

Business Problem Statement

Vodafone Customer Churn Analysis

Vodafone, a leading telecommunications service provider, is experiencing customer churn, which has a direct impact on revenue and long-term business sustainability. Customer churn occurs when subscribers discontinue their services and switch to competitors. Since acquiring new customers is more costly than retaining existing ones, understanding and reducing churn is a critical business priority.

The management team has observed that customer attrition may be influenced by several factors such as contract type, tenure, monthly charges, payment methods, and service usage patterns. However, there is limited clarity on which of these factors contribute most to churn and which customer segments are at higher risk.

This project focuses on analyzing Vodafone's customer data to identify churn patterns, understand the key drivers behind customer attrition, and support data-driven decision-making for improving customer retention.

Core Business Question

How can Vodafone leverage customer data to identify the key factors driving churn and take proactive steps to improve customer retention?

Deliverables

1. **Data Preparation (MySQL):** Clean, standardize, and prepare the raw Vodafone customer churn dataset to ensure data accuracy and consistency for analysis.
2. **Data Analysis (SQL):** Structure the data and perform exploratory and business-driven analysis using SQL queries to identify churn patterns and high-risk customer segments.
3. **Visualization & Insights (Power BI):** Develop an interactive Power BI dashboard that highlights key churn trends, customer behavior patterns, and critical business metrics to support data-driven decisions.
4. **Report & Business Recommendations:** Document key findings, insights, and actionable recommendations in a clear project report to help stakeholders improve customer retention strategies.
5. **GitHub Repository:** Maintain a well-organized GitHub repository containing SQL scripts, Power BI dashboard files, and project documentation.