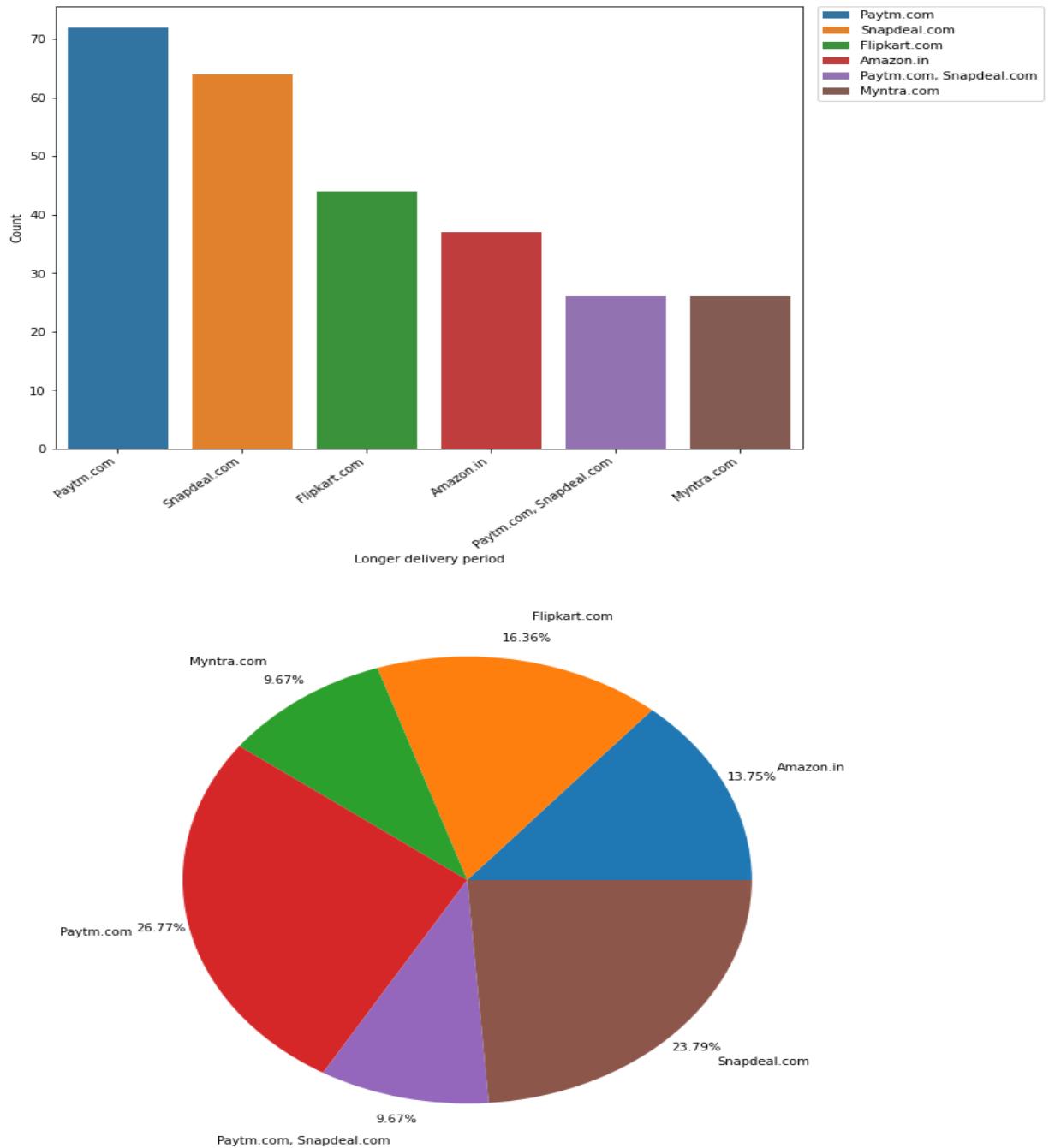
Analysis of data based on limited mode of payment on most products (promotion, sales period)



Findings:

Most of the customers have rated Snapdeal.com and Amazon.in are having limited payment modes on most products during promotion and sale period.

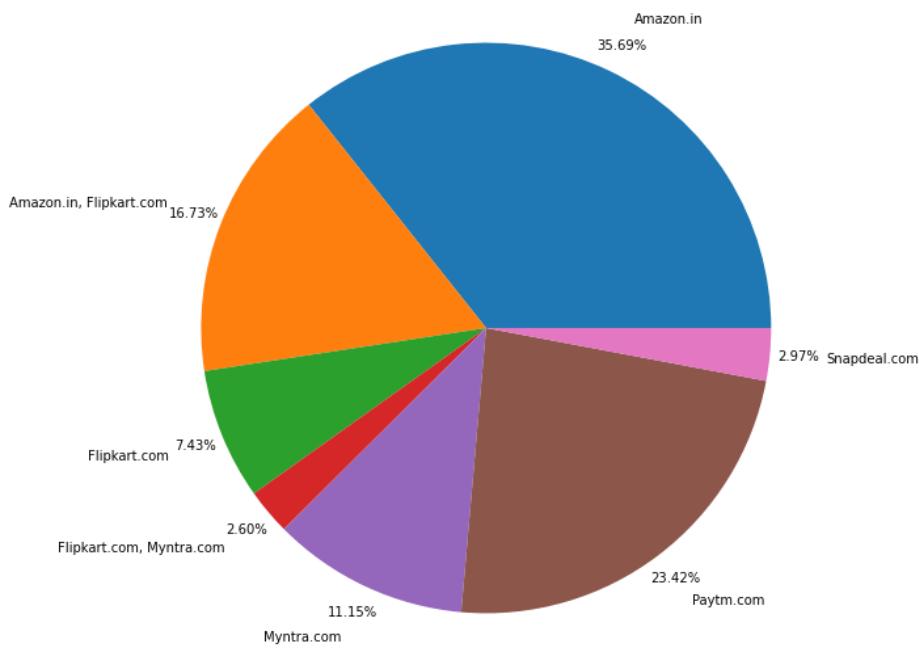
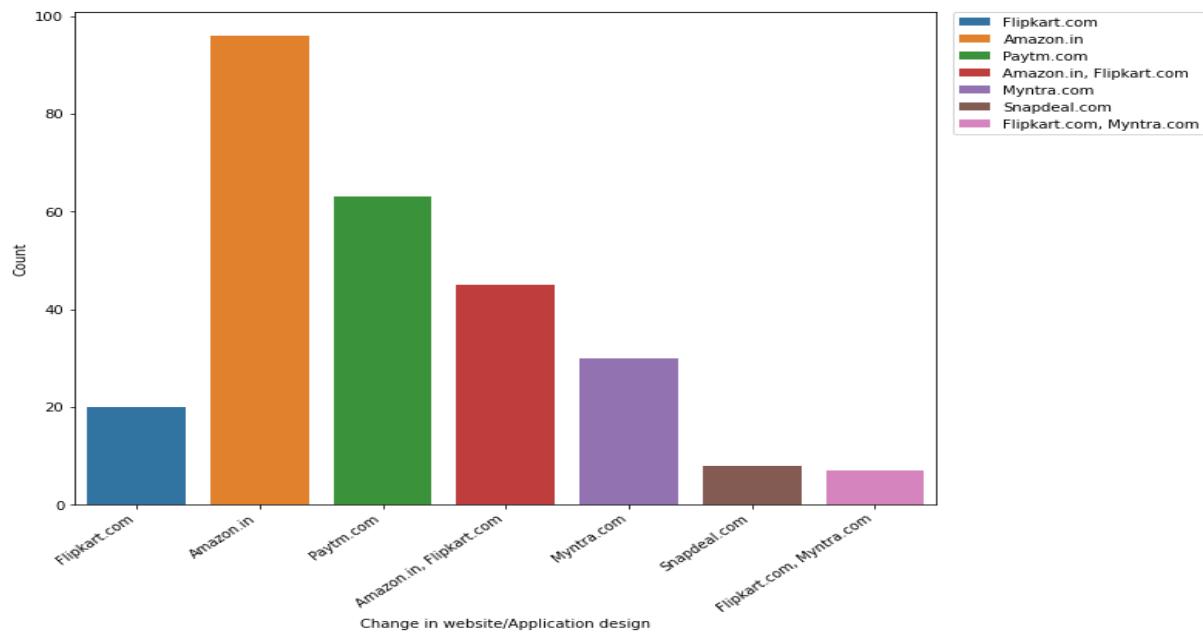
Analysis of data based on longer delivery period



Findings:

Most of the customers have rated Snapdeal.com and Paytm.com as the e-tailers that takes longer deliver time of orders.

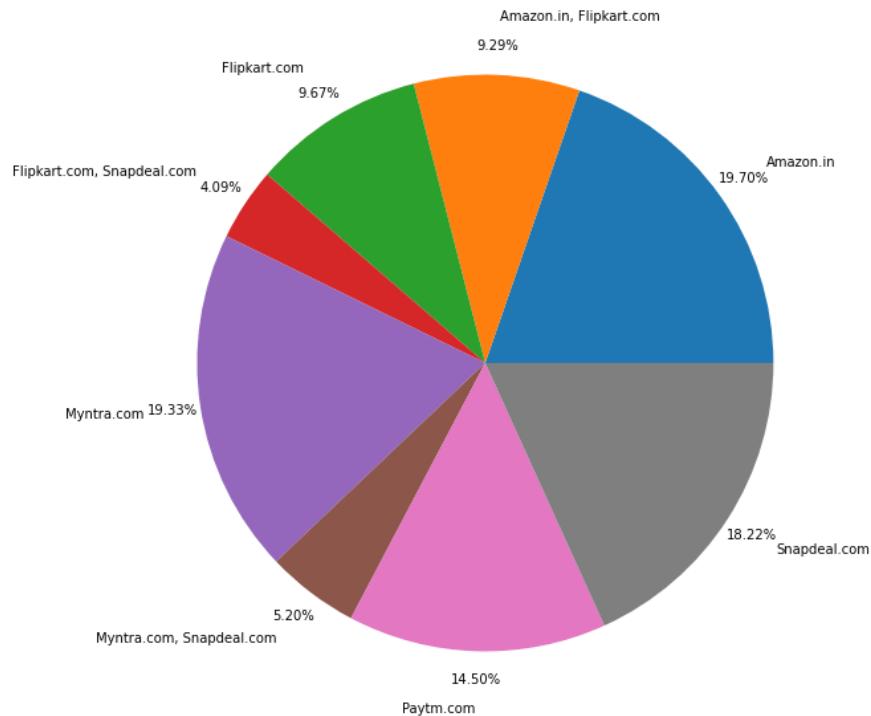
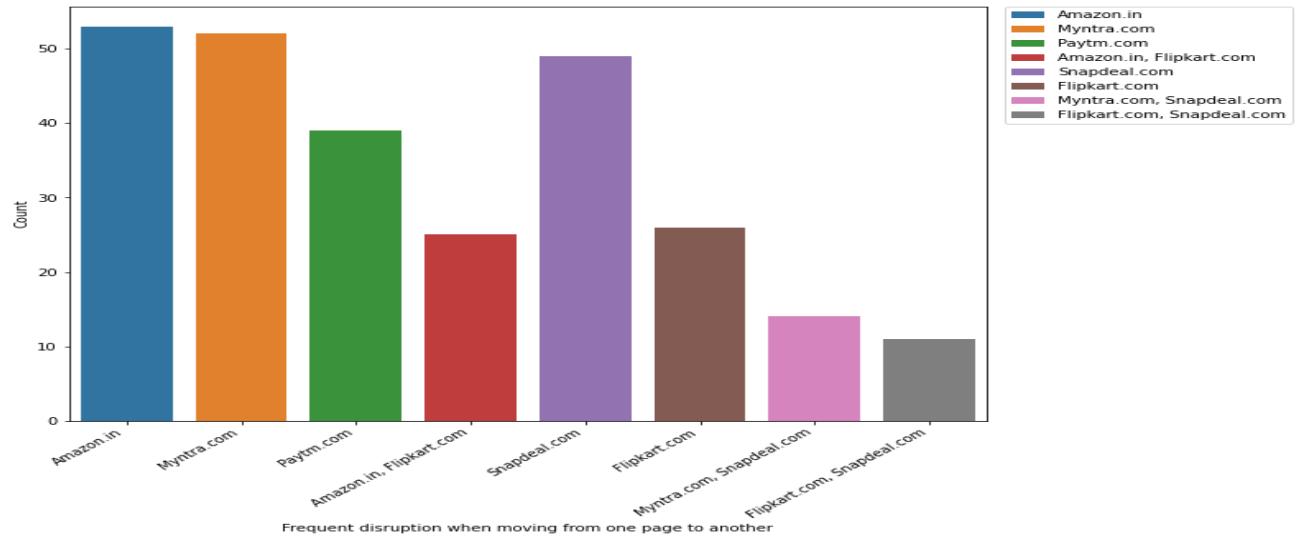
Analysis of data based on change in website/application design



Findings:

Most of the customers have rated Amazon.in as the e-tailer whose website/application having changes in designs.

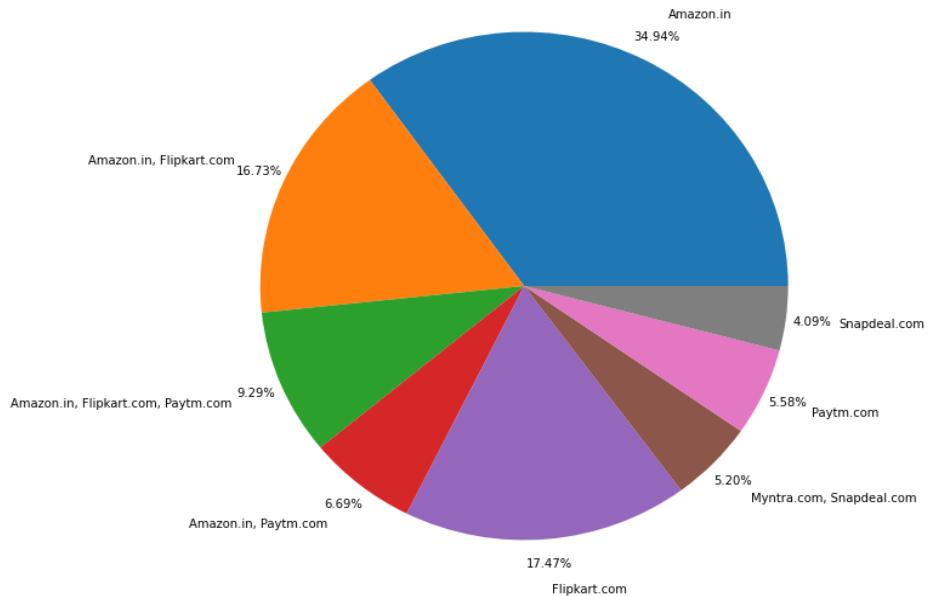
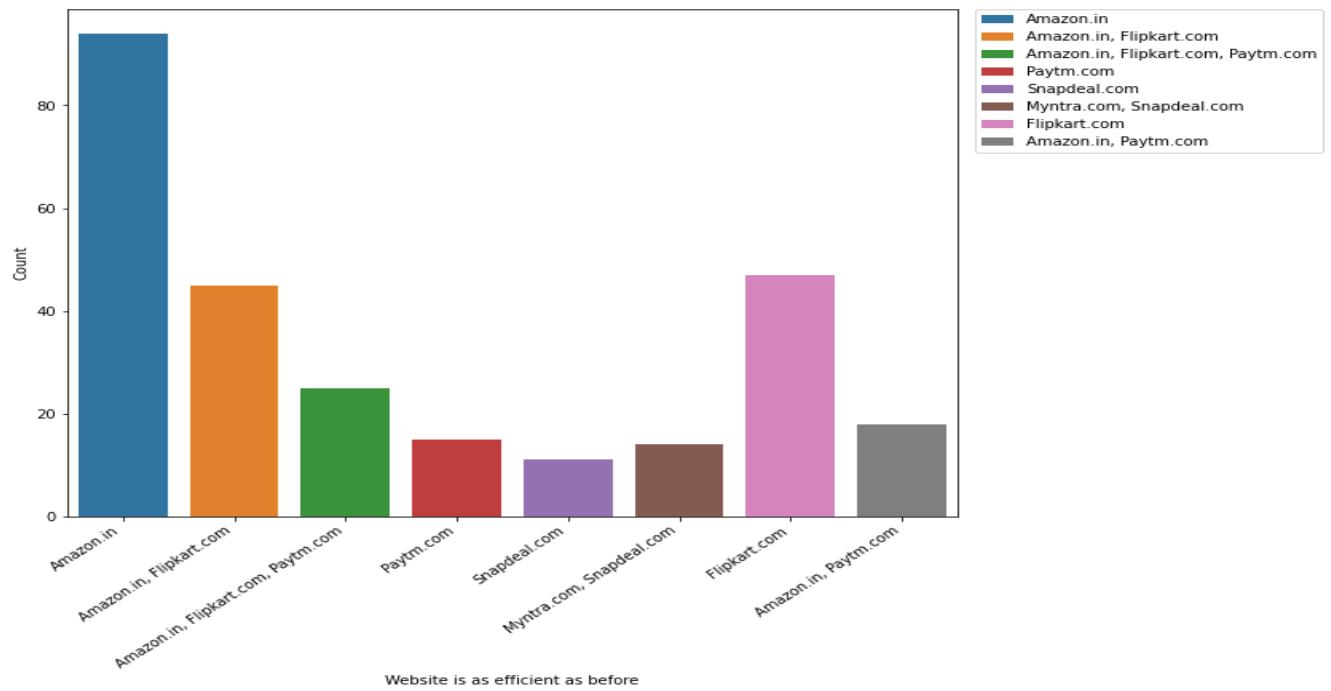
Analysis of data based on frequent disruption when moving from one page to another



Findings:

Most of the customers have rated Amazon.in and Myntra.com are having frequent disruptions when moving from one page to another.

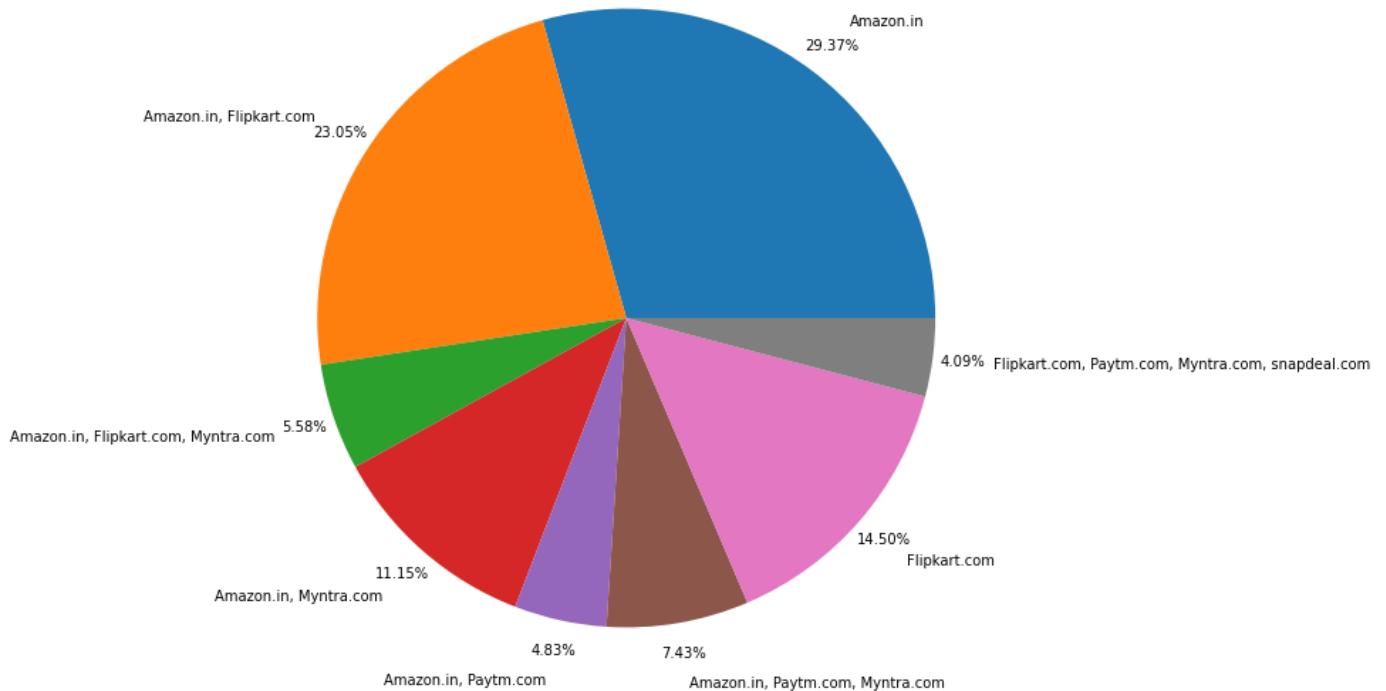
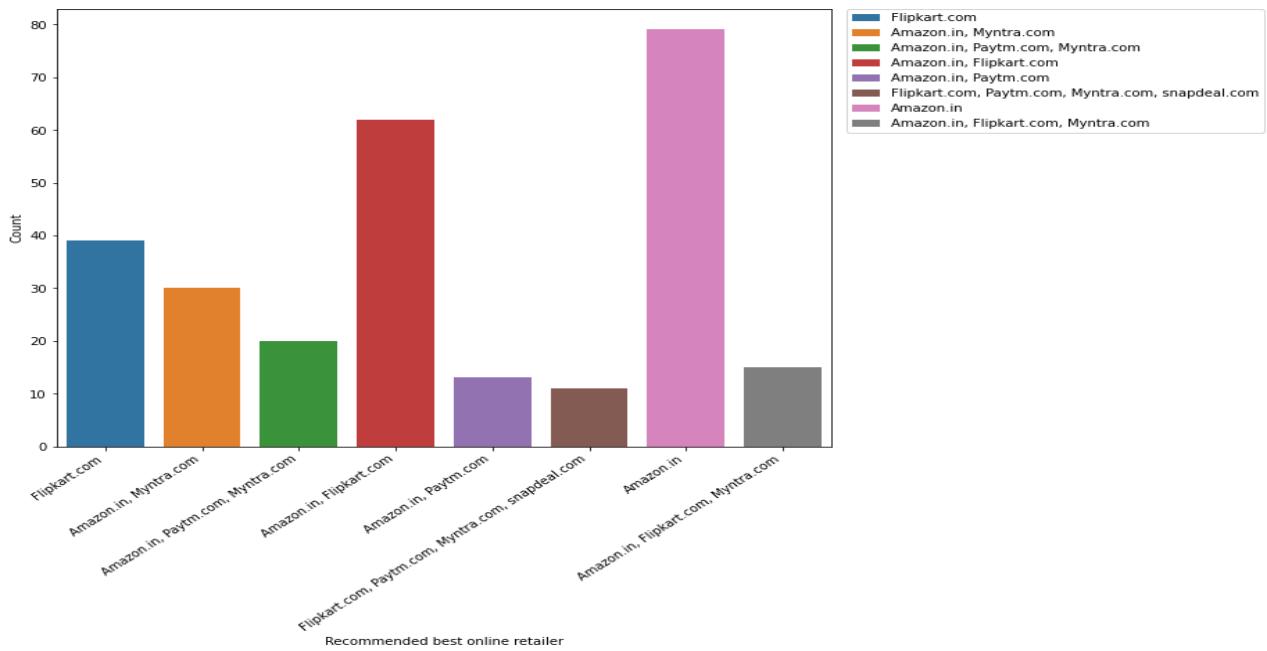
Analysis of data based on website is as efficient as before



Findings:

Most of the customers have rated Amazon.in as the e-tailer having website which is efficient as before.

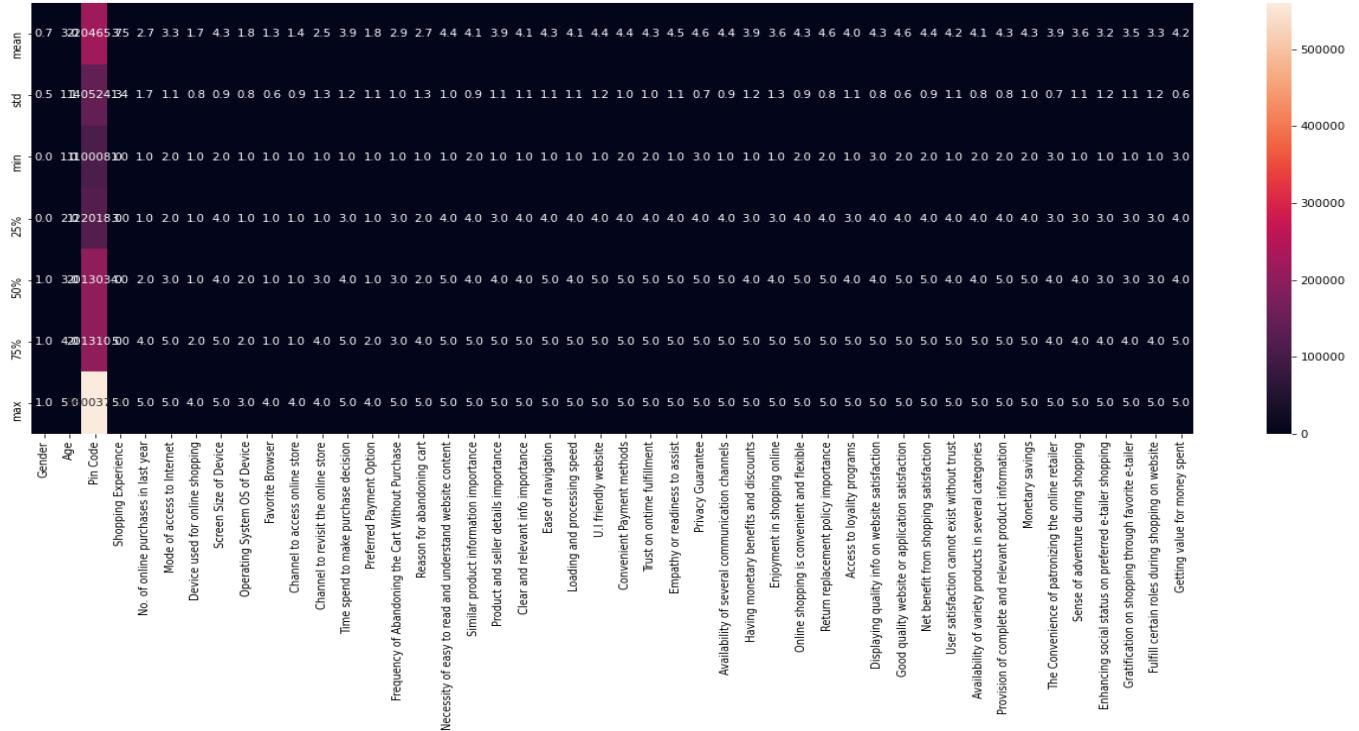
Analysis of data based on recommended best online retailer



Findings:

Most of the customers have rated Amazon.in as the best recommended online retailer. Second most rated e-tailer is Flipkart.com

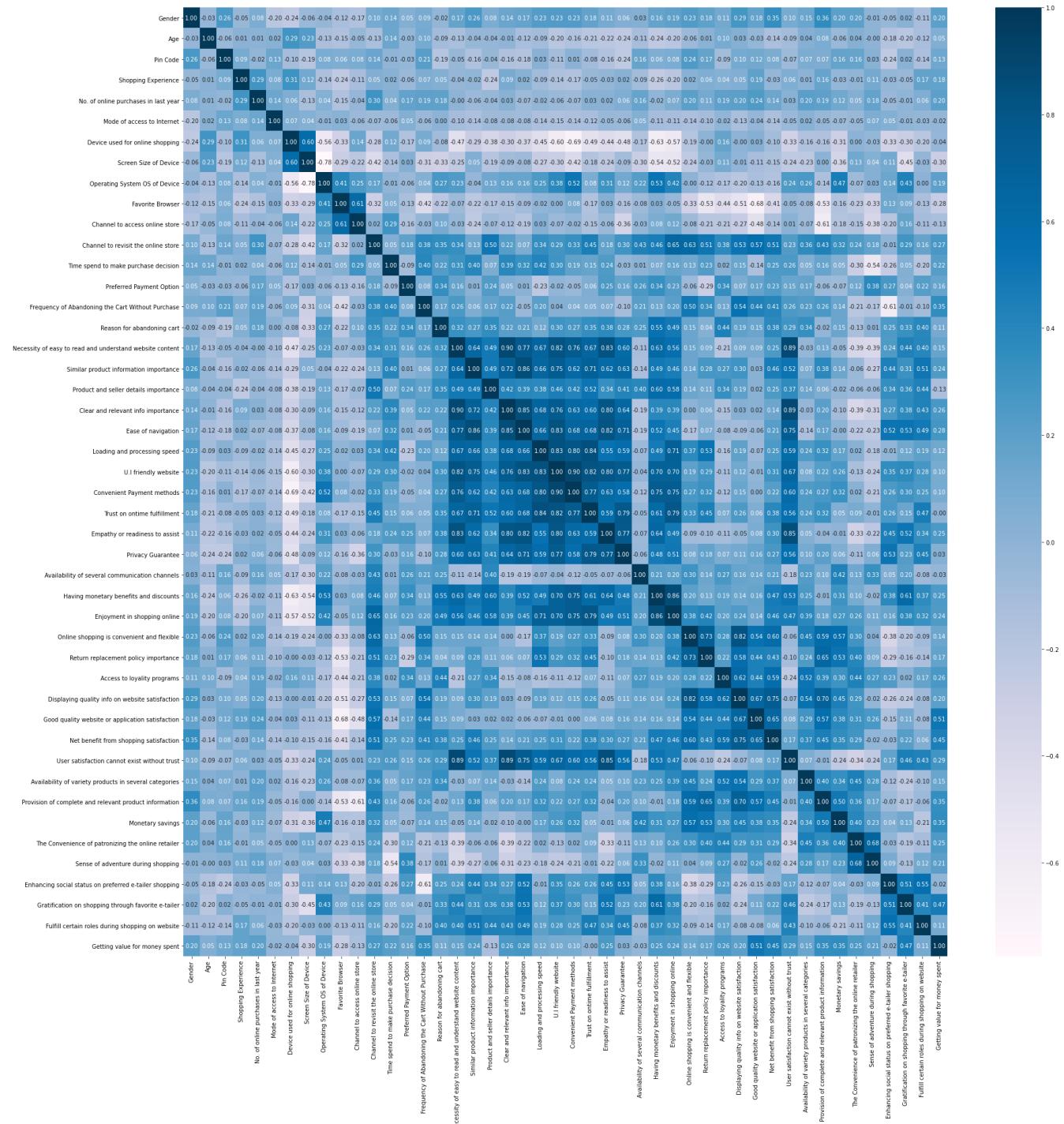
Statistical Summary of Data (Describe of Data)



Findings:

Most of the categorical columns are having higher mean value than the median value. But since the data is categorical in nature but were encoded, skewness is irrelevant for these data.

Correlation



Findings

From the above observations, customers were asked to rate the best e-tailer (Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com) according to various aspects. Out of which Amazon.in was rated as best e-tailers compared to other e-tailers during various aspects.

Also, there were user ratings where Amazon.in was having the drawbacks (like longer time to load graphical and image contents during sale or promotion period). But after considering all the customer ratings, Amazon.in was customers' choice for an ideal e-tailer compared to other e-tailers.

Conclusion

When it comes to customer retention on online shopping, e-tailers should consider the hedonic values and utilitarian values to increase the customer base and attract more customers to online shopping. 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.

Currently most of the e-tailers are working well by providing better quality products with better services at affordable prices and improving their pre-sale and after-sale services. When it comes to online shopping, e-tailers should also consider other factors like on time delivery, multichannel communication service, multiple payment modes, readiness to assist the customers with the best support team, providing promotions, sale, access to loyalty program etc. to improve the repeat purchase and to bring more potential customers.