

# PROJECT REPORT:

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

Submitted by: Deepthi Prakashan

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## Introduction

Online shopping in the recent years have seen a big influx in customers and has altered the way business is done in India. The Indian E-commerce market is expected to grow to US\$ 188 billion by 2025 from US\$ 46.2 billion as of 2020[1]. This booming growth is a consequence of advancing technologies and improved internet speed and easier access. Online purchase as such has a lot of advantages owing to its ease and convenience. It presents the customers a variety of options to select from and has the availability of product information as well as user experience to research and buy a good product, which are among few of its advantages. To stay relevant and build a successful e-commerce store, it needs to not just bring

in new customers but also maintain a stable rate of recurrent purchase from the customers.

## Customer Retention

Customer retention is an important metric that is used in measuring success of an e-commerce company. It showcases the ability of the company to keep their customers for a long time. Customer retention is a more sustainable way to grow a company as customer acquisition costs five times more than to retain old customers.

With the rapid growth in the industry, e-commerce stores are also working through various strategies to improve various factors to improve user experience and improve their customer retention rate.

## Problem Statement

To build a successful e-commerce brand, it is necessary that a customer is satisfied with their purchase and had a pleasant experience during the purchase until the purchased product is delivered to the destination without any roadblocks. This will help gain a customer's trust and build loyalty around this company.

However, lacking a good customer retention strategy and neglecting the issues faced by customers during the purchase, the delivery of the product or the quality of the purchased product, can present as a barrier towards customer retention, thereby lagging behind in the competition against the current e-commerce stores.

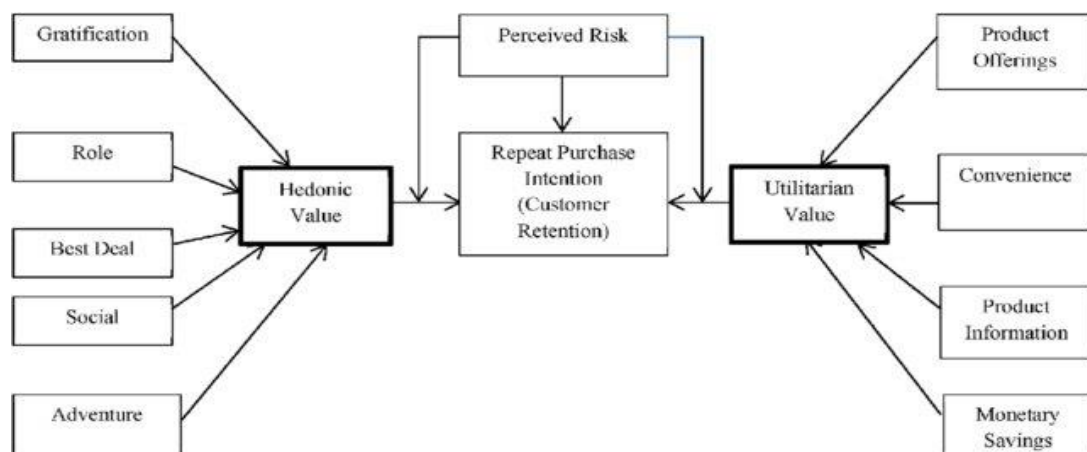
To build a good customer retention strategy, we must identify which factors contribute to the success of an e-commerce store that led to building a strong customer loyalty. Research has identified that a combination of utilitarian value and hedonistic values are identified as stimulants of purchase behaviour in customers.

## Approach to solving the problem

In this project we are going to import the data, perform data cleaning and carry out exploratory data analyses, data visualization and present the main results and conclusion obtained from the analyses.

## About the dataset

- The dataset that we have contains data that was collected from Indian online shoppers which was provided by Flip Robo.



- It contains results that indicates the factors that have contributed to the success of popular Indian e-commerce stores such as Amazon, Myntra, Flipkart, Paytm and Snapdeal.
- The dataset is in xlsx file format.
- There are 269 rows and 71 columns.
- 70 columns were categorical and 1 was continuous.
- The columns consist of questions that investigate both utilitarian values and hedonistic values.

### Data Pre-processing:

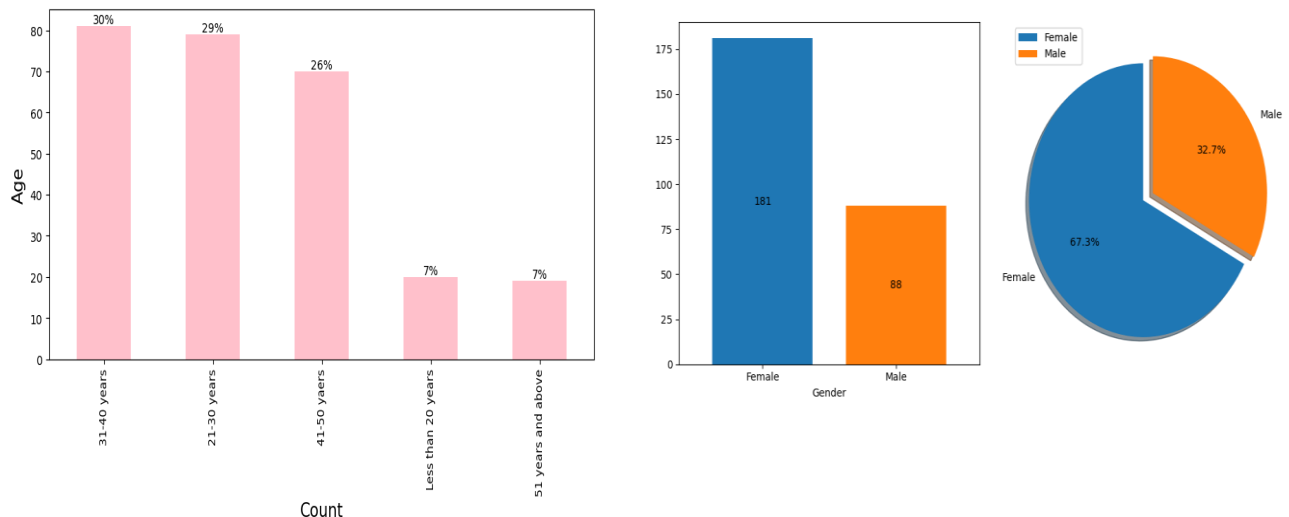
- After importing necessary libraries and the dataset using pandas, we proceeded to the data cleaning step.
- During data cleaning, the presence of null values was checked but no null values were found.
- Next, the column names were replaced with shorter names.
- The info() function was used to check the dtype. 71 columns were object datatype while the pincode was integer, which also contained information regarding the number of entries and null values.
- Using nunique() values returned unique values in each column.
- The value\_counts() function was used to return the counts of unique values in each column. This helped us find duplicates, which were removed by renaming them.

```
: #Removing duplicates
df['Access']=df['Access'].replace('Mobile internet','Mobile Internet')
df['No_of_purchases (past year)']=df['No_of_purchases (past year)'].replace('42 times and above','41 times and above')
```

## Data Visualization:

- Univariate and bivariate analyses were carried out in this step:

### Univariate analyses:



- Most of the people shopping from Indian are from the age group of 31 years- 40 years, majority being females.
- Most of the respondents are customers who have been using the service for 4+ years.
- 73% of the customers have accessed the site using mobile internet
- The browser that customers used to accessing the site is mostly Google Engine followed by Safari
- Customers first checked into the website through search engine
- Percentage of people have accessed the website via the application during the next purchase is high and follows close second to Search Engine. This is mostly due to the ease of usage. Also, this proves that people found the e-commerce store good enough to have downloaded the App.

- 45.7% of the purchasers, which is almost close to half spend above 15 mins before purchasing a product. only 5.6% people spend less than 1 min to purchase a product. Purchasers are very meticulous while buying a product online which explains the time taken for deciding to buy a product.
- Most of the users make payment through debit/credit card users. It is followed by cash on delivery, this probably is because people trust less on the security of online transaction or lack trust if the product will actually be delivered. Less purchasers use E-Wallet which may also be because of inconvenience of transferring money into the E-wallet, or having insufficient balance during the purchase.
- We see that comparatively less number of purchasers abandon their cart very frequently/frequently. Which is a good sign of customer satisfaction in the product being purchased.
- Even during the times when people abandon the product in the cart, it is mainly because of a better offer.
- 90% prefer shopping from websites where the content is easy to read and understand.
- 73% people prefer having similar products to be highlighted which allows the customers to compare products.
- About 69% users require complete information on listed seller and product being offered is important for purchase decision
- About 78% users require all relevant information on listed products to be stated clearly
- About 90% prefer shopping on pages that is easy to navigate through



- Loading and processing speed of the website is considered important by about 80% of the users. This lets us know that the users are very particular about saving time
- 87% people consider User friendly interface is important
- 87% people prefer shopping from sites that are empathetic towards them when queriers are asked
- 89% want the retailer to be responsive with availability of several communication channels (email, online rep, twitter, phone etc.)
- 70% believe online shopping gives monetary benefit and discounts
- 83% users consider shopping online is convenient and flexible
- 92% consider return and replacement policy of the e-tailer is important for purchase decision
- 65% gaining access to loyalty programs is a benefit of shopping online
- 75% customers prefer shopping in websites whereas wide variety of listed product in several category
- About 86% customers require complete and relevant product information
- 82% customers believe that online shopping helps with monetary savings.
- About 79% customers prefer the convenience of patronizing the online retail
- 85% customer prefer getting value for money spent. 0% disagree with it. It is essential that the quality of product sold is at par with the cost of it.
- 88% customers prefer shopping from sites that provide convenient payment options
- 78% customers find displaying quality Information on the website improves satisfaction of customers

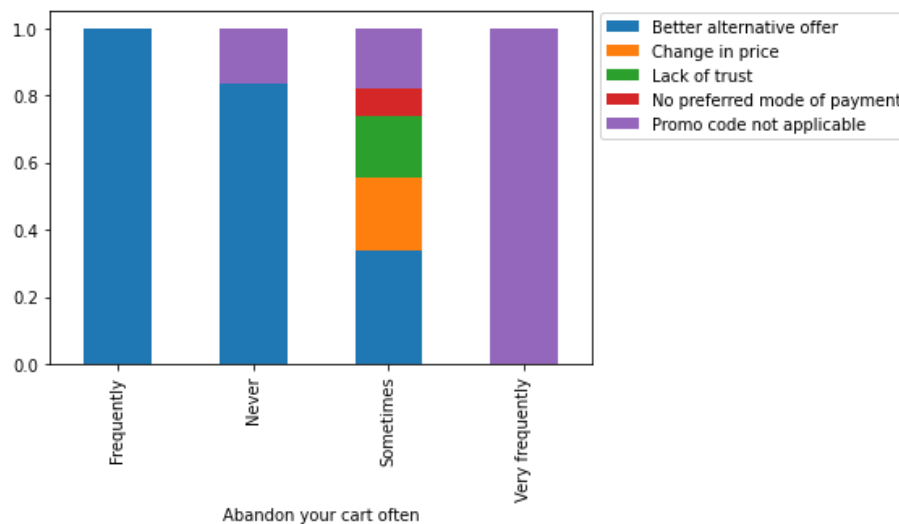
- Building customer's trust is key to longevity of customer loyalty. 89% require the retailer being able to guarantee the privacy of the customer, with a whopping 68% percent strongly agreeing to this.
- 84% of the customers trust that the online retail store will fulfil its part of the transaction at the stipulated time
- 79% agree that displaying quality information on the website improve satisfaction of customers
- 98% users derive satisfaction while shopping on a good quality website or application
- 53% customers find Enjoyment from shopping online
- 81% customers agree that net benefit derived from shopping online can lead to users' satisfaction
- About 89% customer agree that user satisfaction cannot exist without trust
- Only 37% customers regard shopping on preferred e-tailer enhances your social status
- 57% find shopping on the website gives a sense of adventure
- Only 47% feel gratification shopping on favourite e-tailer, this probably is because e-tailer cannot replicate the same experience when visiting and purchasing from a shop.
- Only 46% consider shopping on the website helps fulfil certain roles
- Majority find Amazon, Flipkart provides maximum payment option
- Majority finds that shopping in Amazon allows them to complete their purchase quickly
- Majority customers trust Amazon that their privacy is secured
- Majority trust Amazon with their financial information security
- Majority find Amazon as the most reliable website

- Majority have selected all the websites that they use for shopping
- Majority people had find Amazon and Flipkart to be the most appealing, and Snapdeal to be the least
- Majority find that Amazon has better loading speed
- Myntra has been considered by majority people that it takes a lot of time to load its page, as well as in declaration of price. This can cause inconvenience to people who wish to complete their purchase quickly
- Majority consider Snapdeal to offer limited payment option. This is a setback as people may not be find their convenient way to make payment and may even drop the purchase.
- Majority finds that Paytm takes longer time to get their products delivered
- Majority consider Amazon undergoes changes in its website/Application. Necessary and visually appealing changes are always beneficial. It may also indicate that Amazon keeps tab on customer needs and issues and make changes accordingly
- Majority finds that Amazon has maximum disturbances when changing from page to page
- Majority find all the websites/application is easy to use
- Majority find Amazon and Flipkart have wild variety of products on offer.
- 37% customers find Amazon and Flipkart to have relevant information about the product
- Majority customers perceive Amazon to be most trustworthy
- Majority find Amazon, Flipkart, Myntra and Snapdeal have good presence of multi-channel assistance

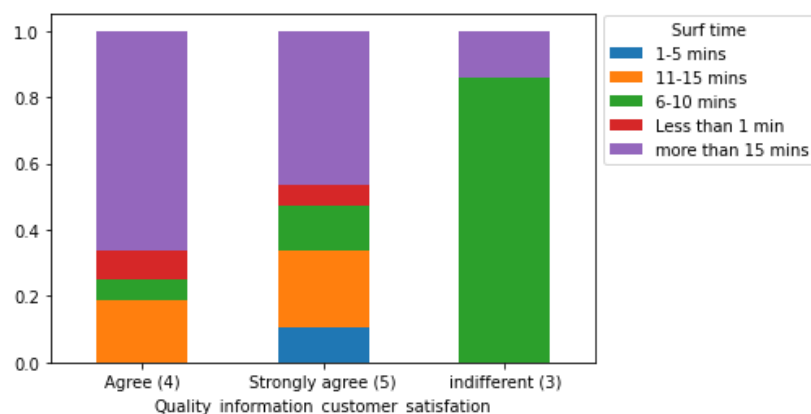
- 35% agree that Amazon.in works as efficient as before. Only 4% agree that Snapdeal.com works efficiently as before
- Amazon.in has seen maximum preference when it comes to recommendation to a friend, which is followed by Flipkart, Myntra Paytm and Snapdeal.

### **Bivariant Analyses:**

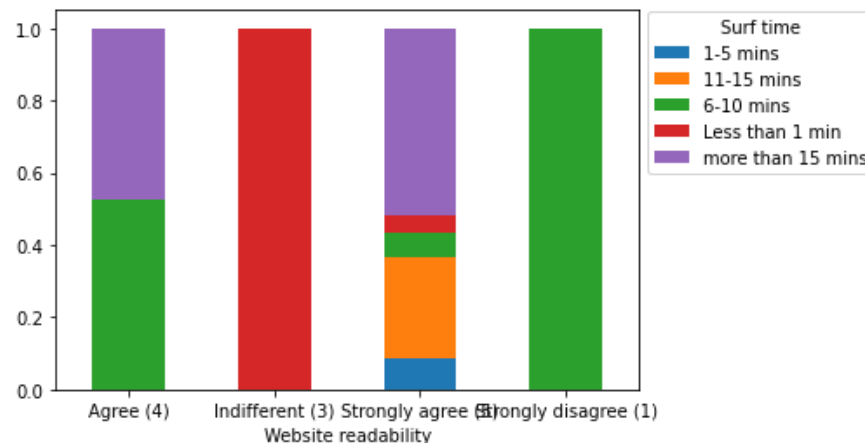
- Mostly people have abandoned their cart due to a better alternative offer or promo card not being applicable. People who abandon their carts sometimes are influence by various reasons.



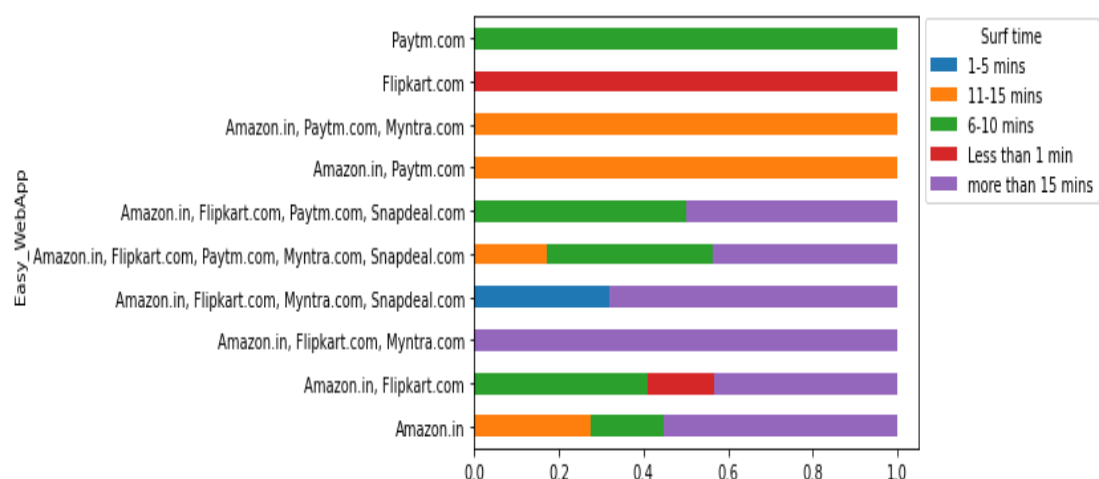
- Customers who agree that quality information should be available on the site seen to spend more time on website before purchasing as well. We had earlier seen 78% customers had also agreed quality information leads to customer satisfaction.



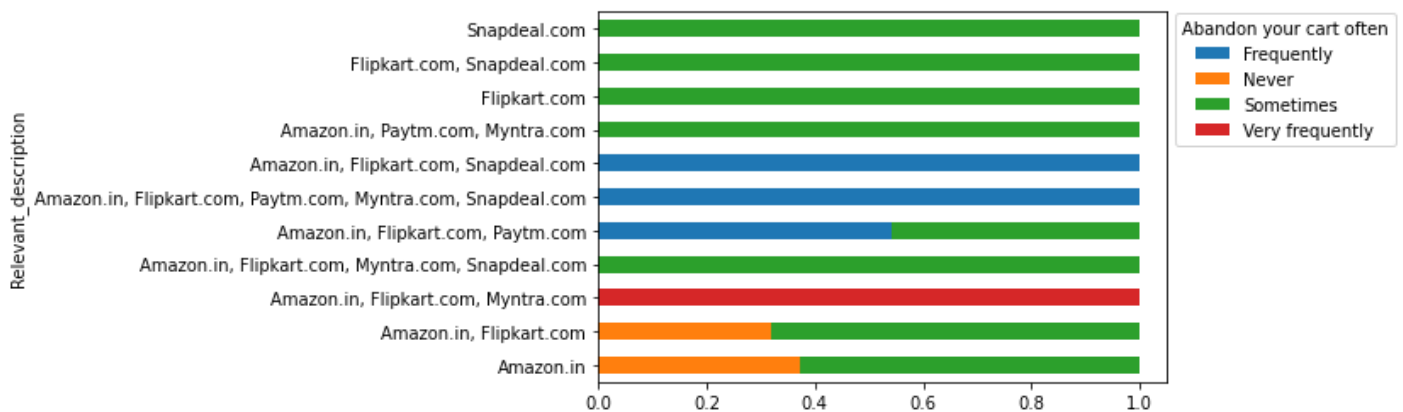
- Almost 50% of the people who strongly agree that website readability is important also spend more than 15 minutes before deciding to purchase a product.



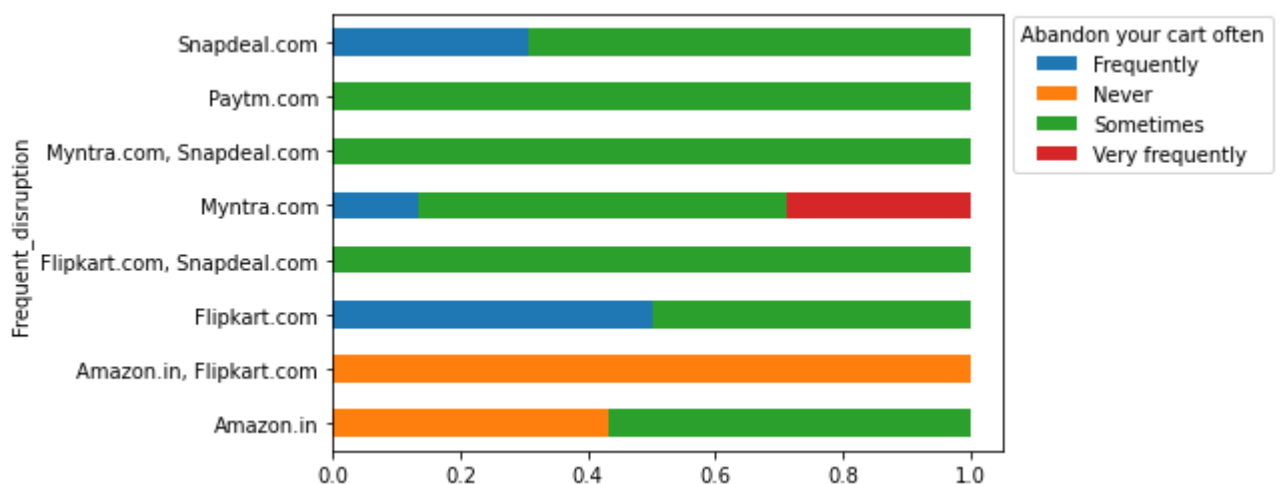
- If the website is easy to use and understand people will prefer to spend more time finding and researching the product to purchase it. We had seen that majority customers found Amazon, Flipkart, Paytm, Myntra and Snapdeal as sites that are easy to use of which majority spend more than 15 minutes surfing before deciding to purchase.



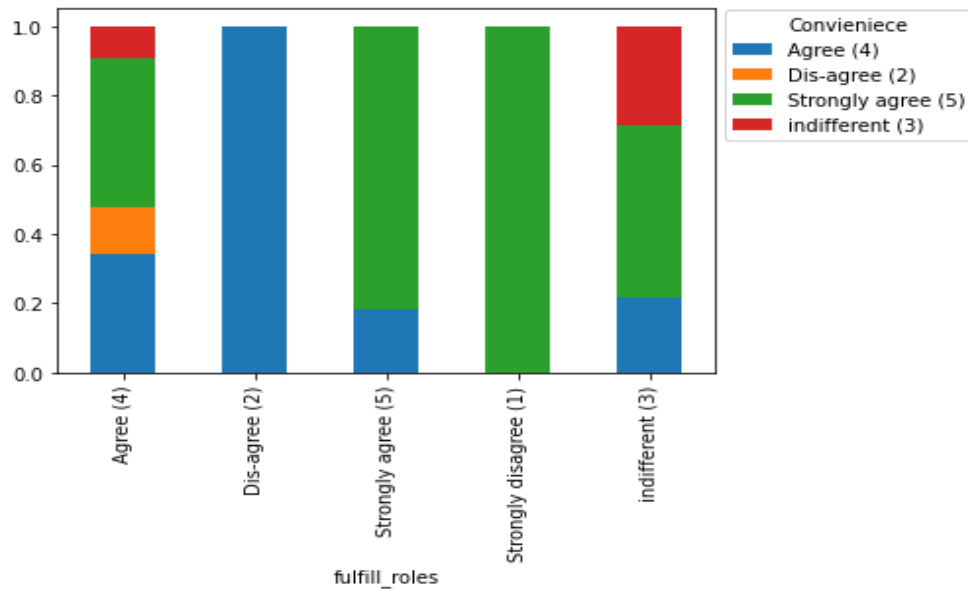
- Better part of the customers had found Amazon to have better/relevant product description. In this graph, we can see that ant 38% of them never abandon their cart as well.



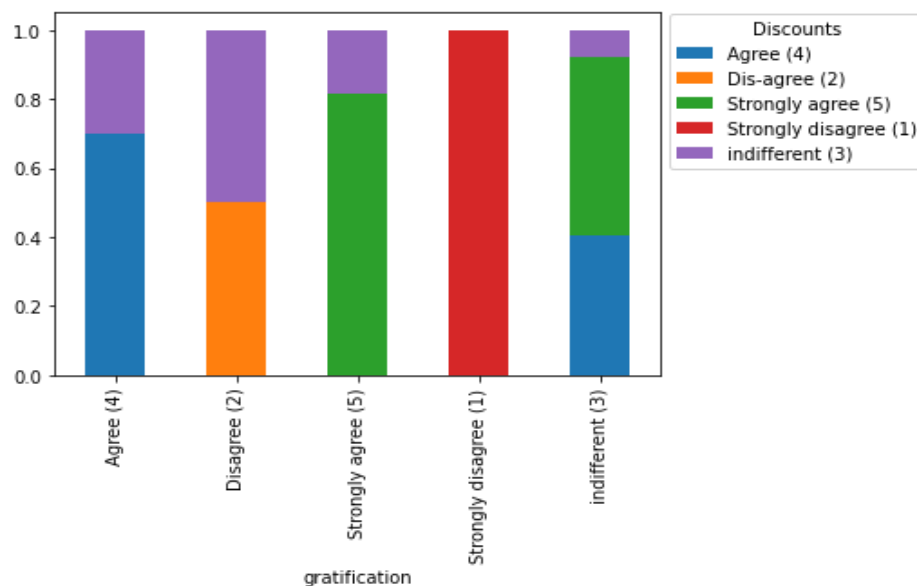
- Even though majority found that there is frequent disruption in Amazon when it loads to next page, they abandon their cart very rarely.



- 80% of the people who feel online shopping help fulfil roles also strongly agree online shopping brings convenience.

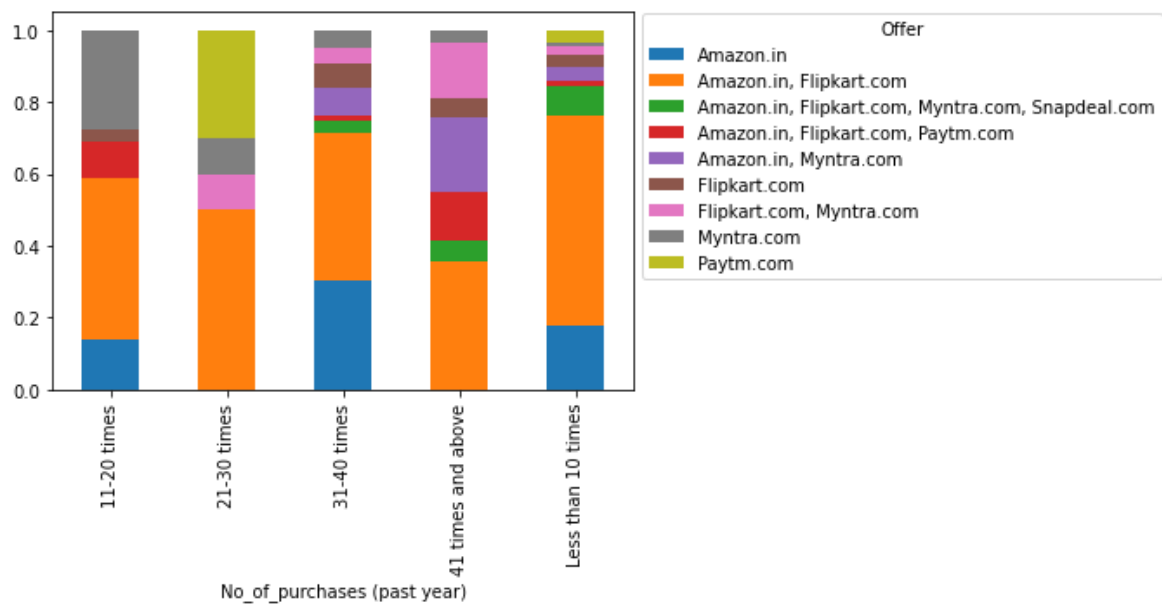


- 80% people who find gratification on online shopping also strongly agree that shopping online gives monetary benefits





- People who have found wild variety of products on discounts on Amazon and Flipkart also have a good percentage of people shopping the maximum number of times



## Conclusion:

- In the project, we analysed factors that contributed the retention of customers thus impacting the success of the e-commerce stores.
- Overall, Amazon was a popular choice among customers
- Their success based on the study can be essentially given to the fact that they achieved to gain the trust of the customers.
- Key areas where the Amazon concentrated based on analyses were to build customer's trust were : quality description of products, ensuring security of both private as well as financial information, provision of multi-channel for enquiries, frequent changes to the webpage design.
- Through the data analysis we saw purchasers in general prefer ease in buying product while also being sure about the quality of the product. Gaining purchasers trust when it comes to the transaction process, privacy security and financial information security is key to customer retention.





