SUMMARY OF TELECOM CHURN

1. OVERVIEW OF THE DATA

This analysis focuses on a telecom dataset to understand why customers leave (churn). The goal is to explore how various factors - such as services used, billing methods, and customer profiles - affect churn rates. The analysis also includes visual insights for better understanding.

2. DETAILED FINDINGS FROM THE ANALYSIS BASED ON CATEGORICAL FACTORS

- 1. CHURN RATE DISTRIBUTION: Approximately 27% of customers have left the service, indicating a need for improved customer retention strategies. Addressing customer needs and enhancing service quality could help reduce churn.
- 2. INTERNET SERVICE TYPE: Around 42% of customers using Fiber Optic Internet have churned, compared to 19% for DSL and 8% for those without internet service. This could be due to service quality, speed, or pricing issues.
- 3. ONLINE SECURITY SUBSCRIPTION: About 48% of customers without Online Security have churned, compared to only 16% of those who subscribed to this service. Offering security services as part of bundled packages or providing discounts could encourage customers to stay.
- 4. TECH SUPPORT AVAILABILITY: Approximately 45% of customers without Tech Support have churned, whereas only 14% of customers with support have left. Enhancing the availability and quality of tech support services could lead to better customer satisfaction and loyalty.
- 5. DEVICE PROTECTION SERVICE: Churn rates for customers without Device Protection are around 41%, while those with the service show a churn rate of just 18%. Providing affordable protection plans or including them in bundled offers could help retain customers.
- 6. PAYMENT METHOD PREFERENCES: Customers using Electronic Check have a churn rate of about 47%, significantly higher than those using credit cards or other payment methods, which have churn rates closer to 22%. Simplifying payment methods and providing incentives for using more

secure and convenient options might help reduce churn.

- 7. PAPERLESS BILLING ADOPTION: Approximately 43% of customers using Paperless Billing have churned, compared to 20% of those who use traditional billing methods. Improving the digital billing experience might help mitigate this issue.
- 8. MONTHLY CHARGES: Customers with high monthly charges (above the median) show a churn rate of 39%, while those with lower charges have a churn rate of 15%. Offering better value for money, discounts, or rewards for high-paying customers could help retain this customer segment.
- 9. TENURE DURATION: Customers with a tenure of less than 12 months have a churn rate of 52%, whereas those with a tenure over 24 months show a significantly lower churn rate of 12%. Offering incentives such as welcome bonuses, loyalty rewards, or discounts for newer customers could help extend customer lifespans.
- 10. CONTRACT TYPE: Customers on a Month-to-Month contract have a churn rate of approximately 55%, much higher than those on a One-Year contract (25%) or a Two-Year contract (11%). Longer contracts tend to reduce churn, possibly due to customer commitment and better value packages offered for longer durations.
- 11. SENIOR CITIZEN STATUS: Senior citizens have a churn rate of approximately 45%, which is significantly higher than non-senior customers who have a churn rate of around 25%. This indicates that senior citizens may face unique challenges or service dissatisfaction, requiring targeted support or tailored service packages to improve retention.

3. CONCLUSION

The analysis reveals that various factors contribute to customer churn in the telecom sector. Categorical variables like service subscriptions, billing methods, and payment preferences significantly impact churn behavior. Addressing these issues through targeted strategies - such as improving service quality, offering bundled services, and enhancing customer engagement - can help reduce churn rates, increase customer satisfaction, and drive business growth.