Dear Associate Director,

I have reviewed the business background information and the potential reasons for churn among SME customers, as well as the discounting approach proposed by the client to address this issue. Based on this information, we will test the following hypothesis at BCG Gamma:

Hypothesis: Price changes have a significant impact on customer churn at PowerCo.

Null Hypothesis (H₀): Price changes have no effect on customer churn at PowerCo.

Alternative Hypothesis (H₁): Price changes are directly responsible for customer churn at PowerCo.

To thoroughly investigate this hypothesis and gain a comprehensive understanding of the current situation at PowerCo, we require a detailed dataset that encompasses the following information:

Customer Data:

* Basic Information: Customer name, address, location, customer since date, and churn status
* Business Information: Business type, industry, product or service offerings, and company size
* Purchase Information: Price per unit, last purchase date, purchase frequency, quantity purchased, and total purchase amount
* Payment Information: Payment history, including any defaults or late payments, and payment terms

Company Data:

* Customer Service Information: Customer complaints, resolution status, time to resolution, and customer satisfaction ratings

Once we have access to this comprehensive dataset, we will proceed with initial data cleaning and filtering to ensure data quality and consistency. We will then define the criteria for classifying customers as either active or churned.

Next, we will conduct an exploratory data analysis to identify patterns and trends within the data. This may involve creating customer segments or cohorts based on various factors, such as demographics, purchase behavior, and payment history. We will then analyze these segments to identify common characteristics among churned customers.

Specifically, we will examine the purchase rate and quantity of churned customers over time and in relation to price changes to determine if there is a correlation between price sensitivity and churn. This analysis will help us assess the validity of our hypothesis and gain insights into the factors that contribute to customer churn.

We will also analyze customer complaints and resolution information to determine if customer satisfaction levels are related to price changes and churn behavior. This additional analysis will provide a more holistic understanding of the factors influencing customer retention.

Based on our findings, we will develop predictive models to identify customers at high risk of churn due to price sensitivity. These models will enable PowerCo to proactively target these customers with personalized pricing strategies, retention offers, or other interventions aimed at reducing churn.

We will continuously monitor the performance of our predictive models and retrain them as needed to adapt to changing market conditions and customer behavior. This iterative approach will ensure that our models remain effective in identifying and mitigating churn risks.

Please let me know if you have any questions or require further clarification. I look forward to collaborating with you and the team to address this critical issue for PowerCo.

Sincerely,

Bukola Adenuga,

Data analyst,

BCG Gamma