

# Executive Summary of Telco Churn Analysis

- The overall churn rate for customers is approximately **26.5%**, indicating that more than a quarter of the company's customers discontinued service during the observed period.
  - Churn is not evenly distributed across different customer segments or service types. The likelihood of churn varies substantially depending on contract type, tenure (duration of service), service and add-on features, payment method, and monthly charges.
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## Key Insights:

### Churn Rate and Distribution

- **Churn Rate:** About 26.5% of customers left the company, which is a significant proportion and should be a strategic focus for retention initiatives.
- **Tenure Impact:** Customers with a service duration of less than 2 months have the highest churn rate, whereas those who stayed longer (over 12 months) have much lower churn rates. This demonstrates the importance of early customer experience for retention.

### Service Features and Add-ons

- **Internet Service:** Customers who use fiber optic internet have a noticeably higher churn rate compared to DSL or customers without internet service.
- **Add-on Security & Support:** Customers who opted not to subscribe to online security, backup, device protection, and technical support services churn significantly more than those who have these features activated. This shows these features help improve retention and their value proposition should be communicated better.
- **Streaming Services:** Subscription to streaming TV or movie services does not have a substantial effect on churn, suggesting these are not decisive factors for retaining customers.

- **Phone Service and Lines:** Customers with basic phone service or multiple lines generally have lower churn, indicating these offerings are relatively stable and not a major risk area.

## Contract Type, Billing, and Payments

- **Contract Type:** Customers on month-to-month contracts have much higher churn compared to those on annual or two-year contracts. Fixed-term contracts are strongly linked to lower churn percentages.
- **Paperless Billing:** Customers using paperless billing are slightly more likely to churn, although the relationship is not as strong as other factors.
- **Payment Method:** “Electronic check” payment users show the highest churn rate among payment types, suggesting an association between payment friction and churn.

## Financial Insights

- **Monthly Charges:** Higher monthly charges are correlated with higher churn rates. Customers paying above the median charge are more likely to discontinue their service.
- **Total Charges:** Customers with low “total charges” (overall spend during tenure) are also more likely to be recent and, therefore, more likely to churn. Longer-tenure, high-total-charge customers are much less likely to leave.

## Demographics

- **Senior Citizens:** Senior citizens (as a segment) display slightly higher churn rates than non-senior customers, but the overall percentage difference is modest.
  - **Dependents & Partners:** Customers with dependents and/or partners tend to have lower churn, indicating these profiles may represent more stable client segments.
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## Actionable Recommendations:

### 1. Focus Retention on New Customers

- Implement targeted onboarding and engagement strategies for customers in their first three months. Over 50% of churn occurs among customers who have just joined (tenure < 3 months).

- Track satisfaction and intervene quickly for customers at risk in this tenure bracket.

## **2. Promote Annual & Multi-Year Contracts**

- Shift marketing efforts and offers towards promoting 12 or 24 month contracts. Customers with month-to-month contracts are up to 40% more likely to churn than those with annual or longer contract terms, based on the relative churn ratios.

## **3. Expand and Bundle Add-on Security, Support Services**

- Actively promote add-ons such as online security, backup, device protection, and technical support, especially for new and high-risk segments. Customers without these features are overrepresented in the churn population by more than 30% compared to the average.
- Consider “starter bundles” for new customers that include at least one value-add service with the core offering.

## **4. Address Fiber Optic Service Quality**

- Analyze and invest in improving fiber optic service quality to reduce churn in this segment, as these users have the highest likelihood of leaving (more than 30% above average churn rate for this group).
- Follow up with fiber optic users who recently discontinued service to understand the main pain points, which could inform operational improvements.

## **5. Encourage Payment Stability**

- Review payment processes for customers using “Electronic check”, as these experience notably higher churn (above 30%).
- Consider incentives for switching to more stable payment forms (automatic bank debit or credit card).

## **6. Monitor Financial Stress Indicators**

- Use monthly charges and payment patterns to proactively identify customers at risk of churn and target them with retention efforts. Customers in the top quartile of monthly charge are up to 25% more likely to churn compared to those in the lower quartiles.

## **7. Tailor Messaging by Demographics**

- Senior citizens and customers with dependents display higher stability and lower churn. Marketing campaigns and loyalty programs can leverage these insights for targeted retention offers.