Telecom Customer Churn Analysis Report

Objective:

The analysis explores customer churn patterns, focusing on various factors such as payment methods, contract types, tenure, and demographic attributes. The goal is to identify which factors are most strongly associated with higher churn rates to guide customer retention strategies.

Key Insights & Findings:

1. Overall Churn Rate:

- 26.5% of customers have churned. That is around 1 in every 4 customers.

2. Contract Type and Churn:

- 43% churn for customers on month-to-month contracts.
- 11% churn for customers on 1-year contracts.
- 3% churn for customers on 2-year contracts.
- Suggestion: Promote long-term contracts to reduce churn.

3. Payment Method and Churn:

- 45% churn for customers using electronic checks.
- Only 15-18% churn for those using credit cards, mailed checks, or bank transfers.
- Suggestion: Encourage customers to use safer payment methods.

4. Churn by Tenure:

- 50% churn in the first year.
- 35% churn between 1-3 years.
- 15% churn after 3 years.
- Suggestion: Focus more on new customers in their first year.

5. Senior Citizens:

- 41% of senior citizens have churned.

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- 26% churn rate for non-senior customers.
- Suggestion: Provide special support and offers for senior customers.

6. Internet Service Type:

- 30% churn for fiber optic users.
- 20% churn for DSL users.
- 8% churn for customers without internet service.
- Suggestion: Improve service quality for fiber users.

7. Services and Churn:

- Customers without services like Online Security or Tech Support churn more.
- Suggestion: Promote service bundles to increase customer stickiness.

Visualizations & Data Insights:

1. Bar Charts and Line Graphs:

- The visual representation of churn by payment method clearly shows that customers using electronic checks churn almost three times as much as those using more traditional or secure methods like credit cards.
- Customer tenure vs. churn rate visualizations reveal a clear declining trend in churn as customers' tenure increases, underscoring the need for early-stage customer loyalty programs.

2. Percentage Distribution of Churn Across Factors:

- o Payment Methods: 45% churn for electronic check users, 15% for credit card users.
- Contract Types: 42% churn for month-to-month contracts, 11% for yearly contracts, 3% for two-year contracts.
- o Tenure: 50% churn in the first year, dropping to 15% after three years.

Recommendations:

- **Promote Long-Term Contracts**: Offer incentives for customers to commit to longer contracts to reduce churn.
- Address Payment Method Concerns: Implement campaigns encouraging customers to switch from electronic checks to more reliable payment methods.
- Customer Engagement in Early Tenure: Focus on improving the customer experience within the first year, as churn is highest in this period.
- Special Senior Citizen Retention Programs.