

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. The data is collected from the Indian online shoppers. Results indicate the e-retail success factors, which are very much critical for customer satisfaction.

EDA steps and visualizations:-

EDA

#Printing their object type and their unique values

for column in df:

if df[column].dtype==object:

print(str(column)+' : '+str(df[column].unique()))

print(df[column].value_counts())

print("*****")

print('\n')

#Plot Pie chart male vs female

calculate their age group

pie chart of shopping duration

#types of sites online used

#method of access to online sites of shopping

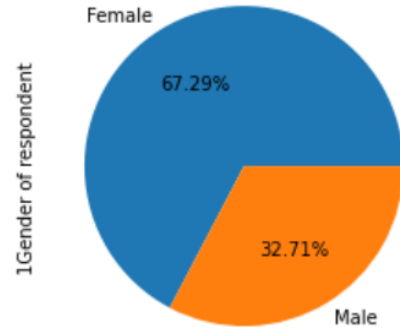
#logged in promotions

#delivery period

#payment method

```
In [12]: df['1Gender of respondent'].value_counts().plot.pie(autopct='%4.2f%%')
```

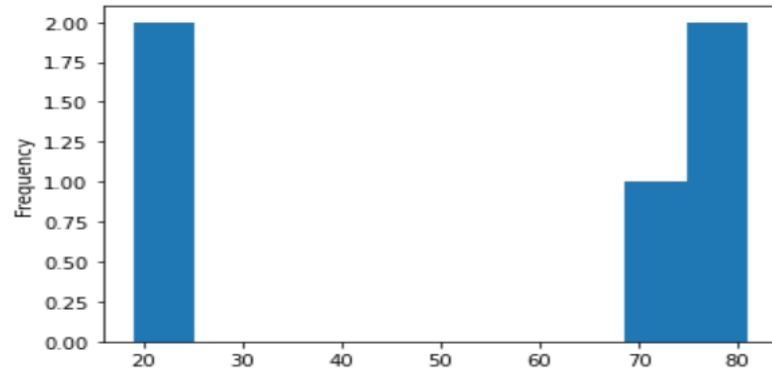
```
Out[12]: <AxesSubplot:ylabel='1Gender of respondent'>
```



Our dataset contains 67 % female and 33% male. This concludes females buy more than men through online portals.

```
In [13]: df['2 How old are you? '].value_counts().plot.hist()
```

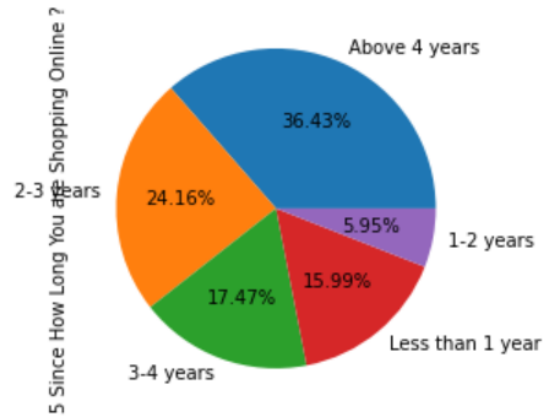
```
Out[13]: <AxesSubplot:ylabel='Frequency'>
```



The data contains age group of 20 to 25 & 68-82

```
In [14]: df['5 Since How Long You are Shopping Online ?'].value_counts().plot.pie(autopct='%4.2f%%')
```

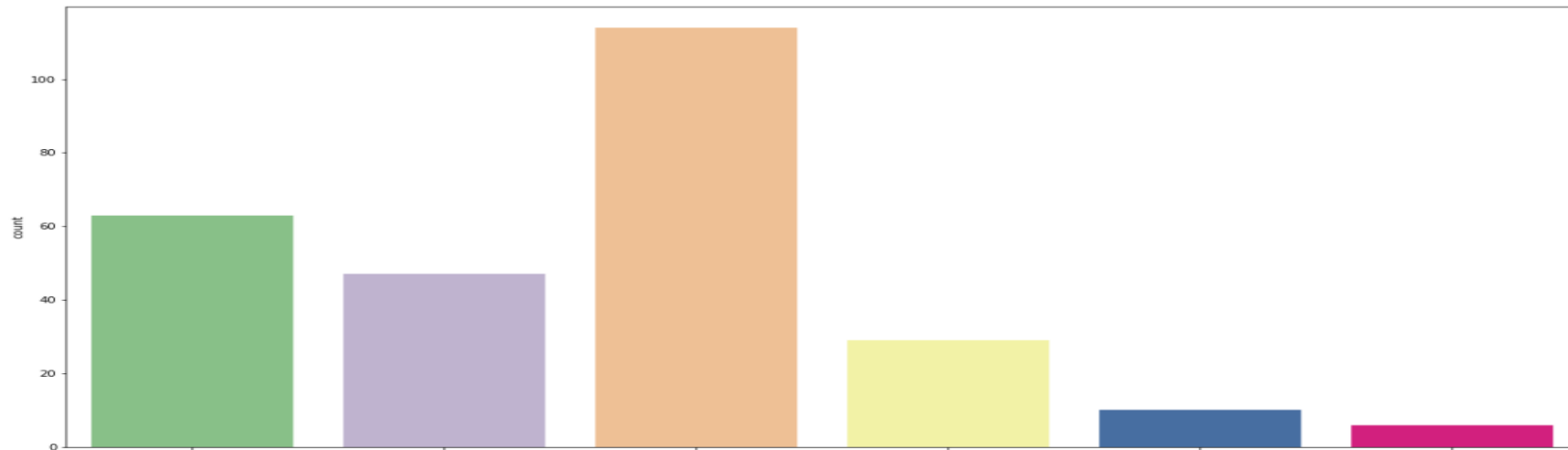
```
Out[14]: <AxesSubplot:ylabel='5 Since How Long You are Shopping Online ?'>
```



The dataset has higher customers of above 4 years

```
In [41]: plt.figure(figsize=(20,10))
sns.countplot(x="6 How many times you have made an online purchase in the past 1 year?",data=df,palette="Accent")
```

```
Out[41]: <AxesSubplot:xlabel='6 How many times you have made an online purchase in the past 1 year?', ylabel='count'>
```

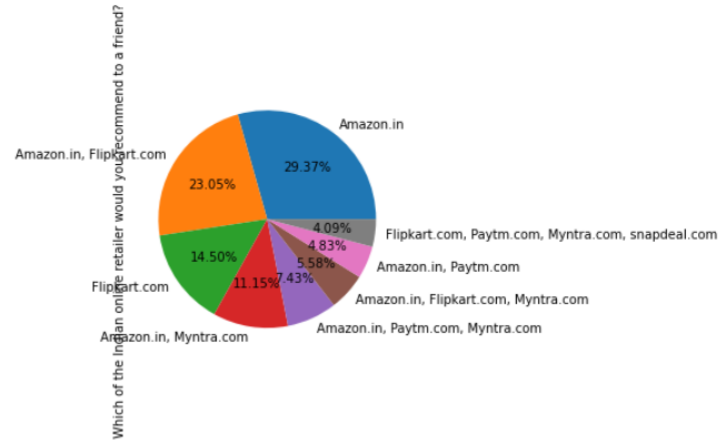


Very few customers who have purchased more that 42 times , theree more number of custometrs who have purchased less than 10 times

```
In [43]: df['Which of the Indian online retailer would you recommend to a friend?'].value_counts().plot.pie(autopct='%4.2f%%')
```

```
Out[43]: <AxesSubplot:ylabel='Which of the Indian online retailer would you recommend to a friend?'

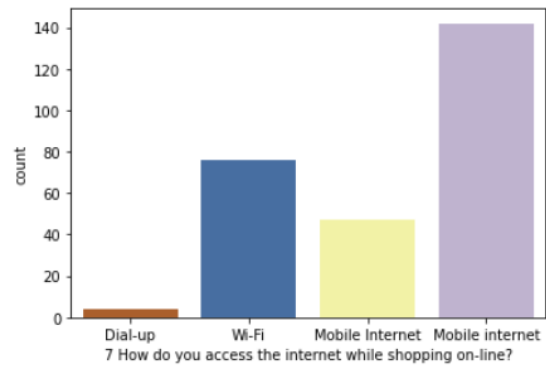
```



The higher recommendations are for amazon followed by flipkart and then myntra

```
In [51]: sns.countplot(x="7 How do you access the internet while shopping on-line?",data=df,palette='Accent_r')
```

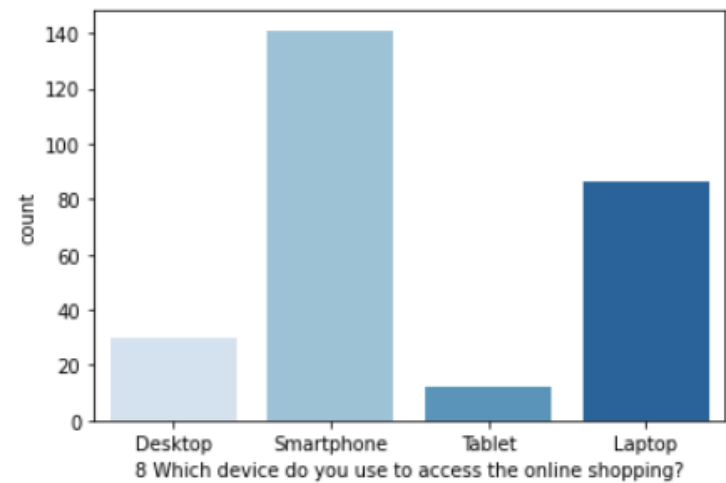
```
Out[51]: <AxesSubplot:xlabel='7 How do you access the internet while shopping on-line?', ylabel='count'>
```



Most of the users prefer online shopping on mobile

```
In [54]: sns.countplot(x="8 Which device do you use to access the online shopping?",data=df,palette="Blues")
```

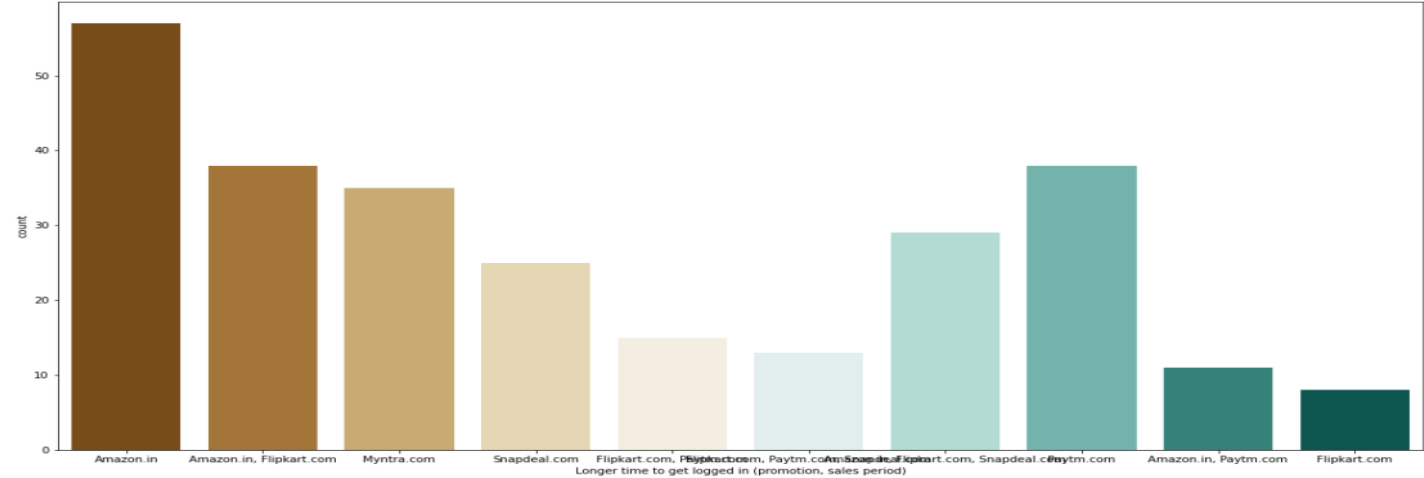
Out[54]: <AxesSubplot:xlabel='8 Which device do you use to access the online shopping?', ylabel='count'>



Most of the people use smartphone for online shopping

```
In [56]: plt.figure(figsize=(20,10))
sns.countplot(x="Longer time to get logged in (promotion, sales period)",data=df,palette="BrBG")
```

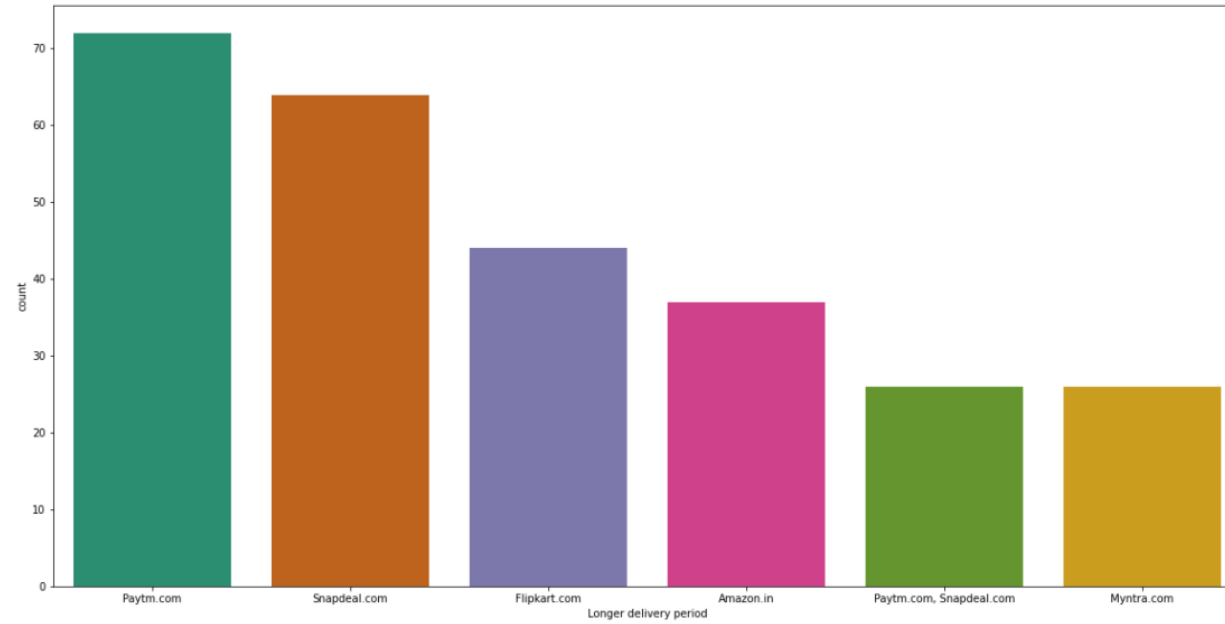
Out[56]: <AxesSubplot:xlabel='Longer time to get logged in (promotion, sales period)', ylabel='count'>



Highest sales promotion is done by Amazon

```
In [58]: plt.figure(figsize=(20,10))
sns.countplot(x="Longer delivery period",data=df,palette="Dark2")
```

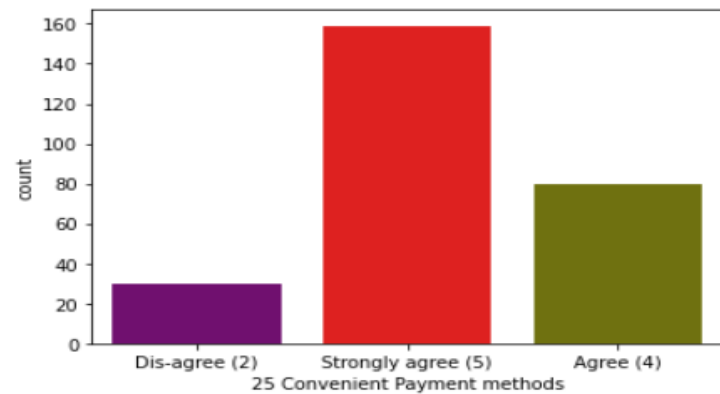
```
Out[58]: <AxesSubplot:xlabel='Longer delivery period', ylabel='count'>
```



Myntra has lowest delivery period

```
In [60]: sns.countplot(x="25 Convenient Payment methods",data=df,palette="brg")
```

```
Out[60]: <AxesSubplot:xlabel='25 Convenient Payment methods', ylabel='count'>
```



Most of the people agrees that th epayment made online are safe

Conclusion:-

#Most of the people agrees that the epayment made online are safe

#Myntra has lowest delivery period

#Highest sales promotion is done by Amazon

#Most of the people use smartphone for online shopping

#Very few customers who have purchased more that 42 times , there more number of custometr who have purchased less than 10 times

#The dataset has higher customers of above 4 years

#Our dataset contains 67 % female and 33% male. This concludes females buy more than men through online portals.