Telecom Churn Analysis

64.21%

35.79%

19-25

The objective of this project is to analyze the churn of a telecom company and find out the factors which result in high churn rates. This project plans to explore customer profile, contracts and services and feedbacks given by leaving customers and provide a comprehensive look at factors within them for the churn.

7K 2K 27% 21M **Total Customers Total Revenue** Churned Rate Churned Revenue Lost Part 1: Customer Profile Churned: Age-Group Churned: Male V/S Female Churned: City San Diego 51-65 Churned: No Dependency V/S Dependency Los Angeles 36-50 31 San Francisco 66-80 445 29 San Jose Churned: Single V/S Married 302 26-35

• **Gender-Based Churn:** Churn is almost equal between females (50.24%) and males (49.76%), indicating that gender does not significantly impact retention, suggesting other factors like age or location are more influential.

Fallbrook

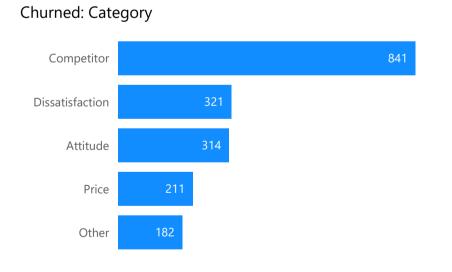
Sacramento

- Dependency-Based Churn: A significant 94.33% of churned customers had no dependents, implying single individuals are more likely to switch providers due to greater flexibility and fewer long-term commitments.
- Marital Status-Based Churn: 64.21% of churned customers were not married, suggesting that single individuals may be less loyal to the service, possibly due to fewer shared household commitments and a higher willingness to explore alternatives.
- Age Group Churn: Older customers (51-65: 470, 36-50: 462, 66-80: 445) have the highest churn, possibly due to cost concerns, seeking more senior-friendly services, or dissatisfaction with offerings.
- City-Based Churn: San Diego (185 churned) has the highest churn rate, likely due to increased competition, pricing variations, or local service dissatisfaction compared to other cities.

Part 2: Contract and Services Churned: Contract Type Churned: Offers Provided Churned: Payment Methods Offer E 426 1655 Month-to-Month (21.29%)**Payment Method** 161 Offer D Bank Withdrawal 101 Offer B Credit Card Mailed Check Offer C 142 (7.6%)Offer A 1329 (71.11%) Churned: Online Backup Yes/No Churned: Online Security Yes/No • Contract-Based Churn: Month-to-month contracts have the highest churn, while one-year and two-year contracts have significantly lower churn, indicating long-term contracts improve retention. Yes 29.78% No 83.20% No 70.22% • Offer-Based Churn: Offer E has the highest churn, followed by Offer D, suggesting these offers may not provide sufficient value or have hidden downsides leading to dissatisfaction. Churned: Streaming Movies Yes/No Churned: Premium Tech Support Yes/No Payment Method-Based Churn: 71.11% of churned customers used mailed checks, compared to lower churn for bank withdrawals and credit cards, possibly due to payment delays or a preference for modern digital payment options. Service-Based Churn: 1. Customers without online security (83.20%) and premium tech support (82.35%) churned Churned: Streaming Music Yes/No Churned: Streaming TV Yes/No **more**, indicating security and support services play a role in retention. 2. Streaming services users (TV: 46.36%, Movies: 46.58%, Music: 41.46%) had higher churn, No 53.64% Yes 41.46% Yes 46.36% suggesting dissatisfaction with streaming content or pricing.

Part 3: Feedback By Customers

Churned: Reason



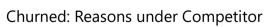
Churn Reason	Churned
Competitor had better devices	313
Competitor made better offer	311
Attitude of support person	220
Don't know	130
Competitor offered more data	117
Competitor offered higher download speeds	100
Attitude of service provider	94
Price too high	78
Product dissatisfaction	77
Network reliability	72

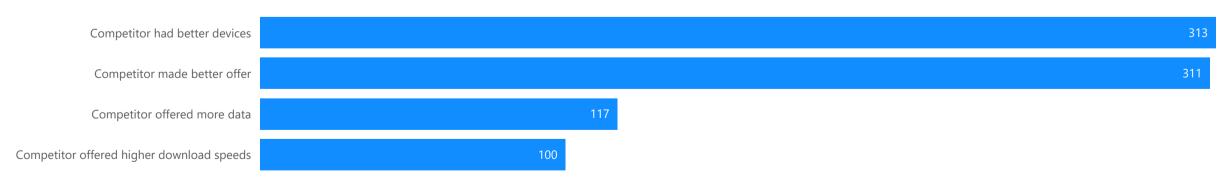
Competitor-Based Churn: 841 customers left due to competitors, mainly for better devices (313) and offers (311), highlighting strong competition in pricing and features

Dissatisfaction & Support Issues: 321 customers churned due to dissatisfaction, with 220 citing poor support service, indicating the need for improved customer experience.

Price Sensitivity: 211 customers churned due to pricing, with 78 mentioning "too high price," suggesting the need for more competitive pricing strategies.

Network & Product Quality: 72 customers left due to network reliability, and 77 due to product dissatisfaction, showing a need for better service quality and offerings.





Part 4: Recommendations

Enhance Competitor Benchmarking & Offer Personalization

- Observation: 841 customers churned due to competitors. Most common reasons: better devices (313), better offers (311), more data (117), and higher download speeds (100).
- Action: Conduct competitive analysis to match or exceed competitor offerings. Provide **personalized offers** based on customer usage patterns and past interactions.

Improve Customer Support & Service Quality

- Observation: Attitude of support personnel (220) and service provider dissatisfaction (94) were major churn reasons.
- Action: Implement customer service training programs, introduce Al-driven support chatbots, and improve service response times to enhance the customer experience.

 Target Single & Non-Dependent Customers with Retention Strategies
- Observation: 94.33% of churned customers had no dependents, and 64.21% were unmarried, indicating they have more flexibility to switch providers.
- Action: Create loyalty programs, exclusive discounts, and bundled plans targeting individual users to increase retention and long-term commitment.

Address Price Concerns & Introduce Flexible Pricing Plans

- Observation: 211 churned due to price, and "price too high" was a direct churn reason (78). Older customers (51-80 years) had higher churn rates, likely due to pricing concerns.
- Action: Offer senior-friendly packages, flexible contract options, and introduce discounted long-term subscription plans to retain price-sensitive customers Optimize Retention Efforts in High-Churn Cities
- Observation: San Diego had the highest churn (185 customers), likely due to strong competition and service dissatisfaction.
- Action: Conduct region-specific surveys, improve service quality in high-churn areas, and launch geo-targeted retention campaigns to counteract regional churn trends.