

## Key Insights from Telecom Churn Analysis :

### 1. Overall Churn Rate – *How many customers are leaving?*

- About **26.5% of customers** left the company.
  - This means **1 out of every 4 customers** stops using the service.
  - High churn = company keeps losing many customers despite gaining new ones.
- 

### 2. Gender Impact – *Do men or women leave more?*

- Churn is **almost the same** for both men and women.
  - So, **gender is not an important factor** in predicting who will leave.
- 

### 3. Senior Citizens – *Are older customers leaving more?*

- Only **16% of total customers** are senior citizens.
  - But **seniors leave at a higher rate** compared to younger customers.
  - This may be because older people may:
    - Find services harder to use.
    - Be more sensitive to price.
    - Need more personal support.
- 

### 4. Tenure (How long they stay) – *When do people leave?*

- **New customers (1–2 months)** are **most likely to leave**.
  - **Long-term customers (2+ years)** rarely leave — they become loyal.
  - Example: If a customer stays beyond 2 years, they are very unlikely to churn.
- 

### 5. Contract Type – *Does the contract matter?*

- **Month-to-month contracts** = **highest churn**.
- **1-year or 2-year contracts** = **very low churn**.
- Why? Because long contracts “lock in” customers and show commitment.

## 6. Internet Service Type – *Which service has more problems?*

- **Fiber optic internet customers leave more** compared to DSL.
  - Possible reasons:
    - Higher prices.
    - Service issues or downtime.
    - Customer expectations not met.
- 

## 7. Extra Services – *Do add-ons help keep customers?*

- Customers **without Online Security, Tech Support, or Device Protection** are more likely to leave.
  - Customers who buy **extra services stay longer**.
  - Example: If a customer has internet + tech support + security, they are less likely to churn.
- 

## 8. Entertainment Services – *Do streaming services help?*

- Having **Streaming TV or Streaming Movies** helps a little in reducing churn.
  - But it's **not as strong** as security or tech support services.
- 

## 9. Phone & Multiple Lines – *Does phone service matter?*

- Having a phone line or multiple lines **does not reduce churn much**.
  - Internet-based services are **much more important** for retention.
- 

## 10. Payment Method – *Does payment choice matter?*

- **Electronic check customers churn the most**.
  - **Automatic payments (credit card, bank transfer)** = lowest churn.
  - Easy and reliable payment methods build loyalty.
- 

## 11. Billing Type – *Paper or paperless?*

- Customers with **paperless billing churn a little more**.
- This might be because paperless billing is often linked to electronic checks.

### 12. Monthly Charges – *Do high prices cause churn?*

- Customers with **higher monthly bills** are more likely to leave.
  - Suggests many customers **don't see enough value** for the high price.
- 

### 13. Total Charges – *Does spending more mean loyalty?*

- Customers with **low total spending (new/short-term users)** leave more.
  - Customers with **high lifetime spending** stay loyal.
  - This shows: keeping customers in the **first few months is the hardest**.
-

## **Overall Business Implications :**

### **1. Focus on New Customers**

- Most people leave in the first 3 months.
  - Give welcome offers or discounts to make them stay.
  - Provide extra support and solve issues quickly.
  - Make them feel valued with check-in calls or messages.
- 

### **2. Promote Long Contracts**

- Month-to-month customers leave faster.
  - Offer discounts for 1–2 year contracts.
  - Add freebies like free month, free device, or streaming.
  - Longer contracts make customers stay loyal.
- 

### **3. Fix Fiber Optic Issues**

- Fiber users leave more than DSL users.
  - Improve speed and reduce service problems.
  - Adjust pricing if it feels too costly.
  - Take feedback from fiber customers regularly.
- 

### **4. Sell Bundles**

- Customers without add-ons leave more often.
  - Bundle Online Security, Tech Support, and Protection together.
  - Offer bundles at a lower price than buying separately.
  - More services used = harder for customers to leave.
- 

### **5. Encourage Auto-Pay**

- Customers using electronic checks churn the most.
- Give rewards like cashback or discounts for auto-pay.

- Auto-pay is easier with credit cards and bank transfers.
  - Simple sign-up makes more people choose it.
- 

### 6. Review Pricing

- High-bill customers feel service is not worth the price.
  - Give loyalty discounts to reduce this feeling.
  - Offer perks like faster support or free upgrades.
  - Let customers customize plans to fit their needs.
-