CUSTOMER CHURN ANALYSIS

A Data-Driven Dashboard on Customer Behavior and Retention Factors

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CUSTOMER CHURN ANALYSIS

7032
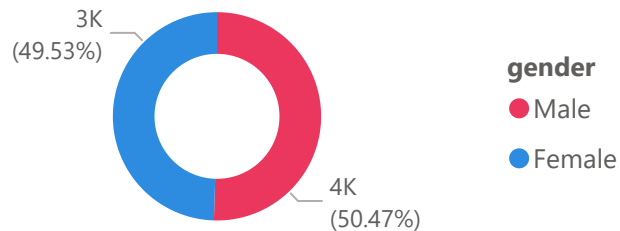Total Customers

1869
Total Churned

26.58
Sum of churn_rate_percent
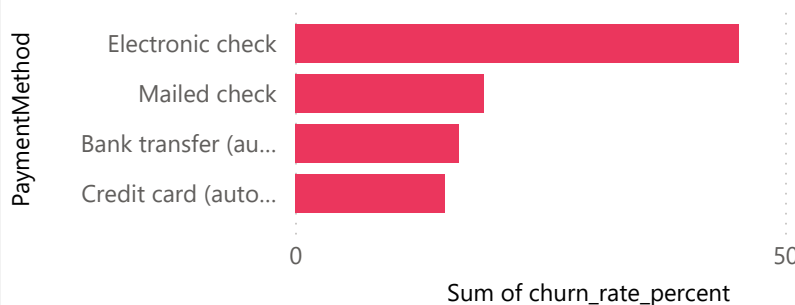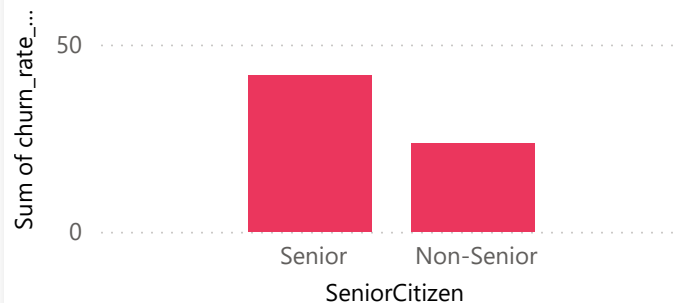
135.75
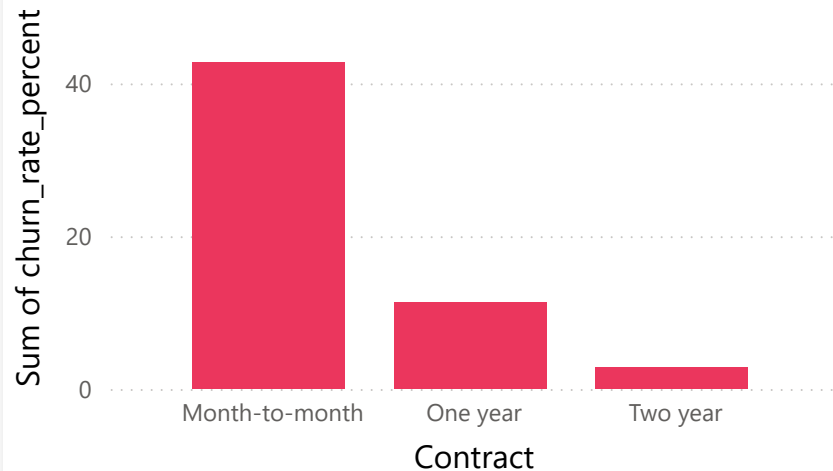Average Monthly Charge

55.63
Average Tenure

Churn by Gender

3K (49.53%)
4K (50.47%)

gender
- Male
- Female

Churn by Payment Method

PaymentMethod	
Electronic check	
Mailed check	
Bank transfer (au...	
Credit card (auto...	

0 — 50
Sum of churn_rate_percent

Churn by Senior Citizen Status

Sum of churn_rate_...

50 — 0

Senior — Non-Senior
SeniorCitizen

Churn by Contract Type

Sum of churn_rate_percent
40 — 20 — 0

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

Churn by Paperless Billing

3K (40.73%)
4K (59.27%)
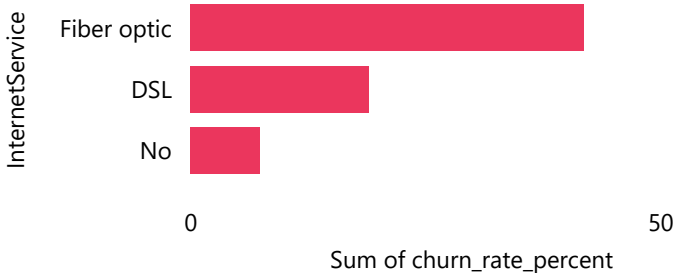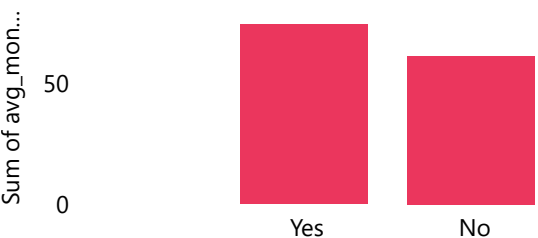
PaperlessBilling
- Yes
- No
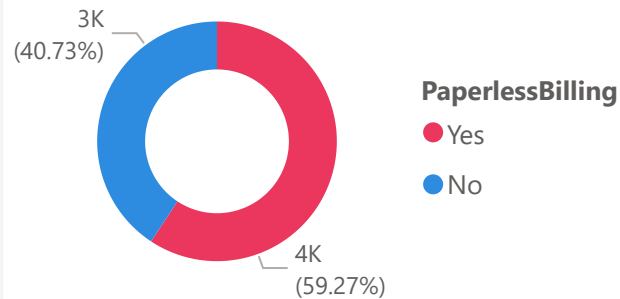
Key Insights :

- **Churn Rate is 26.58%** – over 1 in 4 customers leave the company, indicating retention needs focus.
- **Senior Citizens churn 18% more** than non-seniors (41.68% vs 23.65%), making them a high-risk group.
- **Customers with Month-to-Month contracts** churn at **42.7%**, compared to just 2.85% for 2-year contracts – highlighting contract length as a major retention lever.
- **Electronic Check users** show the **highest churn rate (45.29%)**, while automatic payments (Credit Card/Bank Transfer) see far lower churn.
- **Paperless billing users** churn twice as much (33.59%) as those using mailed bills (16.38%), possibly due to digital communication gaps or less engagement.
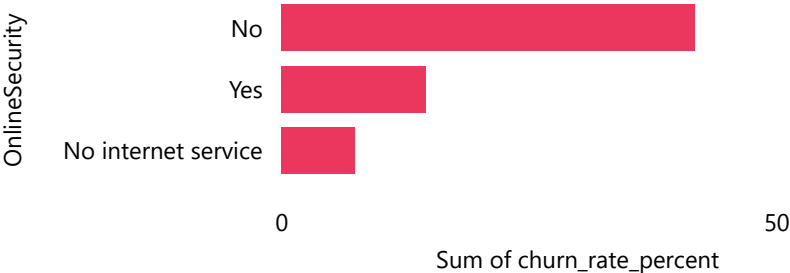
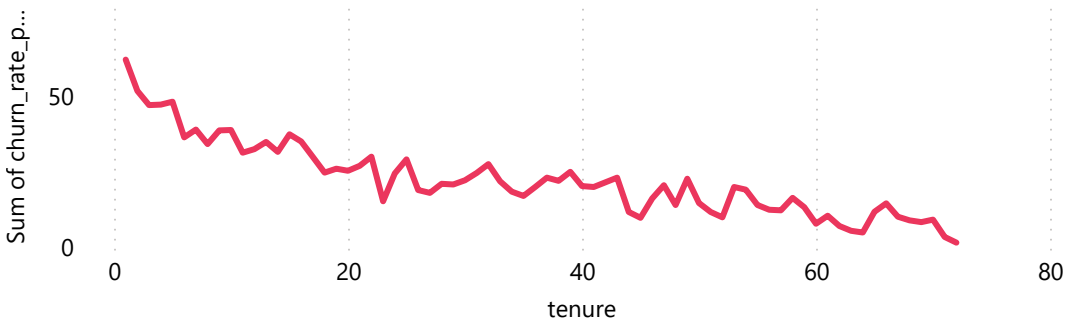# Customer Churn – Behavioral & Service Insights

Churn by Internet Service

InternetService: Fiber optic, DSL, No
X-axis: Sum of churn_rate_percent (0 to 50)

Monthly Charges Distribution by Churn Status

Y-axis: Sum of avg_mon... (0, 50)
X-axis: Yes, No

Churn by Online Security

OnlineSecurity: No, Yes, No internet service
X-axis: Sum of churn_rate_percent (0 to 50)

Churn Rate over Tenure

Y-axis: Sum of churn_rate_p... (0, 50)
X-axis: tenure (0, 20, 40, 60, 80)

Sum of avg_tenure

36.00
55.63
0.00 — 72.00
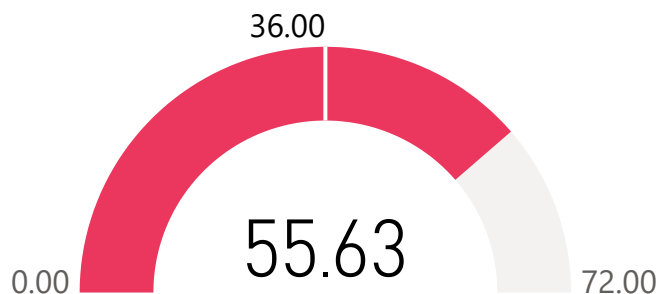
Key Insights:

- **Fiber Optic Internet users** churn at a high rate (41.89%) — possibly due to performance or price sensitivity compared to DSL (19%).
- **Lack of Online Security services** strongly correlates with churn: customers without it churn at **41.78%**, versus just 14.64% with it.
- **Tenure analysis** shows most churn occurs in the **first 6 months** — early onboarding experience may be crucial.
- **Churned customers pay more** on average monthly charges (₹74.44 vs ₹61.31), indicating possible dissatisfaction with value for money.
- Overall, churned customers have lower total lifetime value (₹1531.8 total charges vs ₹2555.3 for retained), confirming the financial impact of poor retention.

Contract	InternetService	PaymentMethod	PaperlessBilling
All	All	All	All

Gender	SeniorStatus
All	All