

## Framing the hypothesis for Power Co.

- 1) Identify the problem- Customer Churning due to pricing issues
- 2) State research questions-
  - a. Does fluctuation in prices (mostly increasing prices) affect customer churn?
  - b. Do SMEs prefer price or customer service?
  - c. By giving a 20% discount, will that make brand loyalty among SMEs?
- 3) Define variables-
  - a. Dependent- Churn Status [Yes/No]
  - b. Independent-
    - Price changes
    - TypeOfIndustry
    - Location
    - Size
    - TenureWithPowerCo
    - ElectricityUsageYearly
    - ElectSpring
    - ElectSummer
    - ElectFall
    - ElectWinter
- 4) Collect and analyze-
  - a. Historical data
  - b. CRM
  - c. Billing Systems
  - d. Energy Monitoring devices
  - e. Publicly available data sources
- 5) Predict Model-
  - a. Logistic Regression
  - b. Random Forest
  - c. Support Vector Machines
  - d. XGBoost

- 6) Apply Model at 1<sup>st</sup> of every month
- 7) Monitor and evaluate
  - a. Compare predictions with actual outcome
- 8) Iterate and Improve-
  - a. Improve discount strategy on market dynamics