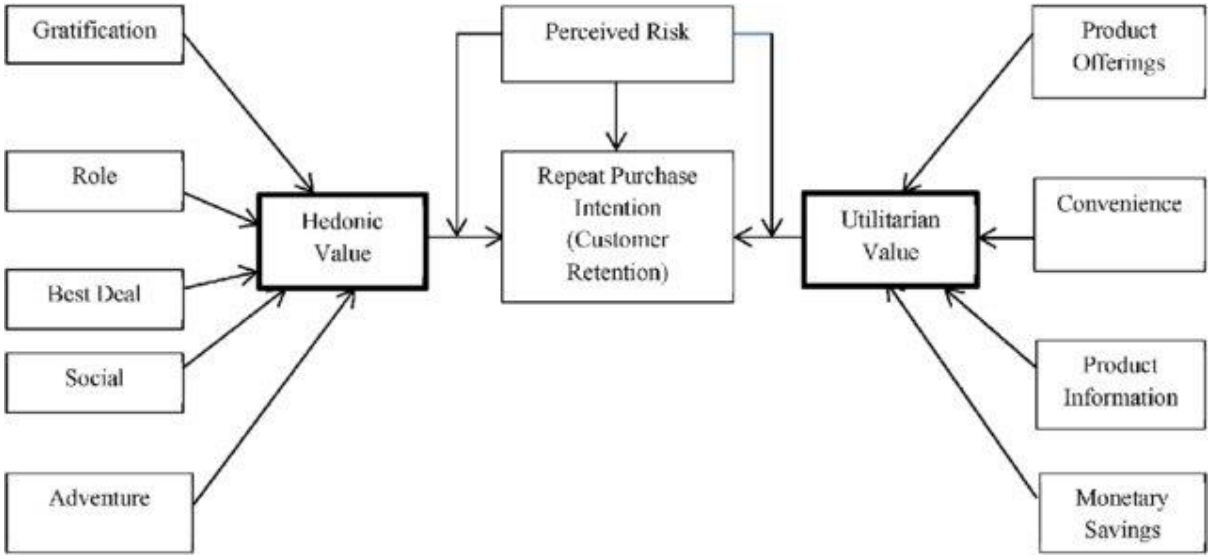
Customer Retention Project Report

. Problem Introduction

We all know about the e-commerce which is the online platform from where we sell or buy our goods and services, or the transmitting of funds or data over the internet. In this project, we have to analyze the data of success factor of e-commerce websites. To present the models for customer activation and retention, a thorough assessment of the literature, theories, and models was conducted. Service quality, system quality, information quality, trust, and net benefit were recognised as five important factors that contributed to the success of an e-commerce store. The study also looked into the elements that influence the likelihood of repeat purchases by internet clients. To positively influence repeat purchase intention (loyalty), a combination of utilitarian and hedonistic values is required. The information was gathered from Indian online shoppers. The findings reveal the key e-commerce success elements that influence client happiness.

. Data set

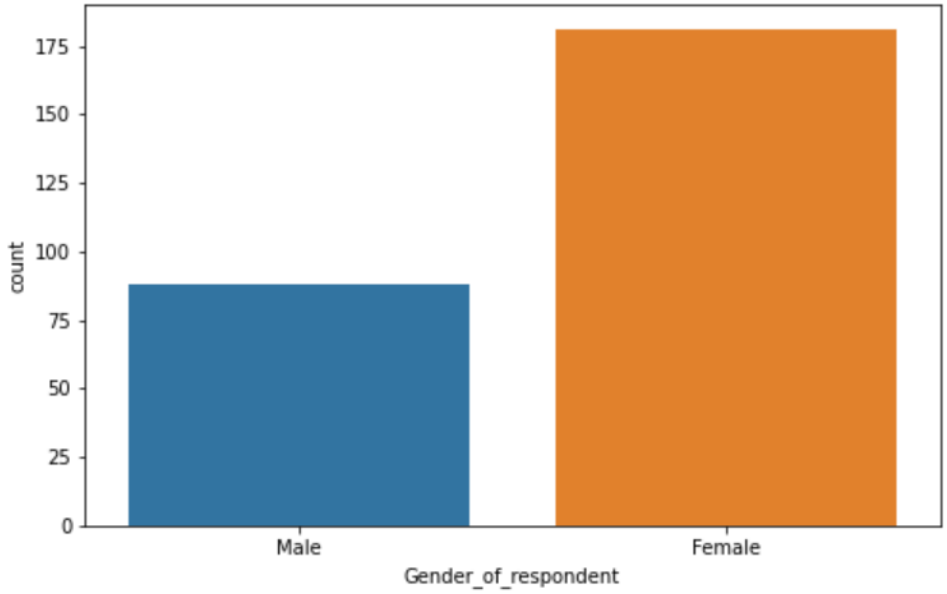
We were given a dataset by Flip Robo, from where I am doing my internship. This data is customer retention data The data is collected from the Indian online shoppers. Results indicate the e-retail success factors, which are very much critical for customer satisfaction.



. Feature and Processing

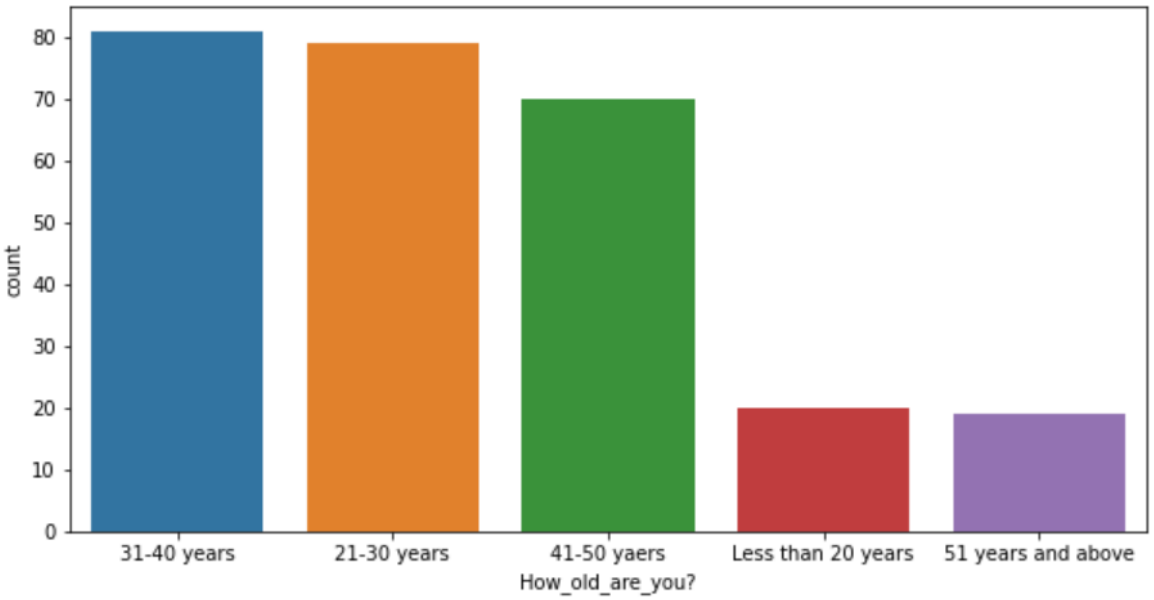
We first opened the Jupyter notebook so that we start making the model, after this we ha ve imported the library and loaded the dataset . We have calculated the shape of the data “The dataset have 71 columns or attributes and 269 rows representing each respondant's answers values of each attribute. After that checking that we need to check the column a nd Instanciating the list of columns name and Renaming the old columns of the dataset wi th the modified columns name. Checking the dataset after renaming the columns name. H ere is the plot and mapping of the data.

<AxesSubplot:xlabel='Gender_of_respondent', ylabel='count'>



The males are 32% of the total gender count as compared to females being 67%.

<AxesSubplot:xlabel='How_old_are_you?', ylabel='count'>



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<AxesSubplot:xlabel='How_old_are_you?', ylabel='count'>
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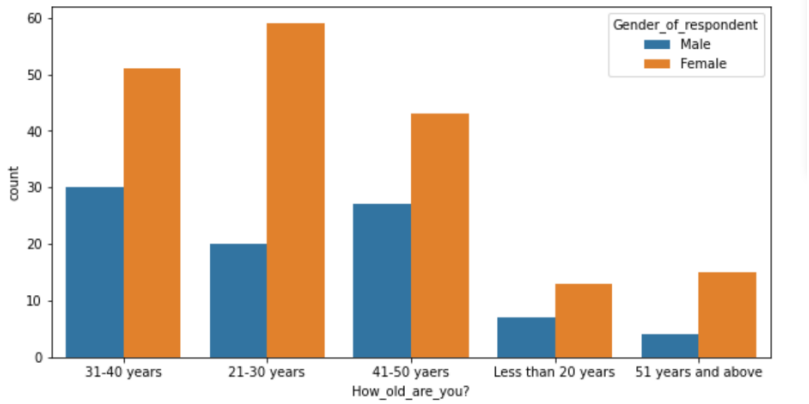


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<AxesSubplot:xlabel='Which_city_do_you_shop_online_from?', ylabel='count'>
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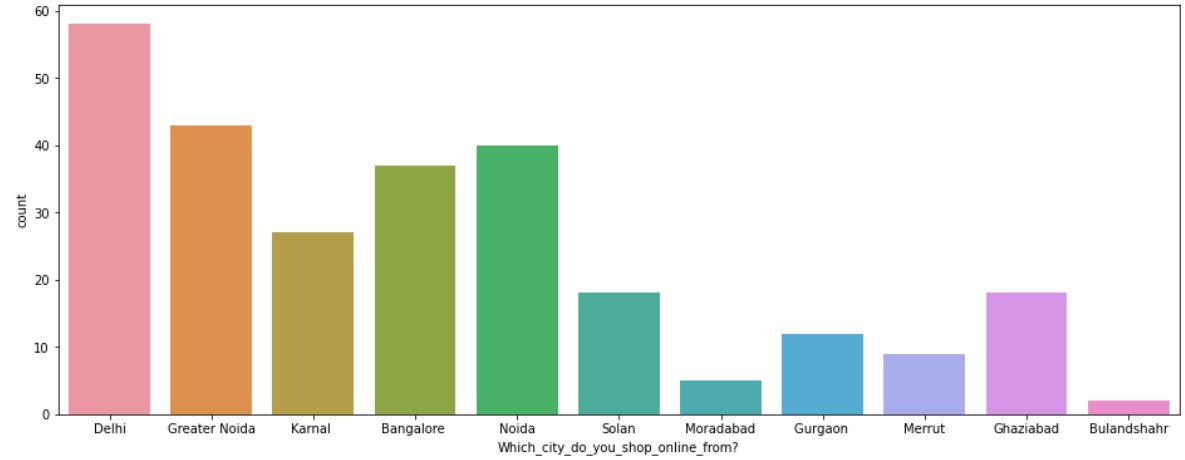

From the above countplot, Delhi is the city having higest number of purchasers among the other respective cities. This, plot also shows that the count of people from delhi is more as compared to other citied in respect of online shopping.

On the other hand, Bulandshahr & moradabad are not much adaptive for online shopping as per this dataset.

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<AxesSubplot:xlabel='Which_city_do_you_shop_online_from?', ylabel='count'>
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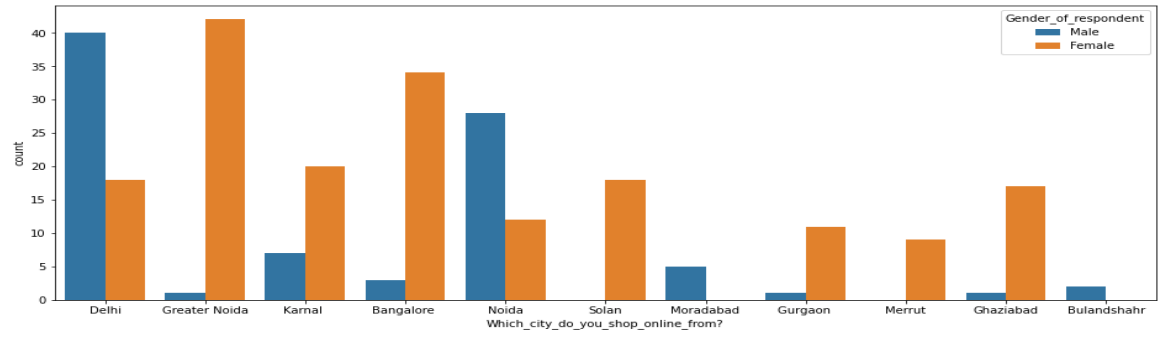
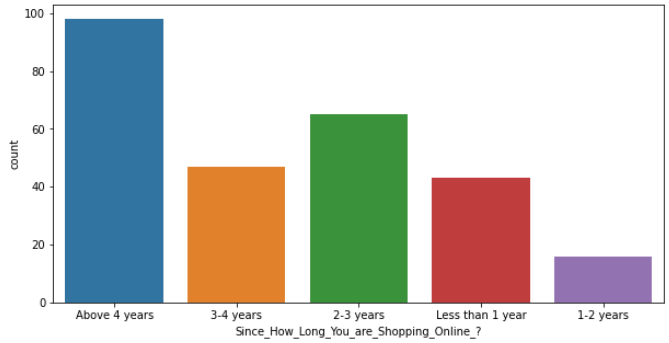
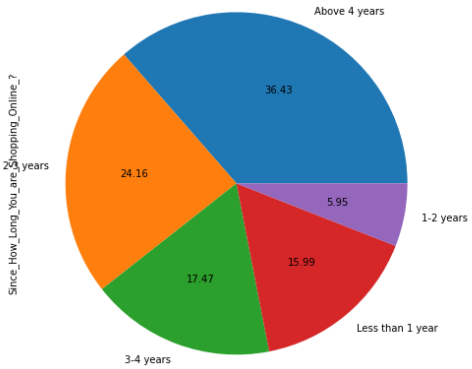


From the above countplot,
- The count of males from Delhi city and females from Greater Noida is higher among all the other cities.
- And in Bulandshahr city there are no females who have done online shopping.
- Similarly, males do not shop online who belongs to Merrut and Solan.
- In the whole dataset, the males shop online more as compared to feamles belongs to two cities only, named Delhi followed by Noida.

<AxesSubplot:xlabel='Since_How_Long_You_are_Shopping_Online_?', ylabel='count'>

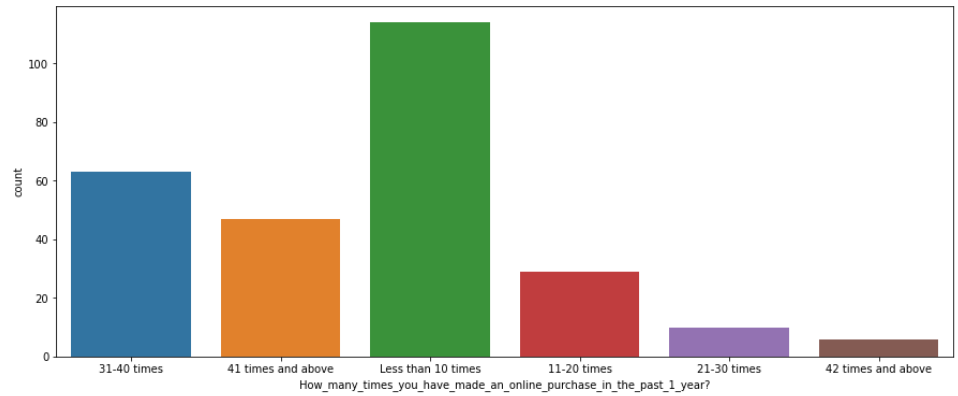


<AxesSubplot:ylabel='Since_How_Long_You_are_Shopping_Online_?'>



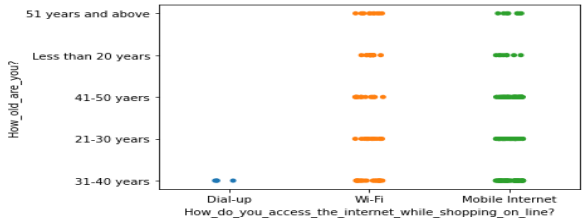
The above plots shows that maximum number of people are shopping online from past 4 years. Thus the ratio of shopping online is more of 4 years having 36.43% and the least is of 1-2 years being only 5.95% of the total data.

<AxesSubplot:xlabel='How_many_times_you_have_made_an_online_purchase_in_the_past_1_year?', ylabel='count'>



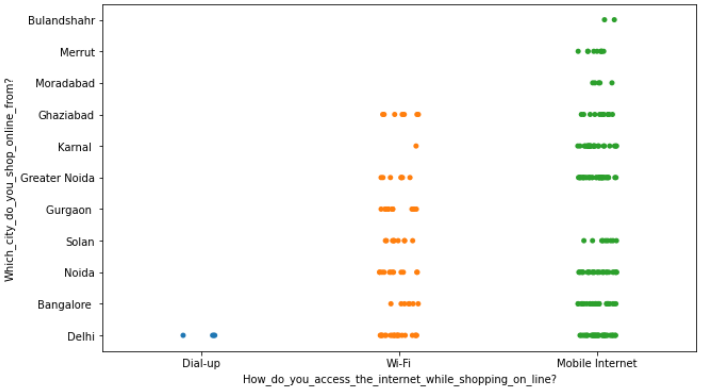
Maximum number of people have done online shopping about less than 10 times in past 1 year, but around 02% people have done online purchasing about 42 times and above in past 1 year.

: <AxesSubplot:xlabel='How_do_you_access_the_internet_while_shopping_on_line?', ylabel='How_old_are_you?'>



Here, Mobile Internet and Wi-Fi are used by every age group. On the other hand, Dial-up is just used by the people of age-group 31-40 years.

<AxesSubplot:xlabel='How_do_you_access_the_internet_while_shopping_on_line?', ylabel='Which_city_do_you_shop_online_from?'



From the above plot, it is observed,
- People belongs to Delhi only access the dial-up in order to shop online.
- Gurgaon consumers don't use mobile internet, rest all the citites consumers access the same to shop online.
- Customers belongs to Moradabad, Merrut and Bulandshahr don't access Wi-Fi for online shopping.

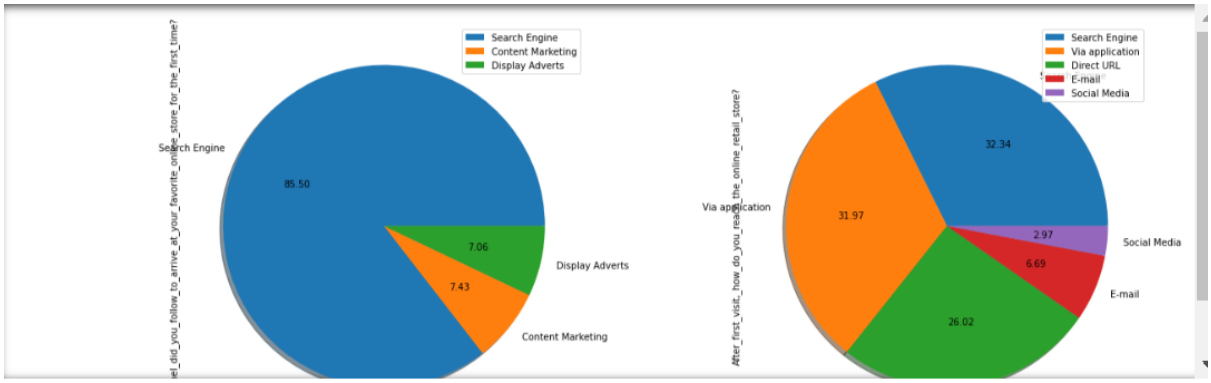
Observations:

1. Which_device_do_you_use_to_access_the_online_shopping? - The smartphone users are more as compared to other devices to be used by customers. The ratio of mpbile users is 52% which is half of the total data for this attribute.

2. What_is_the_screen_size_of_your_mobile_device? - Around 49% consumers screen size is not specifically known as the count of 134 consumers have different screen size of their device. But around 36% of the total data of this attribute have screen size of their device of 5.5 inches.

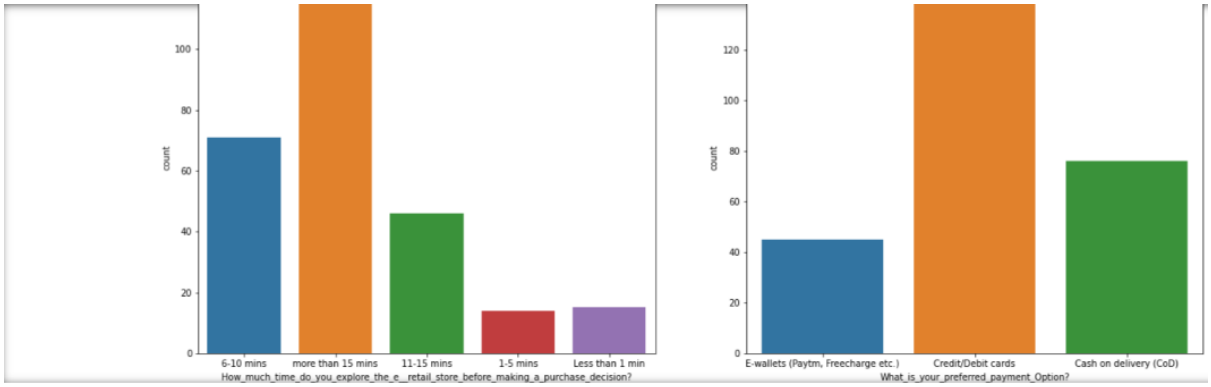
3. What_is_the_operating_system_(OS)_of_your_device? - Around 45% consumers have Window/windows Mobile as their operating system of their device having mobile phones and laptops for the same.

4. What_browser_do_you_run_on_your_device_to_access_the_website? - Majority of the consumers i.e. 80% use Google Chrome to access the website.

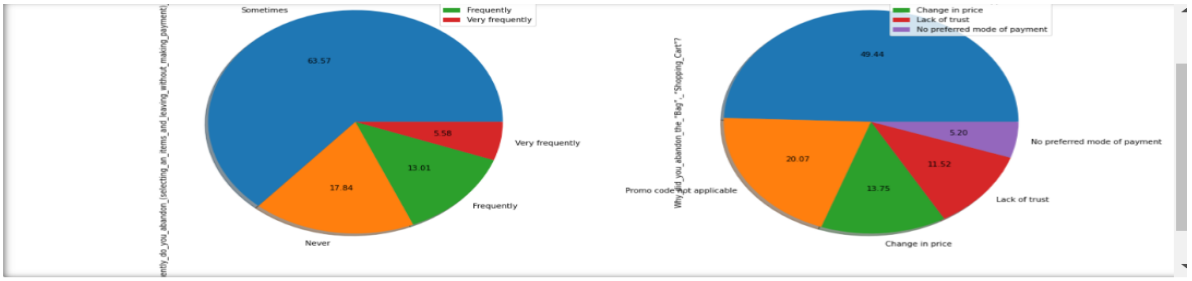


-> Which_channel_did_you_follow_to_arrive_at_your_favorite_online_store_for_the_first_time? :
- Majority i.e. around 86% customers used search engines in order to reach their respective favorite online store for the first time.
- On the other hand, Display Adverts and Content marketing are almost or nearly equally used as a channel by the customers for the same purpose.

-> After_first_visit,_how_do_you_reach_the_online_retail_store? :
- Around 32.34% and 31.97% customers have reached the online store using Search engines and Via respective application.
- Social media is not much popluar to reach the online store as it contributes nearly only 3%.
- Direct - url is also prefferred by the customers for the same.
- Thus, Search engines, applications and direct url are used or preferred the most by the customers to reach online retail store respectively.

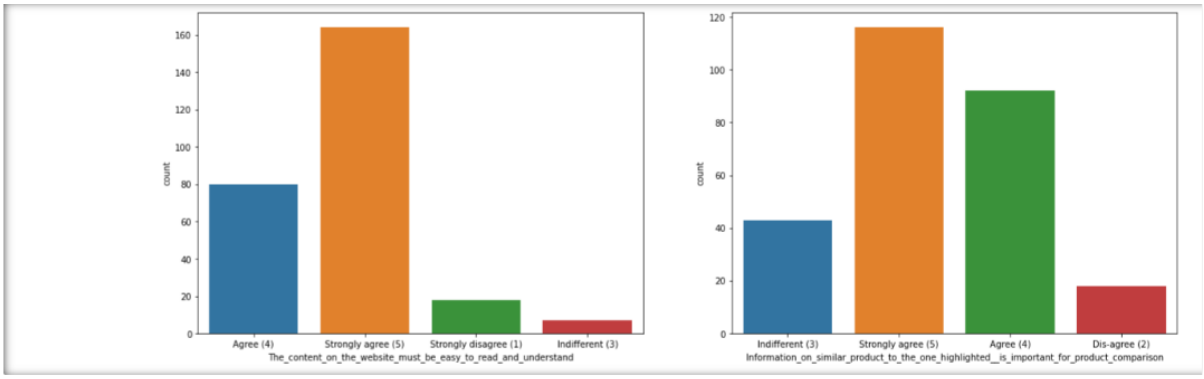
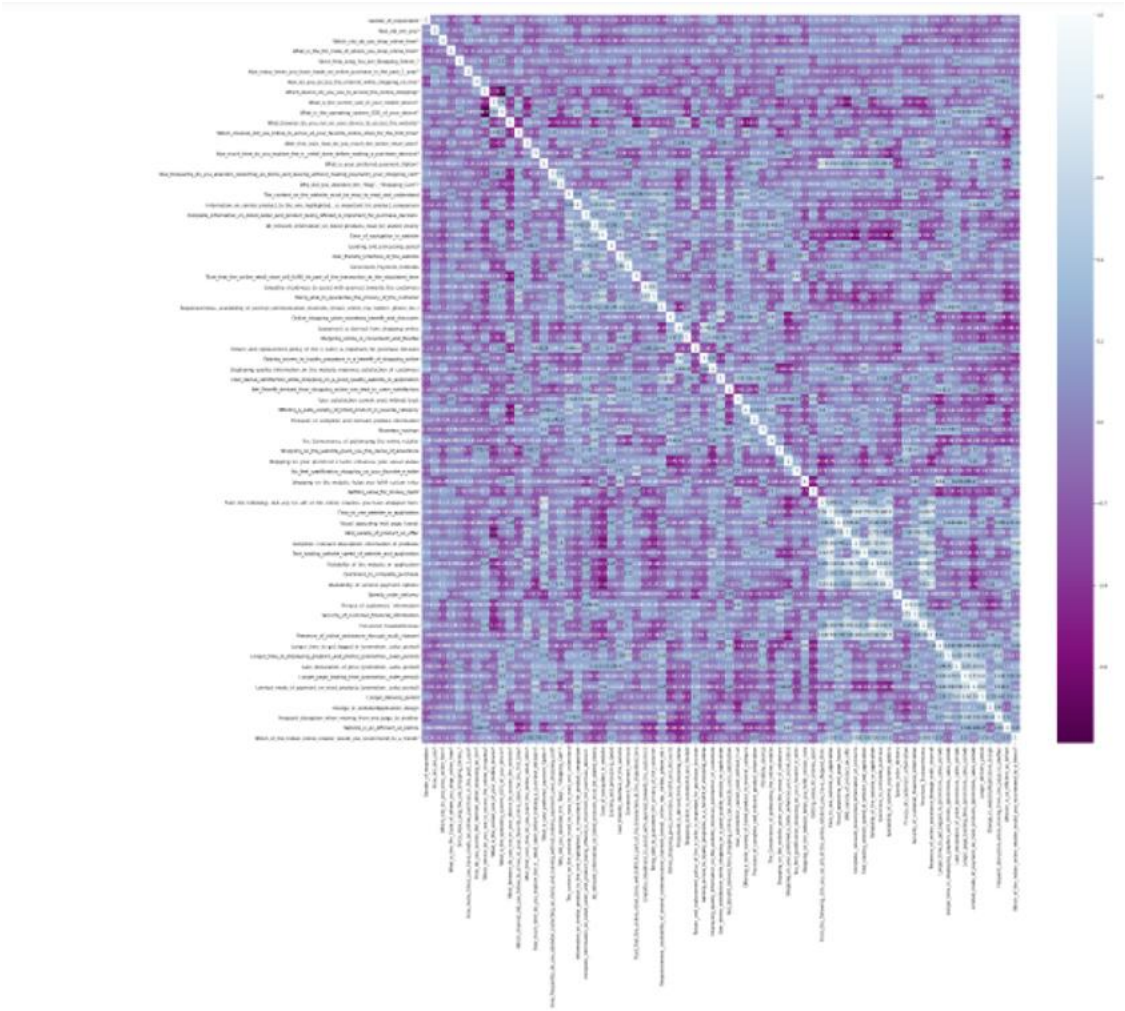


- Maximum number i.e. 45% of customers explore the e-retail store more than 15 times before making a purchase decision.
- Around 55% of the customers preferred Credit/debit Cards as payment option.
- The Cash on delivery option is preferred by the custoners which are equal to the half of the customers using credit/debit cards.



-> How_frequently_do_you_abandon_(selecting_an_items_and_leaving_without_making_payment)_your_shopping_cart? :
- Approximately, 64% customers sometimes leave the without making payment after selecting any item.
- The customers who never leave as such and purchase the item selected is ust about approx. 18%.
- Thus, the companies needs to be more innovative in order to hold the customers and let them purchase the items.
So, that the percantage of customers leaving would be reduced.

-> Why_did_you_abandon_the_"Bag",_"Shopping_Cart"? :
- The reason to abandon the bag or shopping cart can be interpreted from the above plot to be getting other better alternative offer.
- Around 20% customers abandon the bag because the promo codes are not able to be applicable, thus customers faces issue in getting te discounts using promo codes so, as a result the purchasing got abandoned.


count
Agree (4)
Strongly agree (5)
Strongly disagree (1)
Indifferent (3)
The_content_on_the_website_must_be_easy_to_read_and_understand
count
Indifferent (3)
Strongly agree (5)
Agree (4)
Dis-agree (2)
Information_on_similar_product_to_the_one_highlighted__is_important_for_product_comparison