Project Objective

The primary goal of this study is to pinpoint the specific factors causing clients to discontinue their telecom services. By evaluating user profiles, spending habits, and service engagement, we aim to develop data-driven strategies that strengthen customer loyalty and minimize turnover.

Dataset at a Glance

The investigation utilized a comprehensive database of approximately 7,000 individual records. The data spans three main categories:

- User Profiles: Includes age demographics (senior status), family dynamics (partners/dependents), and gender.
- Service Portfolio: Details on internet packages, security add-ons, technical support, and media streaming.
- Account Metrics: Analysis of contract duration, billing methods, and expenditure levels.
- Outcome Variable: The "Churn" indicator, which identifies whether a user has left or remained with the provider.

Primary Discoveries

1. General Attrition Trends

The analysis reveals that roughly one-quarter of the customer base has opted to leave the service.

2. Profile Vulnerabilities

- Age and Independence: While gender does not appear to be a factor, senior citizens show a higher propensity to leave. Furthermore, individuals without partners or dependents are more likely to churn, potentially due to higher price sensitivity.

3. Product Engagement

- Safety Features: There is a clear link between churn and a lack of supplemental services like Device Protection, Online Security, or Tech Support.
- Bundling: Users who subscribe to multiple integrated services demonstrate much higher levels of brand loyalty.

4. Financial & Contractual Patterns

- Commitment Levels: Monthly rolling contracts are the highest risk category, whereas long-term annual agreements provide much greater stability.
- Transaction Methods: Users who pay via electronic checks are significantly more likely to depart than those enrolled in automated bank transfers.

- Cost Sensitivity: Higher monthly bills often lead to dissatisfaction and departure, yet many who churn do so early in their lifecycle, resulting in lower lifetime total charges.

Strategic Recommendations

- Incentivize Commitment: Transition users away from month-to-month plans by offering loyalty rewards or discounts for signing annual or multi-year agreements.
- Highlight Add-on Value: Focus marketing efforts on "peace-of-mind" services like Online Security and Tech Support to increase user "stickiness".
- Targeted Retention: Create specialized outreach programs for high-risk segments, such as senior citizens and single-user households.
- Early Intervention: Since many users leave early, implement proactive support and "welcome" rewards during the first few months of service to prevent early disengagement.
- Payment Optimization: Encourage the adoption of automated payment systems to reduce the friction often associated with manual electronic checks