



Customer Retention

Submitted by:

Nitish Kumar Sharma

ACKNOWLEDGMENT

It is great pleasure for me to undertake this project. I feel overwhelmed doing this project entitled – **“Customer Retention”**.

Did a lot of research about this domain (e-retail) and came to know about new things related to this industry from wikipedia.

Visited websites like zuora, vendhq, barilliance and buildfire to extract informations related to this project.

So these were the resources that helped me to complete this project.

INTRODUCTION

Business Problem Framing

E-retail factors for customer activation and retention: A case study from Indian e-commerce customers

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.

Problem Statement:

- Today, with the increasing recognition of the importance of customer retention and loyalty, companies now understand the importance of service.
- The idea is that to understand the needs of customers as well as the changes in their needs over the time.
- If the companies want loyal customers, the customers must be satisfied which is a key stimulant of purchase, repurchase intentions . The company should know what customers want from them. Companies must provide good services to attract more and more customers.
- Ways to achieve combination of both utilitarian value and hedonistic values for repeat purchase intention.

Conceptual Background of the Domain Problem

- The cornerstone of a successful retention strategy is the customer.
- Customers want great products. They want excellent customer service. They want convenience. Increasingly, customers want a personalized shopping experience.
- The challenge for eCommerce stores is adapting new technology fast enough to meet these expectations.
- Before you design your own customer retention programs, it is important to understand the most important factors that contribute to repeat purchases.
- Product value is the primary driver for customer retention.
- If a customer is dissatisfied with their purchase they are unlikely to come back.
- If you want to create an effective customer retention strategy, it starts with understanding what your customers value and providing a product that matches that.

Review of Literature

In today's challenging economy and competitive business world, retaining their customer base is critical to organization success. If the company doesn't give their customer some good reason to stay, organization's competitors will give the customer a reason to leave. Customer retention and customer satisfaction drive profits. It's far less expensive to cultivate organization existing customer base and sell more service to the customer than it to seek new, single-transaction customers. Most surveys across industries shows that keeping one existing customer is five to seven times more profitable than attracting one new customer. A customer-focused approach among its employees is still not present. In this era of intense competition .it is very important for any service company to understand that merely acquiring customer is not sufficient because there is a direct link between customer retention over time and profitability & growth. Customer retention to a great extent depends on service quality and customer satisfaction. Complaints are natural part of any service activity as mistakes are an unavoidable feature of all human endeavor and thus also of service recovery. Service recovery is the process of putting things right after something goes wrong in the service delivery. Customer retention is the maintenance of continuous trading relationships with customers over the long term. Customer retention is the mirror image of customer defection or churn.

High retention is equivalent to low defection. In an industry where there are a multiple purchases over the years, organization's entire team should be very focused on retaining those customers:

- Delivering service that's consistent with your value proposition and brand
- Cross-selling, up-selling and asking for referrals from existing customers
- Developing programs to increase customer loyalty and decrease turnover
- Prioritizing retention as a major focus in your annual marketing plan.
- Knowing the lifetime value for different segments and using that data to improve the marketing.

Studies say it costs ten times more to generate a new customer than to maintain an existing one. If organization has a small number of customers, losing a few could cripple company. Even if there are a large number of customers, a small increase in the rate should dramatically increase profits. The maintenance of the patronage of people who have purchased a company's goods or services once and the gaining of repeat purchases. Customer retention occurs when a customer is loyal to a company, brand, or to a specific product or service, expressing long-term commitment and refusing to purchase from competitors. Of critical importance to such strategies are the wider concepts of customer service, customer relations, and relationship marketing. Companies can build loyalty and retention through the use of a number of techniques, including database marketing, the issue of loyalty cards, redeemable against a variety of goods or service, preferential discounts, free gifts, special promotions, newsletters or magazines, members' clubs or customized products in limited editions. It has been argued that customer retention is linked to employee loyalty, since loyal employees build up long-term relationships with customers. Customer retention has always been an important topic for the marketing

Motivation for the Problem Undertaken

- To analyse customer behaviour patterns doing online shopping and finding insights from data, so that we could customize services accordingly to their needs.
- To come up with solutions that would make customer satisfied, so that they purchase, repeat purchases and hence we could generate profits to our clients.
- What extra services to provide to customers so that we have more and more loyal customers.
- E-retail market is a hot market, so we have to build strong & long relationship with our customers.

Data Sources and their formats

- It's a case study on Customer Retention doing online shopping through e-retail store companies.
- Format of dataset is a excel file.
- The dataset contains 269 rows and 71 columns.

```
print('Total no of rows & columns: ',df.shape) # to check number of rows & columns
```

```
Total no of rows & columns: (269, 71)
```

- The dataset does not contain any null values.

```
df.isnull().sum() # to check null values
```

```
1Gender of respondent      0
2 How old are you?         0
3 Which city do you shop online from?  0
4 What is the Pin Code of where you shop online from?  0
5 Since How Long You are Shopping Online ?  0
..
Longer delivery period     0
Change in website/Application design  0
Frequent disruption when moving from one page to another  0
Website is as efficient as before  0
Which of the Indian online retailer would you recommend to a friend?  0
Length: 71, dtype: int64
```

- The dataset contain only one integer feature which is 'pincode' and rest all are object features.
- Using .nunique() function to count number of unique values present in each columns.

```
In [89]: # to count number of unique values in each columns
df.nunique()
```

```
Out[89]: 1Gender of respondent      2
2 How old are you?         5
3 Which city do you shop online from?  11
4 What is the Pin Code of where you shop online from?  39
5 Since How Long You are Shopping Online ?  5
..
Longer delivery period     6
Change in website/Application design  7
Frequent disruption when moving from one page to another  8
Website is as efficient as before  8
Which of the Indian online retailer would you recommend to a friend?  8
Length: 71, dtype: int64
```

Data Preprocessing Done

- Renaming the columns as it was having lots of spaces in it and shortening the words for better view point.

[illegible]

- Dropping unnecessary columns which is not useful for prediction.
- Removing duplicate elements and appending into one as it had some how same meaning but was represented differently.

```
df['Ease of navigation in website'].unique()

array(['Agree (4)', 'Strongly agree (5)', 'Strongly disagree (1)',
       'Dis-agree (2)'], dtype=object)
```

```
# appending duplicate elements in lists into one (i.e Strongly agree to Agree / Strongly disagree to dis-agree)
df['Ease of navigation in website']=df['Ease of navigation in website'].replace('Strongly agree (5)','Agree (4)')
df['Ease of navigation in website']=df['Ease of navigation in website'].replace('Strongly disagree (1)','Dis-agree (2)')
```

```
# to count number of unique values
df['Internet access'].unique()

array(['Dial-up', 'Wi-Fi', 'Mobile Internet', 'Mobile internet'],
      dtype=object)
```

Same element (Mobile Internet) present twice

```
# appending duplicate values into one
df['Internet access']=df['Internet access'].replace('Mobile internet', 'Mobile Internet', regex=True)
```

```
# to count number of unique values
df['Online purchase in past 1 year'].unique()

array(['31-40 times', '41 times & above', 'Less than 10 times',
       '11-20 times', '21-30 times'], dtype=object)
```

In above column, '41 times and above' and '42 times and above' represent same thing

```
# removing duplicate and appending into one
df['Online purchase in past 1 year'] = df['Online purchase in past 1 year'].replace(
    ['41 times and above', '42 times and above'], '41 times & above', regex=True)
```

```
# to count number of unique values
df['Online purchase in past 1 year'].unique()

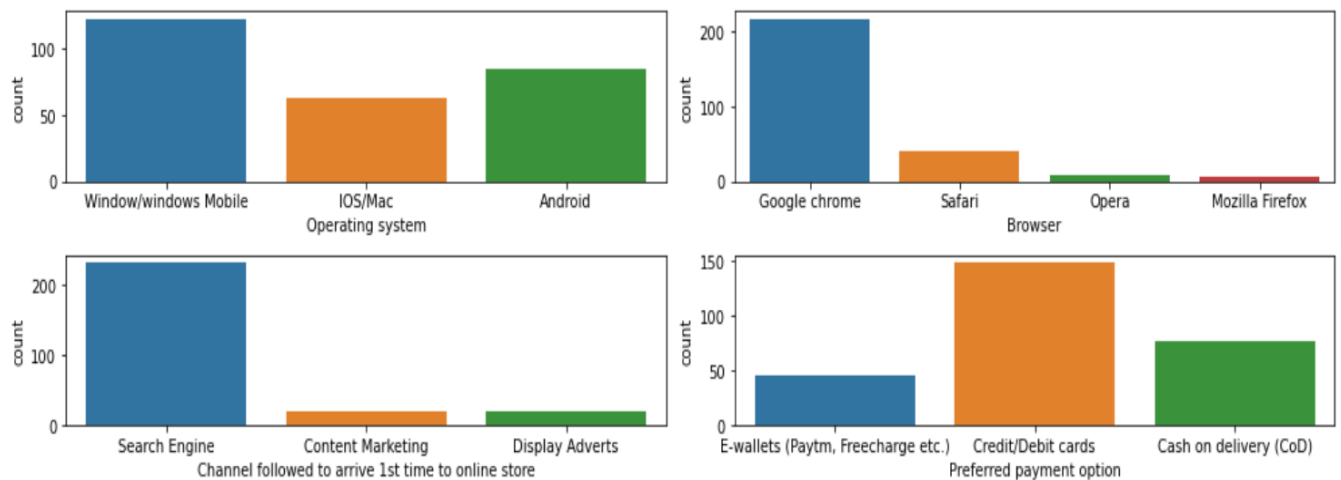
array(['31-40 times', '41 times & above', 'Less than 10 times',
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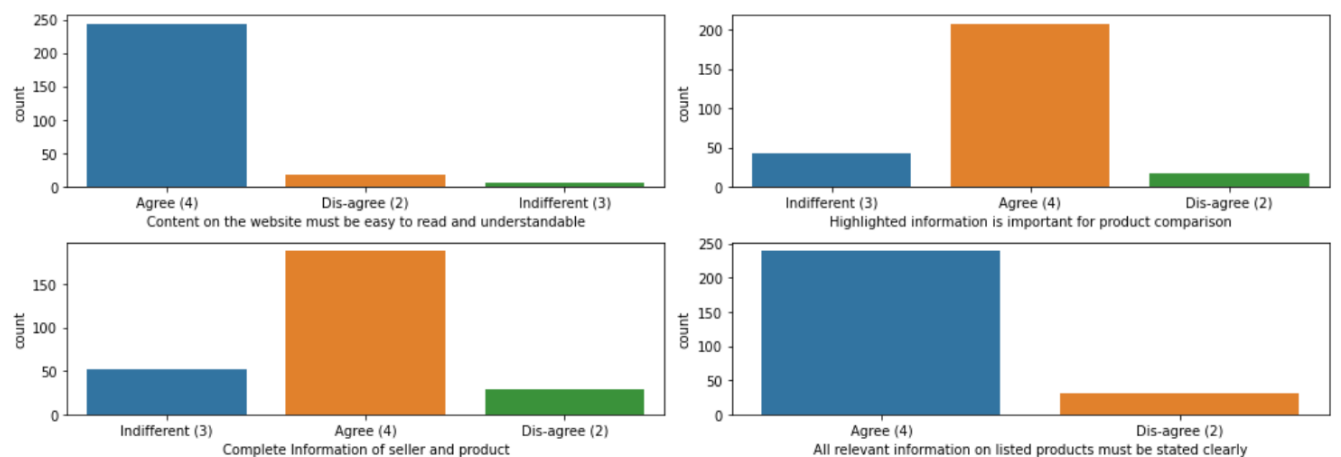
```
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df['Online purchase in past 1 year'] = df['Online purchase in past 1 year'].replace(
    ['41 times and above', '42 times and above'], '41 times & above', regex=True)
```

- After data cleaning, then visualizing the data using seaborn and matplotlib libraries.
- Doing univariate and bivariate analysis for finding insights from data.
- Applying label encoder function to convert categorical variables into integers for model building further.
- Checking skewness of the data.
- Using heatmap to find co-relation between variables.

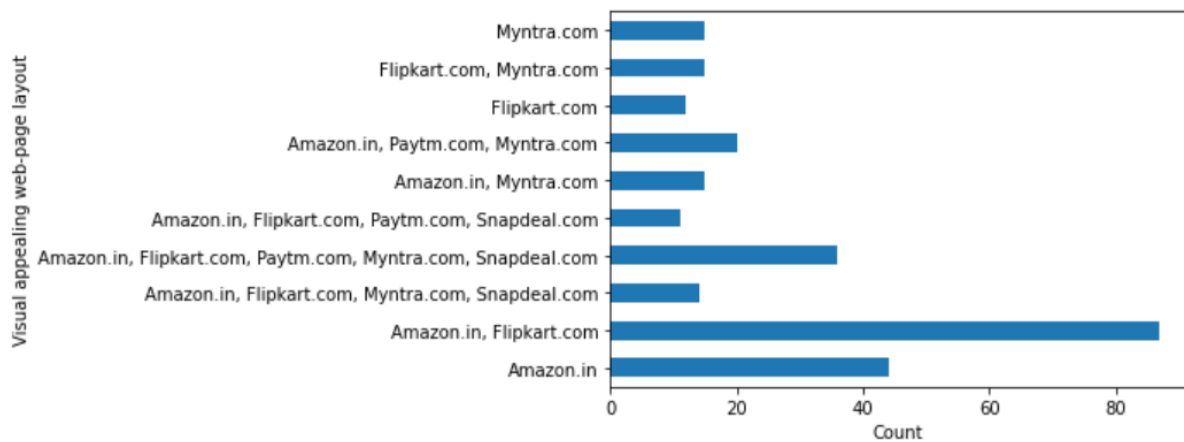
Visualizations



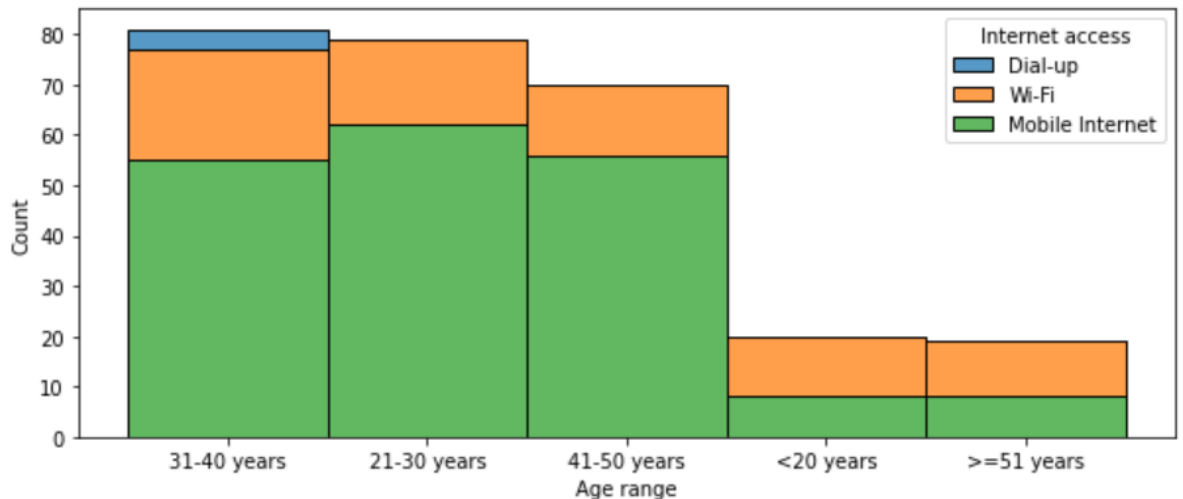
- Using countplot function from seaborn library to visualize columns which gives insights from the data.
- Writing down inferences from each plot of univariate analysis.
- It gives the rough idea about the data.



- Using countplot function from seaborn library to visualize Likert Scale (Agree, Disagree), the survey given by respondents/customers upon services provided by online shopping website/application.
- Total 30 questions were asked in reference to which respondents/customers have to agree, disagree or remain indifferent (show no concern for the question asked).



- Amazon & Flipkart has outcasted every e-retail store companies present in the dataset in terms of trust, security, reliability, privacy, offering wide variety of products and payment options.
- Total 24 questions were asked to respondents in different context out of which they have to choose their favourite e-retail online store providing best user experience in all aspects.
- Amazon & Flipkart has certainly build a strong relationship with its customers.
- Snapdeal and paytm has lost its connect with customers as per survey.



- Using histplot function from seaborn library to visualize relationship between categorical variables.
- Writing down inferences from each plot of bivariate analysis.
- Using different parameters for better visualization of categorical variables.
- Closely examining the plots and drawing conclusions out of it for business perspective.

Interpretation of the Results from visualization

- Female customers are more likely to do online shopping.
- Smartphone is used mostly for shopping online with lot of them using mobile internet for internet access.
- Credit/Debit cards and CoD (cash on delivery) payment option has been used mostly by customers for shopping online.
- Delhi city has the maximum count of customers doing online shopping.
- Customers add and remove items from their shopping cart mostly if they find better alternative offer elsewhere.
- Amazon & Flipkart has been well appreciated by customers in all aspects (security, privacy, trust, reliability etc)
- Female customers takes more time exploring e-retail store than male before making a purchase decision.
- Count of shopping online in terms of years is increasing, as customers find a sense of adventure in it.
- Google Chrome browser is used mostly by customers.
- After first visit, customers rely heavily on applications and search engines to visit online retail store.

Conclusions

Key Findings and Conclusions of the Study

- Product value is the primary driver for customer retention.
- Strong brand-customer relationships drives loyalty and repeat purchases.
- If you want to create an effective customer retention strategy, it starts with understanding what your customers value and providing a product that matches that.
- Use data to understand your customers, their likes and dislikes, their shopping behavior patterns, etc and customize your services accordingly.
- Be creative with the services you offer and go with the trend unless you come up with a brilliant marketing strategy.
- The recipe for customer retention is simple – retail has to become relentlessly customer-focused.