

# Customer Churn - Executive Summary

Total Customers

Total no. of Customers

7.043K

Churned Customers

No. of Churned Customers

1.869K

Churn Rate




26.54%

Total Revenue

\$16.06M

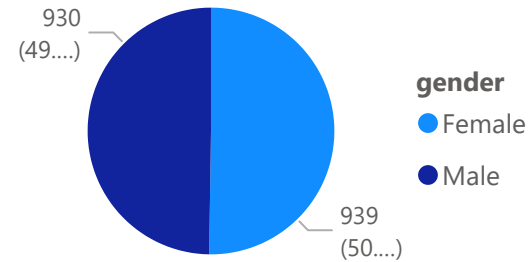
Avg Monthly Charge

\$64.76

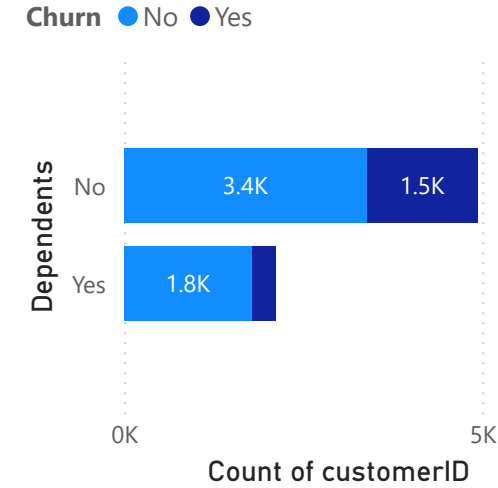
- gender 
- ☐ Female
- ☐ Male
- Contract 
- ☐ Month-to-month
- ☐ One year
- ☐ Two year
- InternetService 
- ☐ DSL
- ☐ Fiber optic
- ☐ No



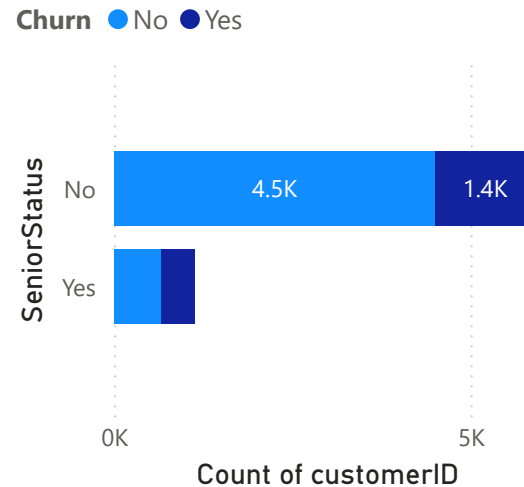
Count of customerID by gender and Churn



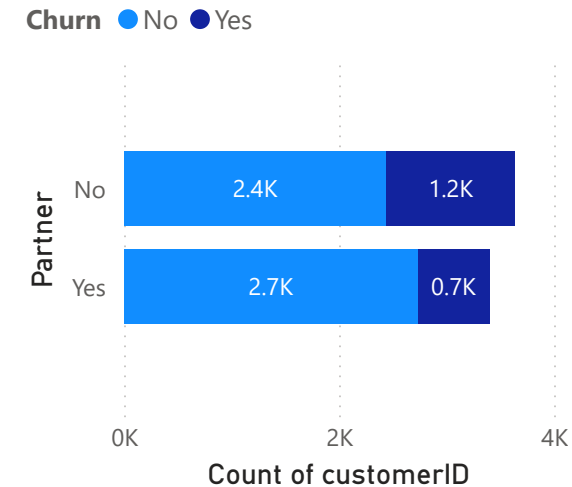
Churn by Dependent Status



Churn by Senior Citizen Status



Churn by Partner Status

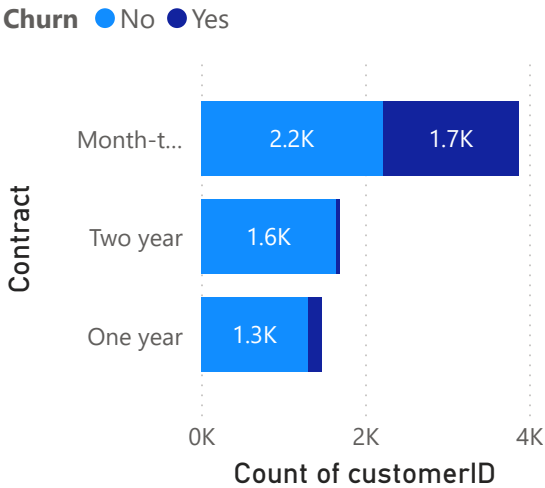


### Demographic Insights Summary:

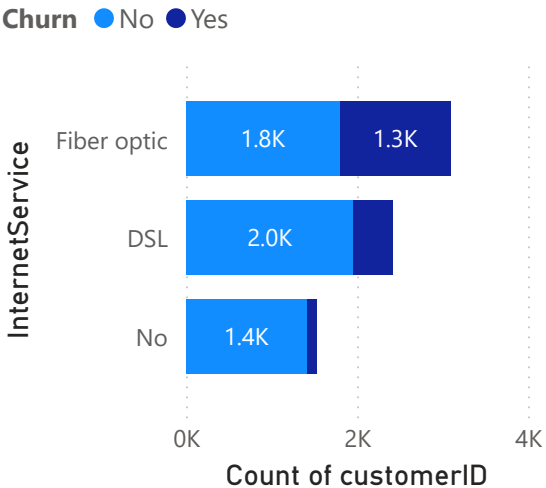
- Churn is **almost evenly split** between male and female customers.
- **Senior Citizens** churn at a **higher rate** relative to their share of the customer base.
- Customers **without partners or dependents** are **more likely to churn**, indicating social/family ties may influence retention.
- These segments should be considered for **targeted retention strategies**.



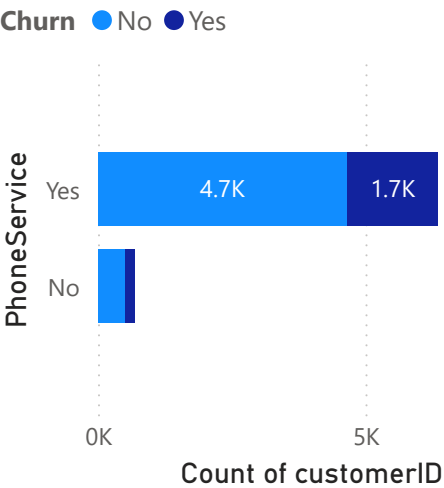
Churn by Contract Type



Churn by Internet Service Type



Churn by Phone Service



Churned Customers by Online Security & Tech Support

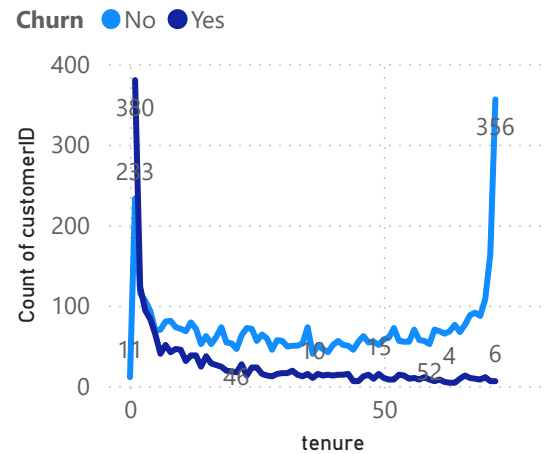
OnlineSecurity	No	No internet service	Yes	Total
No	1250		211	1461
No internet service		113		113
Yes	196		99	295
Total	1446	113	310	1869

Service Usage Insights Summary

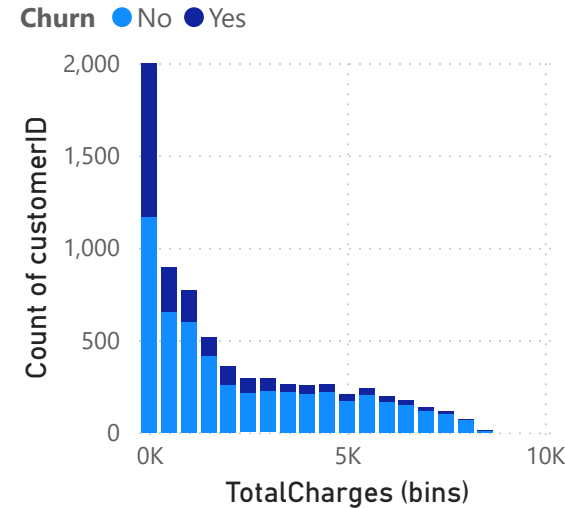
- The **highest churn** occurs among customers with **no Online Security and no Tech Support** (1,250+ churned).
- Churn is **significantly lower** for customers who had **both services enabled**.
- This pattern suggests that **support and protection services** add perceived value and can play a key role in **customer retention**.
- Encouraging adoption of these services may help reduce future churn.



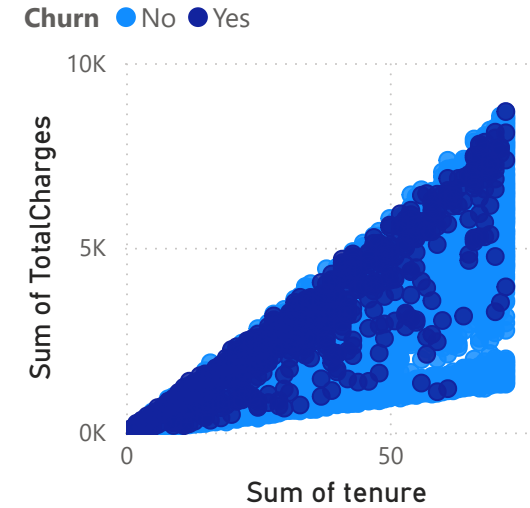
Churn Distribution Across Customer Tenure



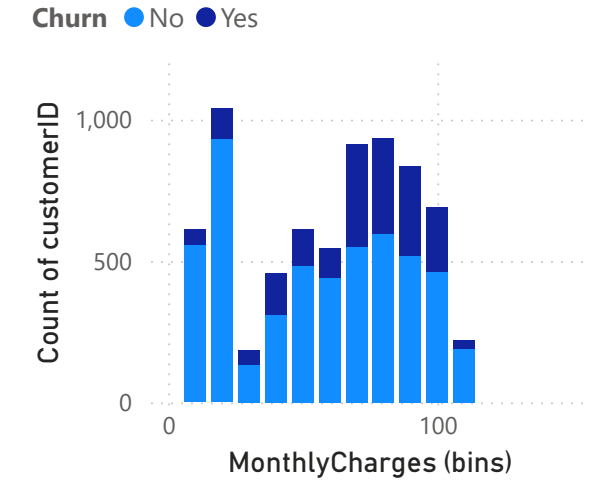
Churn by Total Charges



Tenure vs Total Charges by Churn



Churn by Monthly Charges

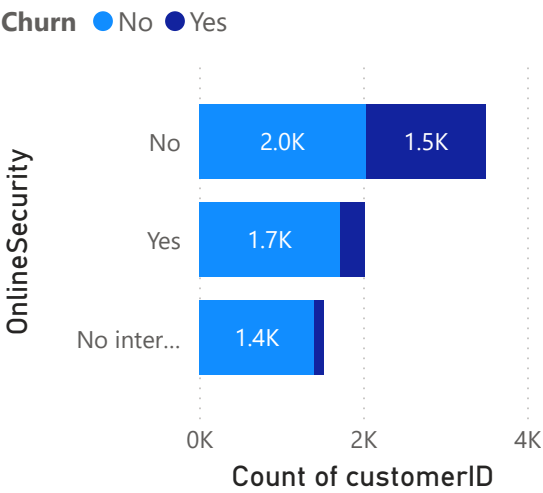


## Tenure & Billing Analysis – Key Insights:

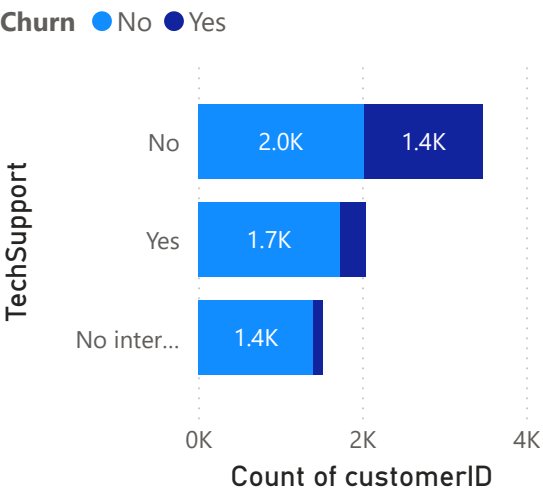
- **Early-stage churn is significantly high:** A substantial portion of customers leave within the initial months of service, indicating a critical window for onboarding and engagement.
- **Churn is concentrated among mid-range monthly charges:** Customers paying between **\$60–\$90 per month** show the highest churn, suggesting a potential mismatch in value perception or service expectations at this price tier.
- **High total spend correlates with retention:** Customers with greater **TotalCharges** (lifetime value) are far less likely to churn, emphasizing the importance of cultivating long-term relationships.
- **Tenure and TotalCharges are positively related:** The scatter analysis reveals that customers who stay longer also spend more, with **churned customers clustered at low tenure and low spend levels**.
- These findings underscore the need for:
  - Early retention campaigns
  - Strategic value communication for mid-tier plans
  - Loyalty incentives for long-tenure customers



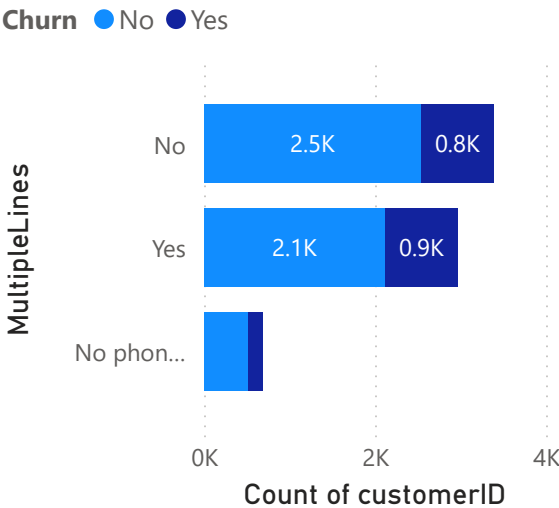
Churn by Online Security



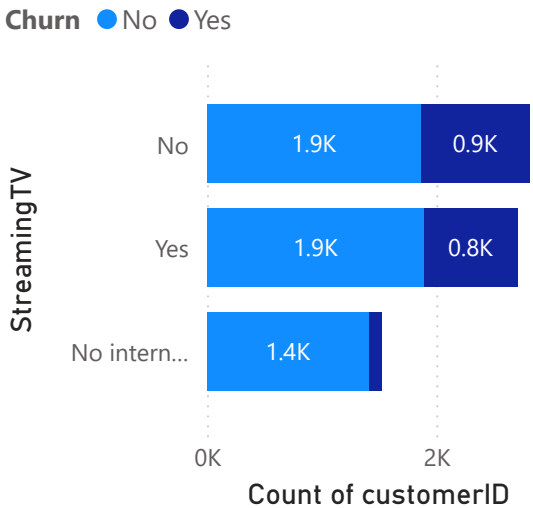
Churn by Tech Support



Churn by Multiple Lines



Churn by Streaming TV



OnlineSecurity	No	No internet service	Yes	Total
No	1250		211	1461
No internet service		113		113
Yes	196		99	295
Total	1446	113	310	1869

Segmentation Insights Summary

- **Customers without Online Security or Tech Support** show **consistently higher churn rates**, indicating a potential trust or support gap.
- The **matrix view** reveals that customers who lack both services simultaneously are at the **greatest risk of churning**, making this combination a key target for retention strategies.
- **Multiple Lines** and **Streaming TV** services show only marginal differences in churn, suggesting they may be **less critical in retention** decisions.
- **Service bundling** (offering security + support) may offer a meaningful way to reduce churn by increasing perceived value.



Number of Customers

1409

Count of CUSTOMERID

Predicted Churn Rate

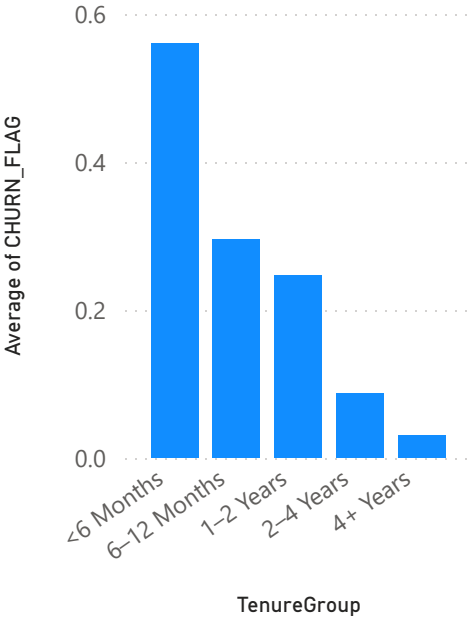
Churn Rate

0.21

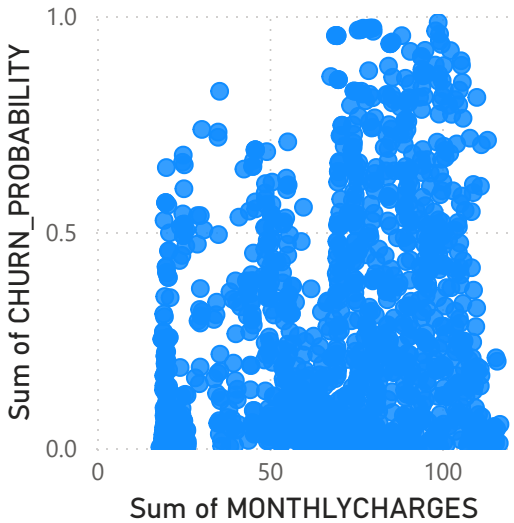
RevenueAtRiskPart

\$22.9K

Churn Rate by Tenure Group



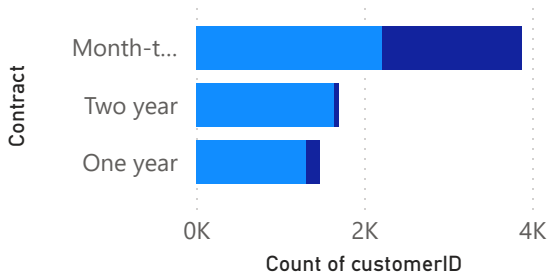
Churn Probability vs. Monthly Charges



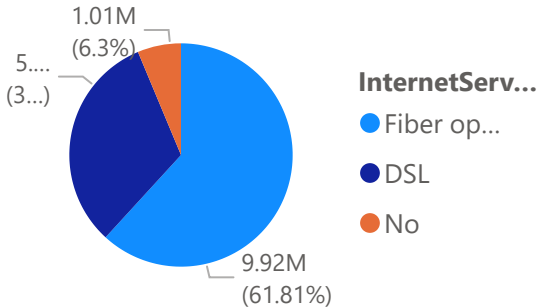
CUSTOMERID	Sum of CHURN_PROBABILITY	RISK_FACTORS	Sum of MONTHLYCHARGES
5966-EMAZU	0.55	TOTALCHARGES: 3.033, TENURE: -1.861, MONTHLYCHARGES: 0.938	108.50
2798-NYLMZ	0.42	TOTALCHARGES: 2.882, TENURE: -2.359, MONTHLYCHARGES: 1.063	108.55
3766-EJLFL	0.59	TOTALCHARGES: 2.373, TENURE: -1.123, MONTHLYCHARGES: 1.039	109.05
5696-CEIQJ	0.60	TOTALCHARGES: 2.053, MONTHLYCHARGES: 1.844, TENURE: -1.59	103.15
5140-FOMCQ	0.37	TOTALCHARGES: 1.937, TENURE: -0.733, MONTHLYCHARGES: 0.165	109.15
2522-AHIXP	0.14	TOTALCHARGES: 1.916, TENURE: -1.842, MONTHLYCHARGES: 0.072	109.45
Total	371.03		90,301.20

# Count of customerID by Contract and Churn

Churn ● No ● Yes



## Sum of TotalCharges by InternetService





## Sum of TotalCharges by InternetService

