Customer Churn Analysis

Ahmed Yehia

6678

1.08K

Total Customers

Average Charges per Customer

27%

Churn Rate



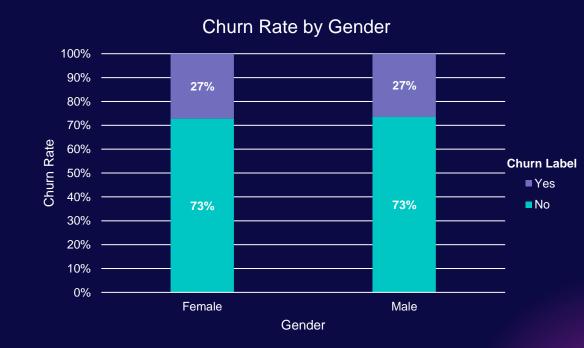
Churn Rate Trends with Age: Higher Risk in Older Demographics

- The churn rate starts relatively low, around 15-20%, for younger customers in their early 20s.
- It gradually increases with age, stabilizing around 20-30% for customers in their 30s to early 50s.
- After age 55, the churn rate begins to climb more sharply, reaching 40-50% as customers approach their 70s and beyond.
- There are noticeable fluctuations throughout the age groups, with significant spikes in churn around the ages of 39, 55, 69, and 83.



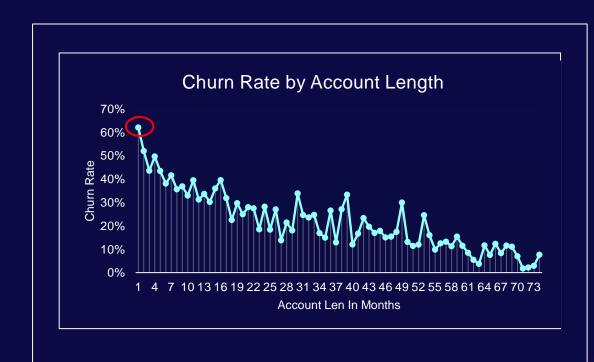
Gender-Based Churn Rate Analysis

- The chart compares churn rates between male and female customers.
- There is no significant difference in churn rates between genders. Both male and female customers have a 27% churn rate.
- 73% of both male and female customers remain with the company.



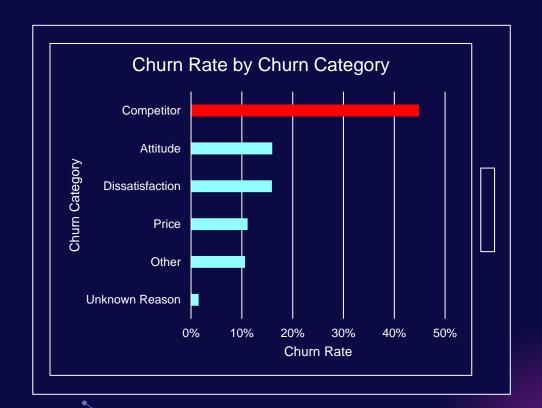
Churn Rate Decreases Over Time: A Study Of Account Longevity.

- The churn rate is highest at the start, around 60-65% for accounts less than 4 months old.
- The rate decreases steadily as the account length increases.
- After about 20 months, the churn rate stabilizes, fluctuating between 10–30%.
- There are some spikes in churn around 28, 36, and 52 months, but overall, the trend is downward.



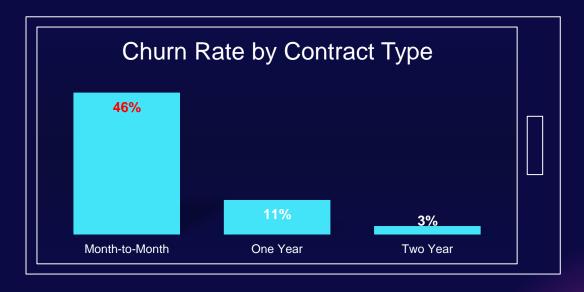
Churn Rate Breakdown By Category

- Visual inspection suggests that "Competitor" represents around half of the churners.
- The "Unknown Reason"
 category indicates a portion
 of customers leaving without
 providing a clear explanation.

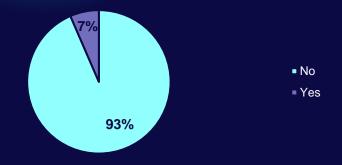


Impact of Contract Length on Churn Rate

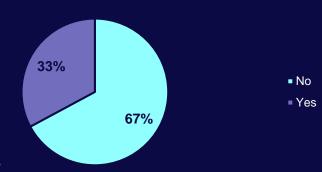
- Month-to-Month contracts exhibit the highest churn rate at 46%.
- One-Year contracts have a significantly lower churn rate at 11%.
- Two-Year contracts show the lowest churn rate at 3%.



Churn Rate by Customers in Group



Churn Rate by Non-Grouping Customers

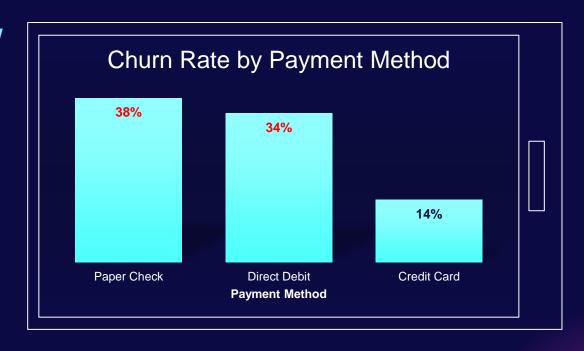


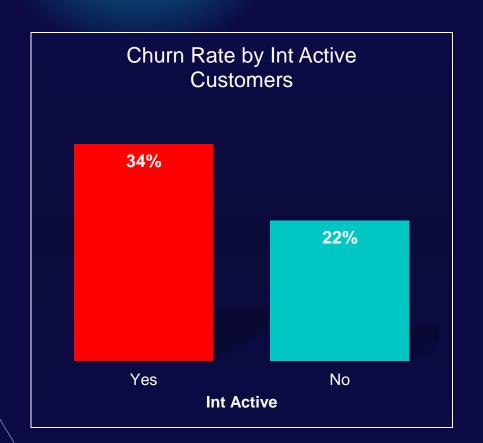
The Impact of Group on The Churn Rate.

- Only 7% of customers in groups have churned.
- There 33% of non-grouping customers have churned.

Churn Rates by Payment Method: Credit Card Users Show Highest Retention

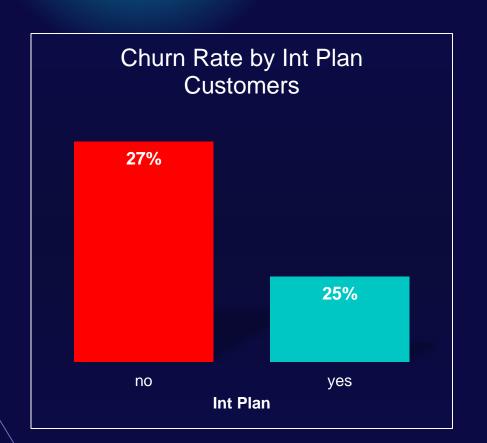
- The highest churn rate is seen among customers using Paper Checks, at 38%.
- Direct Debit follows with a churn rate of 34%.
- The lowest churn rate is among customers using Credit Cards, at just 14%.





Impact of International Activity on Customer Retention

Customers with international activity (Yes) have a significantly higher churn rate of 34% compared to those without international activity (No) at 22%.



Impact of International Plan on Churn Rate

Customers without an International Plan (no) have a higher churn rate (27%) than customers with an International Plan (yes) at 25%.

Impact of International Plan and Activity on Churn Rate

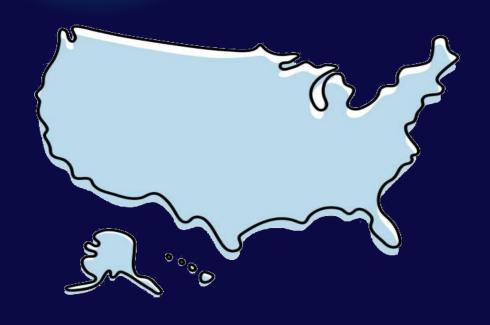
- The highest churn rate is International Plan Customers Without being International Active
- 40% of International Active customers without International plans churn and that's a high rate.
- The lowest churn rate is International Active Customers With International Plans.

Churn Rate by Int Active & Int Plan Customers



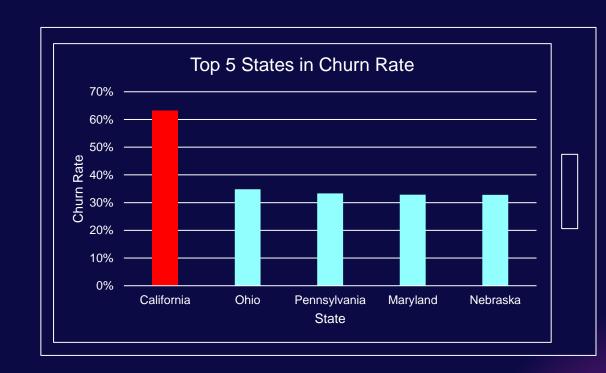


States Analysis



Churn Rate by State: A Comparative Analysis

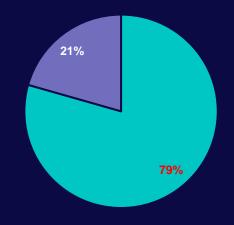
- California has the highest churn rate among the listed states.
- Pennsylvania, Maryland, and Nebraska have the same churn rate and Ohio is higher than them by only 2%.
- There's a significant difference in churn rates between California and the other 4 states.



Group Impact on the churn rate of California Customers.

Most of the customers are not in groups maybe this impacts their churn rate.

Grouping customers in California



No

Yes

Contract Type Impact on the churn rate of California Customers.

There around 50% of the customers have a month-to-month contract type so, maybe this is the reason for their high churn rate.



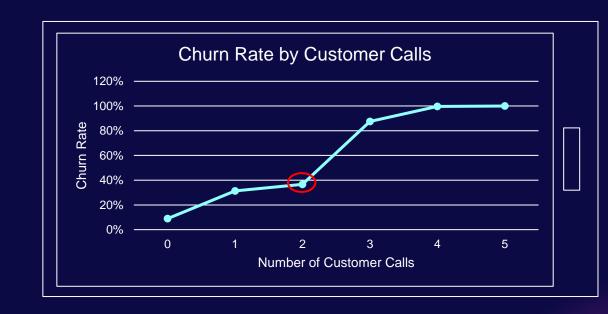


Customer Service Calls



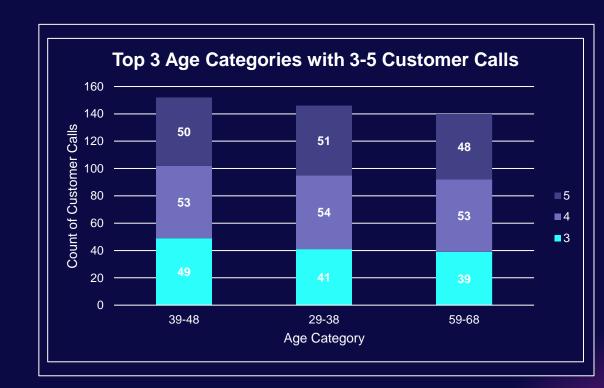
Churn Rate and Customer Calls Correlation

- There seems to be a general trend suggesting that a higher number of customer calls might correlate with a higher churn rate.
- 2-customer-calls may be a critical value after which the churn rate increases sharply from 27% to 88%.



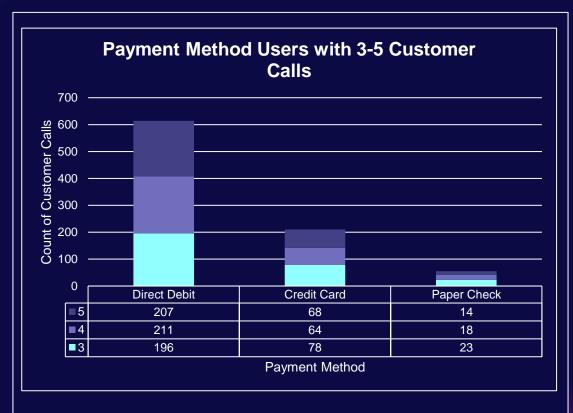
Call Activity by Age: Top Age Groups with Frequent Customer Interactions

- The 39-48 age category has the highest total number of customer calls.
- Each age category has a similar distribution of the number of calls, with a roughly even split between customers who made 3, 4, or 5 calls.
- The 59-68 age group has slightly fewer total calls compared to the other two age groups.



Customer Engagement by Payment Method: Direct Debit Users Lead in Frequent Calls

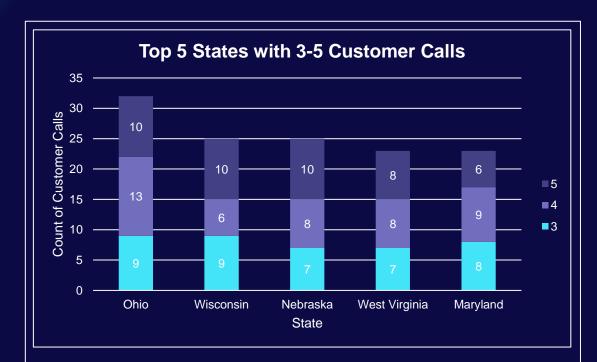
- Direct Debit users have the highest number of customer calls, with a significant portion making 4 calls.
- Credit Card users have fewer total calls compared to Direct Debit users but more than Paper Check users.
- Paper Check users have the fewest customer calls, with relatively equal distribution across 3 to 5 calls.



This may be the reason for the high churn rate of the direct debit users.

Top 5 States by Customer Call Volume (3-5 Calls)

- Ohio has the highest number of customers with 3-5 calls.
- Maryland has the lowest number of customers with 3-5 calls among the listed states.
- There's a significant difference in call volume between Ohio and Maryland.
- Wisconsin and Nebraska have a relatively similar number of customers making 3-5 calls.



Ohia, Nebraska, and Maryland are among the top 5 states regarding churn rate so, maybe the frequent 3-5 customer calls are the reason for their high churn rate.

Recommendations



Target Senior Customers

Customers aged 55 and above exhibit a higher likelihood of churning. Tailored engagement strategies for this demographic could help in retention.

Reassess Month-to-Month Contracts

Month-to-month contract holders are at a greater risk of churn. Offering incentives for longer-term contracts might reduce this risk.

Evaluate International Plan Usage

Customers subscribed to international plans but not utilizing them may consider discontinuation. Proactive communication about the benefits of these plans or alternative options could help retain these customers.

Focus on Short-Tenure Customers

Customers with shorter account lengths are more prone to churn. Early-stage retention efforts could significantly improve loyalty.

Revise Payment Method Strategies

Customers who use paper checks or direct debit payment methods are more likely to churn. Encouraging the adoption of more secure and convenient payment options could enhance customer satisfaction and retention.

Address Regional Churn Risks

Customers residing in California show a higher propensity to churn. Regional-specific retention strategies could be effective in this market.

Improve Customer Service Efficiency

Customers who make more than two calls to customer service are more likely to churn. Enhancing the first-call resolution rate and overall service quality could mitigate this risk.

Leverage Group Dynamics

Customers who are part of groups or communities tend to have a lower churn rate. Encouraging group-based plans or community engagement initiatives could further strengthen customer loyalty.

Offer International Plans to Frequent International Users

Customers who frequently engage in international activities but lack an international plan may benefit from tailored offers, potentially reducing their likelihood of churn.

Counteract Competitor Influence

A significant percentage of customers are leaving due to competitors' offerings. Developing competitive retention strategies, such as exclusive deals or loyalty programs, could help in retaining these customers.



THANKS!

a7med.ye7ia44@gmail.com

DO YOU HAVE ANY QUESTIONS?



www.linkedin.com/in/a7medya7hia



https://github.com/Ahmed-Yehia-2021

