**Telecom Churn Analysis & Retention Strategies**

**Key Findings**

**1. Overall Churn Rate**

* **Total Customers:** 6,418
* **Churn Rate:** **27%** (High and requires action)

**2. Demographic Insights**

* **Gender Distribution & Churn:**
  + Female: **4,048** (Churned: **1,111**, **64%** of total churn)
  + Male: **2,370** (Churned: **621**, **36%** of total churn)
  + **Insight:** More females are churning than males. Further investigation is needed to understand the reasons.
* **Age Group & Churn Rate:**
  + **< 20 years:** **23.1%**
  + **20-35 years:** **23.5%**
  + **35-50 years:** **24%**
  + **Above 50 years:** **31%**
  + **Insight:** Churn rate increases with age. Older customers may require targeted offers or improved service quality.

**3. Account Information & Churn Trends**

* **Payment Method & Churn Rate:**
  + **Bank Withdrawal:** **37.8%**
  + **Mailed Check:** **34.4%**
  + **Credit Card:** **14.8%**
  + **Insight:** High churn for bank withdrawal and mailed check users. Need to investigate payment experience issues.
* **Contract Type & Churn Rate:**
  + **Month-to-Month:** **46.5%** (Very high)
  + **One-Year:** **11%**
  + **Two-Year:** **2.7%**
  + **Insight:** Longer contracts significantly reduce churn. Encourage long-term contracts through incentives.
* **Tenure Group Churn Rate:**
  + Churn remains between **26.4% and 27.5%** across different tenure groups, suggesting a consistent risk.

**4. Services Used & Churn Rate**

* **Internet Type & Churn Rate:**
  + **Fiber Optic:** **41.7%** (Highest churn)
  + **Cable:** **25.7%**
  + **DSL:** **19.4%**
  + **Insight:** Fiber optic users show higher churn—potential service quality issues or cost concerns.

**5. Churn Distribution by Reason**

* **Churn Categories:**
  + **Competition:** **761**
  + **Dissatisfaction:** **300**
  + **Attitude:** **301**
  + **Price Concerns:** **196**
  + **Insight:** Competition is the leading reason for churn. Retention efforts should focus on competitive pricing and value-added services.

**6. Geographic Insights**

* **Top 5 States with Highest Churn Rates:**
  + **Jammu:** **57.2%**
  + **Assam:** **38.1%**
  + **Jharkhand:** **34.5%**
  + **Chhattisgarh:** **30.5%**
  + **Delhi:** **29.9%**
  + **Insight:** Regional differences indicate the need for localized marketing and service improvements.

**Retention Strategies**

1. **Targeted Offers for Older Customers:**
   * Special discounts or personalized plans for customers aged **50+** to reduce high churn rates.
2. **Encourage Long-Term Contracts:**
   * Offer incentives (discounts, exclusive benefits) for customers to switch from **month-to-month** to **yearly** contracts.
3. **Improve Fiber Optic Service Quality:**
   * Investigate why **fiber optic users** have the highest churn rate (pricing, speed issues, outages).
4. **Enhance Customer Loyalty Programs:**
   * Reward long-term customers with loyalty points, free add-ons, or exclusive support to improve retention.
5. **Address Payment Method Issues:**
   * Investigate high churn in **bank withdrawal & mailed check users** and encourage transitions to **credit card payments** via discounts or ease-of-use improvements.
6. **Geographic-Specific Strategies:**
   * Identify the reasons behind high churn in **Jammu, Assam, Jharkhand, Chhattisgarh, and Delhi** and implement **region-specific campaigns** (pricing, service quality, network improvements).
7. **Combat Competition Losses:**
   * Strengthen competitive pricing, exclusive promotions, and better customer support to retain users considering competitors.