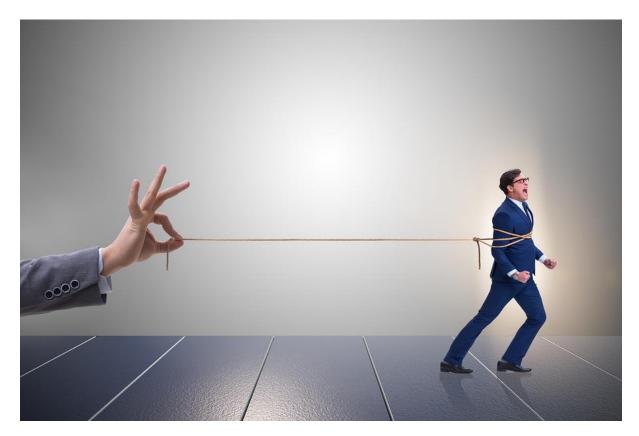


Customer Retention



Submitted by:

Rahul Singh

ACKNOWLEDGMENT

Thanks for giving me the opportunity to work in FlipRobo Technologies as Intern and would like to express my gratitude to Data Trained Institute as well for trained me in Data Science Domain. This helps me to do my projects well and understand the concepts.

INTRODUCTION

Business Problem Framing
 Customer satisfaction is one of the important key factors to get success in online shopping.

It includes a wide variety of products and its quality and price and return and replacement policy and delivery speed etc.

It makes the customer to re-visit or repurchase the E-comm shopping site for purchase the products from the store. Generally, It is the process of engaging the existing customers to buy products from the store.

Analytical Problem Framing

Data Sources and their formats

The given task id here to provide analysis on this topic, I can see that there are so many columns which indicates a different factors regarding customer shopping on E-commerce site.

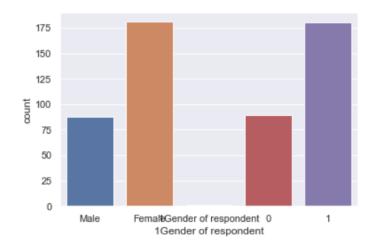
```
In [13]: df.columns
'4 What is the Pin Code of where you shop online from?',
'5 Since How Long You are Shopping Online ?',
'6 How many times you have made an online purchase in the past 1 year?',
'7 How do you access the internet while shopping on-line?',
'8 Which device do you use to access the online shopping?',
'9 What is the screen size of your mobile device?\t\t\t\t\
'10 What is the operating system (OS) of your device?\t\t\t\t
'11 What browser do you run on your device to access the website?\t\t\t
                                                                          '12 Which channel did you follow to arrive at your favorite online store for the first time?
                                                                         '13 After first visit, how do you reach the online retail store?\t\t\t
                                                                         '14 How much time do you explore the e- retail store before making a purchase decision?
                                                                         '15 What is your preferred payment Option?\t\t\t\t
                                                                          '16 How frequently do you abandon (selecting an items and leaving without making payment) your shopping cart?\t\t\t\t\t
                                           \t\t
                                                                         '17 Why did you abandon the "Bag", "Shopping Cart"?\t\t\t\t
                                                                         '18 The content on the website must be easy to read and understand',
'19 Information on similar product to the one highlighted is important for product comparison',
'20 Complete information on listed seller and product being offered is important for purchase decision.',
'21 All relevant information on listed products must be stated clearly',
'22 Ease of navigation in website', '23 Loading and processing speed',
'24 User friendly Interface of the website',
'25 Convenient Payment methods',
'26 Trust that the online retail store will fulfill its part of the transaction at the stipulated time',
'27 Empathy (readiness to assist with queries) towards the customers',
'28 Being able to guarantee the privacy of the customer',
'29 Responsiveness, availability of several communication channels (email, online rep, twitter, phone etc.)',
'30 Online shopping gives monetary benefit and discounts',
'31 Enjoyment is derived from shopping online',
'32 Shopping online is convenient and flexible',
'33 Return and replacement policy of the e-tailer is important for purchase decision',
                                            '33 Return and replacement policy of the e-tailer is important for purchase decis standard and in the standard and replacement policy of the e-tailer is important for purchase decision', 32 Shopping online is convenient and flexible', 33 Return and replacement policy of the e-tailer is important for purchase decision', 34 Gaining access to loyalty programs is a benefit of shopping online', 35 Displaying quality Information on the website improves satisfaction of customers', 36 User derive satisfaction while shopping on a good quality website or application', 37 Net Benefit derived from shopping online can lead to users satisfaction', 38 User satisfaction cannot exist without trust', 39 Offering a wide variety of listed product in several category', 40 Provision of complete and relevant product information', 41 Monetary savings', 42 The Convenience of patronizing the online retailer', 43 Shopping on the website gives you the sense of adventure', 44 Shopping on your preferred e-tailer enhances your social status', 45 You feel gratification shopping on your favorite e-tailer', 46 Shopping on the website helps you fulfill certain roles', 47 Getting value for money spent', 50 From the following, tick any (or all) of the online retailers you have shopped from; 45 Form the following, tick any (or all) of the online retailers you have shopped from;
                                                'Easy to use website or application',
'Visual appealing web-page layout', 'Wild variety of product on offer',
'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',
'Security of customer financial information',
'Perceived Trustworthines'
                                                'Security of customer financial information',
'Perceived Trustworthiness',
'Presence of online assistance through multi-channel',
'Longer time to get logged in (promotion, sales period)',
'Longer time in displaying graphics and photos (promotion, sales period)',
'Late declaration of price (promotion, sales period)',
'Linger page loading time (promotion, sales period)',
'Limited mode of payment on most products (promotion, sales period)',
'Longer delivery period', 'Change in website/Application design',
'Frequent disruption when moving from one page to another',
'Website is as efficient as before',
'Which of the Indian online retailer would you recommend to a friend?'],
ttype='object')
                                           dtype='object')
```

Most of the customers who do online shopping are Females than males in terms of gender

.. . .

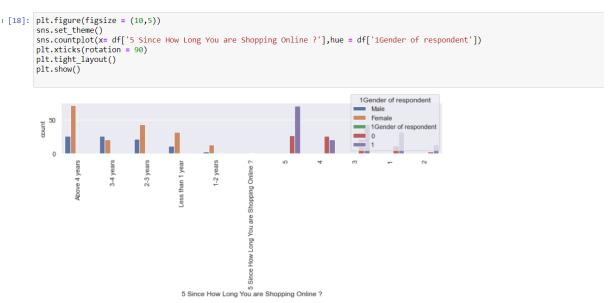
```
In [14]: sns.set_theme()
sns.countplot(df['1Gender of respondent'] )
```

Out[14]: <AxesSubplot:xlabel='1Gender of respondent', ylabel='count'>



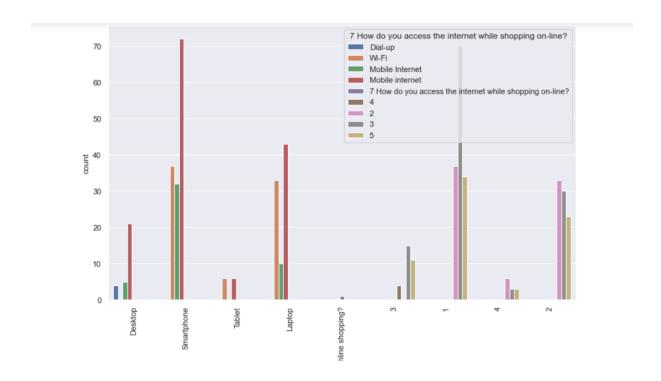
As online shopping is in trends from 6-7 years, it is used to take time for the

people to get familiar on the site which is very important. So as they are getting used to it the plot shows that most of the customers are actively using online shopping for>4years.

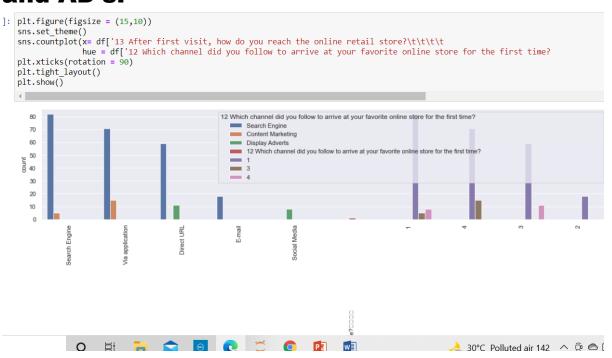


the above plot tells that Female Customers are widely using ecommerce shopping from >4+ years and whereas the male customers shows that <4 in terms of gender and usage of online shopping.

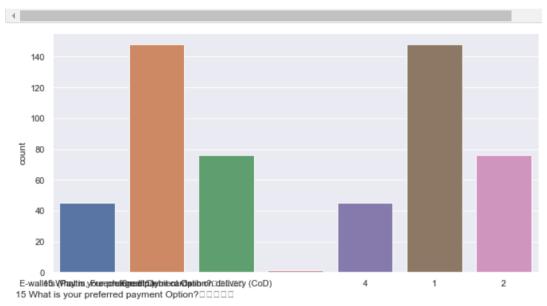
Customers prefer to use smartphones than desktop or laptop for online shopping as it is easy to carry and flexible and user friendly.



While visiting the store, Customers are using search engine more than content and AD's.



Important thing is about payment and most of the customers preferred to pay online through credit/ debitcards and safe transaction as well ans COD as well.



the above plot customers are preferring Credit/Debit card for payment than COD.

CONCLUSION

 Key Findings and Conclusions of the Study

In-order to retain the customer to back to the site, Websites should have easily accessible and limiting the process in Login/Register.

As most of the customers are females, Websites can spend a quality time on analytics to see what the customers has purchased often and their recently viewing items and how many items they have viewed that products etc.

Also to attract male customer, Website can give specific discount or offers to customers to retain them back.