

Customer Churn Analysis Report – Summary & Insights

1. Data Cleaning & Preparation

All missing values (especially in `TotalCharges`) were replaced with 0, assuming they are new users. Null-checks confirmed a clean dataset. The `SeniorCitizen` column was mapped from 0/1 to No/Yes for better readability.

2. Overall Churn Rate

73.46% of customers are retained, while 26.54% have churned. This churn rate requires strategic intervention.

3. Churn Among Senior Citizens

Senior citizens ("Yes") have a higher churn rate. Tailored services could help reduce this.

Recommendation: Offer senior-specific support and care packages.

4. Tenure vs. Churn (CRITICAL INSIGHT)

Users with 0–12 months tenure churn the most. Longer tenure (24+ months) customers tend to stay.

Recommendation: Introduce a "First 90 Days Engagement Program" with loyalty perks and early support to improve retention.

5. Contract Type & Churn

Month-to-month users churn more compared to long-term contracts.

Recommendation: Incentivize long-term contracts with discounts or free add-ons.

6. Service Usage & Its Impact

Lack of services like `OnlineSecurity`, `TechSupport`, and `DeviceProtection` is strongly associated with higher churn. Fiber optic internet users also show higher churn.

Recommendation: Bundle key services and investigate fiber optic satisfaction issues.

7. Payment Method Influence

Electronic check users have the highest churn rate.

Recommendation: Promote secure payment methods with discounts and check system reliability.

Final Recommendations

Priority	Recommendation	Target
 High	Focus on early tenure customers (0–12 months)	Reduce churn in the most vulnerable group
Medium	Convert monthly contract users to annual plans	Boost long-term engagement
Medium	Promote service bundles with security/support features	Improve perceived value
Low	Improve experience for senior citizens	Expand customer trust and inclusivity

 Low

Investigate Fiber Optic dissatisfaction

Reduce technical churn causes