

# Analyzing Customer Churn at a telephone company in Power BI

**Churn:** Customers in the telephone company who discontinue the telephone service.

**Scenario:** Customers in the telecom industry can choose from a variety of service providers and actively switch from one to the next. They can stop doing business with the telephone service. If the company could forecast which customers are likely to leave ahead of time, it could focus customer retention efforts only on these "high risk" clients.

**Goal:** Predict which customers are at high risk of leaving (churn) to reduce customer churn. Ultimately, the telephone company can expand its coverage area and retrieve more customer loyalty.

# Churn

Total of customers

7043

Total of Churned  
Customers

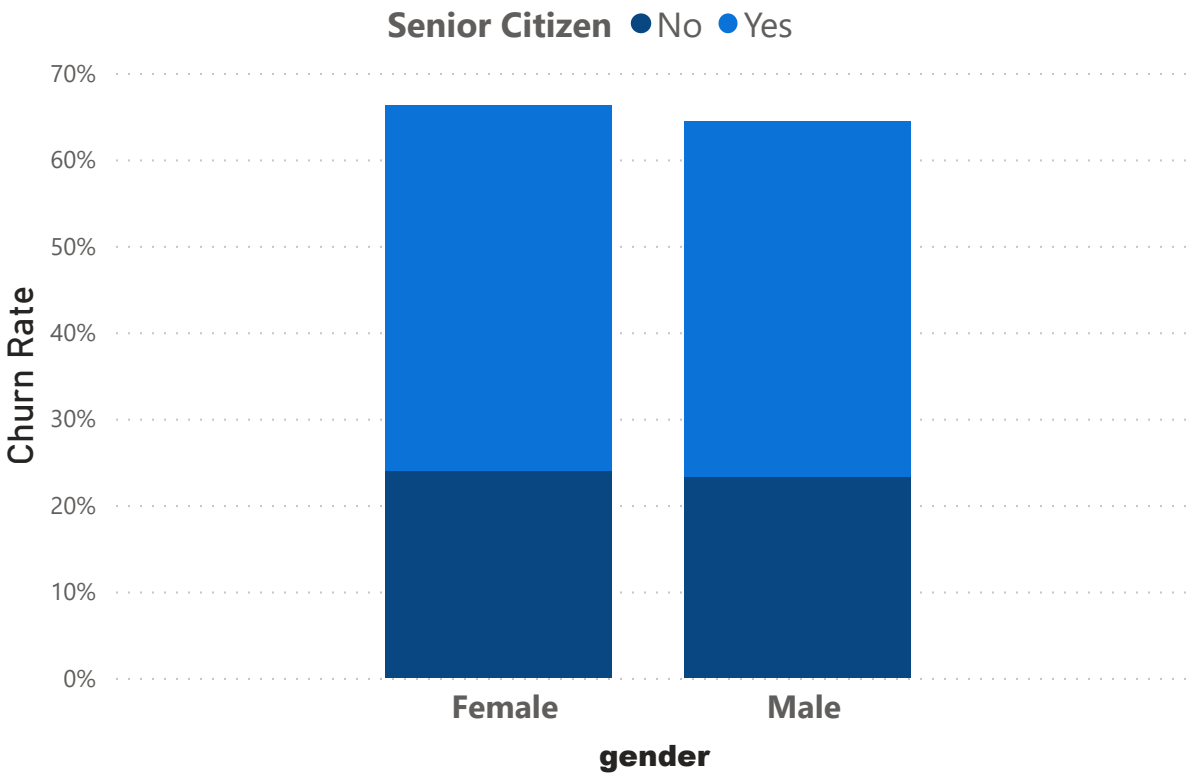
1869

Churn rate

26.54%

Partner	Dependents	Churn Rate
Yes	No	25.41%
Yes	Yes	14.24%
No	No	34.24%
No	Yes	21.33%
Total		26.54%

Churn Rate by gender and Senior Citizen

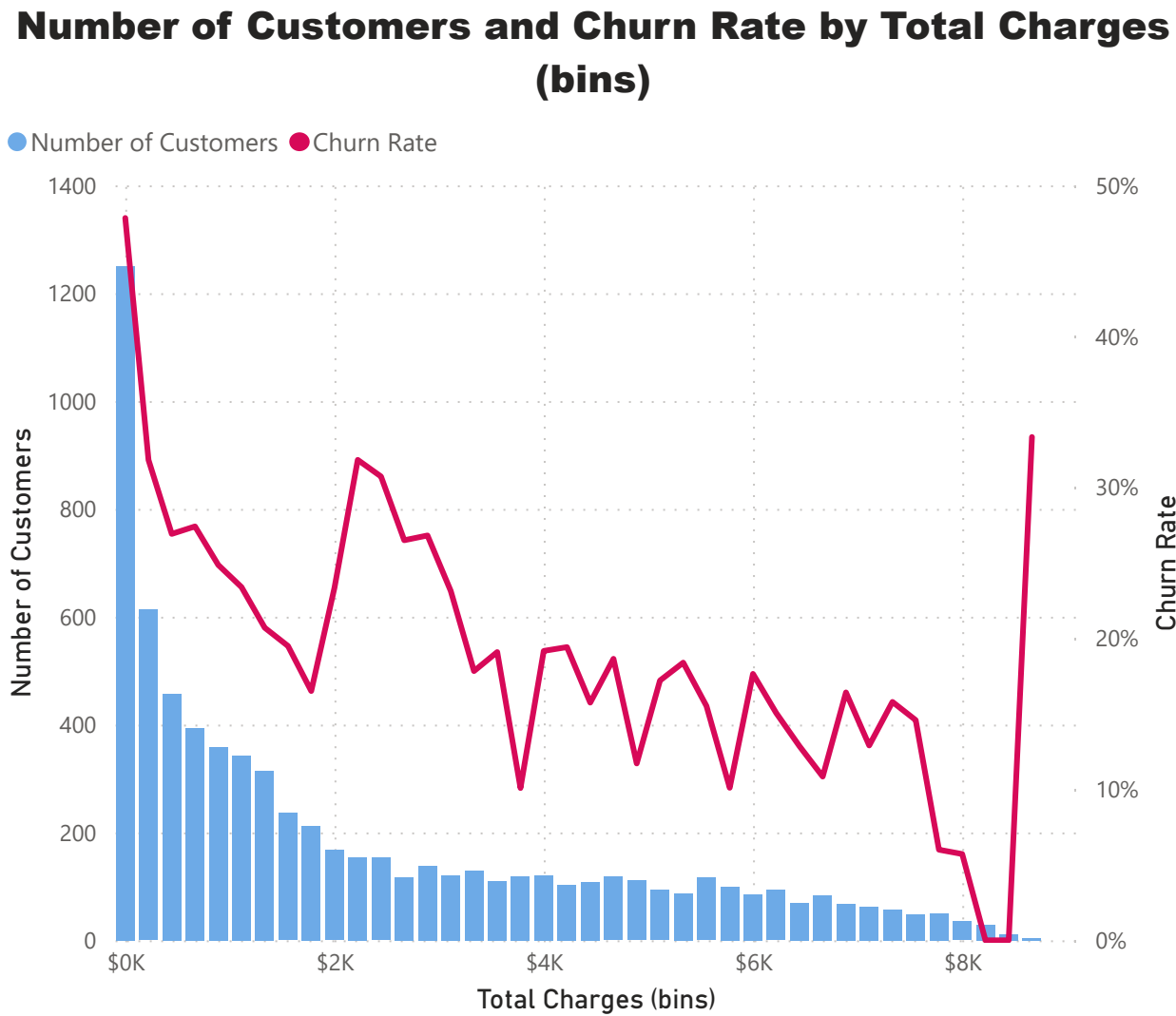
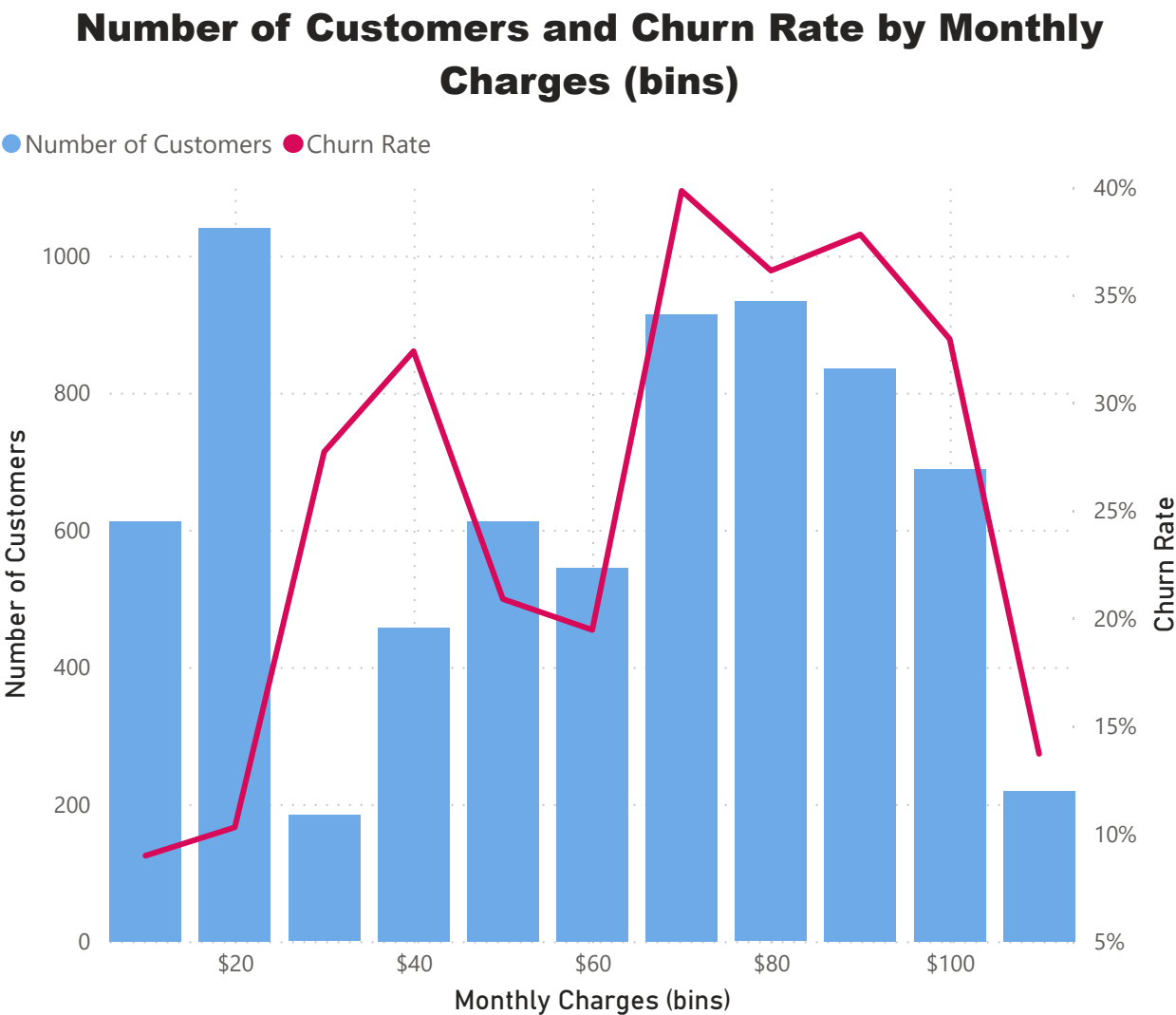


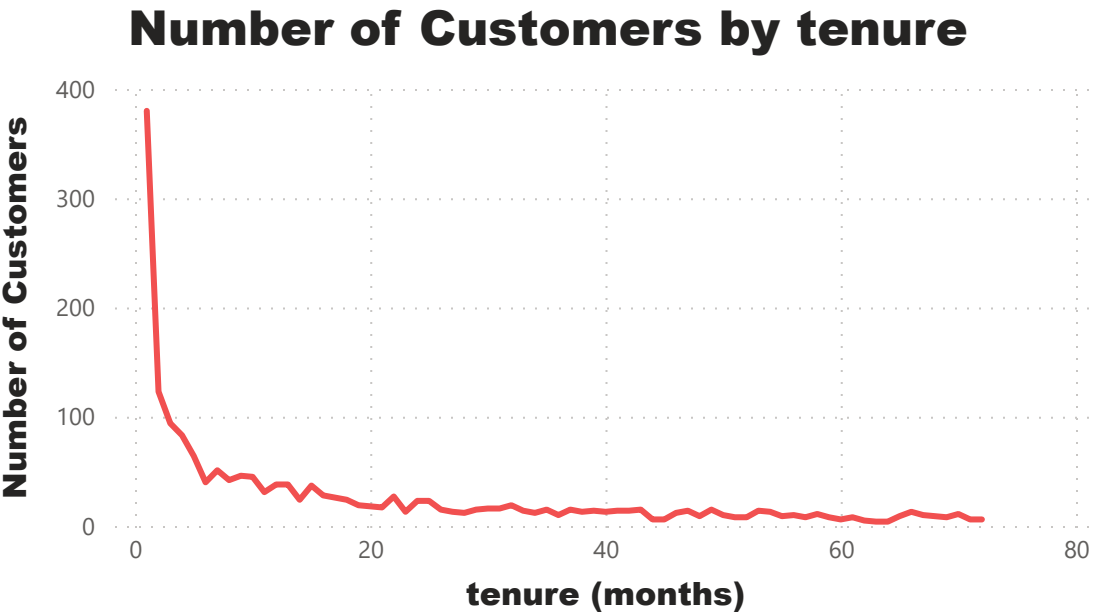
# Charges

Tenure (months) ▼

0

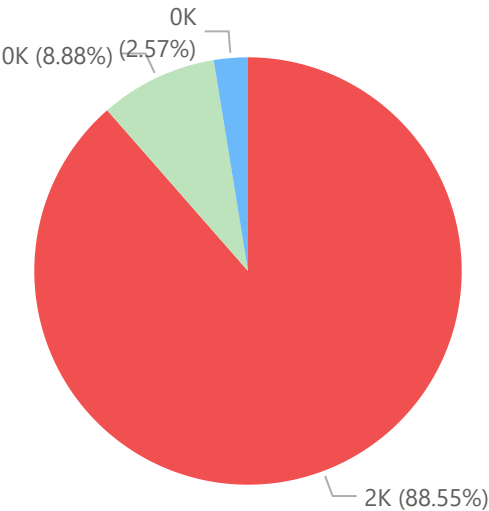
72





## Number of Customers by Contract

Contract ● Month-to-month ● One year ● Two year



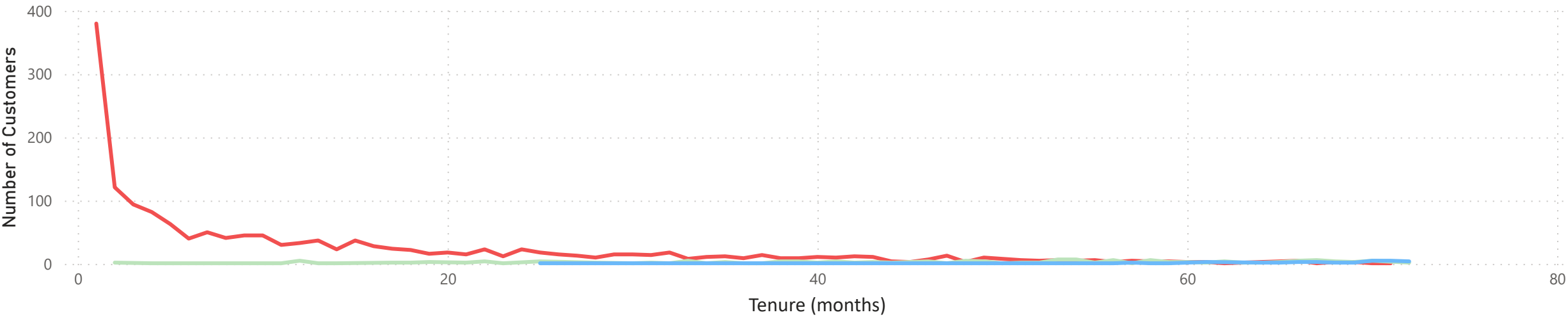
## Churn



- ☒ Yes
- ☐ No

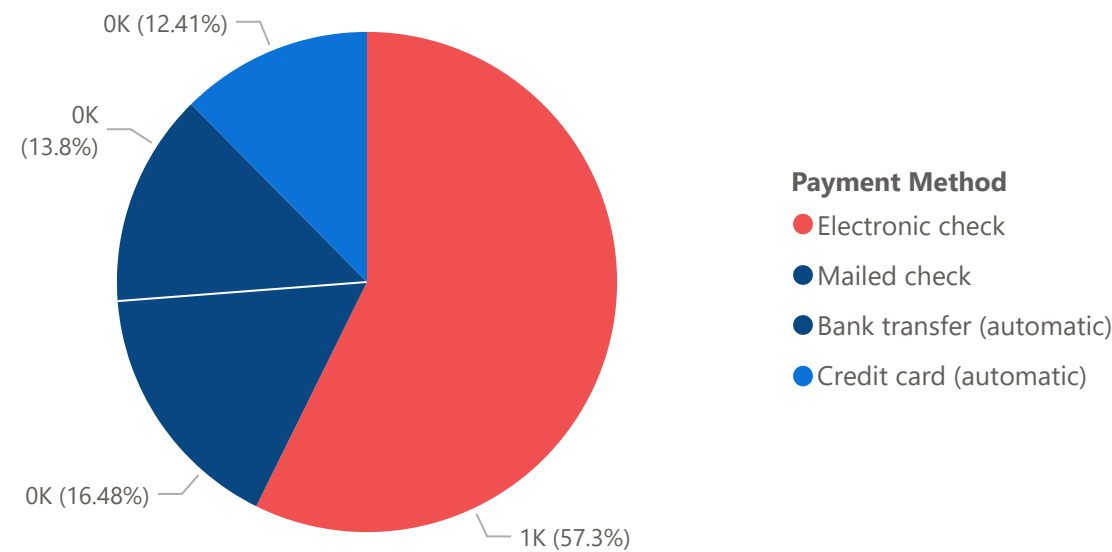
## Number of Customers by tenure and Contract

Contract ● Month-to-month ● One year ● Two year

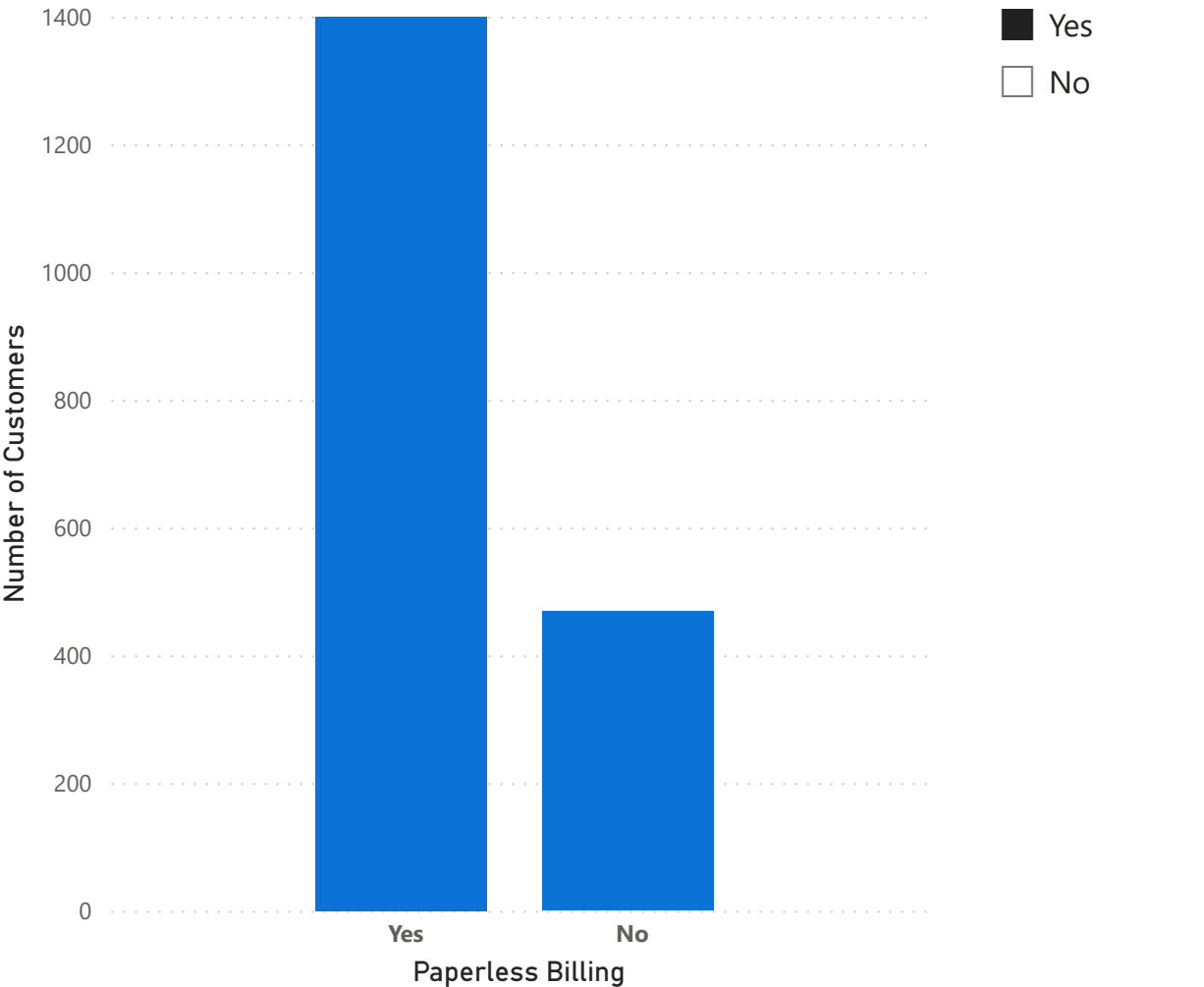


# Payment and Billing

Number of Customers by Payment Method



Number of Customers by Paperless Billing



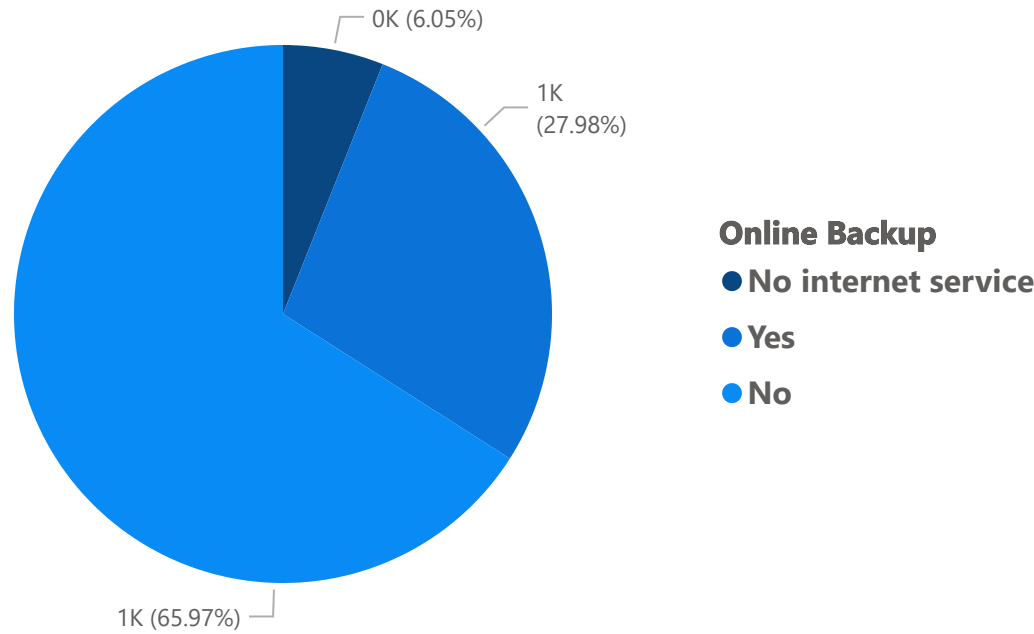
# Services

Churn

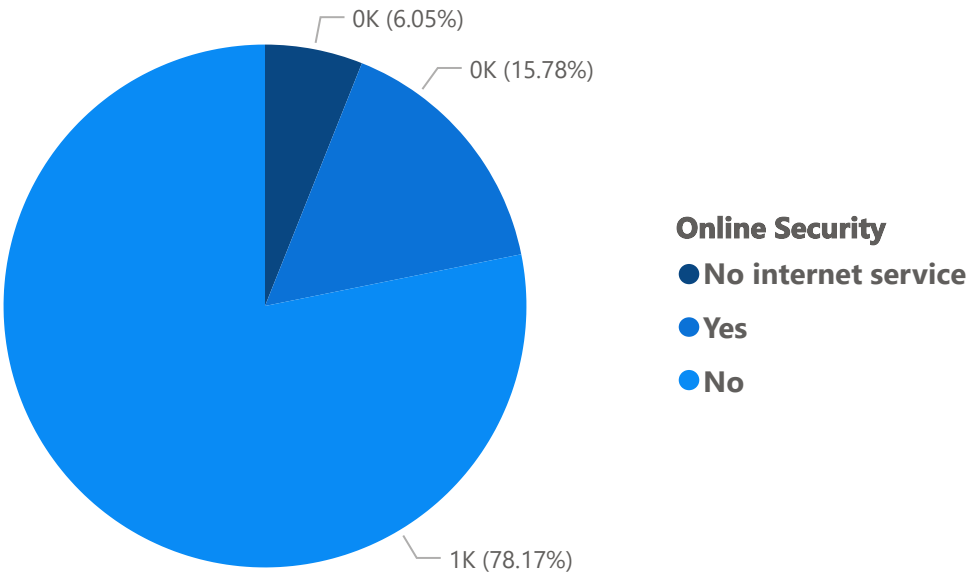
Yes

No

Number of Customers by Online Backup



Number of Customers by Online Security



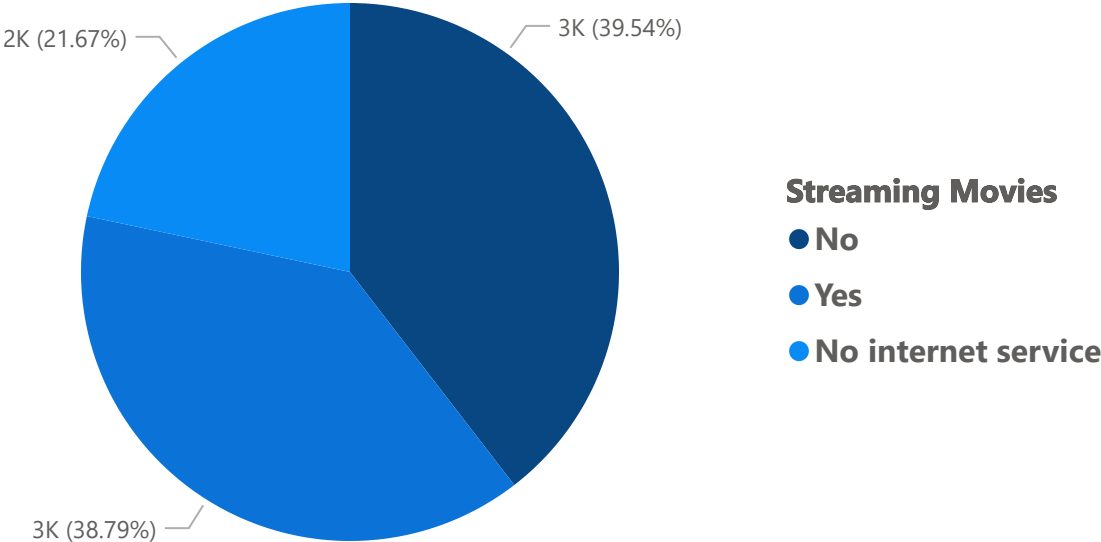
# Streaming Service

Churn 

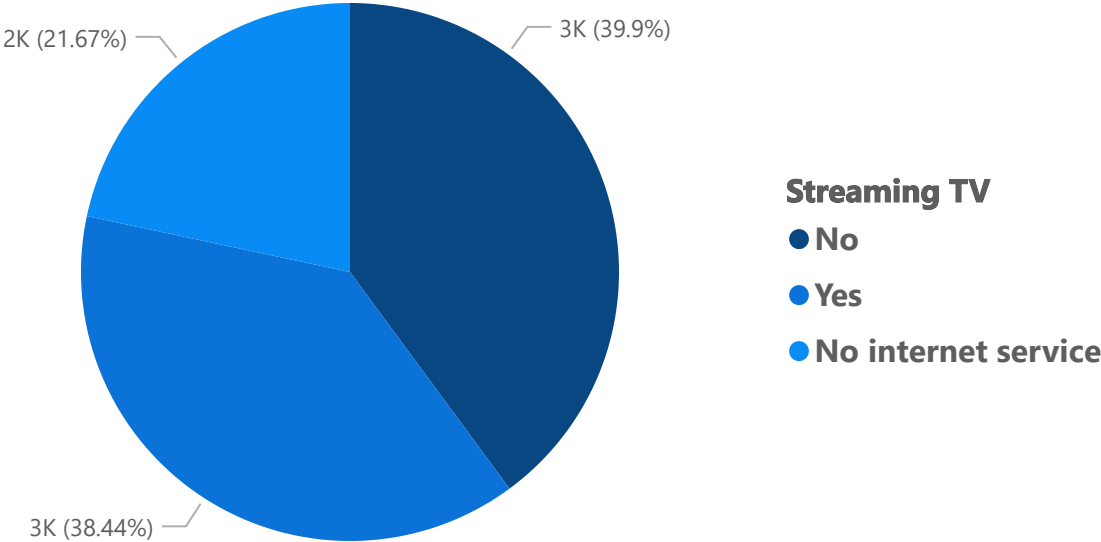
☐ Yes

☐ No

Number of Customers by Streaming Movies



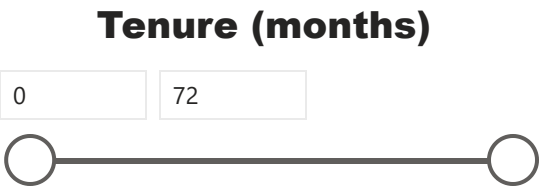
Number of Customers by Streaming TV



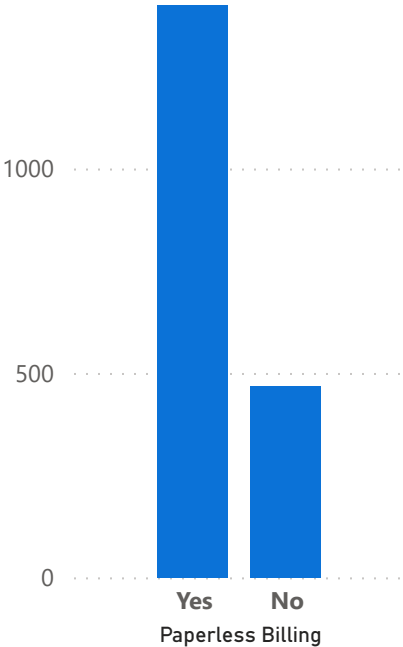
# Overview

The sorter the Tenure and the higher the Monthly Charges are, the higher the churn rate.

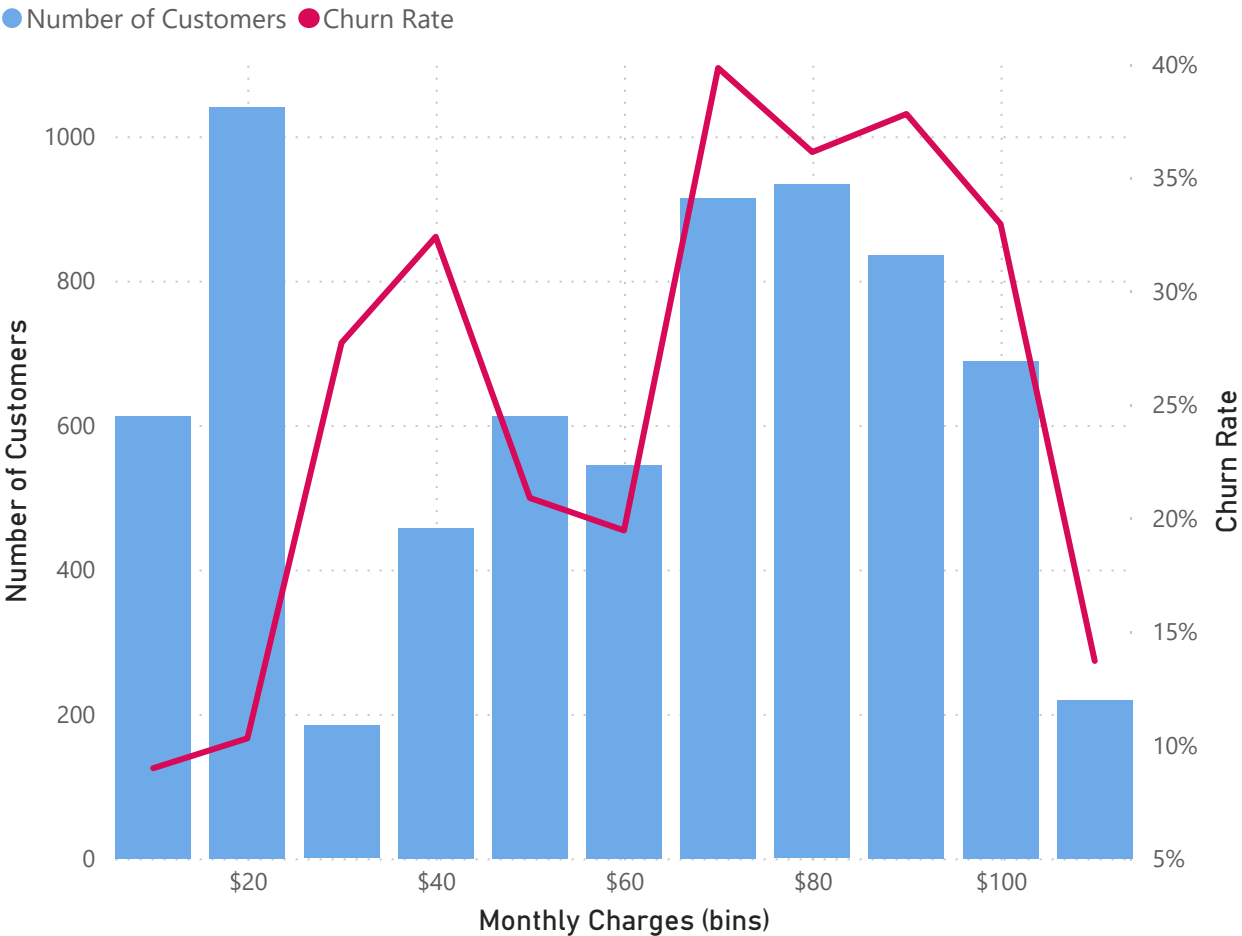
Churn rate  
26.54%



## Churned Customers by Paperless Billing

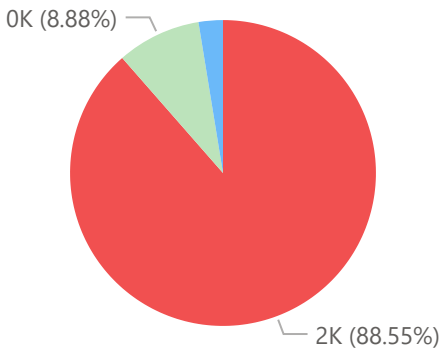


## Number of Customers and Churn Rate by Monthly Charges (bins)

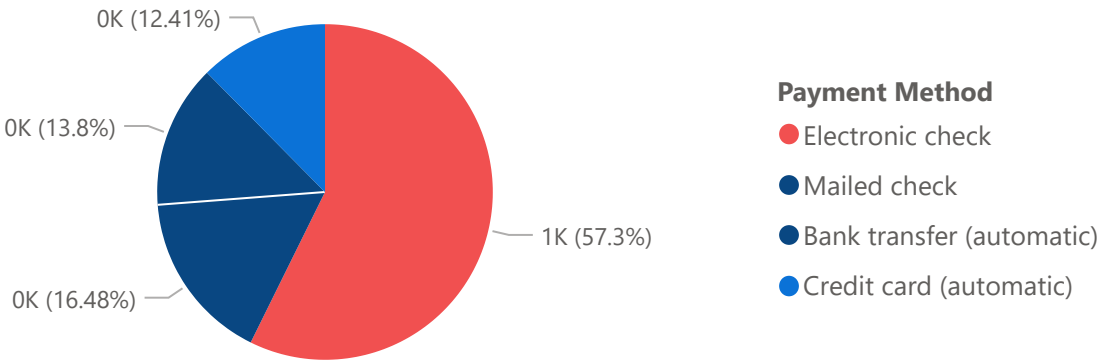


## Churned Customers by Contract

Contract Month-to-month One year Two year



## Churned Customers by Payment Method





# Takeaways

**Churn rate**

**77.27%**

**Tenure  
(Months)**

**6**

**Monthly charges more than:**

**\$100.2**

**Contract Type:**

**Month-to-month**

Customers who initiated telephone service within the last **six months** and are on **month-to-month** contracts with **high monthly charges** tend to leave (Churned rate: 77.27%).

## <Solution>

### **Personalized offers for new customers:**

Provide tailored promotions or discount to new customers.

### **Improved Customer Support for new customers:**

Enhance customer support services with a focus on catering to the needs of new customers.

### **Longer-Term Contracts:**

Encourage customers to switch from month-to-month contracts to longer-term commitments with benefits like reduced monthly charges or additional services.