**Customer Retention Data Analysis Report**

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**Introduction**

There are number of Retailer’s Websites or Applications in the market. There main goal is to cater the large number of customers and their Retention. There are so many aspects on which the Retention of customers depends like for how long they are shopping online, are they getting any monetary benefits and quality products with better services.

In this dataset our main focus will be to analyze the factors affecting the retention of the customers and on the basis of that we have to identify which of the following websites or the application is best suited to the people and they want to recommend others.

**Dataset**

This data is gathered from 269 people, it shows in which city they live and how old are they, How much they shop online and from how long they are shopping online, how come they arrive on the platform for the first time and whether they are getting the monetary benefits and quality products with good services and whether these things are even important to them for choosing an online retailer or not and which websites or application they feel easy to use and want to recommend to a friend.

**Libraries used for Analyzing the data**

Pandas – Since we have to make a Data Frame so we can load the data in jupyter notebook file in a tabular representation

Seaborn – We have to make the statistical graphics representation in python so we can easily understands the data through the graphical representation.

Matplotlip – We’ll need the matplotlib library for plotting the data into different plots for their graphical representation.

**Analysis**

1. **Drop** – Firstly, I dropped the unwanted and excess data which was not making any difference in the dataset.

45 Columns dropped :

1. 4 What is the Pin Code of where you shop online from?
2. 7 How do you access the internet while shopping on-line?
3. 8 Which device do you use to access the online shopping?
4. 9 What is the screen size of your mobile device?
5. 10 What is the operating system (OS) of your device?
6. 11 What browser do you run on your device to access the website?
7. 13 After first visit, how do you reach the online retail store?
8. 16 How frequently do you abandon (selecting an items and leaving without making payment) your shopping cart?
9. 17 Why did you abandon the “Bag”, “Shopping Cart”?
10. 18 The content on the website must be easy to read and understand
11. 19 Information on similar product to the one highlighted is important for product comparison
12. 23 Loading and processing speed
13. 24 User friendly Interface of the website
14. 25 Convenient Payment methods
15. 26 Trust that the online retail store will fulfill its part of the transaction at the stipulated time
16. 27 Empathy (readiness to assist with queries) towards the customers
17. 29 Responsiveness, availability of several communication channels (email, online rep, twitter, phone etc.)
18. 31 Enjoyment is derived from shopping online
19. 34 Gaining access to loyalty programs is a benefit of shopping online
20. 35 Displaying quality Information on the website improves satisfaction of customers
21. 36 User derive satisfaction while shopping on a good quality website or application
22. 37 Net Benefit derived from shopping online can lead to users satisfaction
23. 38 User satisfaction cannot exist without trust
24. 39 Offering a wide variety of listed product in several category
25. 40 Provision of complete and relevant product information
26. 41 Monetary savings
27. 42 The Convenience of patronizing the online retailer
28. 43 Shopping on the website gives you the sense of adventure
29. 44 Shopping on your preferred e-tailer enhances your social status
30. 45 You feel gratification shopping on your favorite e-tailer
31. 46 Shopping on the website helps you fulfill certain roles
32. Wild variety of product on offer
33. Fast loading website speed of website and application
34. Reliability of the website or application
35. Quickness to complete purchase
36. Perceived Trustworthiness
37. Presence of online assistance through multi-channel
38. Longer time to get logged in (promotion, sales period)
39. Longer time in displaying graphics and photos (promotion, sales period)
40. Late declaration of price (promotion, sales period)
41. Longer page loading time (promotion, sales period)
42. Limited mode of payment on most products (promotion, sales period)
43. Change in website/Application design
44. Frequent disruption when moving from one page to another
45. Website is as efficient as before
46. **Is\_null** – Checking if any of the column has the null value present or not, there was no column which has the null value.
47. **Countplot** – Counted the number of Male & Female, how old are they, which city they shop online from, how long they are shopping online, how many times they have purchased in last 1 year, from which channel they followed to arrive their favorite online store for the 1st time, how much do they explore to make purchase decision, preferred payment options, complete information of seller, ease of navigating website, privacy of customer, convenience, replacement policy and getting value for money spent.
48. **Catplot** – Plotting which city you shopped from, how old are you and what’s your gender.

Scatterplot -Plotting Which city do you shop online from and How many times you have made an online purchase in the past 1 year.

1. **Histplot** – Checked which websites provide complete, relevant description information of products.
2. Checked how many people think easy to use website or application of each retailer is, How many people think Visually appealing web-page layout of each retailer and How many People will recommend each Indian retailer to a friend.

**Results**

On the basis of my analysis I found that majority of people are preferring Amazon.in and Flipkart.com for various factors, Here is the data of what how many people are choosing each website for different factors :

**How many people think easy to use website or application of each retailer is :**

Amazon: women – 168 & men – 81 total - 249

Flipkart: women – 132 & men – 69 total – 201

Paytm: women – 74 & men – 51 total – 125

Myntra : women – 107 & men – 40 total – 147

Snapdeal: women – 79 & men – 51 total – 130

**How many people think Visually appealing web-page layout of each retailer :**

Amazon: women – 148 & men – 79 total - 227

Flipkart: women – 109 & men – 66 total – 175

Paytm: women – 38 & men – 29 total – 67

Myntra : women – 74 & men – 41 total – 115

Snapdeal: women – 38 & men – 23 total – 61

**How many People will recommend each Indian retailer to a friend :**

Amazon: women – 151 & men – 68 total - 219

Flipkart: women – 85 & men – 42 total – 127

Paytm: women – 27 & men – 17 total – 44

Myntra : women – 53 & men – 23 total – 76

Snapdeal: women – 10 & men – 1 total – 11

**Conclusion**

We were analyzing this dataset to check which of the websites or application is the most trusted and preferred by people. We chose different libraries for creating the data frame and making graphical representations of the data. By counting and plotting the data from the columns we observed that Amazon and Flipkart are the most used and recommended websites while Paytm and Snapdeal were the least recommended websites.