Respected Sir,

There mainly two hypotheses to test, the first one is that the churn is driven by customer price sensitivity and the second one is offering customers at a high propensity to churn a 20% discount might be effective.

In order to test the two hypotheses, we would need to model the churn probabilities of customers and derive the effect of prices on churn rates. We would need the following data to be able to build the following models:

1. Customer data - which should include characteristics of each client, for example occupation, electricity consumption, date joined as customer etc.
2. Churn data - Indicate whether the SME customer has churned or not
3. Price data - Indicate the prices of different SME customers at different times.

Once we have the data, we would need to do feature engineering based on the data that we obtain then we need to do the exploratory analysis to confirm if the churn is driven by customer price sensitivity. If it is driven by customer price sensitively, then we can build a classification model (e.g. Logistic Regression, Random Forest Classifier, XGBoost Classifier etc.) to predict customers likely to churn. We can find the most appropriate model that fits best based on the accuracy of test data. Once

we get the model we would be able to understand the impact of price on churn rates as well as the relative importance of prices compared to other factors. Furthermore, the model would allow us to size the business impact of the client's proposed discounting strategy.

Regards

Vipin kk