

**Subject:** Proposal for Investigating PowerCo's Customer Churn Issue

Dear Associate Director,

In response to your request, Estelle and I have been diligently considering how to delve into PowerCo's issue with customer churn. We understand the importance of thoroughly understanding the problem before devising any solutions. Here's our plan:

**Problem Formulation:** The issue at hand is to comprehend why customers are either staying with PowerCo or opting to switch to other energy providers. We will address this through the following steps:

**Business Understanding:** We'll conduct interviews with stakeholders to gain insights into PowerCo's customer base, existing strategies, and market trends.

**Data Collection:** We'll gather relevant data to investigate factors influencing customer decisions, such as price fluctuations, energy source preferences, customer service quality, geographical factors, and possibly regulatory changes.

**Data Preparation:** This involves cleaning, aggregating, and structuring the collected data for analysis.

**Data Analysis:** We'll employ various techniques such as statistical analysis, machine learning algorithms, and data visualization to identify patterns and correlations within the data.

**Interpretation & Evaluation:** Finally, we'll interpret the findings to understand the key drivers of customer churn and evaluate potential strategies to mitigate it.

**Key Factors Influencing Customer Decisions:** Based on preliminary analysis and industry knowledge, we believe the following factors could significantly impact a customer's decision to stay with or switch from PowerCo:

1. **Price:** Competitiveness of pricing plans compared to rivals.
2. **Energy Source:** Preference for clean or renewable energy sources.
3. **Customer Service:** Quality of customer service experience.
4. **Geographical Factors:** Location-based offerings or constraints.
5. **Regulatory Environment:** Compliance with regulations and policies governing the energy sector.

**Data Required for Investigation:** To thoroughly investigate these factors, we would need access to the following datasets:

1. **Customer Purchasing Trends:** Historical data on customer transactions and interactions over the past 5 years.
2. **Pricing Data:** Detailed information on pricing plans and changes.
3. **Customer Feedback:** Surveys, complaints, and feedback data related to customer service experiences.
4. **Geographical Data:** Location information of customers and competitors.
5. **Regulatory Updates:** Data on changes in regulations affecting the energy sector.

**Analyzing and Visualizing the Data:** Once we acquire the necessary data, we can employ various analytical and visualization techniques to test the impact of the identified factors on customer churn. For instance:

1. **Correlation Analysis:** Determine the relationship between pricing changes, customer satisfaction levels, and churn rates.
2. **Segmentation Analysis:** Identify distinct customer segments based on preferences and behaviors.
3. **Predictive Modeling:** Build machine learning models to forecast customer churn and assess the influence of different variables.
4. **Geospatial Visualization:** Map customer distribution and competitor locations to identify regional trends and competitive dynamics.

By employing these techniques, we aim to provide actionable insights to PowerCo for enhancing customer retention strategies and addressing the root causes of churn.

We look forward to your feedback and guidance on this approach. Please feel free to reach out if you require any further clarification or assistance.

Best regards,

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