Dear AD,

Here are the steps that I believe should be followed to figure out the main reasons for customer churning and what data would we need to look into it deeply.

Here are some Key Factors for customers deciding to stay with or switch energy providers.

1. Cheaper Tariffs – Our tariffs might be more expensive than our competitor’s.
2. Customer Service – We might not be able to provide good customer services.
3. Green Tariffs – We might not be able to offer legit green tariffs to our customers who want to do their part in saving the environment.
4. Deals and incentives – What kind of deals and incentives are we offering to keep the customers and attract new ones.

Here are some data along with their fields we would require to look deeper into the matter at hand and draw better conclusions.

1. Tariff Contract – Monthly / Half-Yearly / Yearly
2. Tariff Type – Renewable (Green) / Non-Renewable (Blue)
3. Tariff Plan – Individual / Family
4. Opt. for Energy Saving Newsletter – Yes/ No
5. No. of queries raised
6. No. of queries resolved
7. Annual visit by company representative = Yes/No
8. No. of units
9. Historical Pricing Data – that would indicate the prices charged at granular time intervals
10. Subsidy amount
11. Final Amount
12. Churn – Yes/ No

Here are the following exploratory analyses on the relevant fields that can give us more insights about the customer churn’s behaviour.

1. With the help of bar graph, we could find the following:
2. Customers from which tariff contract are churning out the most.
3. Customers from which tariff type are churning out the most.
4. Customers from which tariff plan are churning out the most.
5. Are customers with high no. of queries churning out?
6. Are the customers churning out opted for energy saving newsletter?
7. Are the customers churning out had annual visit by company representative?
8. Line graph showing no. of queries raised and resolved. (Are we able to resolve all the queries of our customers)
9. Are customers with high pricing bill getting good subsidy amount or not and is this a reason for customer churn?

After this deep exploratory data analysis we would figure out what is price sensitivity and calculate it, the build a binary classification model (logistic regression, Random Forest classifier, XG Boost Classifier etc.)

We would then choose the best model based on accuracy. And dive deeper into the cause of the churn because of price changes.

Looking forward for your suggestions on this.

Thanks and regards

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