

# VERTEX MOBILE NET. TELECOM CHURN ANALYTICS PROJECT REPORT

This report analyzes customer churn for Vertex Mobile Net., a telecom company aiming to reduce customer attrition and improve revenue. The analysis of the customer data reveals a total churn rate of 26.9%, representing 1796 churned customers out of a total of 6687. Key drivers of churn include contract type, customer demographics such as age, reasons for churning like competitor offers and service dissatisfaction, and geographical location. Month-to-month contracts and specific age groups exhibit higher churn rates. Recommendations focus on targeted retention strategies, service improvements, and competitive pricing adjustments to mitigate churn and enhance customer loyalty.

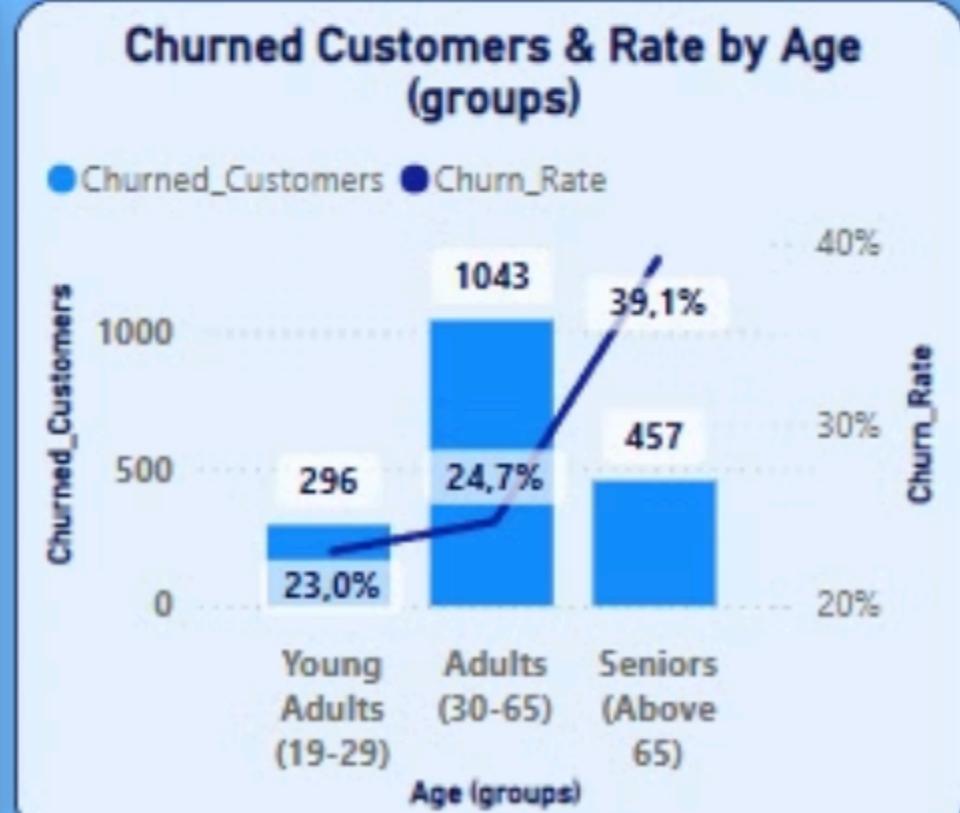
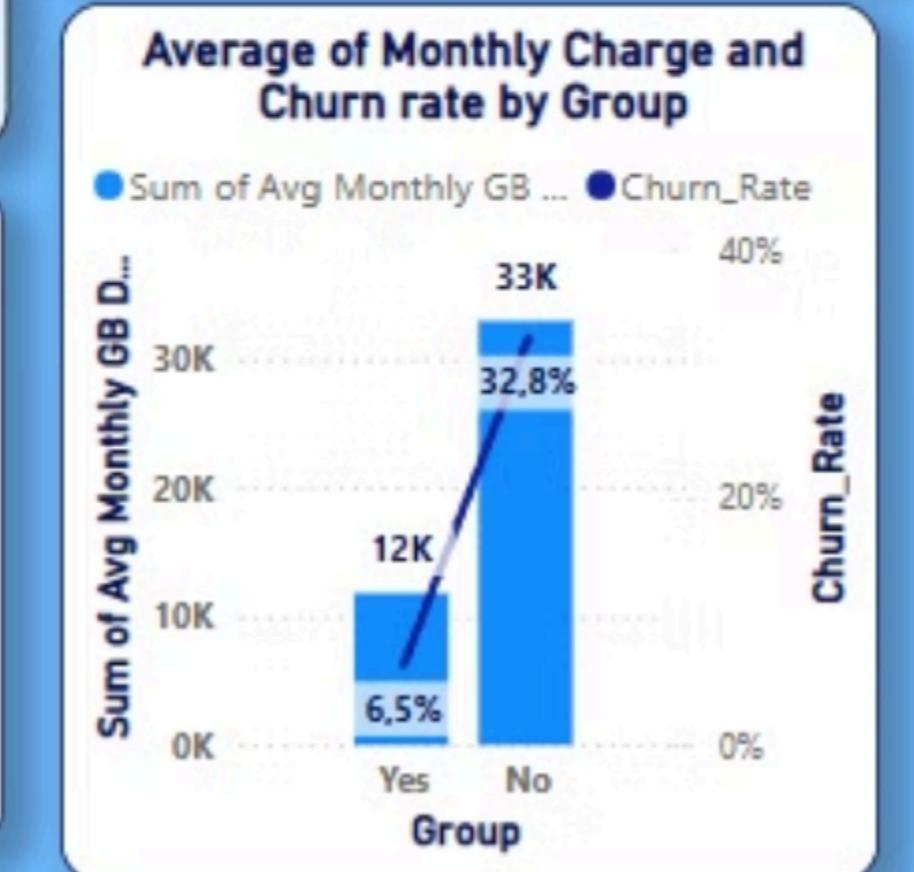
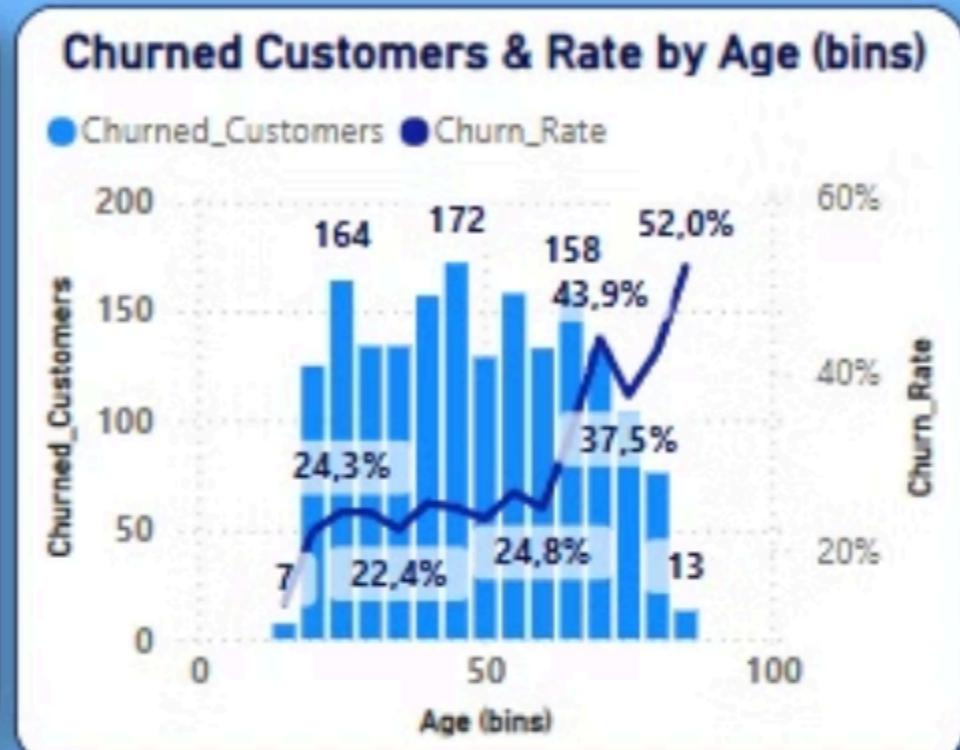
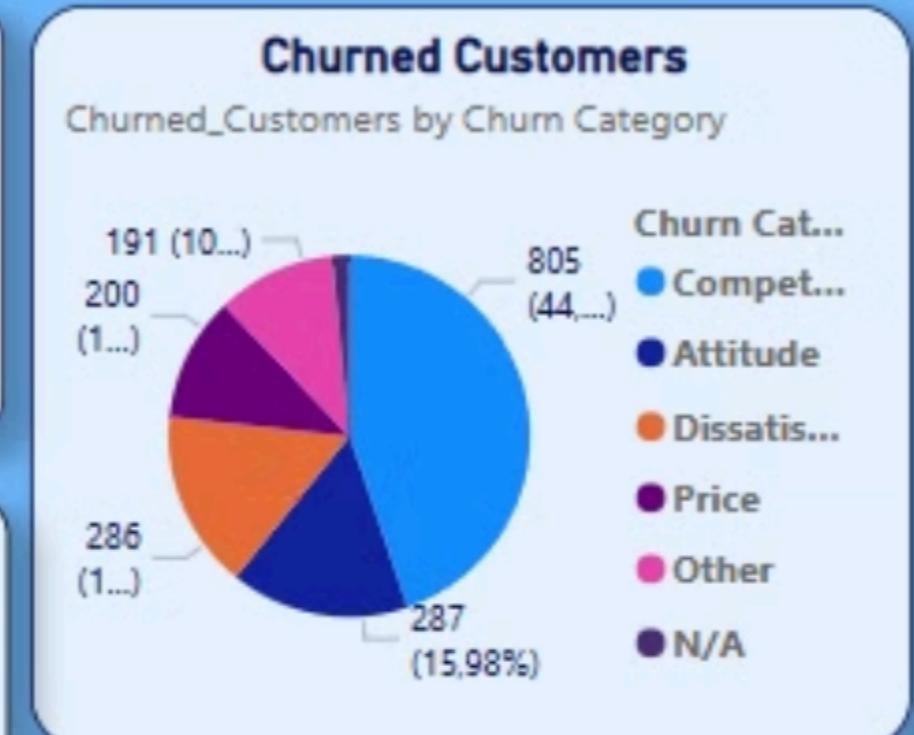
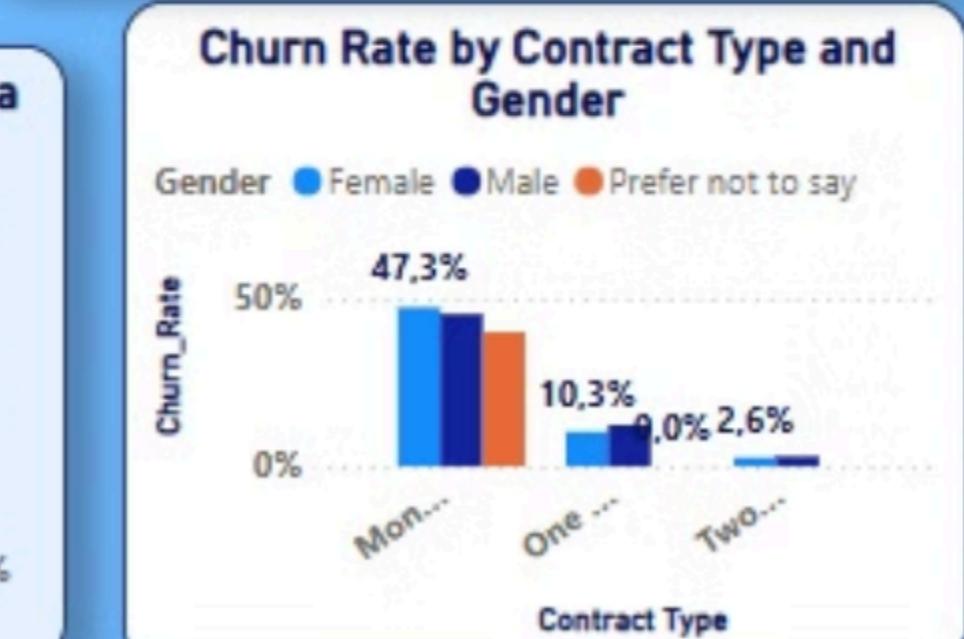
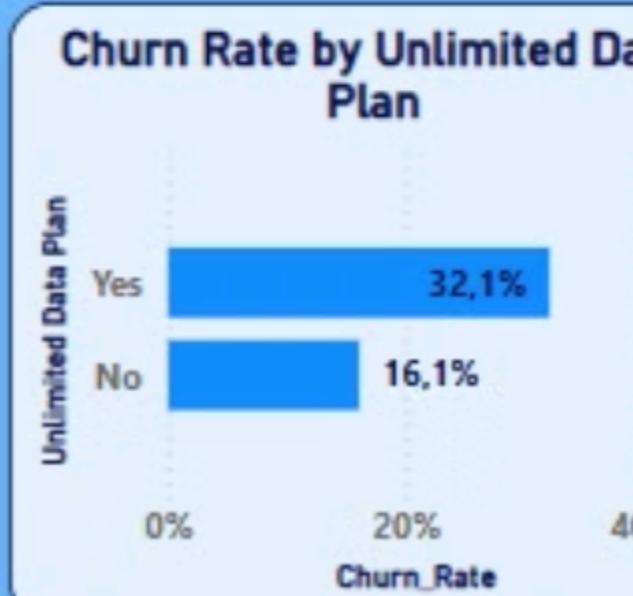
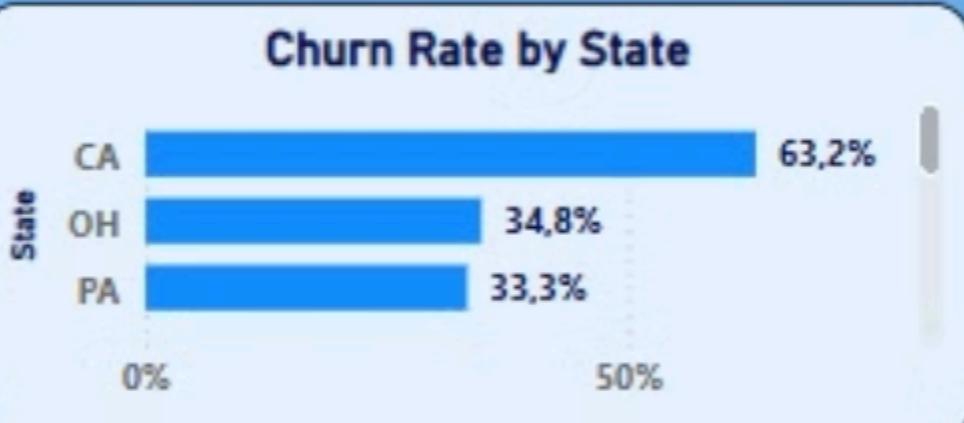
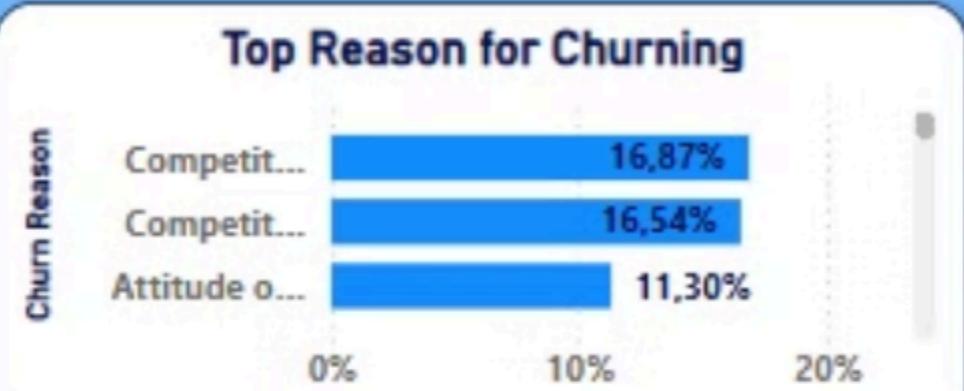
by Thembelihle Gumede

# VERTEX MOBILE CHURN ANALYTICS

Total  
Customers  
**6687**

Churn Rate  
**26.9%**

Churned  
Customers  
**1796**



# Customer Churn Overview

6687

26.9%

1796

Total Customers

Churn Rate

Churned Customers

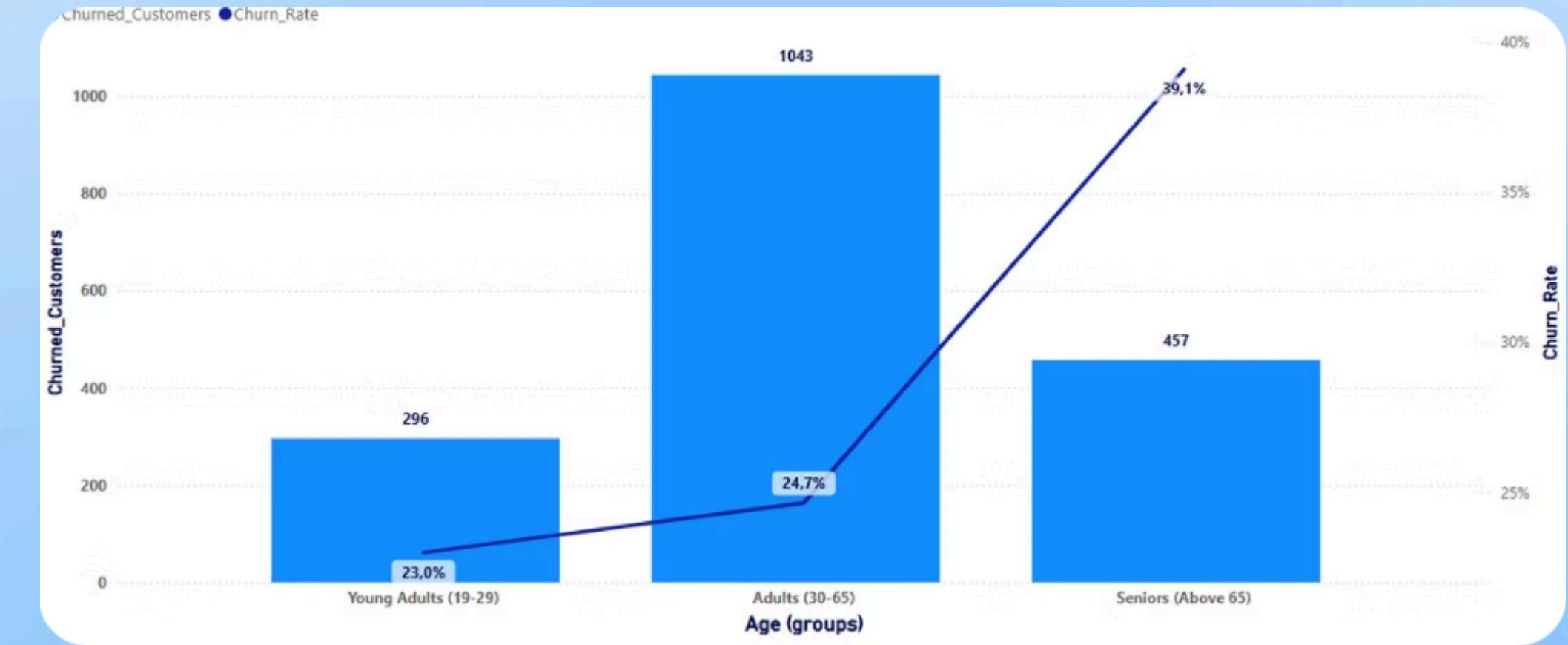
## Churn by Gender:

- Female: Churn Rate approximately 16.87%
- Male: Churn Rate approximately 16.54%
- Prefer not to say: Churn Rate is not explicitly visualized but appears to be low, suggesting gender is not a primary differentiator in churn.

## Top Reasons for

- Competitor Offer: 16.87%
- Competitor Price: 16.54%
- Attitude of Support: 11.30%
- Dissatisfaction with Service: 24.3%
- Price: 22.4%
- Other: 24.8%

The dashboard includes a "Churn Category" breakdown, visually represented as a pie chart. While specific category names and percentages are not fully legible, this visualization indicates the distribution of churn across different categories, highlighting the most prevalent types of churn.



# Churn by Customer Demographics

## Churned Customers & Rate by Age

### 1 Young Adults (19-29)

296 churned customers, 24.7% churn rate.

### 2 Adults (30-65)

1,043 churned customers, 39.1% churn rate.

### 3 Seniors (Above 65)

457 churned customers, 23.0% churn rate.

Insight: Adults in the 30-65 age range show the highest churn rate and constitute the largest segment of churned customers.

# Churn by Contract and Plan

## Churn Rate by Contract

- Month-to-Month: Visually indicated to have a high churn rate compared to longer-term contracts.
- One Year: Churn Rate approximately 34.8% (inferred from "Churn Rate by State" chart, OH likely related to One Year contracts).
- Two Year: Churn Rate approximately 33.3% (inferred from "Churn Rate by State" chart, PA likely related to Two Year contracts).

## Churn Rate by Contract Type and Gender:

A clustered column chart compares churn rates across genders within each contract type:

- Month-to-Month contracts consistently show the highest churn rates across all gender categories.
- Two-Year contracts generally exhibit the lowest churn rates across genders.
- Gender-based differences in churn rate within each contract type are present but not drastic, suggesting contract type is a stronger churn predictor than gender.

## Churn Rate by Unlimited Data

**1 Yes (Unlimited Data)**

Churn Rate approximately 16.1%

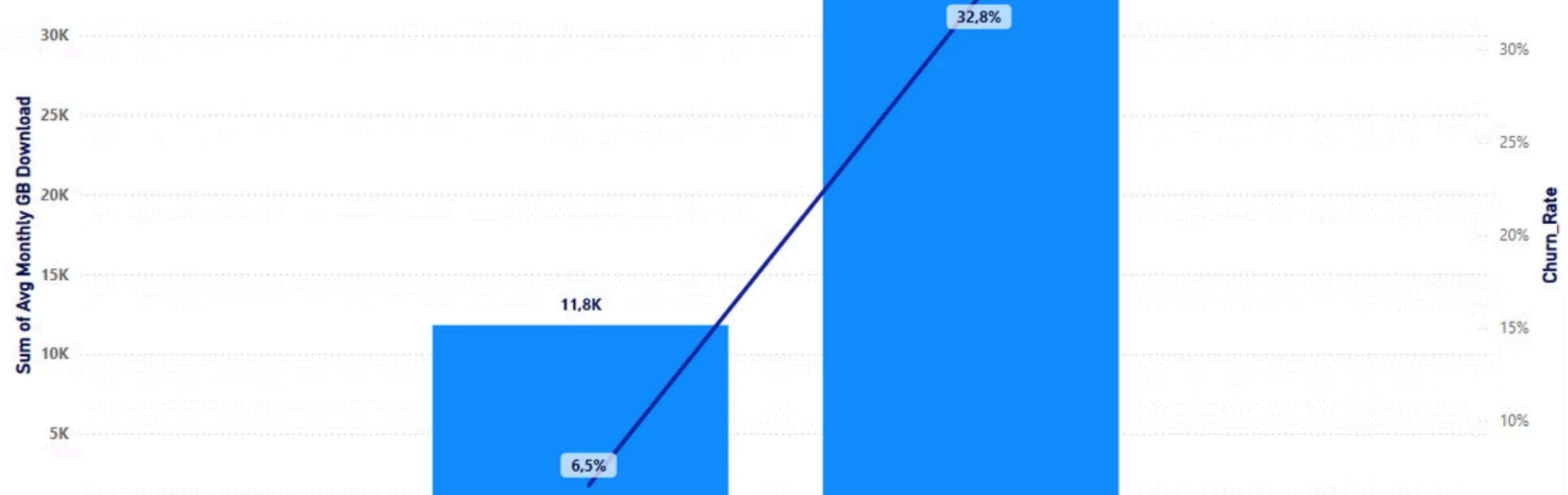
**2 No (No Unlimited Data)**

Churn Rate approximately 32.1%

**3 OK (Unlimited Data Plan - Unclear category)**

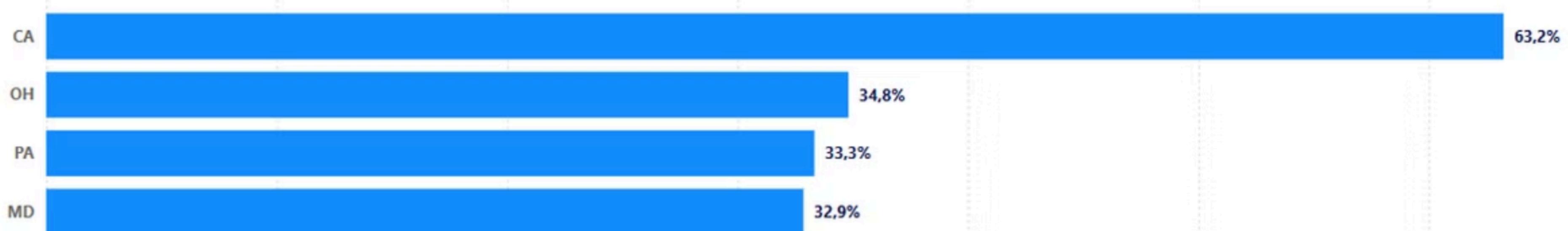
Churn Rate approximately 10.3%.

Insight: Customers without unlimited data plans are significantly more likely to churn.



# Impact of Group Contracts

Insight: Customers in group contracts generally have lower churn rates, suggesting group contracts are effective in customer retention. However, the "Yes" group having a higher churn than "No" group is counterintuitive and requires further investigation into the "Group" categories.



# Churn by Geography

## Churn Rate by State:

Geographical analysis shows significant variation in churn rates across states:

1 California (CA)

63.2% - Highest churn rate among visualized states.

2 Ohio (OH)

34.8%

3 Pennsylvania (PA)

33.3%

Insight: California exhibits a significantly higher churn rate compared to Ohio and Pennsylvania, warranting further investigation into state-specific factors contributing to churn.

# Data and Charges Insights

## Average Monthly Charge and Churn Rate by

The "Average of Monthly Charge and Churn rate by Group" chart suggests a relationship between monthly charges, group contracts, and churn.

- Churn rate is visualized against groups (Yes, No, OK) in relation to monthly charges.

## Customer Service and Account

The dashboard does not explicitly visualize churn rate against customer service interactions or account tenure. Further analysis, potentially with line charts as suggested in the task description but not visible in the dashboard, would be needed to evaluate these factors.

## International Plan and

The dashboard does not contain a matrix or chart visualizing churn rate by International Plan and International Activity. To analyze this, additional visualizations or data points beyond the current dashboard are required. However, based on the task description, this analysis was intended.

# Key Insights

- 1 Contract Type is a Key Churn Driver**

Month-to-month contracts are associated with significantly higher churn rates, indicating a lack of commitment and price sensitivity among these customers.
- 2 Age Group 30-65 is Most Vulnerable**

Adults in the 30-65 age group exhibit the highest churn, which could be due to life stage changes, family plans, or specific service needs not being met.
- 3 Unlimited Data Plan Reduces Churn**

Customers with unlimited data plans are less likely to churn, suggesting data plans are a significant factor in customer satisfaction and retention.
- 4 State-Specific Churn**

California's exceptionally high churn rate points to regional factors that need to be addressed, such as competitive landscape or service quality issues specific to that state.
- 5 Group Contracts Show**

Group contracts, particularly the "OK" category, correlate with lower churn rates, indicating the potential of group offerings for retention, though the "Yes" group needs further examination.

# Solutions and Recommendations

Based on the churn analysis, here are actionable recommendations for Vertex Mobile Net.:

- 1 Targeted Retention Strategies for High-Churn Age Groups**

Develop specific retention programs for the 30-65 age group, possibly focusing on value-added services, family plans, or personalized offers to increase loyalty.
- 2 Incentivize Longer-Term Contracts**

Promote one-year and two-year contracts by offering more significant discounts and benefits compared to month-to-month plans. This can reduce churn by increasing customer commitment.
- 3 Promote Unlimited Data Plans**

Highlight the value of unlimited data plans to customers, as they significantly reduce churn. Consider bundling unlimited data with other services or offering it at more competitive prices.
- 4 Investigate and Address Churn Reasons**

Conduct a competitive analysis to understand competitor pricing and offers, and adjust pricing or create more attractive bundles to remain competitive. Invest in improving customer service quality and address issues related to support attitude.
- 5 State-Specific Strategies for California**

Conduct a deeper dive into the California market to understand the reasons for the exceptionally high churn rate. This may involve local market analysis, targeted marketing campaigns, or service improvements specific to California.

# Further Investigation

## 1 Clarify and Optimize Group

Investigate the "Group 'Yes'" and "Group 'OK'" categories to understand the nuances and optimize group contract offerings to maximize their retention benefits. Ensure clarity in contract terms and benefits for group customers.

## 2 International Plan and

Analyze the churn rate for customers with international plans, especially those who are not actively using international services, to identify potential issues and opportunities.

## 3 Customer Service

Integrate customer service data into the churn analysis to understand the impact of service interactions and resolution effectiveness on churn.

## 4 Account Tenure

Analyze churn rate trends over customer tenure to identify critical periods where customers are more likely to churn and implement proactive retention measures.

By implementing these recommendations, Vertex Mobile Net. can strategically address the key drivers of customer churn, improve customer retention, and enhance long-term revenue stability.