Customer Retention Case Study

Submitted by:

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ACKNOWLEDGEMENT

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. 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.

- Conceptual Background of the Domain Problem.

  There are many factors involved while analysing this specific problem. the main motivate of this case study is to maintain the customer relationship between to e-commerce sites.

  The initial guess is to keep the customer relationship active by analysis like which type of customer are there and since how they are shopping through this site and what keeps them regularly active those sites, is it the offers or the product satisfaction, and many more other factors are inclusive in this case study. These above questions are asked to get initial sights of the dataset. Rest is identified by using visualization and comparison of the columns group by and many other methods.

- Review of Literature

  Customer service and experience count now more than ever before no compromises, no exceptions. Brands with the ability to build flawless customer experiences and offer exceptional standards of customer service stand to set themselves apart from their competitors in a notable way.

  When it comes to Customer Service, in particular, today's digital consumer is very much in charge. Due to the hyperconnected, incredibly convenient, and instantaneous nature of the modern consumer world, and the number of touchpoints on offer, maintaining excellent levels of service by utilizing carefully.

  A service report extracts invaluable information and insights from customer service data, allowing you to meet customer expectations and provide a better experience. By increasing service levels organizations can ultimately generate business value and increase profits.

  In the digital age, consumers are more empowered, more tech-savvy, and more demanding than ever before. If you don't satisfy a

customer's needs or resolve their issues almost instantly or with a degree of competency that they deem unacceptable, they simply will not stick around. Add to this the fact that customers now trust the opinions of their peers more than the brand itself, focusing on your Customer Service offerings should be your topmost priority if you want to succeed.

The important factor for customer retention that the relationship s should be handle with care each aspect of the customer should be thought twice before applying any kind of policy.

The customer should feel happy, when he has satisfied with the product delivered by the e-commerce site. Or he /she trust for the brands.

- ## Motivation for the Problem Undertaken

My main objective to make this project to learning and develop the skills required to deal with real-world problems.

Also, to apply skills which are base foundation of the machine Learning and dive deep. work on the industry base problems.

- # Analytical Problem Framing

In statistics, linear regression is a linear approach for modelling the relationship between a scalar response and one or more explanatory variables (also known as dependent and independent variables). The case of one explanatory variable is called simple linear regression.

In linear regression, the relationships are modelled using linear predictor functions whose unknown model parameters are estimated from the data. Such model is called linear model

Linear regression has many practical uses. Most applications fall into one of the following two broad categories

If the goal is prediction, forecasting, or error reduction, linear regression can be used to fit a predictive model to an observed data set of values of the response and explanatory variables.

- ## Data Sources and their formats

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Thier are 71 columns which are features columns for the case study. The data set is the form of excel sheet format. For which we have to use pandas' data frame to load it in a tabular format, which gives great visual of data set.

- ## Data Pre-processing Done

The pre-processing of data in this project. There were no null or

Nan value present in the dataset to handle them.

But the most of the data was in the string format so for better

Machine learning patterns it has to be converted into numeric

By using the label encoder to transform the whole data set into

Numeric form for accurate result of machine using many algorithms.

For analysis purpose we don't need to convert data into numeric form because we can visualize using plots from various libraries to get the insights of the data.

- ## Hardware and Software Requirements and Tools Used
- Listing down the hardware and software requirements along with the tools, libraries and packages used. Describe all the software tools used along with a detailed description of tasks done with those tools.
- The Minimum Hardware requirement for this project is 4 GB RAM, i3 processor.
- The software requirements are Python 3.2 version libraries and packages used are as follows:
- Pandas, Numpy, Matplotlib, Seaborn, Warnings, Sklearn Pre-processing, MinMax scaler, Metrics, linear model, tree, Ensemble.model selection, xgboost, Regulration,Lasso, GridSearchCV,Model saving Pickle.

- ## Key Findings and Conclusions of the Study

The one of the key findings of this project is that, the Customer retentions are major issues faced by many of the e-commerce site which leads to customer swap to the other site which will the great loss for the sites to over-come such problem the site uses the analysis and as per the   it takes effective measure for the sale growth.

The sites can look after the customer how tends to swap. The reason could anything product quality, better offers displayed by other contemporary. May be the loyalty for specific brand etc.

Above are all the factor being important to kept in mind while dealing with customer retention.

The customer who are more than customer for 2 to 3 years be provided with better offers because they are neglected. According to my analysis the major customer retention occurs due to lack of offers not given to the customers who all are part of the organization for longer time.

But the new customer can be attracted by giving offers and good deals, who has signed up newly. This can also boost the sale of the products, the customer who are customer more than 1 year or 2 year graphical representation has generated low which less 20 percent

The delivery time, shipping process, availability of the product, how frequently customer orders from the sites, this are factors, which are important for the long of sites. Return and replacement policy is also one of the important features of this case-study.

The GUI also play important role to grab attention of the users. The graphical user interface, which leads to attract the customer by the visual effective given to the sites. Security of the financial information is most important task to handle the user data which contains secured information of the customer, so it also should be maintained by the sites.

Conclusion:

On average, acquiring a new client costs five times as much as keeping an existing one, and marketing to a new customer can cost five times as much as retaining an existing one, depending on the industry. Increasing client retention rates by merely 5%, on the other hand, can increase earnings by 25% to 95%. Customers who have already purchased from you are more likely than the average consumer to spend more, buy more, and promote your company to others. Here are effective customer retention strategies key to your business's success.

Consumers enjoy being rewarded for their purchases. As a result, when you offer your customers exclusive discounts or promotions, they will feel both excited and valued. You can offer your clients random rewards to keep them happy.

When you try to build a brand, you're attempting to in still a belief in your customers that will stay. That involves following through on the promises you make, as well as the ones you suggest. Keeping your promises builds loyalty.

Customer retention is the difference between firms that grow and those that don't. The more clients you can retain and sell to, the more likely you are to meet your business objectives. Ther above customer retention techniques will allow you to deliver and extract additional value from your current client.