

Telecom Customer Churn Analysis - Summary Report

1. Overview

Customer churn is a crucial concern for telecom companies as it directly impacts revenue and customer retention. This analysis explores churn trends based on various factors like **contract type**, **senior citizens**, **payment methods**, and **additional services**.

2. Key Findings

◆ Overall Churn Percentage

- **Churn Rate:** 26% of total customers have churned.
- **Retention Rate:** 72% of customers remained with the company.

◆ Pie Chart Analysis:

The churn distribution shows that a significant percentage of customers leave, requiring targeted retention strategies.

◆ Churn Analysis by Customer Type

👴 Senior Citizens & Churn

- **Senior Citizens:** 42% of total customers.
- **Churned Senior Citizens:** 58% of total senior customers have churned.
 - ◆ **Insight:** Older customers tend to have a higher churn rate, indicating the need for better service or senior-friendly packages.

📄 Contract Type & Churn

- **Month-to-month contracts have the highest churn rate.**
 - **Long-term contract customers (1-year, 2-year) are more likely to stay.**
 - ◆ **Insight:** Encouraging customers to opt for long-term contracts may reduce churn.
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◆ Churn Analysis by Payment Method

Payment Method	Churned Customers (%)
Electronic Check	Highest churn rate
Mailed Check	Moderate churn rate
Bank Transfer (Automatic)	Lower churn rate
Credit Card (Automatic)	Lowest churn rate

◆ Insight:

- Customers using **electronic checks** tend to churn more.
 - Automatic payment users (bank transfers & credit cards) are **more loyal**.
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◆ Churn Analysis by Additional Services

- Customers without **Tech Support, Online Security, or Backup services** are **more likely to churn**.
- Customers with **Multiple Lines & Streaming Services** show mixed churn trends.

◆ Insight:

Encouraging customers to subscribe to **support & security services** may reduce churn.

3. Recommendations

✓ **Promote Long-Term Contracts** – Provide discounts or incentives to customers opting for 1-year or 2-year contracts.

✓ **Encourage Automatic Payments** – Offer benefits for credit card or bank transfer payments, as they have lower churn rates.

✓ **Improve Services for Senior Citizens** – Provide personalized support, discounts, and easy-to-use plans.

✓ **Bundle Value-Added Services** – Promote **Tech Support, Security, and Online Backup Services** to retain more customers.

4. Visual Representation

✓ **Pie Chart** – Churn vs. Non-Churned customers

✓ **Bar Chart** – Churn rate based on **Contract Type**

✓ **Countplot** – Churn by **Payment Method & Additional Services**

📌 Conclusion

This analysis highlights that **month-to-month customers, electronic check users, and senior citizens** have **higher churn rates**. Implementing **contract incentives, payment automation, and service improvements** can **significantly reduce churn** and improve retention.