

Executive Summary

Here are a few key findings from the analysis. These highlight the major customer segments and features where churn is most common:

- > **Month-to-month contracts** have the highest churn rate (42.7%). Customers with no long-term commitment are more likely to leave.
- > **Fiber optic users** have a churn rate of 41.9%. These customers may not be happy with the service, even though it's a premium option.
- > **Customers without Online Security** churn at 41.8%, while those who have it churn much less (only 14.6%).
- > **People who pay using electronic checks** have the highest churn rate (45.3%). They might be more sensitive to price or less comfortable with digital tools.
- > **Senior citizens** have a higher churn rate (41.7%) compared to younger customers (23.6%).
- > **New customers in their first year** churn the most (47.7%). This shows the first year is very important for keeping customers.
- > **Customers with one-year contracts** churn much less (11.3%), and **two-year contracts** have the lowest churn (2.9%). Longer contracts help retain customers.

Recommendation for Retention:

- > **Offer discounts or bundles** to encourage customers to switch from month-to-month to one- or two-year contracts.
- > There may be issues with **pricing or service quality**.
- > Promote extra services like **online security, support, or streaming** as part of bundle offers.
- > Major focus should be to use **automatic payment** methods by offering small rewards or discounts.
- > Attracting Senior Citizens there should be **easy-to-use, affordable plans** (like possible providing DTH connection or providing OTA Platforms) for senior citizens. Include features like **simple billing and dedicated support**.
- > Focus more on new customers in their first year. Using a **welcome offer** can be a good use.

Churn_Analysis:

FeatureName	FeatureValue	total_customers	churned_customers	churn_rate_percent
Contract	Month-to-month	3875	1655	42.71
Contract	One year	1472	166	11.28
Contract	Two year	1685	48	2.85
PaymentMethod	Electronic check	2365	1071	45.29
PaymentMethod	Mailed check	1604	308	19.2
PaymentMethod	Bank transfer (automatic)	1542	258	16.73
PaymentMethod	Credit card (automatic)	1521	232	15.25
SeniorCitizen	Yes	1142	476	41.68
SeniorCitizen	No	5890	1393	23.65

Cohort_Analysis:

tenure_group	total_customers	churned_customers	churn_rate_percent
0-12 months	2175	1037	47.68
13-24 months	1024	294	28.71
25-36 months	832	180	21.63
37-48 months	762	145	19.03
49-60 months	832	120	14.42
61-72 months	1407	93	6.61

Feature_Analysis:

FeatureName	FeatureValue	total_customers	churned_customers	churn_rate_percent
Contract	Month-to-month	3875	1655	42.71
Contract	One year	1472	166	11.28
Contract	Two year	1685	48	2.85
InternetService	Fiber optic	3096	1297	41.89
InternetService	DSL	2416	459	19
InternetService	No	1520	113	7.43
OnlineSecurity	No	3497	1461	41.78
OnlineSecurity	Yes	2015	295	14.64
OnlineSecurity	No internet service	1520	113	7.43
PaymentMethod	Electronic check	2365	1071	45.29
PaymentMethod	Mailed check	1604	308	19.2
PaymentMethod	Bank transfer (automatic)	1542	258	16.73
PaymentMethod	Credit card (automatic)	1521	232	15.25
StreamingMovies	No	2781	938	33.73
StreamingMovies	Yes	2731	818	29.95
StreamingMovies	No internet service	1520	113	7.43
StreamingTV	No	2809	942	33.54
StreamingTV	Yes	2703	814	30.11
StreamingTV	No internet service	1520	113	7.43
TechSupport	No	3472	1446	41.65
TechSupport	Yes	2040	310	15.2
TechSupport	No internet service	1520	113	7.43