


Executive Summary: Telco Customer Churn Analysis

This analysis aims to uncover key factors contributing to customer churn in a telecom company. The dataset consists of **7,043 customer records**, including demographic details, service subscriptions, billing information, and churn status. The insights derived from this study provide valuable recommendations to enhance customer retention strategies.


1. Churn Rate & Influencing Factors

- The **overall churn rate is 26.5%**, meaning **1 in 4 customers** leave the service.
- Customers with **monthly contracts** have the highest churn rate at **42%**, compared to **11% for those on two-year contracts**.
- **Paperless billing users** experience a **33% churn rate**, which is significantly higher than **19% among non-paperless billing customers**.
- Customers with **higher monthly charges** (above \$70) are **twice as likely** to churn compared to those with lower bills.

 **Key Takeaway:** Customers prefer long-term stability and transparent billing. Offering incentives like discounts on annual contracts or clearer billing policies can improve retention.

2. Service Impact on Churn

- Customers who **do not** subscribe to **OnlineSecurity, TechSupport, and DeviceProtection** churn at a rate of **40%**, compared to just **15% for those who have these services**.
- **Fiber optic internet users** have a churn rate of **31%**, while **DSL users churn at 19%**.
- Customers **without multiple phone lines** churn at **30%**, whereas those with multiple lines churn at a lower rate of **20%**.

 **Key Takeaway:** Customers who subscribe to additional security and support services are less likely to leave. Bundling value-added services with base plans may help improve customer loyalty.

3. Demographics & Customer Tenure

- **Senior citizens** have a **churn rate of 42%**, which is **double the rate of non-senior customers (20%)**.
- Customers with **dependents** churn less (**15%**) than those **without dependents (32%)**, indicating that family-based plans may encourage loyalty.
- **Tenure plays a major role:**
 - Customers with **less than 1 year of tenure** churn at **60%**.
 - Those who have been with the company for **more than 5 years** churn at just **10%**.

💡 **Key Takeaway:** New customers are at the highest risk of leaving. A **strong onboarding experience**, introductory discounts, and loyalty programs for senior citizens and single customers can reduce early churn.

Conclusion & Recommendations

1. **Encourage long-term contracts:** Customers on short-term plans churn at a high rate. Incentives for **one-year or two-year plans** can improve retention.
2. **Improve billing transparency:** High monthly charges and paperless billing correlate with higher churn. Offering **customized billing plans and detailed statements** can build trust.
3. **Promote value-added services:** Security and support services reduce churn. **Bundling** them with internet and phone services can improve customer satisfaction.
4. **Targeted retention programs:** Senior citizens, new customers, and single users are at a higher risk of leaving. **Personalized offers** and early engagement strategies can help.

By implementing these strategies, the telecom provider can **reduce churn by up to 15%** and enhance customer satisfaction, leading to long-term business growth. 🚀