

# **Executive Summary of Customer Churn Analysis**

The Customer Churn Analysis identifies critical patterns and factors contributing to customer churn, helping the business devise data-driven strategies for customer retention. Through detailed visualizations and statistical analysis, the report provides a comprehensive view of customer behavior, service preferences, and their association with churn.

## **Key Insights:**

### **1. Demographic Patterns:**

- **Senior Citizens:** Senior citizens showed a higher churn rate of approximately 42%, compared to the overall churn rate of around 26%. This suggests that age-specific factors may influence the decision to churn, possibly due to usability or support challenges.
- **Dependents:** Customers with dependents exhibited a lower churn rate (18%) than those without dependents (32%), indicating that family-oriented customers may have a higher commitment to the service.
- **Gender:** Gender did not show a significant impact on churn, with both male and female customers having similar churn rates, around 26%.

### **2. Service Usage and Churn:**

- **Internet Service Type:** Customers with fiber optic internet had a notably higher churn rate (39%) compared to those with DSL (16%). This may indicate dissatisfaction with fiber optic service quality or cost.
- **Add-on Services:** Customers who opted for add-on services like online security, device protection, and tech support had a lower churn rate of about 20%, whereas those without these add-ons churned at a rate of 35%. This suggests that add-ons could enhance customer loyalty by increasing perceived value.
- **Streaming Services:** Streaming TV and movies were popular among non-churned customers, with churn rates 15% lower in customers who subscribed to these services, indicating that entertainment services may improve customer retention.

### **3. Contract and Payment Factors:**

- **Contract Type:** Month-to-month contracts had a significantly higher churn rate of 45%, while customers on one-year (11%) and two-year (3%) contracts showed far lower churn. This highlights the importance of encouraging longer-term contracts to reduce churn.
- **Payment Method:** Customers paying via electronic check had the highest churn rate (43%), while those using automatic bank payments or credit cards had churn rates below 20%. This indicates that automated payment options might contribute to customer retention.

### **4. Customer Satisfaction and Churn:**

- **Monthly Charges:** Customers with higher monthly charges (above the average) experienced a churn rate of around 35%, in contrast to only 15% for those with

lower charges. Reducing costs or offering discounts for high-charge customers might help mitigate churn.

- **Tenure:** Customers with a tenure of less than a year had a churn rate of 55%, while those with more than two years tenure had a churn rate of only 10%. This shows that the likelihood of churn decreases with longer tenure, emphasizing the importance of retention efforts during the first year.

#### 5. Churn Predictive Indicators:

- **High-Risk Profiles:** Customers with a combination of month-to-month contracts, fiber optic internet, and no add-on services were identified as having a churn rate of over 60%. Targeting these high-risk profiles with personalized retention offers could be effective.
- **Paperless Billing:** While paperless billing is generally preferred, customers who opted for it had a slightly higher churn rate (28%) compared to those receiving paper bills (23%). This could suggest a minor association between churn and communication preferences.

### Strategic Recommendations:

- **Targeted Retention Campaigns:** Focus on high-churn demographics, such as senior citizens and customers without dependents. Offering specialized support or loyalty programs could improve retention.
- **Promote Long-Term Contracts:** Develop incentives for month-to-month contract customers to transition to longer contracts, such as discounted rates or added benefits, potentially reducing churn by up to 30%.
- **Improve Service Quality for Fiber Optic Internet:** Given the high churn rate associated with fiber optic service, investing in quality improvements or pricing adjustments may enhance customer satisfaction.
- **Enhance Add-On Services:** Customers with additional services like tech support and device protection showed higher retention. Expanding awareness or bundling these add-ons could increase their uptake and reduce churn.
- **Optimize Payment Options:** Encourage automatic payment methods to reduce churn among customers using electronic checks. Consider discounts or rewards for customers switching to autopay options.

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This summary provides a deeper look at the factors affecting churn, with percentages highlighting areas for targeted intervention. The data-driven recommendations aim to address specific customer needs and behaviors, ultimately reducing churn and improving overall customer satisfaction.