

The Associate Director,

There are primarily two hypotheses to test, these includes:

- First is that the churn which is caused by price sensitivity among customers.
- Second one is offering a 20% discount to consumers with a high turnover rate, could be effective.

To test the two hypotheses, we'd have to estimate customer churn probability and calculate the effect of prices on churn rates.

To build the following models, we'll need the following information:

- **SME customer data:** It includes each client's SME customer attributes.
- **Churn data:** If the SME customer has churned, indicate it.
- **Price information:** It indicates the prices of various SME clients at various times.

We need to undertake exploratory research after we acquire the data and wrangle it to see if the churn is caused by consumer price sensitivity. We can then develop a binary model such as Logistic Regression, Gradient Descent Boosting Techniques, Random Forests, Support Vector Machines, Decision Trees, Naïve Bayes, etc. to predict the consumers who are likely to churn if it is driven by customer price sensitivity.

We'll be able to select the most appropriate model for the statistics measurement. We'll be able to assess the influence of price on churn rates and size the business impact of the second hypothesis once we have the model.

Ending my thoughts here on how the team should go about testing the hypothesis.

Thanking You,

Regards

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