

1. Understand the Problem

- **Goal:** Reduce customer churn in 3 months.
- **Questions:** Why are customers leaving? How can we stop them?

2. Collect Data

- **Data Needed:** Customer info, account details, services used, and churn status.

3. Clean and Prepare Data

- **Fix Missing Data:** Fill in or remove missing values.
- **Standardize Data:** Make sure all data is in a similar format.
- **Convert Categories:** Turn text data into numbers.

4. Explore Data

- **Visualize:** Use charts to see data patterns.
- **Find Trends:** Look for reasons why customers might leave.
- **Create New Features:** Add useful data points like how long a customer has been with the company.

5. Build Models

- **Choose Methods:** Pick machine learning techniques (e.g., decision trees, logistic regression).
- **Train Models:** Use part of the data to teach the model.
- **Test Models:** Check how well the model works with new data.

6. Tune and Validate Models

- **Optimize:** Adjust model settings for better performance.
- **Cross-Validate:** Ensure the model works well on different data sets.

7. Deploy the Model

- **Integrate:** Add the model to the company's system.
- **Monitor:** Keep an eye on how the model performs and update it as needed.

8. Take Action

- **Identify At-Risk Customers:** Find customers likely to leave.

- **Retention Strategies:** Offer special deals, improve service, or create loyalty programs for these customers.

9. Feedback and Improve

- **Collect Feedback:** Get input from customers and stakeholders.
- **Iterate:** Continuously improve the model and strategies