

# Telecom dashboard summary

**Customer Churn:** The chart titled "Churn distribution" shows the number of churned customers (483) and the churn rate (14.5%) for a specific period. This suggests that the company is losing a significant portion of its customers. Further analysis is needed to understand the reasons behind customer churn.

**Average Monthly Charge:** The chart titled "Average Monthly Charge" displays a slight decrease in the average monthly charge over time. This could indicate a pricing strategy to attract new customers or retain existing ones in a competitive market.

**Number of Customers:** The chart titled "Number of Customers" shows a fluctuation in the number of customers over the weeks. There seems to be a decrease in the number of customers from week 1 to week 12.

**Calls per Day:** The line graph titled "Average of Day(Mins), Calls per day. Monthly Charge, Data Usage by customers" shows the average daily call duration and the number of calls per day. While the call duration seems to be relatively stable, the number of calls per day appears to have increased slightly over the weeks.

**Data Usage:** The line graph also shows the average data usage by customers. Data usage seems to be steadily increasing over the weeks. This could be due to several factors, such as an increase in smartphone usage, the availability of affordable data plans, and the growing popularity of data-intensive applications.

## Analysis

### Churn Analysis

**Churn Rate:** The chart titled "Churn Distribution" shows that out of 3333 customers, 483 churned in the observed period, resulting in a churn rate of 14.5%. This indicates a significant portion of customers are being lost.

**Churn Impact:** The section titled "Churn Impact on Contract Renewal" suggests that customers who renew their contracts are less likely to churn (0.72%) compared to those who don't (2.9%). This highlights the importance of contract renewals in customer retention.

**Data Plan:** The section titled "DataPlan's Impact on Churn Count" indicates that customers on Plan 1 have the highest churn count (333) followed by Plan 2 (106). However, without information on the total number of customers per plan, it's difficult to determine which plan has the highest churn rate.

**Data Usage:** The line graph titled "Data Usage Trends Across Account (Weeks)" shows an upward trend in data usage over the course of the observed weeks. This suggests that customers are consuming more data, potentially impacting churn rates.

## Additional Observations:

**Day Calls:** The chart titled "Churn by DayCalls" suggests a possible correlation between higher call frequency (above 120 calls per day) and churn rate (around 40%).

**Roaming:** The chart titled "Churn Rate by Roaming (Mins)" indicates that customers who roam for longer durations (above 20 mins) might have a higher churn rate (around 42%).

**Contract Renewal:** The section titled "Churn Rate by Contract Renewal" confirms that customers who don't renew their contracts are more likely to churn (2.9%) compared to those who do (0.72%).

## Customer Service

**Calls:** The section titled "Churn Rate by Customer Service Calls" showcases the churn rate for different ranges of customer service calls. It suggests that a higher volume of calls might be associated with a greater likelihood of churn (e.g., 16.72% churn rate for customers with 6-10 calls).

## Additional Insights:

**Contract Renewal:** The section titled "Contract Renewal by Churn" reveals that customers who don't renew their contracts have a significantly higher churn rate (66.67%) compared to those who do (0%).

**Day Calls:** The chart titled "Churn Rate by Day Calls" suggests a potential link between a higher frequency of day calls (above 100 calls) and a higher churn rate (around 50%).

## Recommendations:

- Implement targeted customer retention strategies based on churn risk factors and customer segments.
- Consider offering incentives for contract renewals and data plan adjustments to address customer needs.
- Focus on contract renewals: The data suggests that prioritizing contract renewals can be a key strategy to reduce churn.
- Data plan analysis: Further analysis is needed to assess churn rates by data plan, considering the total number of customers on each plan.
- Investigate high data usage: Understanding the reasons behind the increasing data usage could help identify customer segments requiring specific attention.
- Analyze roaming behavior: Customers with high roaming usage might require targeted communication or plan adjustments to address potential churn.
- Implement strategies to improve customer service quality and address customer concerns effectively.

## **Inferences:**

Customer service focus: The data indicates that addressing customer service issues effectively might be crucial for reducing churn. High call volume could be a sign of customer dissatisfaction.

Data usage analysis: Investigating the reasons behind the correlation between data usage and monthly charge is necessary to determine if it's a factor influencing churn.

Contract renewals: Encouraging contract renewals can be a significant strategy to retain customers, as indicated by the substantial difference in churn rates.

## **Question**

### **1.Variables Contributing to Churn:**

- Contract Renewal: Customers who don't renew their contracts have a significantly higher churn rate
- Customer Service Calls: A higher volume of customer service calls might be associated with a greater likelihood of churn
- Data Usage: An increase in data usage might correlate with churn, potentially due to exceeding data plan limits or incurring overage charges
- Day Calls: A high frequency of day calls (above 100 or 120 calls) might be linked to a higher churn rate
- Roaming: Customers with high roaming usage might have a higher churn rate

### **2.More Likely to Churn:**

- Customers who don't renew their contracts.
- Customers with a high volume of customer service calls.
- Customers with excessive data usage exceeding their data plan limits.
- Customers making a high number of day calls.
- Customers with extensive roaming minutes.

### **3.Actions to Stop Churn:**

- Prioritize contract renewals: Implement targeted campaigns or incentives to encourage customers to renew their contracts.
- Enhance customer service: Address customer concerns effectively to improve satisfaction and reduce churn triggered by service issues.
- Offer flexible data plans: Provide a variety of data plans catering to different usage needs and adjust offerings based on customer analysis.
- Monitor data usage: Implement alerts or notifications for customers approaching data plan limits to encourage them to upgrade their plan or avoid overage charges.
- Consider roaming packages: Develop targeted roaming packages or discounts to address the needs of customers who frequently roam.