



CUSTOMER\_RETENTION

Submitted by:

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**ACKNOWLEDGMENT**

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.

## **INTRODUCTION**

- **Business Problem Framing**

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.

- **Motivation for the Problem Undertaken**

- 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.

## **Analytical Problem Framing**

- Mathematical/ Analytical Modeling of the Problem

Python is widely used in scientific and numeric computing:

SciPy is a collection of packages for mathematics, science, and engineering.

# Pandas is a data analysis and modelling library.

Python is a powerful interactive shell that features easy editing and recording of a work session, and supports visualizations and parallel computing.

The Software Carpentry Course teaches basic skills for scientific computing, running bootcamps and providing open-access teaching materials

- Data Sources and their formats

- Data selection is defined as the process of determining the appropriate datatype and source, as well as suitable instruments to collect data. Data selection precedes the actual practice of data collection. This definition distinguishes data selection from selective data reporting (selectively excluding data that is not supportive of a research hypothesis) and interactive/active data selection (using collected data for monitoring activities/events, or conducting secondary data analyses). The process of selecting suitable data for a research project can impact data integrity

1Gender of respondent	2 How old are you?	3 Which city do you shop online from?	4 What is the Pin Code of where you shop online from?	5 Since How Long You are Shopping Online ?	6 How many times you have made an online purchase in the past 1 year?	7 How do you access the internet while shopping on-line?	8 Which device do you use to access the online shopping?	9 What is the screen size of your mobile device? titititit	10 What is the operating system (OS) of your device? tititit	...	Longer time to get logged in (promotion, sales period)	Longer time in displaying graphics and photos (promotion, sales period)	Late declaration of price (promotion, sales period)	Longe loadin (prom sales p
0	0	3	Delhi	110009	5	4	4	3	5	1 ...	Amazon.in	Amazon.in	Flipkart.com	Flipk
1	1	2	Delhi	110030	5	5	2	1	2	3 ...	Amazon.in, Flipkart.com	Myntra.com	snapdeal.com	Snapde
2	1	2	Greater Noida	201308	4	5	3	1	4	2 ...	Myntra.com	Myntra.com	Myntra.com	Mynt
3	0	2	Karnal	132001	4	1	3	1	4	3 ...	Snapdeal.com	Myntra.com, Snapdeal.com	Myntra.com	Payt
4	1	2	Bangalore	530068	3	2	2	1	2	3 ...	Flipkart.com, Paytm.com	Paytm.com	Paytm.com	Payt

- Data Preprocessing Done

We have found that there are no nan values and missing values.

- **Hardware and Software Requirements and Tools Used**
- Python is widely used in scientific and numeric computing:
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## **Model/s Development and Evaluation**

- Identification of possible problem-solving approaches (methods)

I have done many EDA process And many exploratory analysis on this data.

- Visualizations

I have used violinplot, distplot, boxplot and many visualisation tools.

## **CONCLUSION**

In this paper, We evaluated and compared each model to determine the one with highest performance. We also looked at how some models rank the features according to their importance. In this paper, we followed the data science process starting with getting the data, then cleaning and preprocessing the data, followed by exploring the data and building models, then evaluating the results and communicating them with visualizations.