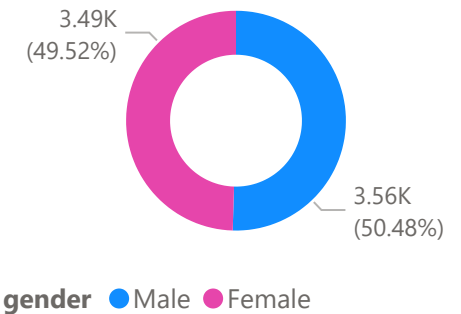# Telecom Customer Churn Analysis
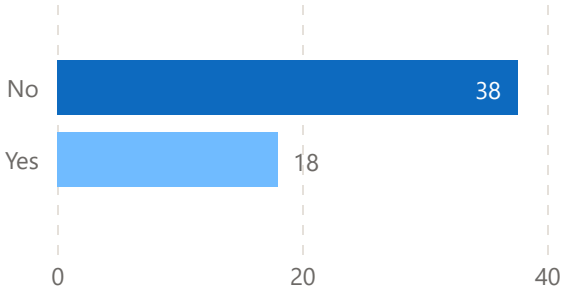
Total Customers	Churned Customers	Churn Rate	Customers Left Last...	Avg Tenure of...
7K	2K	0.27	1869	17.98

Demographics

Proportion of Churn by Gender

3.49K (49.52%)

3.56K (50.48%)

gender ● Male ● Female

Average Tenure by Churn

No	38
Yes	18

0   20   40

1142
Total Senior Citizens

Customers with Dependents by Churn

- No: 1784
- Yes: 326
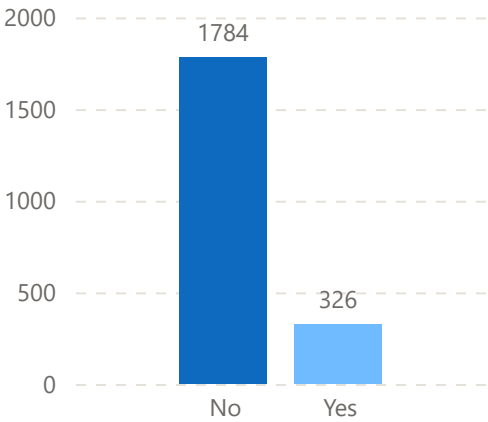
Customers with Partners by Churn

- No: 2.7K
- Yes: 0.7K

Services Each Customer Has Signed Up

CustomerID	Phone Customers	Internet Service	Multiple Lines	Online Security	Streaming TV	Streaming Mc
9995-HOTOH		1		1	1	
9993-LHIEB	1	1		1		
9992-UJOEL	1	1				
9992-RRAMN	1	1	1			
9987-LUTYD	1	1		1		
9986-BONCE	1					
9985-MWVIX	1	1				
9979-RGMZT	1	1				1
Total	**6361**	**5517**	**2971**	**2019**	**2707**	

Total Customers by PaymentMethod

- Electro... check: 2.4K
- Mailed check: 1.6K
- Bank transfer (autom...): 1.5K
- Credit card (autom...): 1.5K
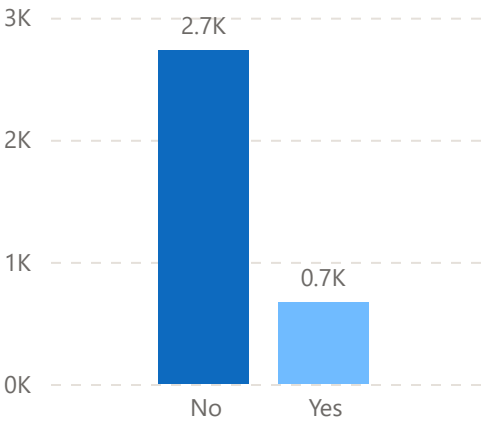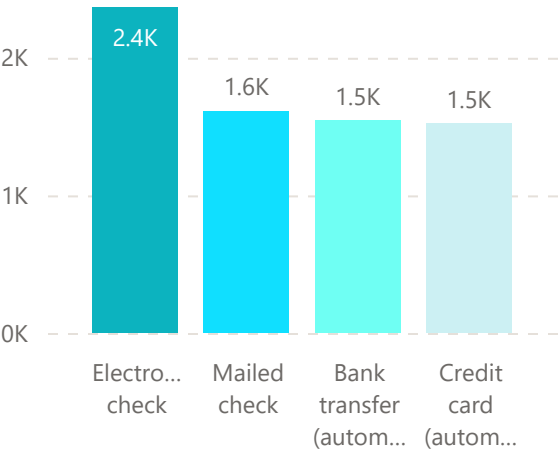
Count of Churn by Contract

1.47K (20.91%)

1.7K (24.0...)

3.88K (55.02...)

Contract
● Month-...
● Two year
● One year

29202
Total Servies

16.06M
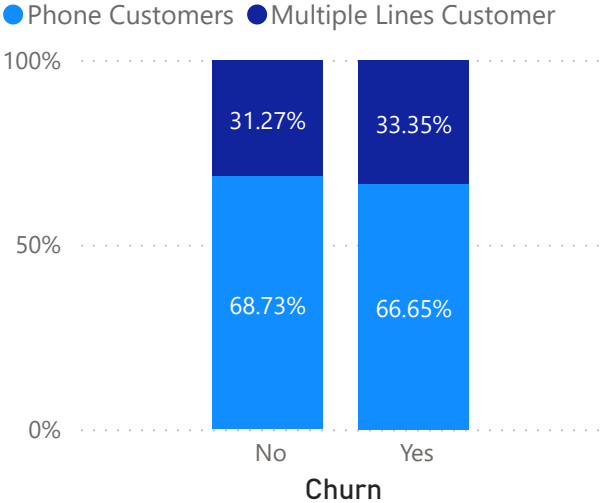Total Charges

3632
Admin Tickets

2955
Tech Tickets

Services Information Analysis

Phone Customers and Multiple Lines Customer by Churn

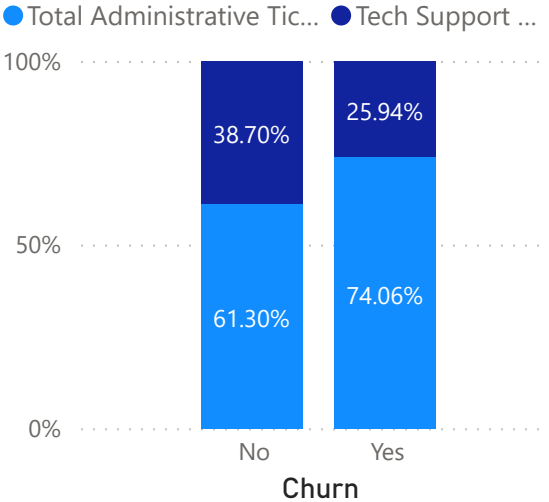- Phone Customers ● Multiple Lines Customer

Churn	Multiple Lines	Phone
No	31.27%	68.73%
Yes	33.35%	66.65%

Chrun by Number of Tech Tickets and Tech Support

● Sum of numTechTickets ● Tech Support Customers

Churn	Sum of numTechTickets	Tech Support Customers
Yes	87.52%	12.48%
No	31.08%	68.92%
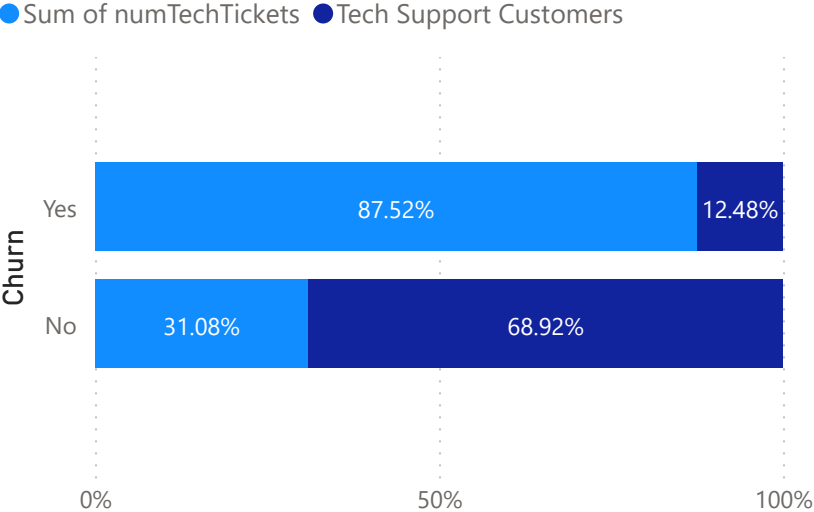
Churn by Internet Service, Streaming TV and Streaming Movies Customers

● Internet Service ... ● Streaming TV ... ● Streaming ...

Churn	Streaming Movies	Streaming TV	Internet Service
No	25.29%	25.01%	49.70%
Yes	24.14%	24.03%	51.83%
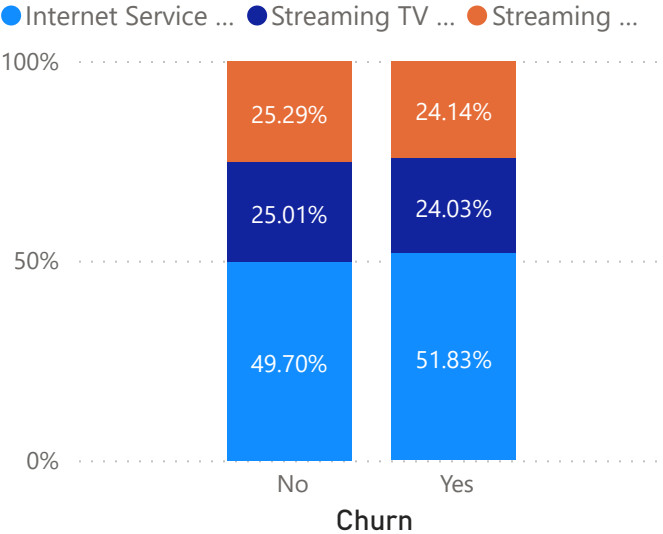
Churn by Num of Admin Tickets and Tech Support

● Total Administrative Tic... ● Tech Support ...

Churn	Tech Support	Total Administrative Tickets
No	38.70%	61.30%
Yes	25.94%	74.06%

Churn by Online Backup Customers and Online Security Customers

● Online Backup Customers ● Online Security Customers

Churn	Online Backup Customers	Online Security Customers
No	1.9K	1.7K
Yes	0.5K	
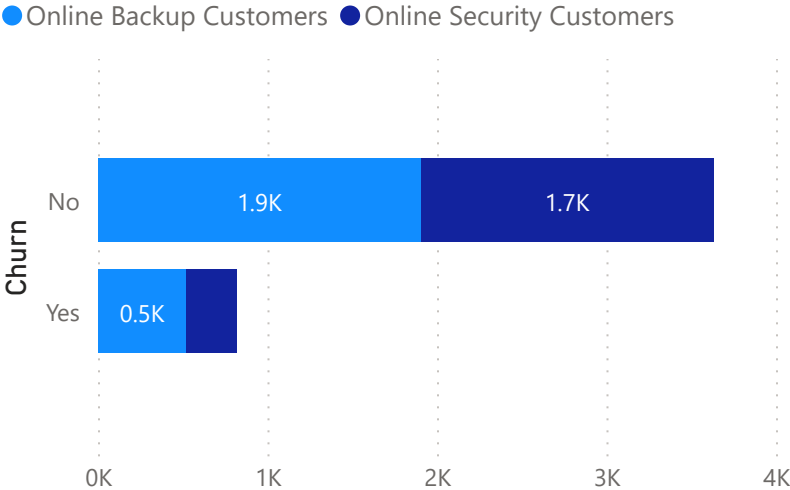
Churn Device Protection Customers

Churn
● No
● Yes

- 1K (22.5%)
- 2K (77.5%)
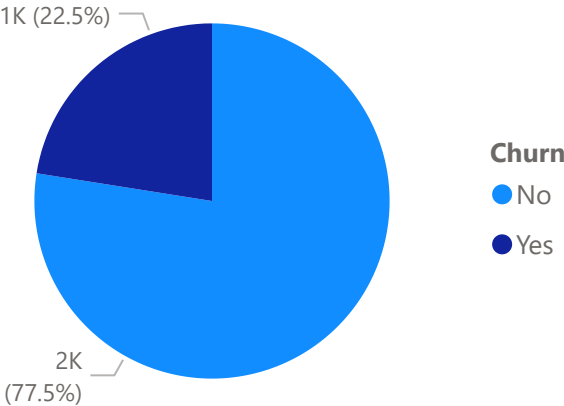
Customer Account Overview

Average Total Charges by Contract Type

Contract Type	Value
Two year	3.7K
One year	3.0K
Month-to-month	1.4K

Churn by Payment Method

Churn ● No ● Yes

Payment Method	No	Yes
Electronic check	1294	1071
Mailed check	1304	308
Bank transfer (automatic)	1286	258
Credit card (automatic)	1290	232
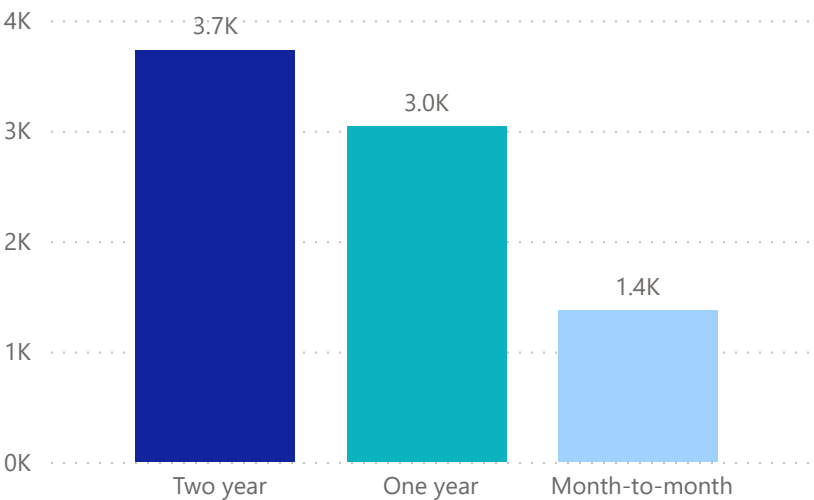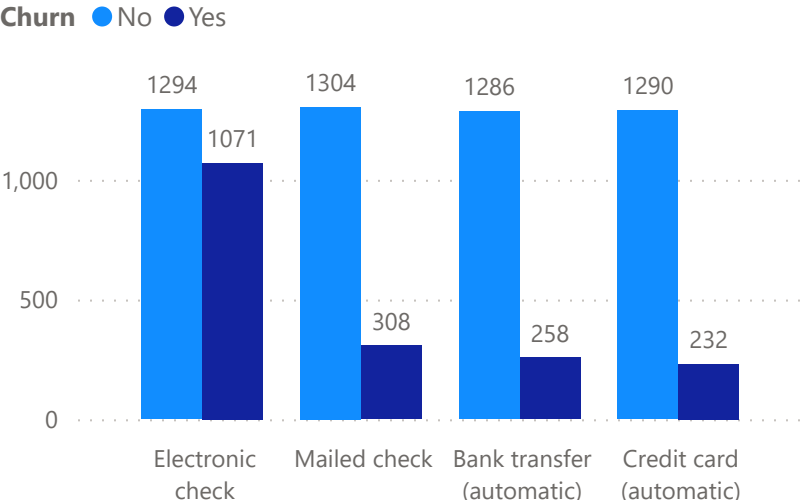
Average Monthly Charges by Contract Type

Contract Type	Value
Month-to-month	66
One year	65
Two year	61
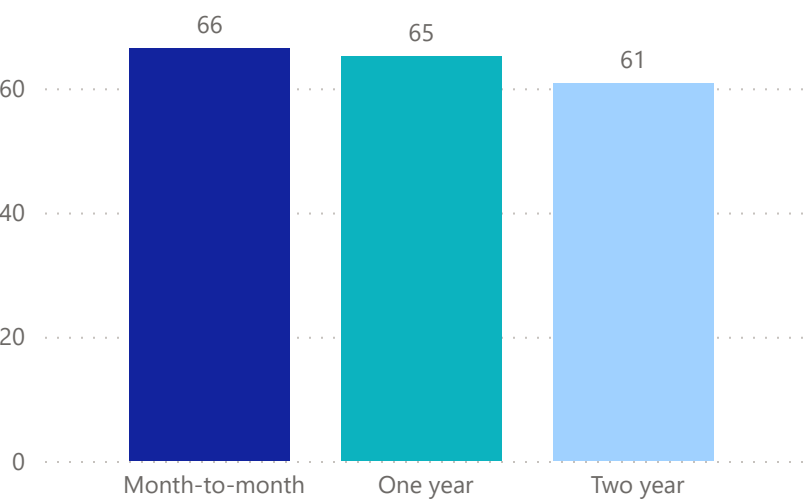
Churn by Paperless Billing Customers and Non-Paperless Billing Customers

● Paperless Billing Customers ● Non-Paperless Billing Customers

Churn	Paperless Billing Customers	Non-Paperless Billing Customers
No	2.8K	2.4K
Yes	1.4K	
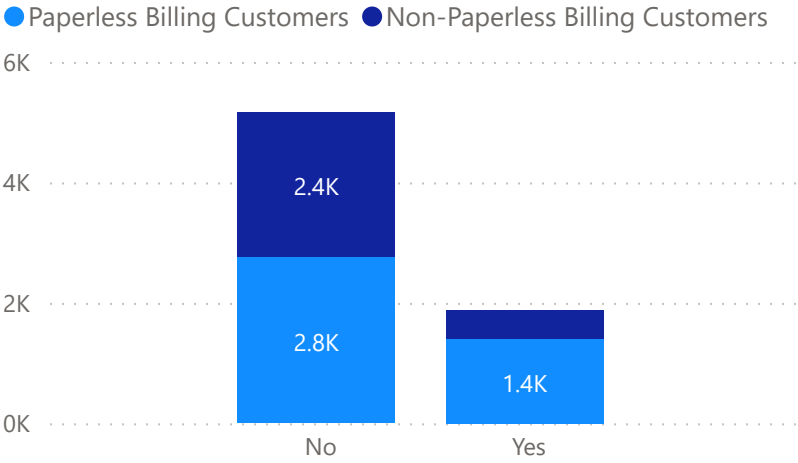
Summary

Key Points:
  • Total Customers: 7,043
  • Churned Customers: 1,869
  • Churn Rate: 0.27

Firstly the demographics insights help us understand the characteristics of customers who have left. Customers with dependents are less likely to churn, as the majority (1,784) do not leave the company, while only 326 have churned. Customers with partners also exhibit a lower churn rate, with 2,700 remaining with the company compared to 700 who have churned. On average, customers who do not churn have a significantly longer tenure compared to those who churn. This indicates that longer-tenured customers are less likely to leave. These insights highlight the significance of customers' family and partner status, along with tenure, in influencing their churn behavior. Retention strategies may benefit from targeting and retaining customers with dependents, partners, and longer tenure.

Service Signup Table
The table displaying services that each customer has signed up for provides a comprehensive view of the range of services offered by the company. This information is crucial for understanding the preferences and needs of customers.

Payment Method Chart
The bar chart depicting the total number of customers by payment method reveals that "Electronic Check" stands out as the most popular payment method, with approximately 2,400 customers choosing this option. This highlights the importance of providing a seamless and secure electronic check payment process.

Churn by Contract Type
The pie chart showing churn by contract type offers a clear visualization of customer attrition based on contract types. It's apparent that contract types significantly impact churn behavior. Identifying which contracts have the highest churn rates guide efforts to enhance customer retention strategies.

Page 2
Page 2 of the report provides a comprehensive analysis of various services and their impact on customer churn. This section includes seven visualizations, each shedding light on a specific aspect of service usage and churn behavior. The analysis starts by examining the churn behavior of phone and multiple lines customers. Among phone customers 68.73% remain with the company (No churn) and 31.27% have churned (Yes churn). For multiple lines customers, 66.65% have not churned, while 33.35% have left. Understanding the impact of these services on churn helps in tailoring retention strategies. The next visualizations focus on the relationship between churn and the number of technical support tickets. This analysis allows for insights into how technical support influences customer retention. In the same way the rest of the the charts are made. This section offers a detailed exploration of how various services and support mechanisms correlate with customer churn. Understanding these patterns can guide the development of customer-focused strategies to enhance satisfaction and reduce churn.

Page 3
It focus on providing a comprehensive overview of customer accounts, including financial aspects and payment behaviors. Four key visualizations provide valuable insights into customer account management and its impact on churn. The first chart offers an analysis of average total charges based on contract type. It is evident that the "Two-Year" contract type has the highest average total charges, reaching 3.7k. Understanding these financial dynamics is crucial for pricing and marketing strategies. Another important aspect analyzed is average monthly charges based on contract types. "Month-to-Month" contracts have the highest average monthly charges, indicating a potentially different customer segment. By understanding these dynamics, these can guide decision-making regarding contract types, payment methods, and billing preferences to enhance customer satisfaction and reduce churn rates.