

## **Subject: Addressing PowerCo's Churn Problem and Discounting Strategy**

Dear Associate Director,

I wanted to provide you with a deeper understanding of PowerCo's churn problem and how we can approach testing the hypothesis that churn is driven by customer price sensitivity. Additionally, I will outline the steps we can take to implement the discounting strategy effectively.

### **PowerCo's Churn Problem:**

As a major gas and electricity utility, PowerCo has been experiencing significant customer churn, particularly in the SME segment. This churn issue is largely attributed to the power-liberalization of the energy market in Europe. To address this challenge, PowerCo has engaged BCG to focus on the SME segment, where the problem is most pronounced.

### **Predictive Modeling and Hypothesis Testing:**

Using a predictive model, we can identify customers who are likely to churn, enabling us to target them effectively. The hypothesis that churn is driven by customer price sensitivity is worth investigating. To test this hypothesis, we will follow these steps:

#### **1. Data Collection:**

We need to collect comprehensive data from PowerCo, including customer information (demographics, contract details, historical consumption), pricing data (changes, discounts), and churn data (timing, reasons).

#### **2. Exploratory Data Analysis:**

By conducting thorough exploratory analysis, we can gain valuable insights into customer churn behavior. We will analyze churn rates over time, segment customers based on characteristics, and examine the impact of pricing changes on churn.

#### **3. Feature Engineering and Model Development:**

We will engineer relevant features, such as tenure, contract type, pricing changes, and consumption patterns, to capture the influence of price sensitivities on churn. Next, we will develop a predictive model using suitable techniques like logistic regression, decision trees, or random forests.

## **4. Model Training, Evaluation, and Deployment:**

Using historical data, we will train and evaluate the model, employing techniques like cross-validation and ROC analysis. Once validated, the model will be deployed to generate churn predictions on the 1st working day of each month.

## **Discounting Strategy:**

To mitigate churn among at-risk customers, the SME division head has suggested offering a 20% discount to those with a high propensity to churn. Here's how we can approach this strategy:

### **1. Model Prediction:**

The predictive model will identify customers who are at a high risk of churn at their current price. These predictions will be used as a basis for targeting the discounting strategy.

### **2. Discounting Implementation:**

PowerCo can strategically offer a 20% discount to these identified customers. The discount should be communicated as a special retention offer, emphasizing its significance in demonstrating PowerCo's commitment to customer satisfaction.

### **3. Monitoring and Refinement:**

To ensure the discounting strategy's effectiveness, we must monitor its impact on customer retention rates. Regular analysis of customer behavior and feedback will help us refine the strategy, tailoring it to specific customer segments and fine-tuning the discounting approach as needed.

By following this comprehensive approach, we can effectively address PowerCo's churn problem and test the hypothesis that customer churn is driven by price sensitivity. The insights gained from our analysis will guide the implementation of the discounting strategy, maximizing its impact on customer retention within the SME segment.

Please feel free to reach out if you have any further questions or if there are specific areas you would like me to focus on. I am committed to supporting PowerCo's goals and look forward to your feedback.

Best regards,

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