

PROACTIVE ATTRITION MANGEMENT CASE STUDY - CONCLUSION

1. Data cleaning including missing values, outliers and multi-collinearity. Describe your predictive churn model. How did you select variables to be included in the model?

Ans: The predictive model was analysed using Logistic Regression technique. The raw data file consisted of 78 attributes, but some attributes were listed separately to imply same information and hence, data cleaning and pre-processing had an important role to play. Various variable reduction techniques were used in order to remove insignificant variables and in the end, I was left with 25 attributes.

Logistic Regression is one of the efficient waysto construct a predictive model, but Ensemble methods and Decision tree can also prove to be handier because of the added advantage of using multiple algorithms to generate better predictive performance.

2. Demonstrate the predictive performance of the model.

Ans: Logistic regressions have always been an influential method in data science and by using it, I found that the accuracy of the model is close to 60% on both training and testing datasets. This amount of accuracy on such a database is significantly enough and implies that the model is robust.

3. What are the key factors that predict customer churn? Do these factors make sense?

Ans: The relationship between the dependent variable and independent variables is established using logistic regression by estimating probabilities using a logistic function.

The following attributes are found to be more important in deciding customer churn (High absolute z value and low p value):

Revenue, Mean monthly minutes of use, percentage change in minutes of use, Mean no. of dropped voice calls, No. of unique and active subs, Age, Refurbished headset, Credit Rating, Equipment days. Percentage change in minutes of use and Mean no. of dropped voice calls can be intuitively understood to be linked to churn as those who cannot afford to pay an increase in bill tend to churn to maintain balance.

The other attributes though contribute more to churning of customers as evident from regression cannot be understood intuitively but as a whole.

4. What offers should be made to which customers to encourage them to remain with Cell2Cell? Assume that your objective is to generate net positive cash flow, i.e., generate additional Customer revenues after subtracting out the cost of the incentive.

Ans: Here are some ways to reduce the customer churn:

1- Cell2Cell would want customers to sign up for additional products, thereby, ensuring the increase in revenue as well as customer retention because surveys have shown that the retention rate of a customer in a telecom industry is directly proportional to the number of products that a customer is buying from a company.

2-Another way is addressing to the customers problem efficiently and effectively. Wireless-telecom industry involves a list of problem such as slow network, billing errors, ease of assistance etc. Cell2Cell can structure a system where a customer can know the way Cell2Cell is using to resolve their queries, the tentative date by which the problem will get fixed and how to provide the contact details of right person for further inquiry.

5. Assuming these actions were implemented, how would you determine whether they had Worked?

Ans: The data collected from customers ' incentive program can be used to cross promote or up sell additional products or services and create highly targeted and relevant marketing campaigns to further improve your business.

In order to track the behaviour of customers, personalized e-mails or SMS marketing campaigns can also be implemented.