Customer Churn Analysis - Summary and Recommendations

Objective:

- To identify the key factors contributing to customer churn in a telecom dataset and derive actionable insights to improve customer retention.

Overall Churn Rate

- Out of the total customer base, **26.54%** have churned.

- This indicates that nearly **1 in 4 customers** discontinued the service — a significant retention concern for the company.

Demographic Insights

- **Gender:** Minimal influence on churn — both male and female customers churn at nearly equal proportions.

- **Senior Citizens:** Although senior citizens form a smaller part of the customer base, they exhibit a **significantly higher churn rate** compared to younger customers, suggesting age-related dissatisfaction or reduced engagement.

Tenure Insights

- **High churn among new customers:** Customers with shorter tenures (0–12 months) show the **highest churn rates**, especially in the first month.

- **Retention increases with time:** Customers with longer tenures (over 60 months) show **very low churn**, indicating stronger loyalty and satisfaction over time.

Contract Type Insights

- Customers with **Month-to-Month** contracts churn the most, contributing the majority of total churns.

- Customers with **One-Year** or **Two-Year** contracts show much **higher retention** — long-term contracts effectively reduce churn.

- This implies that longer commitment periods build stability and decrease switching behavior.

Internet Service Insights

- Customers using **Fiber Optic** services exhibit the **highest churn rate** among all internet types.

- **DSL** users churn considerably less, while customers with **No Internet Service** have the lowest churn rate.

- This trend suggests that **Fiber Optic customers may be more price-sensitive** or **dissatisfied with service quality/performance**.

Payment Method Insights

- Customers using **Electronic Check** as their payment method show the **highest churn rate (approx. 45–50%)**.

- Customers using **Automatic Payments** such as **Credit Card** or **Bank Transfer** have **very low churn (around 15–20%)**.

- This indicates that customers preferring **manual or non-recurring payments** are less committed and more prone to discontinuation.

Key Takeaways

- **Tenure**, **Contract Type**, and **Payment Method** are the most influential factors in customer churn.

- Short-term, new customers paying via electronic checks are the **most vulnerable segment**.

- Long-term customers on **annual contracts** with **automatic payments** show the **highest retention**.

- Focusing on **incentivizing longer contracts**, **promoting auto-payment options**, and **improving early-stage onboarding** could substantially reduce churn.

Strategic Recommendations

- Encourage customers to switch from **month-to-month** to **annual or bi-annual** plans through discounts or loyalty points.

- Promote **automatic payment methods** by offering small incentives or exclusive benefits.

- Enhance **early customer experience** (especially within the first 6 months) to reduce early-stage churn.

- Investigate **Fiber Optic service quality and pricing** to understand and mitigate dissatisfaction causes among high-value users.