## **Customer Retention**

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Project Report

& Data Analysis

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3.	Data Cleaning
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#### INTRODUCTION

Customer retention refers to a company's ability to turn customers into repeat buyers and prevent them from switching to a competitor.

It indicates whether your product and the quality of your service please your existing customers. It's also the lifeblood of most subscription-based companies and service providers.







#### THE CONTENT

## **Objectives**

To understand how and why customers churn.

Retention analysis is key to gaining insights on how to maintain a profitable customer base by improving retention and new user acquisition rates.

## **Objectives**

EDA Exploratory Data Analysis

DATA ANALYSIS

**GRAPHICAL REPRESENTATION** 

MODELS & MACHINE LEARNING

Conducting a customer retention analysis is much more than calculating the churn rate.

To get a clear picture, you need to figure out where, how, and why your customers leave.

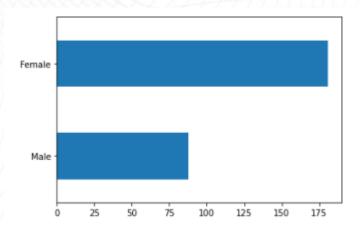




## **TYPES OF QUESTIONS:**

- Dichotomous Questions
- Multiple Choice Questions
- Rating Questions
- Likert Scale Questions
- Categorical Questions
- Open-Ended Questions

#### **GENDER OF RESPONDENT:**

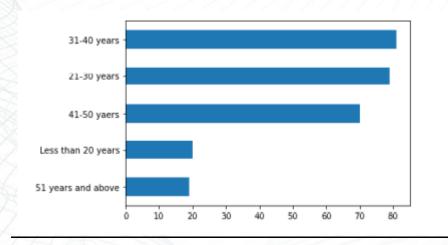


FEMALE=181

MALE=88

<u>Interpretation:</u> Here we see that more than 50% of our respondents are Female and the remaining are Male.

## AGE:



#### Interpretation:

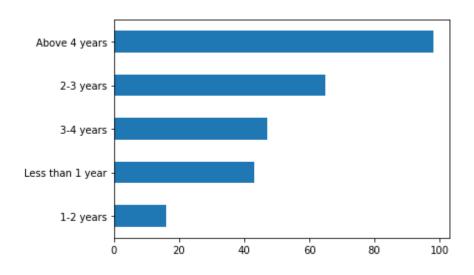
Here we can see our respondent is less below age 20 and above 51 years.

#### **CITIES**:

Delhi	58
Noida	83
Bangalore	37
Karnal	27
Solan	18
Ghaziabad	18
Gurgaon	12
Meerut	9
Moradabad	5
Bulandshahr	2

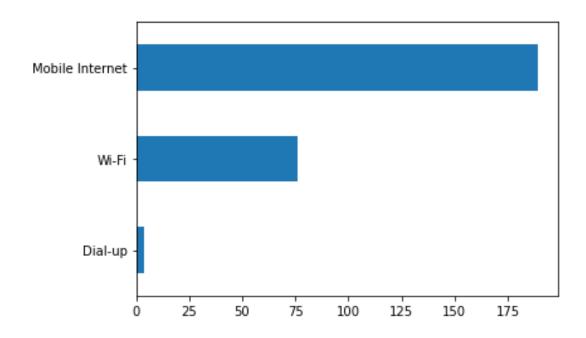
Interpretation: Noida has the highest number of respondents.

### Since How Long You are Shopping Online



<u>Interpretation:</u> There is maximum\_number of respondents that are shopping online for more than 4 years.

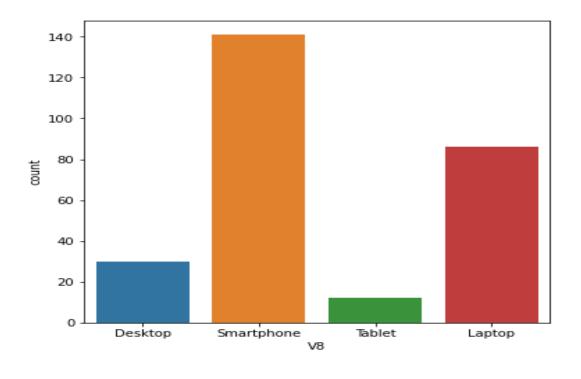
## How do you access the internet while shopping on-line?

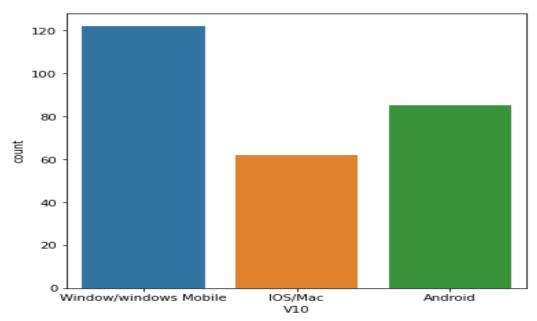


### Interpretation:

The maximum number of respondents are accessing through Mobile Internet.

So we should provide our customers with better images and information on Mobile Internet uses.



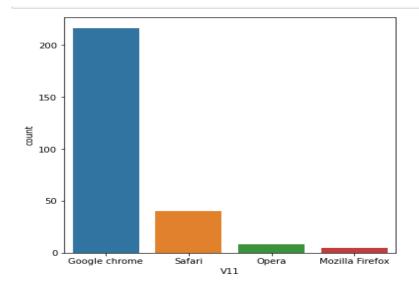


#### Interpretation:

Devices.

Most of the respondents are using Smartphone Operating

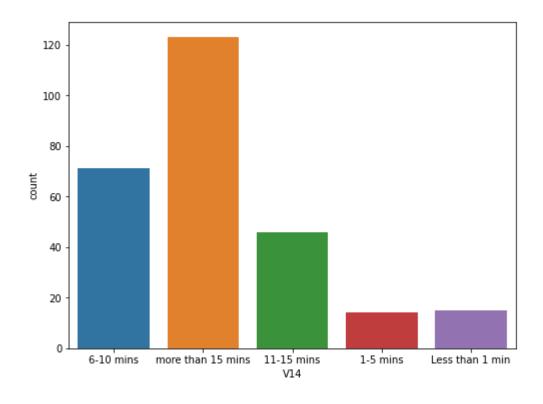
Which leads to maximum use of the Operating System of Windows Mobile.



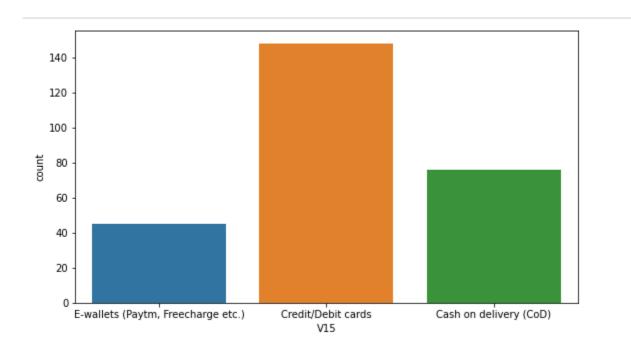
#### Interpretation:

Google Chrome has the maximum respondents.

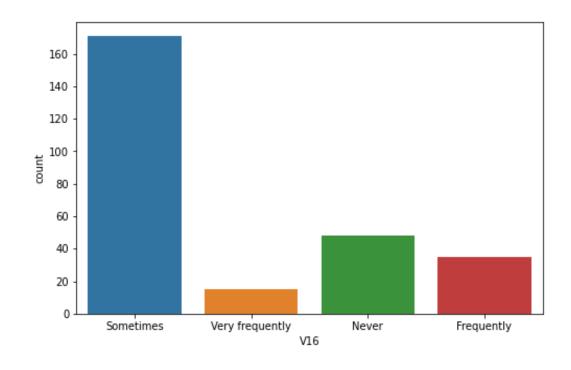
# How much time do you explore the e- retail store before making a purchase decision?



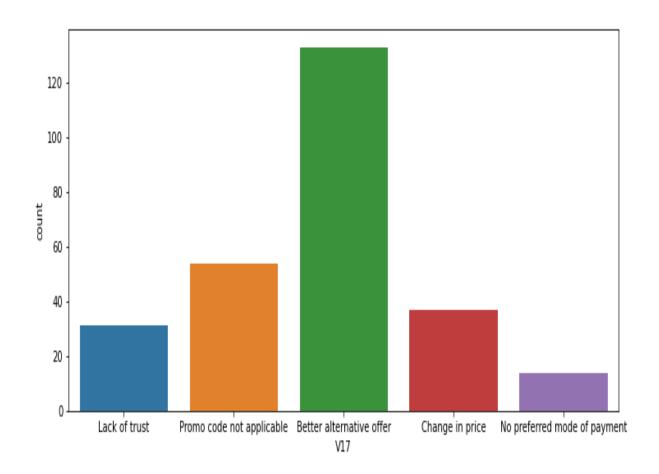
## **What is your preferred Payment Option?**



# How frequently do you abandon (selecting an items and leaving without making payment) your shopping cart?



## Why did you abandon the ?Bag?, ?Shopping Cart?

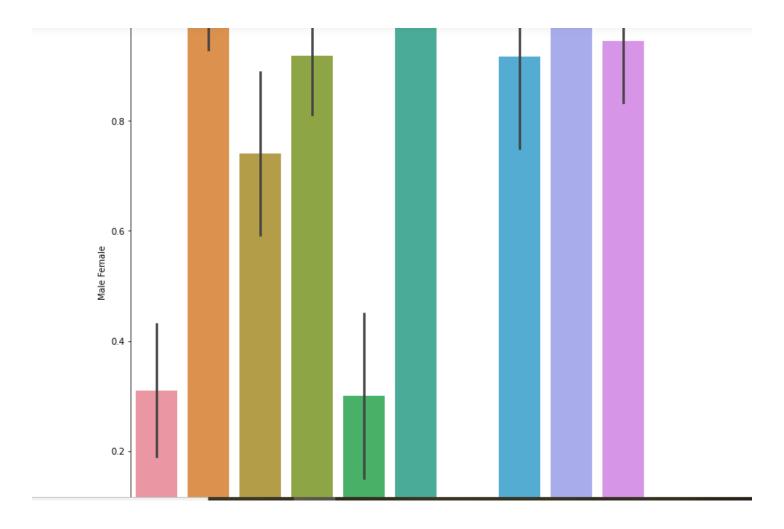


#### **Interpretation:**

We can see that the most preferred payment is by Credit/Debits Cards leading with COD (Cash on Delivery).

Sometimes people do abandon the product. Because they get better alternative offer leading to promo code not applicable.

### **BIVARIATE ANALYSIS AND VISUALIZATION**

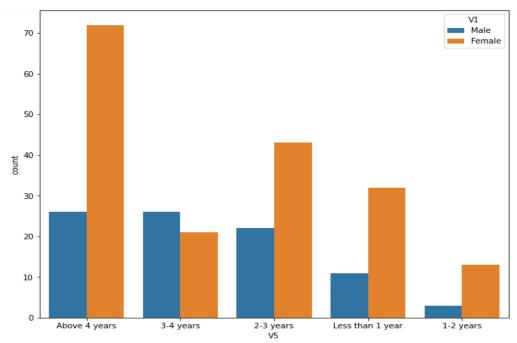


#### Interpretation:

Considering Gender Respondents against which cities they belong to.

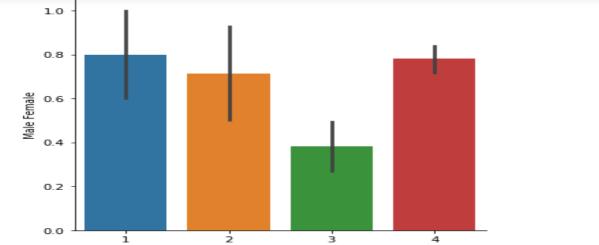
Since we have Female respondents more, here we can see that Female s are mostly from the cities, of Noida, Bangalore, Karnal, Gurgaon, Bulandshahr.

Male is from mostly Delhi



The highest number of people have been shopping online for above 4 years except for the age group below 20 years and above 50 years. People who are shopping online for 1-2 years do not include teenagers and elder





How much time do you explore the e- retail store before making a purchase decision?

1 = Less than 1 min

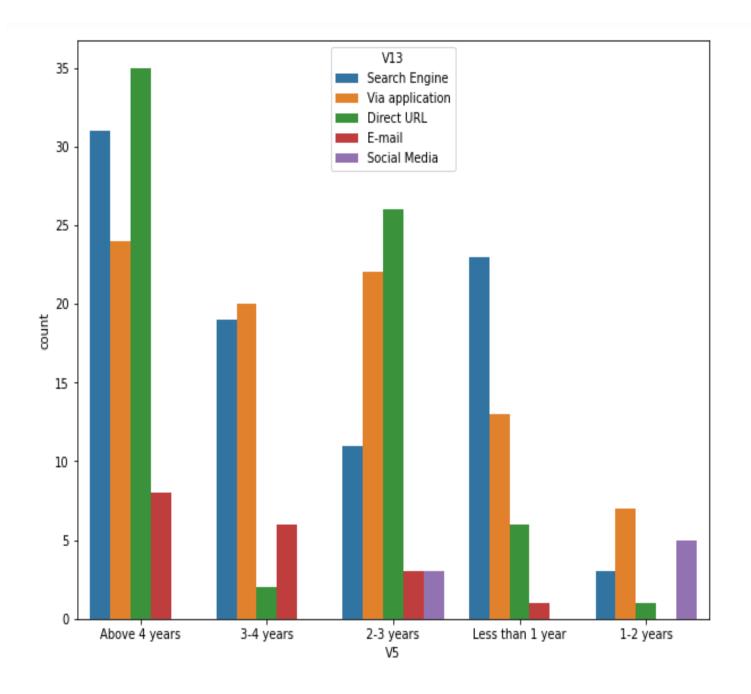
2 = 1-5 mins

3 = 6-10 mins

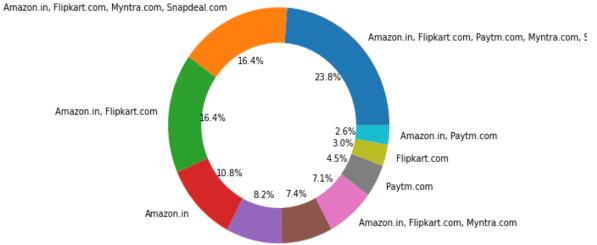
4 = 11-15 mins

5 = more than 15 mins

Male is less likely to Explore.

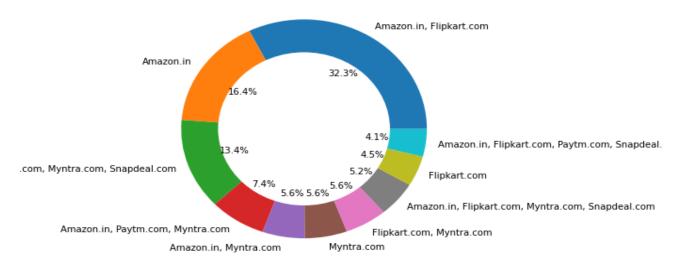


Even though people who are shopping online for more than 3 years do not use the application rather use a search engine and directs URL's in large numbers which indicates that online brands should update all their platforms rather than just the application

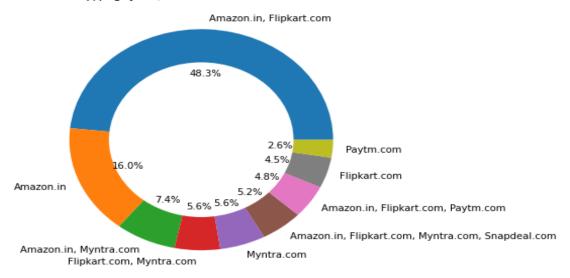


Amazon.in, Flipkart.com, Paytm.com, Snapdeal.com Amazon.in, Paytm.com, Myntra.com

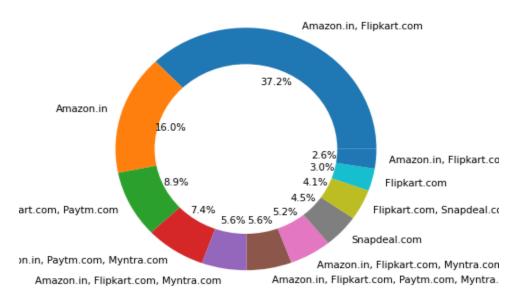
Easy to use website or application



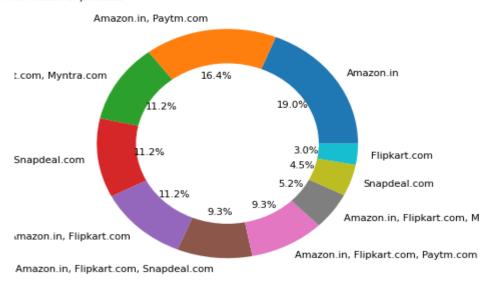
Visual appealing web-page layout



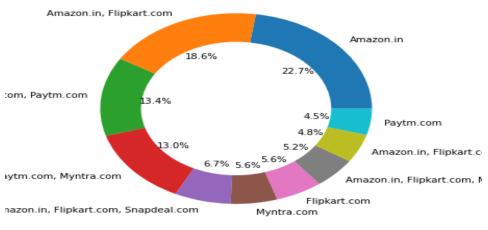
Wild variety of product on offer



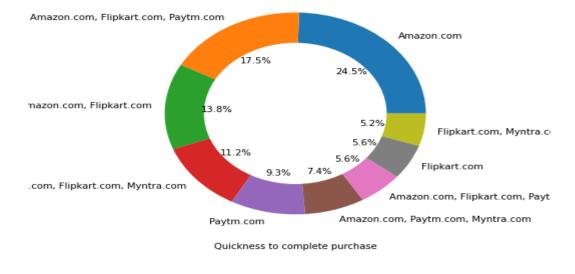
Complete, relevant description information of products

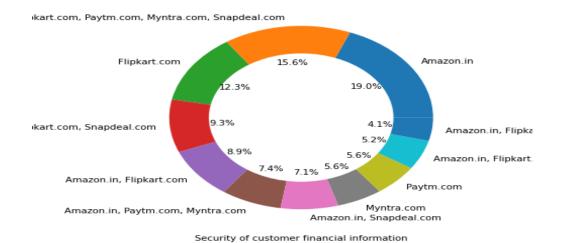


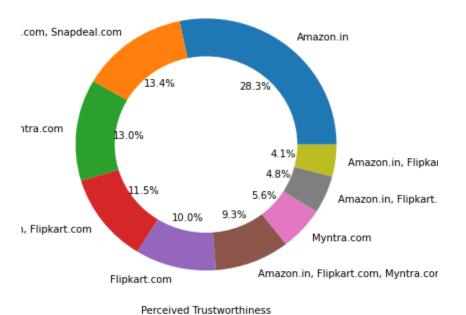
Fast loading website speed of website and application

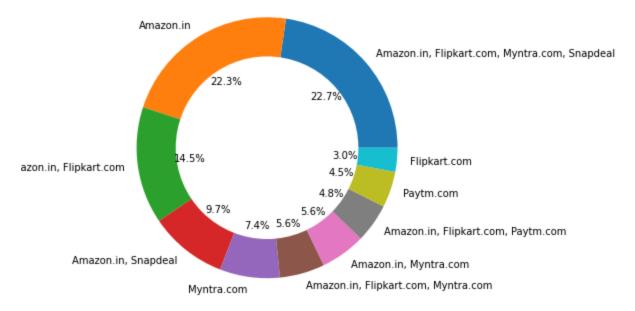


Reliability of the website or application



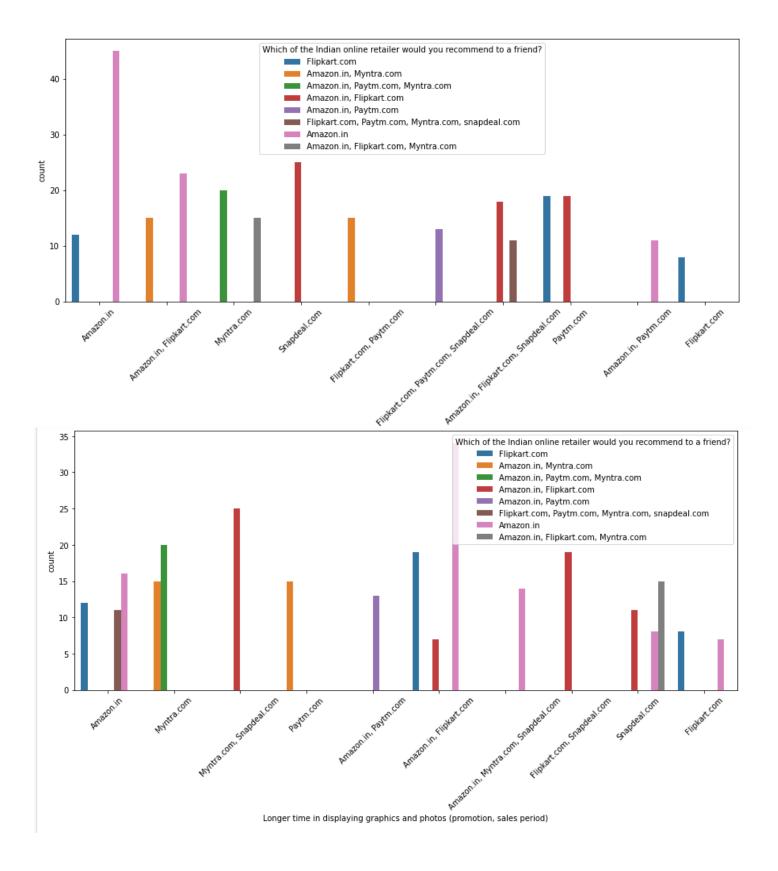


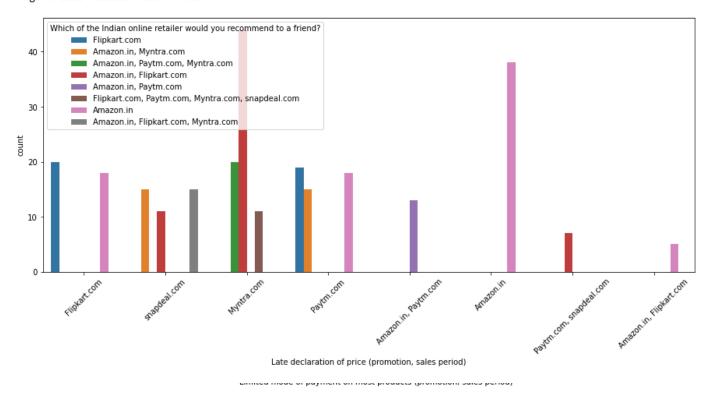




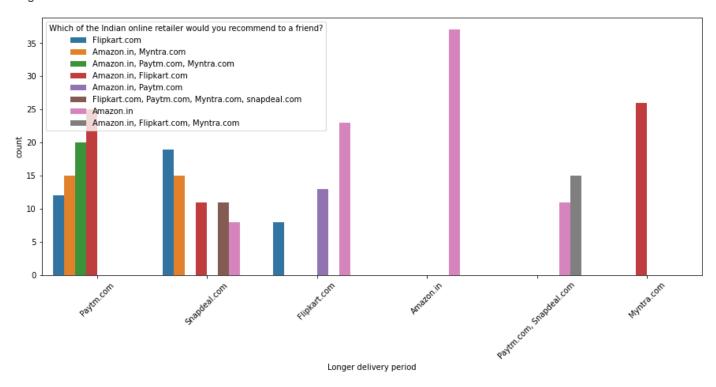
Presence of online assistance through multi-channel

Amazon, Flip kart has had the highest votes for having all the positive points and have maintained a very good brand image followed by Paytm and myntra.

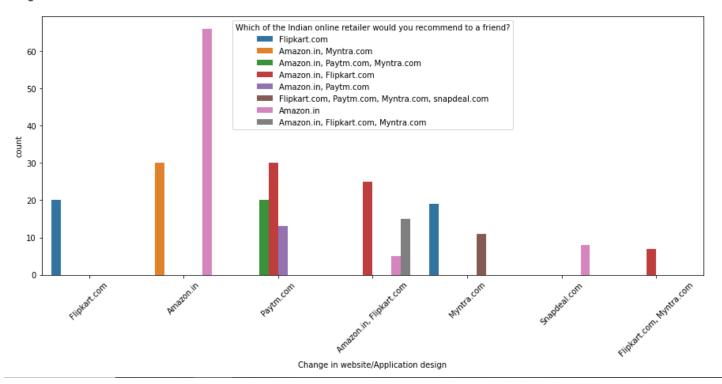


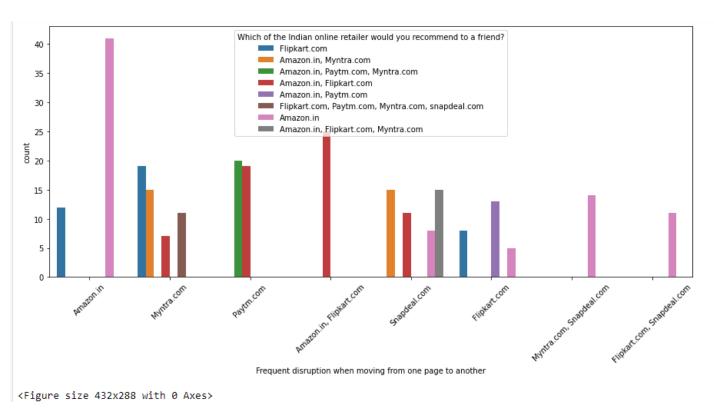


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Customers seem to be more loyal to Amazon, Flip kart and Paytm as even though many of them have given negative remarks about them still they would recommend these platforms to their friend

#### Suggestions For Models and Machine Learning

- Pareto Analysis: Pareto Analysis is a statistical technique in decision making that is used for the selection of limited number of tasks that produce a significant overall effect.
- > It is basically a 80-20 rule which itself says that 80% problems are caused due to 20% of the factors.
- Conjoint Analysis:- Conjoint analysis is a statistical marketing research technique that helps businesses measure what their consumers value most about their products and services.
- > Binary Logistic Regression
- > <u>Sentiment Analysis :-</u> To understand the different types of views expressed by the people.
- Word cloud: A word cloud is a graphical representation of frequently used words in a collection of text files.
- The height of each word in this picture is an indication of frequency of occurrence of the word in the entire text. It is a good way to convey the general idea of the text.

## THANK YOU