CHURN ANALYSIS

2025

PRESENTED BY : Sonali Singh

TELECOM

PROBLEMS

1.

MARKET SATURATION

The telecom industry is highly competitive, with multiple providers offering similar plans and pricing. Customers can easily switch to another operator with minimal effort, which increases churn. The company is continuously losing customers but lacks clarity on which segments are most vulnerable. Without identifying high-risk customers, retention campaigns become generic and ineffective. This leads to wasted marketing cost and declining customer lifetime value.

2.

DIGITAL COMPLEXITY

Modern telecom services include bundles such as internet, streaming, security, and billing options, which can overwhelm customers. Many users do not fully understand the services they are paying for or how to use them effectively. When customers face issues or confusion early in their subscription, they tend to leave instead of resolving the problem. The company currently does not know which service combinations create dissatisfaction. This results in poor onboarding experience and early customer drop-off.

3.

INEFFICIENT RETENTION STRATEGY

Retention efforts are currently reactive instead of proactive. The company offers discounts or support only after customers decide to leave, rather than predicting churn beforehand. There is no clear data-driven strategy to prioritize high-risk customers such as short-tenure users or flexible contract holders. As a result, retention resources are spent on the wrong customers while valuable customers continue to churn. A predictive understanding of churn drivers is required to improve retention efficiency.

OUR OBJECTIVES

IDENTIFY CHURN DRIVERS

The primary objective of this project is to determine the key factors that cause customers to leave the telecom service. By analyzing customer behavior across contract types, services, payment methods, and demographics, the goal is to uncover patterns associated with high churn risk and understand why certain customers are more likely to discontinue the service.

SEGMENT HIGH-RISK CUSTOMERS

Another goal is to classify customers into different risk categories based on their behavior and service usage. This helps the company recognize which groups require immediate attention, such as short-tenure users, flexible contract holders, or customers without support services. Identifying these segments allows targeted retention actions instead of generic marketing efforts.

### DEVELOP DATA-DRIVEN STRATEGIES

The final objective is to translate analytical findings into practical business recommendations. The project aims to suggest actionable strategies such as improving onboarding experience, promoting long-term plans, and bundling value-added services. These insights help the company proactively reduce churn and improve overall customer lifetime value.

CHURN ANALYSIS

Yes (26.5%)
26.5%
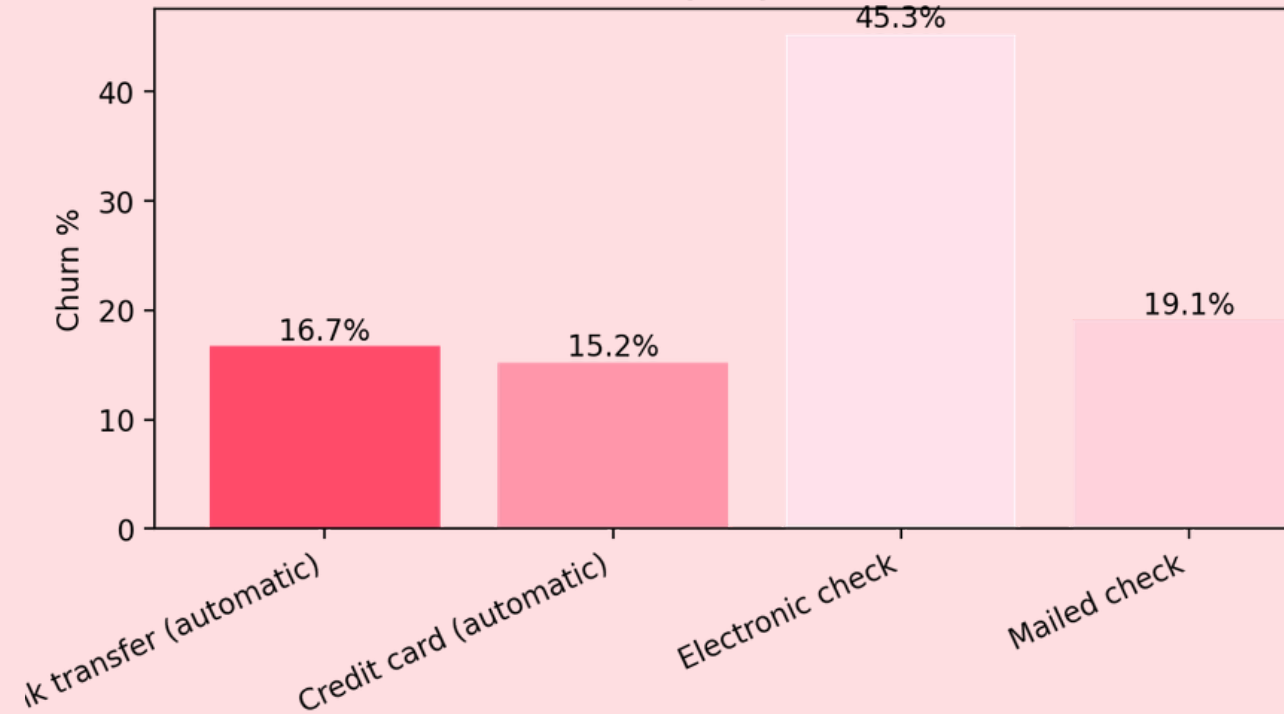73.5%
No (73.5%)
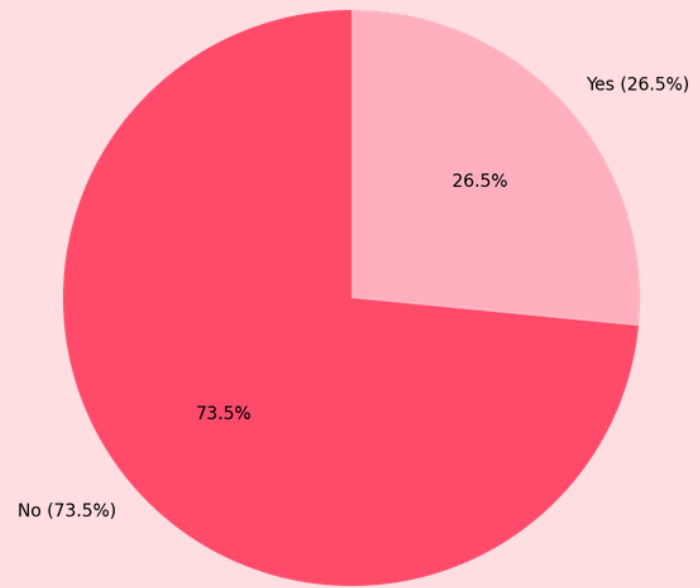
CONTRACT TYPE VS CHURN

Churn % by Contract Type
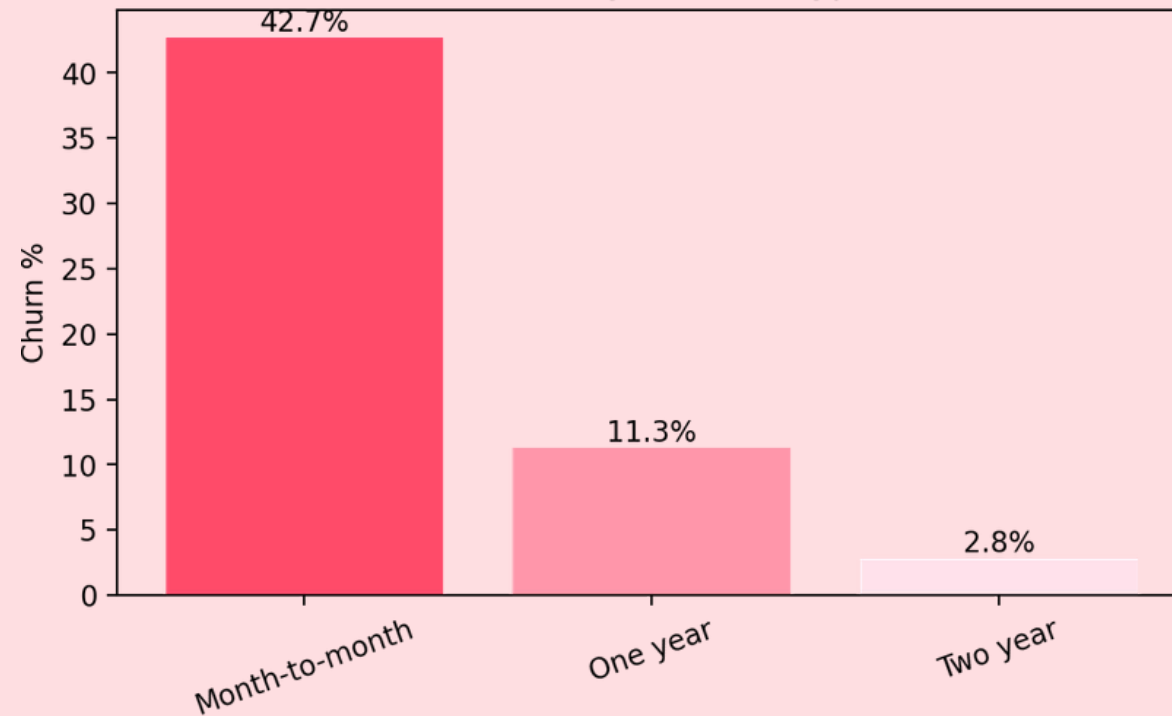
- Customers on month-to-month contracts churn far more frequently than long-term subscribers.
- Longer contracts significantly reduce churn due to higher commitment and switching barriers.
- This indicates that customer retention strongly depends on commitment level rather than demographics.

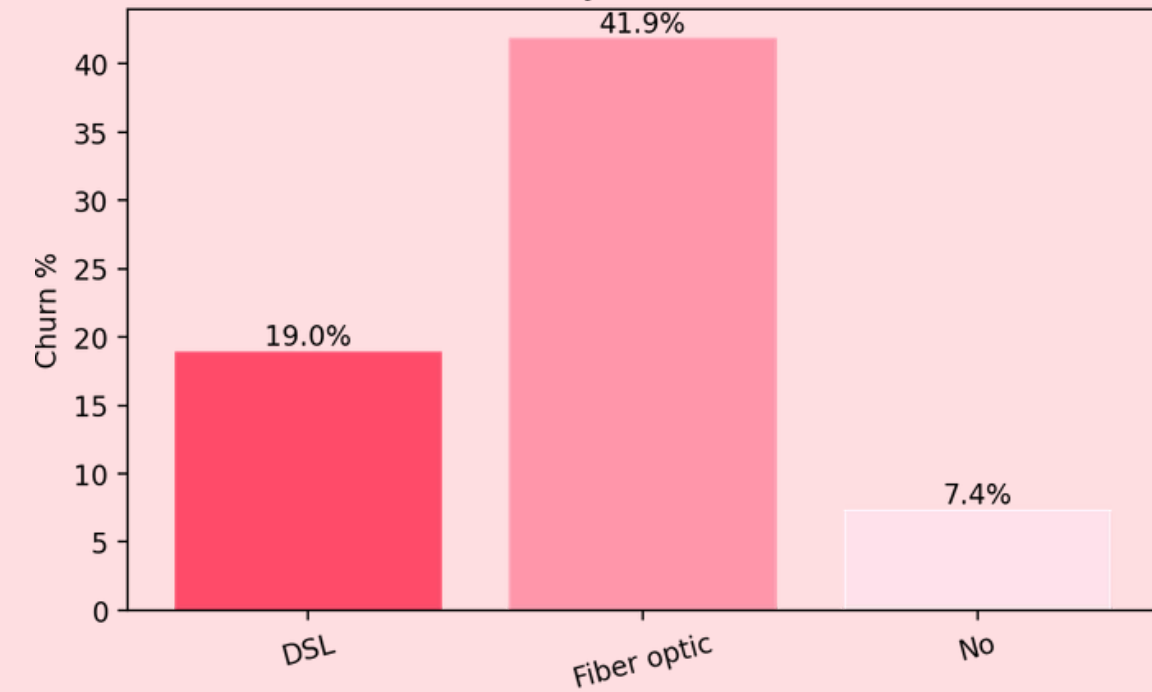## PAYMENT METHOD VS CHURN

Churn % by Payment Method

- Electronic check users show the highest churn among all payment types.
- Customers using automatic payment methods are significantly more stable.
- Automatic billing increases behavioral attachment and reduces the likelihood of switching providers.
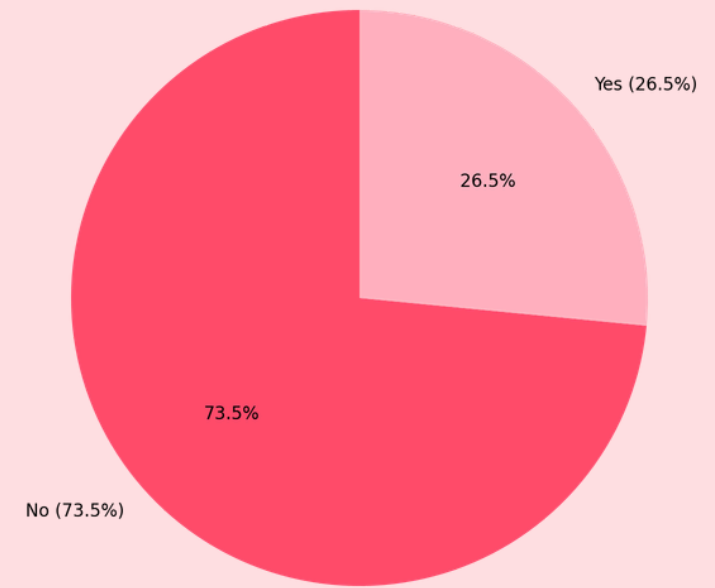
INTERNET SERVICE TYPE VS CHURN
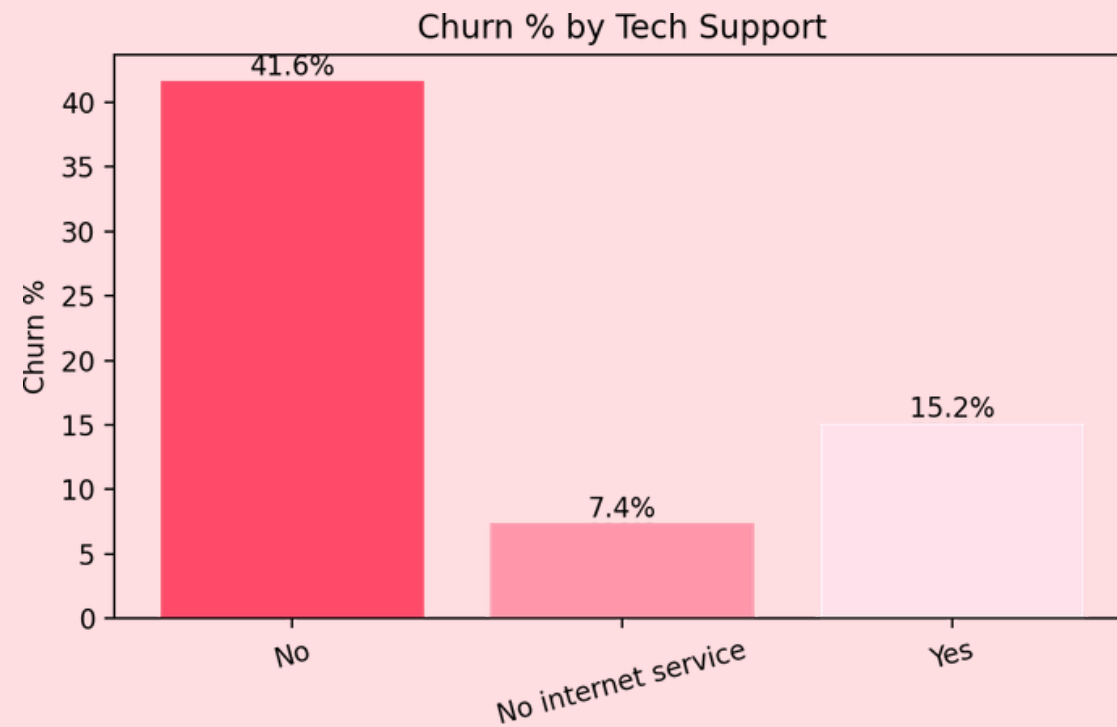
Churn % by Internet Service

- Fiber optic customers churn more despite having premium service.
- This suggests an expectation-experience gap rather than service unavailability.
- Higher-paying customers require better support and satisfaction management.
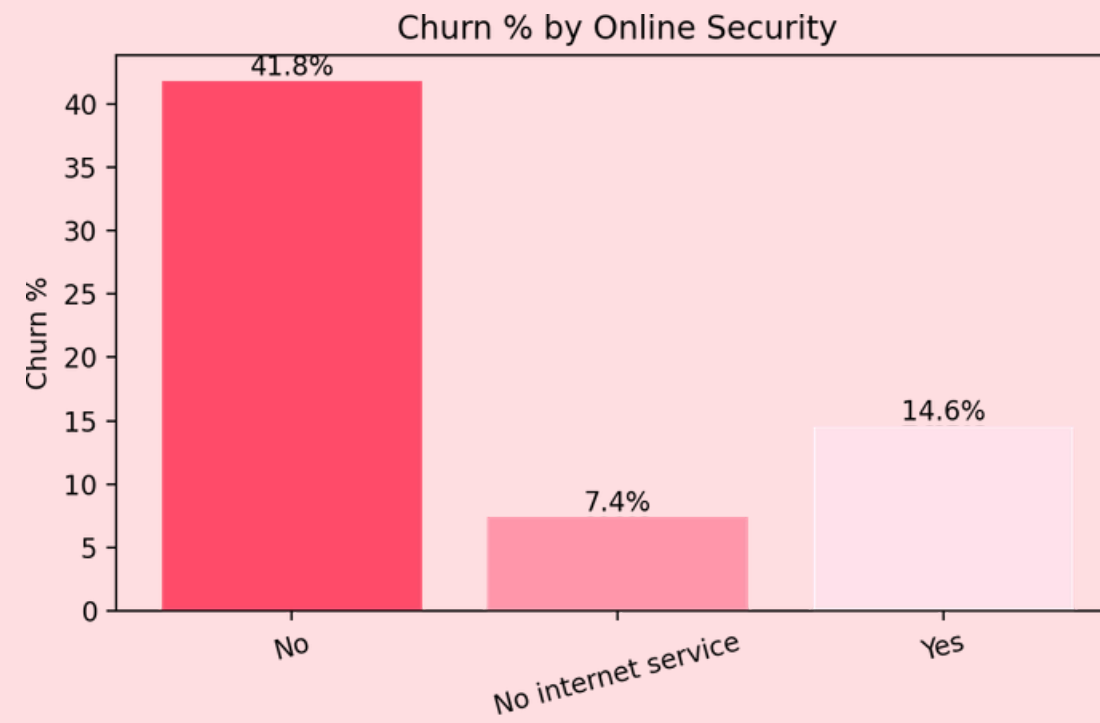
CHURN ANALYSIS

Yes (26.5%)

26.5%

73.5%

No (73.5%)

TECH SUPPORT VS CHURN

Churn % by Tech Support

41.6%

15.2%

7.4%

No   No internet service   Yes

ONLINE SECURITY VS CHURN

Churn % by Online Security

41.8%

14.6%

7.4%

No   No internet service   Yes

ONLINE BACKUP VS CHURN

Churn % by Online Backup

39.9%

21.5%

7.4%

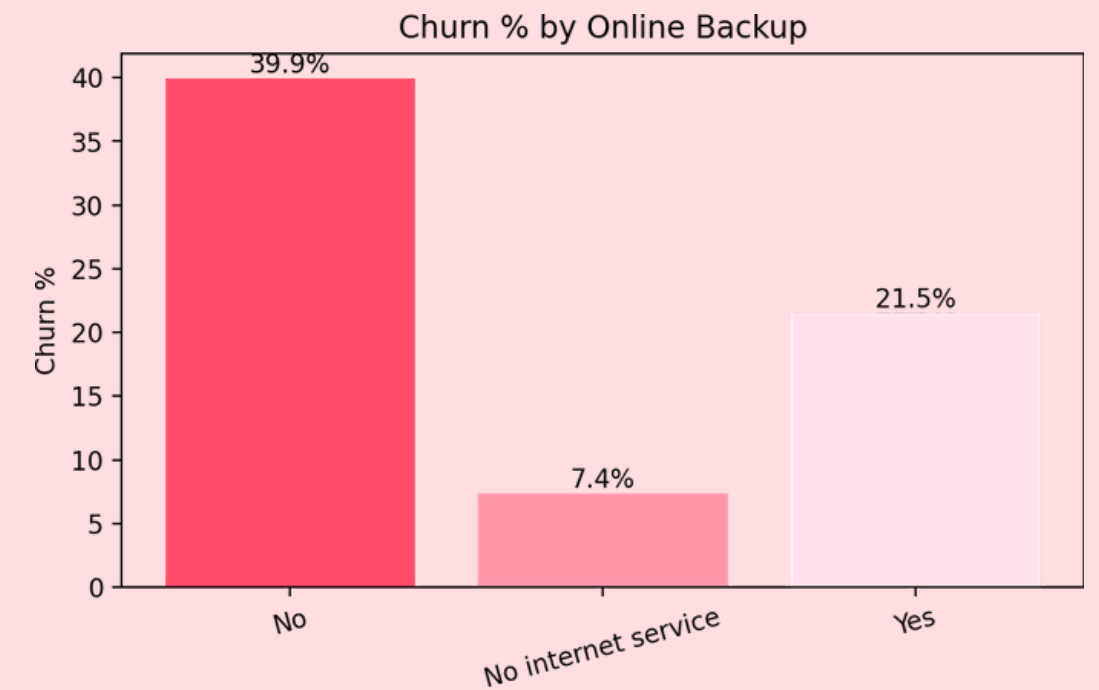No   No internet service   Yes

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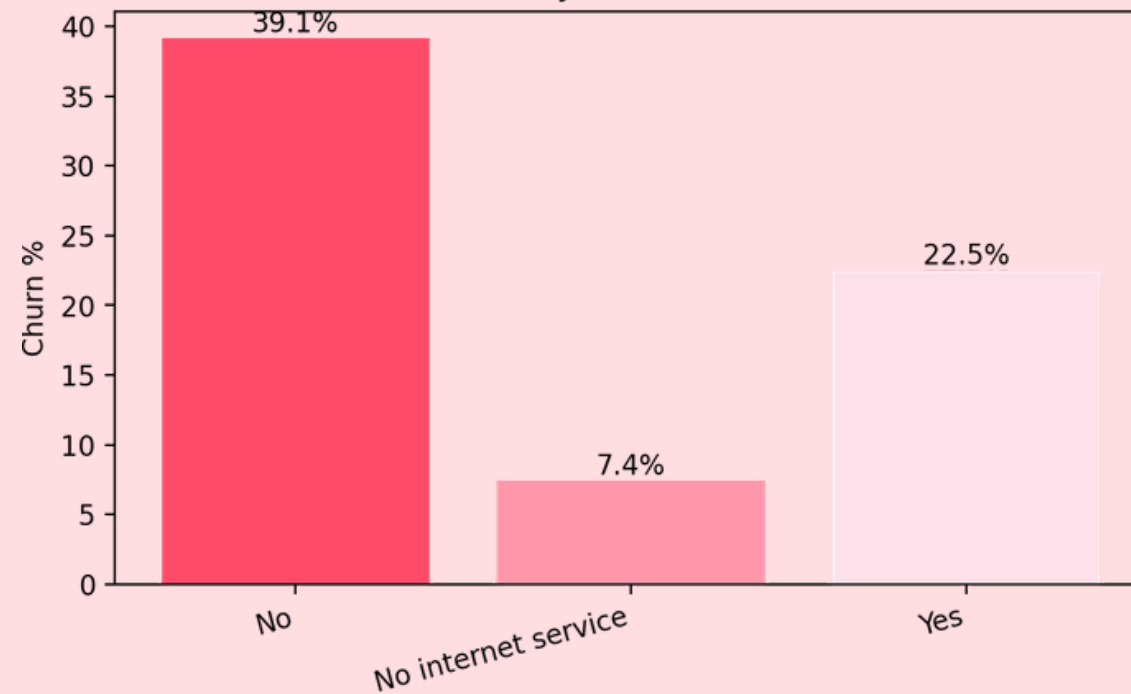
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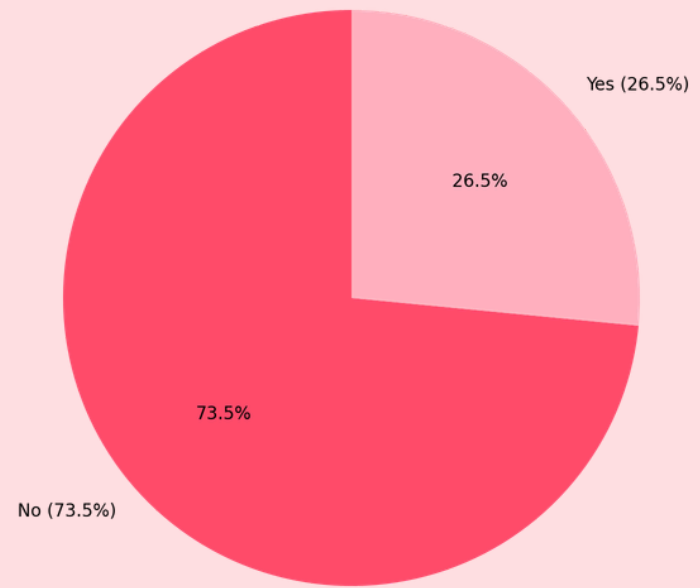
DEVICE PROTECTION VS CHURN

Churn % by Device Protection

39.1%
22.5%
7.4%

No — No internet service — Yes
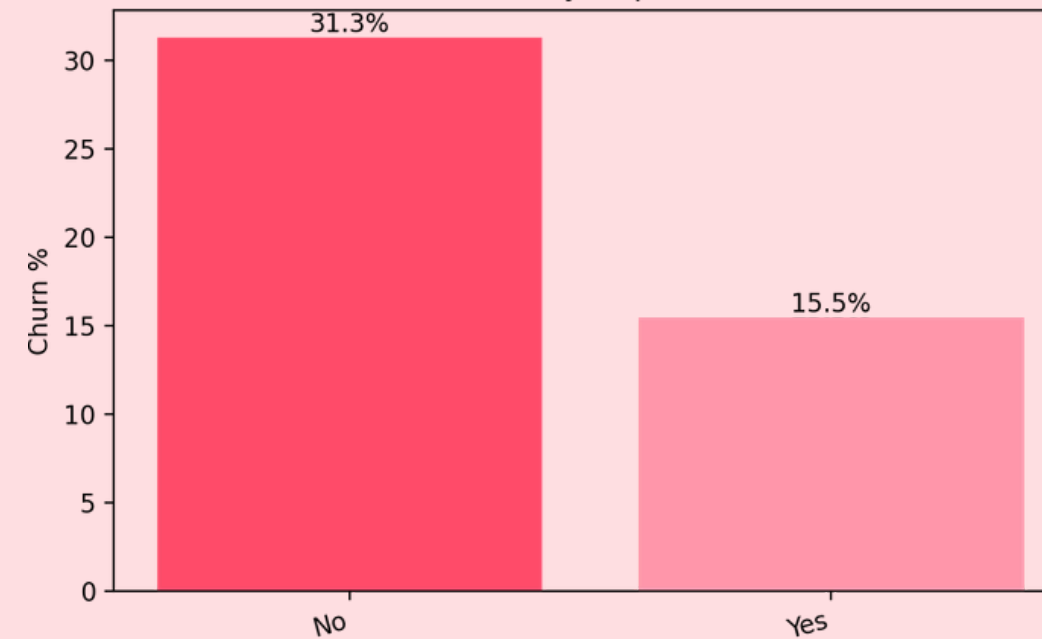
- Customers without device protection show significantly higher churn rates.
- Protection services increase customer commitment to the provider ecosystem.
- Added coverage reduces switching tendency and improves retention.

CUSTOMER STABILITY VS CHURN

### Churn % by Dependents

31.3%
15.5%

No — Yes

- Customers without dependents churn much more frequently.
- Family households prefer stability and long-term service continuity.
- Independent users are more flexible and more likely to switch providers.
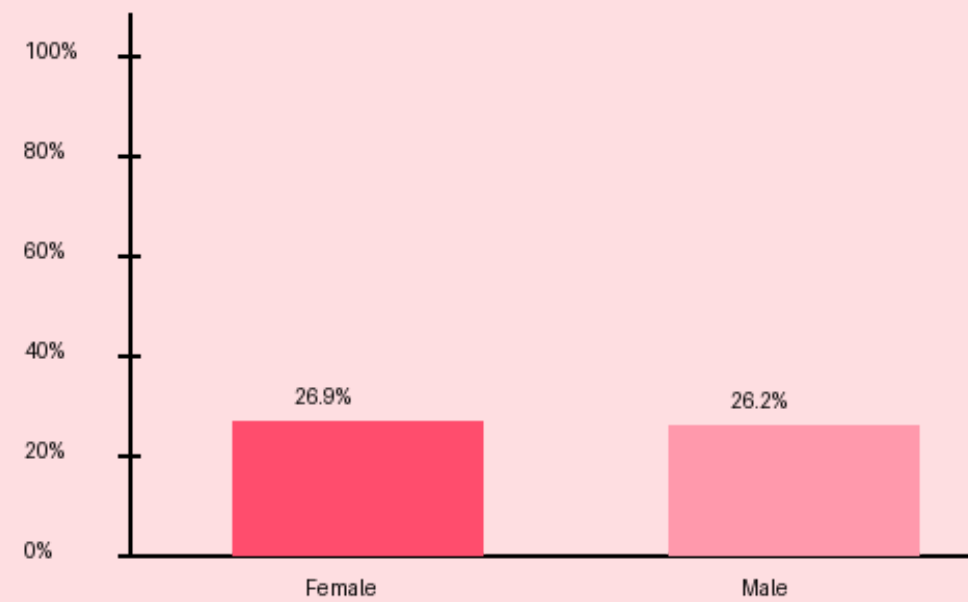
Churn % by Partner

33.0%
19.7%

No — Yes
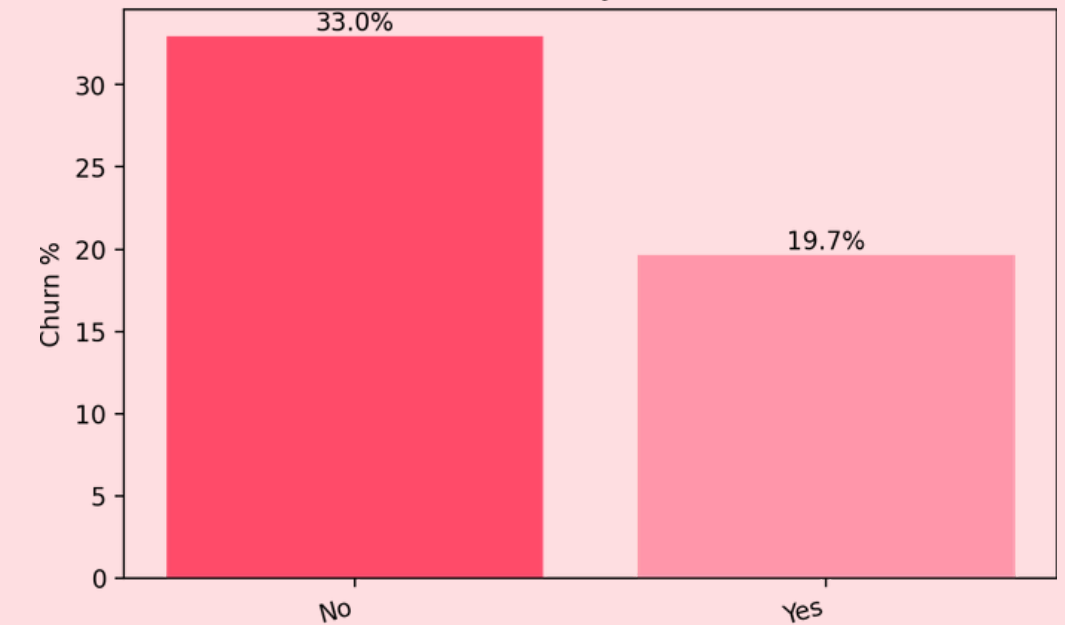
- Customers without a partner churn more compared to partnered customers.
- Shared household usage increases service dependency.
- Stable living situations strongly correlate with higher retention.

CHURN ANALYSIS

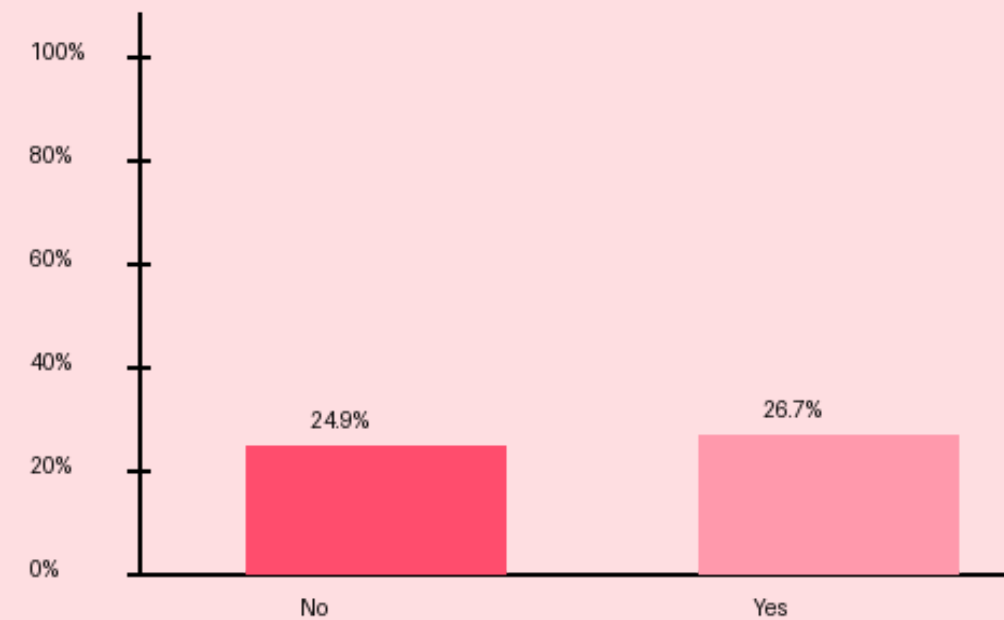Yes (26.5%)
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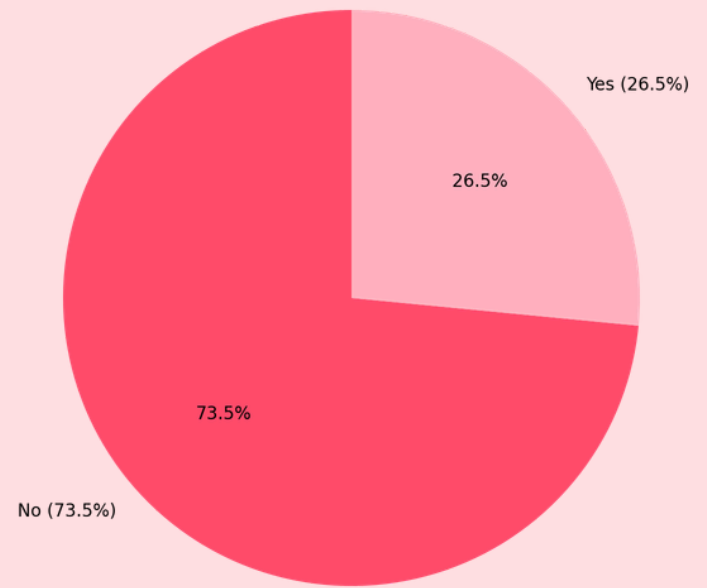
GENDER VS CHURN

- Male and female customers show nearly identical churn rates.
- Customer leaving behavior is not influenced by gender differences.
- Retention strategies should focus on behavior rather than demographics.

PHONE SERVICES VS CHURN

- Customers with and without phone service churn at similar rates.
- Core service availability alone does not ensure customer retention.
- Additional value and experience matter more than basic service presence.

STREAMING TV VS CHURN
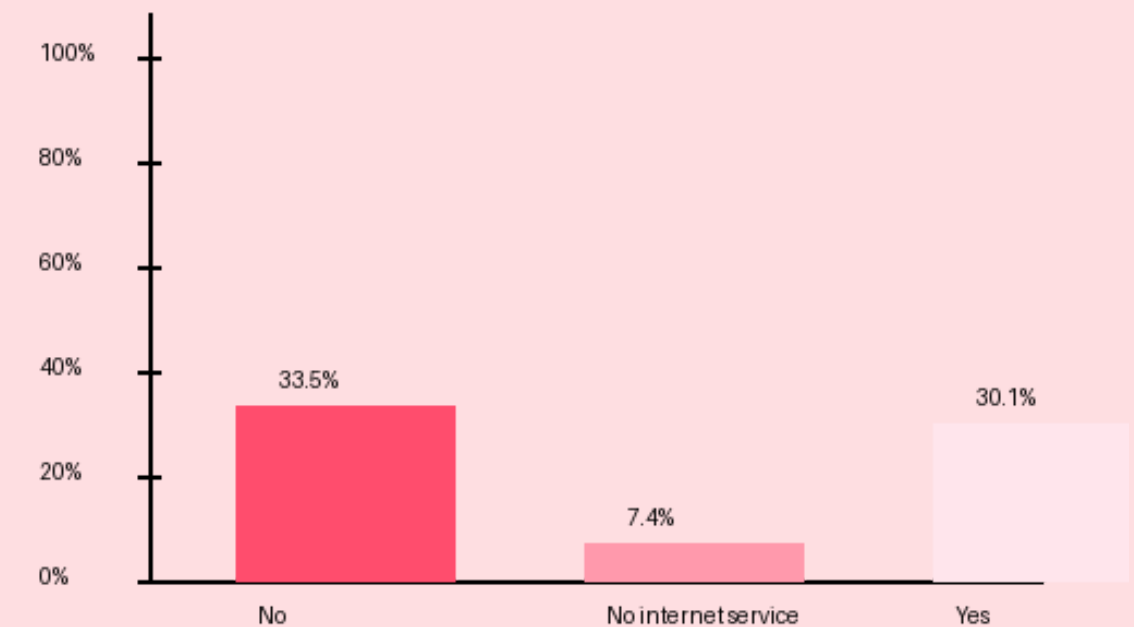
- Streaming TV subscription does not significantly reduce churn.
- Entertainment features alone are insufficient to retain customers.
- Reliability and support services have greater impact on retention.

ROOT CAUSE ANALYSIS

LOW-COMMITMENT CUSTOMERS LEAVE EASILY

Customers on month-to-month contracts and manual payment methods show the highest churn. These customers have no long-term attachment and can switch providers with minimal effort. The absence of commitment creates low switching barriers, making churn a convenience decision rather than a dissatisfaction decision.

LACK OF SUPPORT CREATES FRUSTRATION

Customers without tech support, security, or protection services churn significantly more. When issues occur, they do not receive quick assistance and choose to leave instead of resolving the problem. This indicates churn is strongly driven by poor service experience rather than product availability.

EXPECTATION VS EXPERIENCE GAP

Premium users (fiber internet) churn more despite having better service. Higher-paying customers expect faster resolution and better reliability. When expectations are not met, dissatisfaction leads to early churn.

WEAK EARLY CUSTOMER ENGAGEMENT

Most customers leave in the early stage of their lifecycle. This shows onboarding and early interaction fail to build trust or habit. Customers decide whether to stay within the first few months.

BUSINESS STRATEGIES

1.

INCREASE CUSTOMER COMMITMENT

- Offer discounts for switching to annual or 2-year contracts
- Provide loyalty rewards after 3–6 months of usage
- Incentivize automatic payment enrollment

2.

IMPROVE EARLY CUSTOMER EXPERIENCE

- Dedicated onboarding support for first 60 days
- Welcome call + service setup assistance
- First-month satisfaction check

3.

BUNDLE SUPPORT SERVICES

- Include tech support in premium plans
- Offer free security/backup trial period
- Promote protection packages

4.

HANDLE HIGH-VALUE CUSTOMERS BETTER

- Priority support for fiber customers
- Faster complaint resolution
- Proactive outage communication

BUSINESS STRATEGY IMPACT

SHORT-TERM IMPACT

- Immediate reduction in early-stage churn
- Higher conversion to long-term plans
- Better customer satisfaction

LONG-TERM IMPACT

- Increased customer lifetime value
- Lower acquisition cost per customer
- Stronger brand loyalty

OPERATIONAL BENEFIT

- Targeted retention instead of generic offers
- Efficient use of support resources
- Predictable revenue flow

THANK YOU

2025