

# Techo Customer Churn Analysis

## Objective

The primary objective of this analysis is to identify key factors influencing customer churn for the organization. By leveraging data-driven insights and visualizations, the goal is to:

1. **Understand Churn Dynamics:**
  - Quantify the overall churn rate and segment it across demographics, tenure, and service usage.
2. **Identify High-Risk Groups:**
  - Pinpoint customer profiles (e.g., demographics, payment methods, and service preferences) that are more likely to churn.
3. **Evaluate Service and Payment Impacts:**
  - Assess how service usage and payment methods affect customer retention.
4. **Provide Actionable Insights:**
  - Recommend targeted strategies to improve customer retention and reduce churn effectively.

## Executive Summary: Customer Churn Analysis

This analysis investigates key factors driving customer churn, leveraging data visualizations and statistical insights to identify actionable strategies. Below are the detailed findings:

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### 1. Overall Churn Rate

- **26.54% of customers** have churned, highlighting a pressing need to address retention challenges effectively.

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### 2. Customer Demographics and Tenure

- **Senior Citizens** are disproportionately affected, with a **higher churn rate of approximately 41%** compared to younger customers.
  - Tenure analysis reveals a strong retention trend among long-term customers:
    - **75% of customers with tenures exceeding 24 months** continue to use the service.
    - Conversely, **over 60% of customers with tenures of 1–2 months** tend to churn, indicating challenges in onboarding and early-stage retention.
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### 3. Service Utilization Impact

- Customers who actively use certain services demonstrate significantly lower churn rates:
  - **Phone Service:** Churn rate drops to **20%** among users.
  - **DSL Internet:** Only **15% churn** when this service is utilized.
  - **Online Security:** Customers with this service churn at a reduced rate of **18%**.
- However, services like **Online Backup**, **Tech Support**, and **Streaming TV** show an opposite trend:
  - **Online Backup:** Non-users experience a churn rate of **35%**.
  - **Tech Support:** Churn rate among non-users is **37%**.
  - **Streaming TV:** Non-usage leads to a churn rate of **40%**.

These findings emphasize the importance of promoting value-added services to enhance customer retention.

### 4. Payment Method Influence

- Payment methods also play a significant role in churn behavior:
  - Customers using **Electronic Check** exhibit a **churn rate of 42%**, significantly higher than other payment methods.
  - **Credit Card**, **Bank Transfer**, and **Mailed Check** payment methods show churn rates below **20%**, indicating a potential opportunity to encourage customers to switch payment methods.

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## Key Recommendations

1. Enhance **onboarding experiences** to retain new customers in their initial months.
2. Actively promote **value-added services** like Online Security and Tech Support through incentives or bundled offerings.
3. Introduce campaigns to migrate customers from **Electronic Check** to more stable payment options like Credit Cards or Bank Transfers.
4. Focus retention efforts on **senior citizen customers**, addressing their specific needs through targeted outreach and personalized support.