## Summary:

### **Telcom Customer Churn Analysis**

This comprehensive study explores the underlying causes of customer attrition in a telecom company. The dataset comprises **7,043 customer profiles**, including demographics, service usage, billing details, and churn status. The insights derived offer actionable strategies to improve customer retention  $\triangleleft$   $\rightleftarrows$ .

## 1 Churn Rate and Key Influencers

- The overall churn rate is **26.5**% about **1 in every 4 customers** leave the service.
- Monthly contract holders face the highest churn at 42%, whereas two-year contract users churn at only 11%.
- **Paperless billing users** show a **33**% churn rate, higher than the **19**% for those with traditional billing.
- Customers with monthly bills over \$70 are twice as likely to churn compared to those with lower charges.
- Insight: Users appreciate long-term stability and billing clarity. Introducing discounts on annual plans and transparent billing can boost retention 1.

#### 2 Influence of Services on Churn

- Users not subscribed to OnlineSecurity, TechSupport, or
  DeviceProtection churn at 40%, while those using these services churn at only
  15%.
- Fiber optic users have a churn rate of 31%, while DSL users churn at 19%.
- Customers with a single phone line churn at 30%, versus 20% for those with multiple lines.

# Demographics and Tenure Impact

- Senior citizens churn at a rate of 42%, compared to 20% among younger users.
- Customers with **dependents** churn less (15%) than those without (32%), highlighting the power of **family-focused plans**.
- Ienure-based churn:
  - o Wullers with less than 1 year of service churn at 60%.
  - Customers with over 5 years of loyalty churn at just 10%.

Insight: New and older users are more likely to leave. A strong onboarding experience, introductory offers, and senior-friendly programs can help reduce early churn T.

## Conclusion & Strategic Recommendations

- 1. **Encourage long-term commitments**: Offer **rewards for 1–2 year plans** to reduce churn from short-term users.
- 2. Increase billing clarity: Provide custom billing options and detailed statements to enhance trust.
- 3. Bundle essential services: Combine security, support, and connectivity into attractive packages.
- 4. **©** Launch targeted retention campaigns: Focus on seniors, new users, and single customers with personalized deals and engagement offers.

By implementing these strategies, the telecom company can potentially **reduce churn** by up to 15%  $\mathbb{N}$ , leading to improved customer satisfaction and **sustainable business** growth  $\mathbb{N}$ .