

## Proposal for Addressing SME Churn and Testing the Discounting Strategy

Dear [AD's Name],

I hope this message finds you well. I propose a comprehensive data-driven approach to tackle the significant churn issue in our SME segment due to power liberalisation in the European energy market. Based on our information, it's evident that customer price sensitivity might be a crucial factor driving churn. To address this, I suggest a predictive modeling strategy to identify potential churners, allowing us to implement a targeted discounting strategy to retain these customers.

The hypothesis for this strategy is that Customer churn is driven by price sensitivity. Offering a 20% discount to high-churn propensity SME customers may increase customer retention rates significantly.

To test this hypothesis, I propose the following steps and the data requirements needed for those steps:

**Data Collection:** We would require historical data covering customer profiles, gas & electricity usage patterns, previous and current billing details, and any previous discount offers. Additionally, data on customer interactions, complaints, and satisfaction surveys would be crucial.

**Feature Selection:** Relevant features that we should isolate include customer tenure (average time in years a customer has been with PowerCo), monthly usage, billing history, frequency of price changes, and customer service interactions.

**Model Selection:** Utilizing machine learning algorithm models like Logistic Regression, Decision Trees, or Random Forest, we can predict churn probability, or what drives churn, based on the selected features aforementioned.

**Data Frame Structure:** Each row will represent a unique customer, with columns indicating customer ID, tenure, monthly usage, billing history, interaction frequency, and churn status (0 for retained, 1 for churned).

I also propose we explore the following analyses for more insights into the churn hypothesis:

**Correlation Analysis:** Explore the correlation between churn rates and factors like price fluctuations, customer service response times, and tenure.

**Customer Segmentation:** Utilize clustering algorithms to segment customers based on their usage patterns and responsiveness to price changes.

**Predictive Modeling:** Build a predictive model using historical data, validating it with a holdout/training dataset, to assess its accuracy in predicting churn.

**Batch Testing:** Implement the 20% discount strategy on a sample group and compare their churn rates against a control group to evaluate its effectiveness.

I would be happy to discuss this proposal further, gather the necessary data, and initiate the analysis process. Your insights and feedback on this approach are invaluable. I am looking forward to your response.

Best regards,  
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