Customer Churn Prediction - Project Summary

1. Business Problem

Customer churn occurs when a customer stops using a company's services. High churn rates can significantly impact revenue and customer retention efforts. Our goal is to predict and reduce customer churn using machine learning.

2. Data Sources

The project will use multiple data sources: - **Customer transactions** (SQL Database) - **Web activity logs** (API data) - **Demographics & customer profiles** (CSV files)

3. Expected Outputs

The pipeline will generate: - **Clean datasets** for exploratory data analysis (EDA) - **Feature-engineered datasets** for model training - **A trained machine learning model** to predict churn

4. Evaluation Metrics

To assess model performance, we will use: - **Accuracy**: Overall correctness of predictions - **Precision**: Correct churn predictions out of total churn predictions - **Recall**: Ability to detect actual churn cases - **F1 Score**: Balance between precision and recall