Project Report on case study from Indian e-commerce customers

1. Introduction

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:

a. service quality

b. system quality

c. information quality

d. trust and

e. net benefit.

The research has investigated the factors that influence the online customers repeat purchase intention. The combination of both useful value and pleasure-seeking values are needed to affect the repeat purchase intention (loyalty) positively. Results indicate the e-retail success factors, which are very much critical for customer satisfaction.
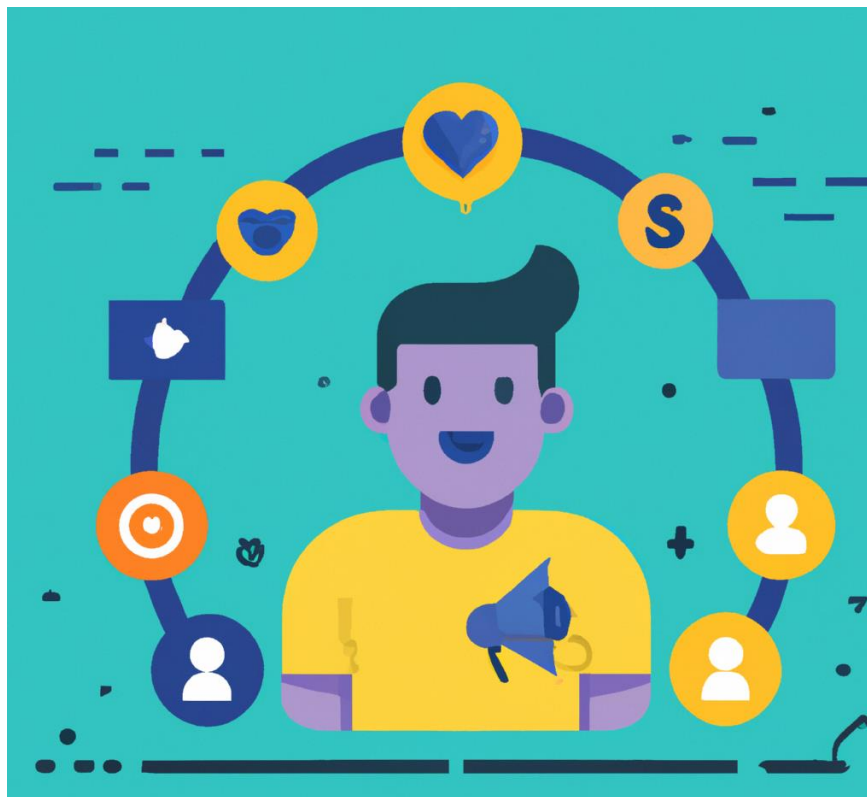

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2. Problem Statement & Given Dataset

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.

3. Summary of Given Dataset

S.no	Feature Description	Total Count	No. of Unique Values	Top Value out of 269 dataset	Frequency of Top Value
1	Gender of respondent	269	2	Female	181
2	How old are you?	269	5	31-40 years	81
3	Which city do you shop online from?	269	11	Delhi	58
4	Since How Long You are Shopping Online ?	269	5	Above 4 years	98
5	How many times you have made an online purchase in the past 1 year?	269	6	Less than 10 times	114
6	How do you access the internet while shopping on-line?	269	4	Mobile internet	142
7	Which device do you use to access the online shopping?	269	4	Smartphone	141
8	What is the screen size of your mobile device?	269	4	Others	134
9	What is the operating system (OS) of your device?	269	3	Window/windows Mobile	122
10	What browser do you run on your device to access the website?	269	4	Google chrome	216
11	Which channel did you follow to arrive at your favorite online store for the first time?	269	3	Search Engine	230
12	After first visit, how do you reach the online retail store?	269	5	Search Engine	87

S.no	Feature Description	Total Count	No. of Unique Values	Top Value out of 269 dataset	Frequency of Top Value
13	How much time do you explore the e- retail store before making a purchase decision?	269	5	more than 15 mins	123
14	What is your preferred payment Option?	269	3	Credit/Debit cards	148
15	How frequently do you abandon (selecting an items and leaving without making payment) your shopping cart?	269	4	Sometimes	171
16	Why did you abandon the "Bag", "Shopping Cart"?	269	5	Better alternative offer	133
17	The content on the website must be easy to read and understand	269	4	Strongly agree (5)	164
18	Information on similar product to the one highlighted is important for product comparison	269	4	Strongly agree (5)	116
19	Complete information on listed seller and product being offered is important for purchase decision.	269	5	Agree (4)	101
20	All relevant information on listed products must be stated clearly	269	4	Agree (4)	132
21	Ease of navigation in website	269	4	Strongly agree (5)	141
22	Loading and processing speed	269	5	Strongly agree (5)	115
23	User friendly Interface of the website	269	5	Strongly agree (5)	189
24	Convenient Payment methods	269	3	Strongly agree (5)	159
25	Trust that the online retail store will fulfill its part of the transaction at the stipulated time	269	4	Strongly agree (5)	141
26	Empathy (readiness to assist with queries) towards the customers	269	4	Strongly agree (5)	194
27	Being able to guarantee the privacy of the customer	269	3	Strongly agree (5)	185
28	Responsiveness, availability of several communication channels (email, online rep, twitter, phone etc.)	269	4	Strongly agree (5)	149
29	Online shopping gives monetary benefit and discounts	269	5	Strongly agree (5)	105
30	Enjoyment is derived from shopping online	269	5	Strongly agree (5)	86

S.no	Feature Description	Total Count	No. of Unique Values	Top Value out of 269 dataset	Frequency of Top Value
31	Shopping online is convenient and flexible	269	4	Strongly agree (5)	146
32	Return and replacement policy of the e-tailer is important for purchase decision	269	3	Strongly agree (5)	198
33	Gaining access to loyalty programs is a benefit of shopping online	269	5	Strongly agree (5)	115
34	Displaying quality Information on the website improves satisfaction of customers	269	3	Strongly agree (5)	133
35	User derive satisfaction while shopping on a good quality website or application	269	3	Strongly agree (5)	175
36	Net Benefit derived from shopping online can lead to users satisfaction	269	4	Strongly agree (5)	164
37	User satisfaction cannot exist without trust	269	5	Strongly agree (5)	122
38	Offering a wide variety of listed product in several category	269	4	Strongly agree (5)	111
39	Provision of complete and relevant product information	269	4	Strongly agree (5)	135
40	Monetary savings	269	4	Strongly agree (5)	148
41	The Convenience of patronizing the online retailer	269	3	Agree (4)	138
42	Shopping on the website gives you the sense of adventure	269	5	Agree (4)	101
43	Shopping on your preferred e-tailer enhances your social status	269	5	indifferent (3)	100
44	You feel gratification shopping on your favorite e-tailer	269	5	indifferent (3)	101
45	Shopping on the website helps you fulfill certain roles	269	5	Agree (4)	88
46	Getting value for money spent	269	3	Agree (4)	149
47	From the following, tick any (or all) of the online retailers you have shopped from;	269	9	Amazon.in, Flipkart.com, Paytm.com, Myntra.com...	82
48	Easy to use website or application	269	10	Amazon.in, Flipkart.com, Paytm.com, Myntra.com...	64

S.no	Feature Description	Total Count	No. of Unique Values	Top Value out of 269 dataset	Frequency of Top Value
49	Visual appealing web-page layout	269	10	Amazon.in, Flipkart.com	87
50	Wild variety of product on offer	269	9	Amazon.in, Flipkart.com	130
51	Complete, relevant description information of products	269	11	Amazon.in, Flipkart.com	100
52	Fast loading website speed of website and application	269	10	Amazon.in	51
53	Reliability of the website or application	269	10	Amazon.in	61
54	Quickness to complete purchase	269	9	Amazon.com	66
55	Availability of several payment options	269	11	Amazon.in, Flipkart.com	65
56	Speedy order delivery	269	6	Amazon.in	107
57	Privacy of customers' information	269	11	Amazon.in	71
58	Security of customer financial information	269	11	Amazon.in	51
59	Perceived Trustworthiness	269	9	Amazon.in	76
60	Presence of online assistance through multi-channel	269	10	Amazon.in, Flipkart.com, Myntra.com, Snapdeal	61
61	Longer time to get logged in (promotion, sales period)	269	10	Amazon.in	57
62	Longer time in displaying graphics and photos (promotion, sales period)	269	10	Amazon.in, Flipkart.com	60
63	Late declaration of price (promotion, sales period)	269	8	Myntra.com	75
64	Longer page loading time (promotion, sales period)	269	11	Myntra.com	61
65	Limited mode of payment on most products (promotion, sales period)	269	8	Snapdeal.com	87
66	Longer delivery period	269	6	Paytm.com	72
67	Change in website/Application design	269	7	Amazon.in	96

S.no	Feature Description	Total Count	No. of Unique Values	Top Value out of 269 dataset	Frequency of Top Value
68	Frequent disruption when moving from one page to another	269	8	Amazon.in	53
69	Website is as efficient as before	269	8	Amazon.in	94
70	Which of the Indian online retailer would you recommend to a friend?	269	8	Amazon.in	79

4. Worthy Observations & Critical Insights from the Analysis

- The dataset contains 269 rows and 71 columns.
- There are no null values present in the dataset.
- Females are more enthusiastic towards online shopping and we find around 67% of female customers shopped online.
- Customers whose age is between 31-40 years are the top online shoppers.
- Internet accessibility: Only 1% of customers utilize the dial-up method to shop online, while 28% of customers use WiFi and 70% of customers access mobile internet for online purchases.
- Windows/Windows Mobile accounts for over 45% of customers' operating systems, and its usage is highly prevalent. Customers using Android OS are next in line.
- Approximately 85.50% of buyers arrived at their preferred online retailer through a search engine.
- The majority of consumers prefer to pay their bills using credit or debit cards, while a small minority prefer to pay with cash upon delivery.
- 90% of respondents agreed that it is possible to protect the privacy of customers. Customers are worried about illegal access to their data because of this. Stores will be able to increase sales and attract more customers by protecting user privacy. Only 9.67% of the clients are in a neutral position, meaning they are unsure whether or not to support this strategy.
- About 70% of clients concur that online buying offers financial advantages and savings.
- Only 18% of customers disagreed with the statement that they enjoy shopping online, while 53.90% agreed.
- Approximately 73% of consumers strongly agree, and 19% of customers agree, that the return/replacement policy aids in their decision to purchase. It is obvious.
- As per 66% of consumers, purchasing online gives them easier access to loyalty programmes.
- 79% of customers stated that showing quality information on the website increases customer satisfaction since they think that doing so has a substantial correlation with it. 21% of the remaining clients are in a neutral state.

- 97% of customers agreed and 3% disagreed that they are happy while buying on a high-quality website.
- Approximately 81% of customers concurred that the net gain from online purchasing can result in users' contentment.
- 88.85% of respondents thought that trust is necessary for customer happiness. The management of client trust is a skill that businesses must acquire. 17.Monetary Savings: 82.90% of clients approved of financial savings. The online retailer needs to understand that persuading customers that his purchases are cost-effective is the best method to increase sales. Not only should the consumer feel better about their purchase, but they should also save a lot of money. The vendor would naturally gain confidence and brand equity as a result of these savings. To do this, online businesses can use social media channels to advertise their greatest offers and discounts to customers. The clients can save money if the businesses offer certain discounted prices.
- 57% of buyers concurred that online purchasing creates a sense of adventure. Adventures on shopping websites encourage people to engage in positive behavior and enjoy their online shopping even more.
- About 39.78% of customers believed that purchasing from their chosen e-tailer raises their social standing.
- 47.58% of buyers said they felt satisfied after making a purchase from their preferred online retailer.
- Around 86% of shoppers felt that they were obtaining value for their money, while 14% believed they were either wasting money or receiving worthwhile goods in exchange for their purchase.

- Most of the customers from the city Delhi, Greater Noida, Noida and Bangalore are used to shop online and the shopping count is high in these cities.

- Most of the customers found shopping online for more than 4 years and the count is high for the same followed by the customers shopping for 2-3 years.

- In last 1 year, most of the customers were purchased online less than 10 times and only few of the customers purchased online 21-30 times.

- Most of the customers used Smartphone device to access the online shopping and only few customers used Tablet to access the online shopping.

- The count is high for others mobile screen size followed by 5.5 inches screen size and 5 inches screen size has least count. That means, the customers who have thier mobile screen size other than mentioned inches shopped more online followed by 5.5 inches and the customers having mobile screen size 5 inches shopped very less.

- Most of the customers used Google chrome to access the website and only few of the customers used Opera and Mozilla Firefox to access the online shopping website.

- Most of the customers used Search Engine and Via application to reach the online retail store after their first visit and also some customers used Detect URL to reach the online store. Which means these customers have downloaded their most favorite application to reach the online stores easily.

- Many customers took more than 15 mins before making the purchase decision and some of the customers explored 6-10 mins. Most of the customers abandoned their shopping cart sometimes and some of the customers abandoned their shopping cart frequently.

- From the dataset around 133 customers abandoned their bag due to some better alternative offer and 54 customers abandoned due to promo code not applicable.

- Around 90% of the customers agreed that the content on the website is easy to read and understandable. Around 77% of the customers agreed that the information on similar product to the one highlighted is important for product comparison.

- About 70% of the customers agreed that complete information on listed seller and product being offered is important for purchase decision.

- Around 88.84% of the customers agreed that all relevant information on listed products must be stated clearly and only 11% of the customers disagreed with it.

- Around 91% of the customers agreed that ease of navigation in website helps them more.

- Most of the customers agreed that they have no issues with the loading and processing speed.

- Around 87% of the customers agreed with user friendly website interface. Creating new user-friendly websites will impact on customers to shop more online. By doing this customer don't have to work around much and overall shopping experience would be smooth.

- Around 84% of the customers trusted that the online retail store will fulfill its part of the transaction at the stipulated time.

- The count is high for the customers who agreed the empathy (readiness to assist with queries) towards the customers in the online shopping website is very helpful. If the online shopping companies ready to assist with customers queries then there will be benefit for both company and the customers.

- The count is high for the customers who agreed that the responsiveness, availability of several communication channels will help them more while shopping online which means if one channel is not available then customers can easily reach out to other channel to fulfill their benifits. So it is important for the companies to provide various channels to communicate with the customers.

- Around 83% of the customers agreed that shopping online is convenient and flexible and 12% of the customers are indifferent which means either they are agreed to this or disagreed and only 5% of the customers completely disagreed with it.

- Most of the customers agreed to offering a wide variety of listed product in several category and the count is high for the same.

- Around 86% of the customers would like to have provision of complete and relevant product information in the online shopping website.

- Around 47% of the customers agreed that shopping on the website helps them fulfilling certain roles and 33% of the customers are in confusion whether to agree or disagree and only 20% of the customers disagrees with it.

- Most of the people shopped from Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com companies and they think that it is easy to use website or application in these companies.

- Amazon.in and Flipkart.com have high visual appealing web-page layout compared to others.

- Around 48% of the customers says that amazon and flipkart shows wide variety of products in their shopping websited compared to other websites. It's important for the companies to show different types of products to gain customers rate.

- Around 37% of the customers liked amazon and flipkart in displaying complete and relevant information of the products.

- Around 51 customers says that Amazon.in is the fast loading website and application and they liked it. About 44 customers liked the web speed of both amazon and paytm followed by amazon and flipkart.

- The count is high for amazon followed by amazon and flipkart which means most of the customers liked the reliability of website or application in amazon and flipkart.

- Most of the customers likes Amazon's quickness to complete the purchase followed by Flipkart's and only few of the customers likes Myntra website.

- In Amazon and flipkart websites there are several payment options available compared to the other shopping websites.

- Most of the customers liked Amazon's delivery speed followed by flipkart and snapdeal.

- 32.Most of the customers trusts amazon followed by flipkart in terms of keeping the privacy of their data information.

- The count is high for the customers who belives that amazon website keeps their financial information secrete also the customers trusts flipkart, Myntra, Snapdeal and paytm in terms of keeping thier financial information secured.

- Most of the customers believed that Amazon has perceived trustworthiness compared to others. Apart from this customer believed that flipkart and Myntra also have perceived trustworthiness.

- Most of the customers like Amazon in terms of presence of online assistance through multi-channel followed by flipkart, Myntra and snapdeal.

- Most of the customers agreed that Amazon takes longer time to get logged them in.

- Most of the customers believes that Amazon and flipkart takes longer time in display the graphics and photos in sales period.

- Customers says that Myntra and paytm have late declaration of price in promotion/sales period compared to others.

- Also Myntra and paytm takes longer page loading time.

- Snapdeal.com has limited mode of payment on most products followed by Amazon.in.

- In terms of time taken in product delivery Paytm has highest count followed by Snapdeal.com.

- Most of the customers disliked change in website/Application design on amazon followed by paytm.

- Most of the customers disliked frequent disruption when moving from one page to another on amazon, Myntra and snapdeal.

- Most of the customers believes that Amazon and flipkart website is as efficient as before.

- Most of the customers would like to recommend amazon retailer to a friend followed by flipkart.

- Most of the female customers shopped online from more than 4 years and the count is also high for the females who shopped from 2-3 years. And only few male customers shop online more than 4 years. Which means the female customers are more enthusiastic to buy products from the online shopping websites.

- Many customers whose age between 31-40 years and 21-30 years used Smartphones followed by Laptops to access the online shopping websites.

- Most of the customers access the shopping websites more than 31-40 times in 1 year through Mobile Internet to shop the products also most of the customers who used mobile internet to access the online shopping website made online purchase less than 10 times in a year. And only few of the customers used WiFi network to access the shopping store.

- Most of the customers used ecommerce websites less than 10 times in a year from the city Delhi to shop the products.

- The customers having their mobile screen size say 6 inches(others) have followed search engine channel to arrive at their favorite online store for the first time. Also the customers who have their screen size 5.5 inches also used search engine channel to access the online shopping store.

- Most of the customers used Smartphones 31-40 times in an year to access the ecommerce websites to shop the products.

- Many customers having windows operating system in their device ran Google chrome to access the ecommerce shopping websites and some of the customers having IOS/Mac operating system used Google chrome as well as Safari to reach the online shopping store.

- Due to Lack of trust on the ecommerce websites, sometimes most of the customers abandoned the websites and some of the customers abandoned the shopping website due to the promo code not applicable. which means, if the product is having the special price or some catalogue price rule is applicable on it.Then coupon code should not be applicable on the products.

- So it is important for the ecommerce companies to create discount price, offers, coupon codes to retain the customers.

- Search engine is the most used channel by the customers to arrive their favourite store for the first time and after visit the website for the first time, most of them used the same channel to reach the online retail store to reshopping the products.

- Most of the customers agreed that the content on the website is easy to read and understandable also they explored more than 15 mins before making the purchase decision and some of the customers strongly disagreed that the content is not good and they explored 6-10 mins before making the purchase decision. So ecommerce websites should enable some images and it should contain clear structure, so that the customers can easily read and understand the content of the product.

- Most of the customers used google chrome to reach the websites and they preferred to pay their product price using Credit/Debit cards and only few of the customers used Safari browser to reach the e-retail websites.

- Sometimes the customers used to abandon their selected items and wants to leave without making payment and most of them making the payment using Credit/Debit Cards methods.

- There are many websites for selling the products among them Amazon.in, Flipkart.com, Paytm.com, Myntra.com, Snapdeal.com are easy to use and shop. Most of the customers used these websites more, this is because, these websites may provide less price products, good discounts and may have lots of varieties of similar products with different brand.

- Amazon and Flipkart have high visual appealing web-page layout compared to others that means these websites provides some colourful graphics on the homepage. The more people find the website attractive, there are higher chances that they will stay a little longer in that website, also these websites provide wild variety of products in an attractive manner which makes the customers to buy the product.

- The consumer determines the shop's reliability based on the information transmitted by the shop and certain sites offer customers the opportunity to purchase items that are used which means they are likely to be the most reliable. Some of the customers completes their purchase very quickly due to the discount, less price, free delivery charges etc provided by the ecommerce websites.