## Hi [LDS],

I hope this message finds you well. I've been contemplating ways to delve into the factors influencing customer churn within our context, particularly focusing on the hypothesis that it might be correlated with price sensitivity. To explore this further, I propose conducting a comprehensive analysis by modeling churn probabilities and understanding how prices might affect churn rates. To proceed, we would require specific data sets to construct and refine our models effectively.

Here's a breakdown of the data we would need:

## 1. Customer Data:

- Characteristics of each client (e.g., industry, historical electricity consumption, date joined as a customer, etc.).

## 2. Churn Data:

- Indications of whether a customer has churned.

## 3. Historical Price Data:

- Pricing information at granular time intervals for both electricity and gas services.

Once we acquire this data, the next steps involve feature engineering based on the obtained information. Subsequently, we plan to develop a binary classification model (such as Logistic Regression, Random Forest, or Gradient Boosted Machines), selecting the most suitable model by considering the tradeoff between complexity, explainability, and accuracy.

The chosen model will provide insights into the direction and magnitude of the impact of prices on churn rates. Additionally, it will help us understand the relative importance of prices compared to other factors contributing to customer churn. This analysis will not only unveil the dynamics at play but also enable us to gauge the business implications of any proposed discounting strategy.

I look forward to your thoughts on this approach and am eager to discuss the next steps in detail.

Best Regards,

Umaiyaal A