Dear LDS:

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.   The SME customer data---contains the SME customer’s characteristics of each client

2.    Churn data---Indicate if the SME customer has churned

3.    Price data---Indicate the prices of different SME customers at different times.

When we get the data, after wrangling the data, 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 binary model (e.g. Logistic Regression, Random Forest, Gradient Boosted Machines to name a few), to predict customers likely to churn. We can find the most appropriate model that fits best. Once we get the model, based on the model, we would able to understand the impact of price on churn rates and we can size the business impact of the second hypothesis.

Regards

Kexin Yao