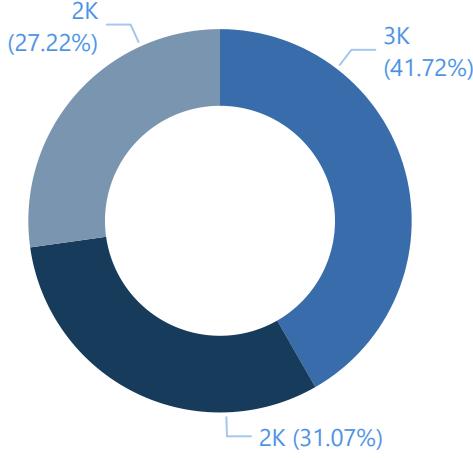


TELCO CUSTOMER SEGMENTATION

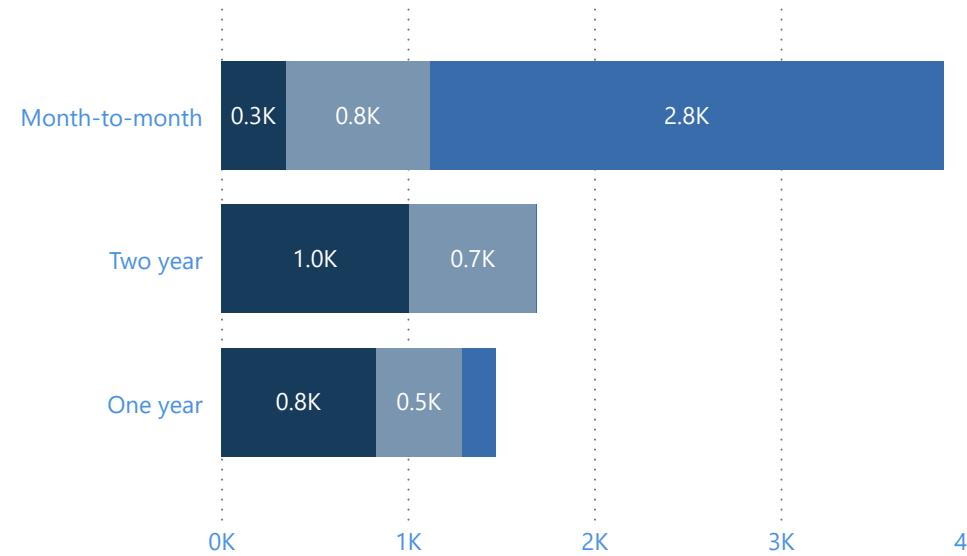
EXECUTIVE SUMMARY

Total Customers	Total Revenue	Overall Churn Rate	Avg Monthly Charges
7043	\$16.07M	26.54%	\$64.76

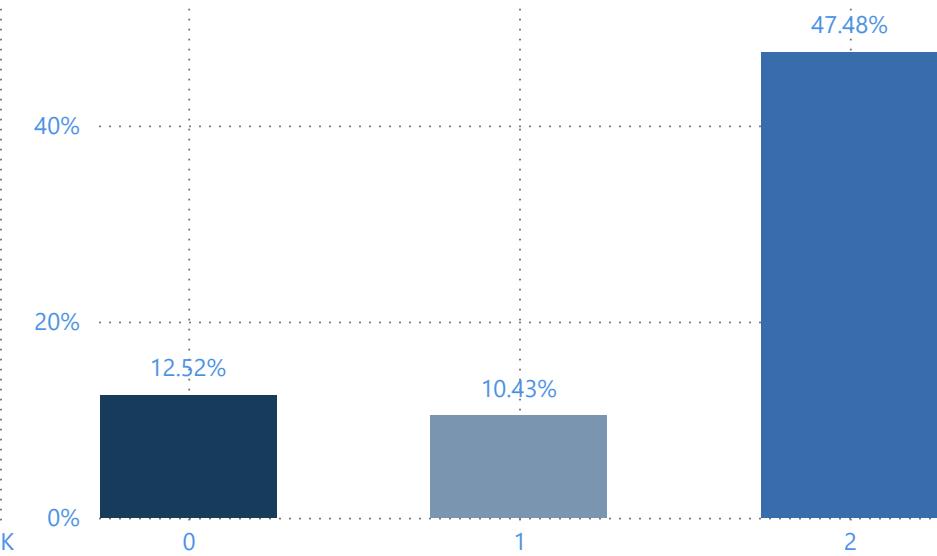
Customer Size Distribution



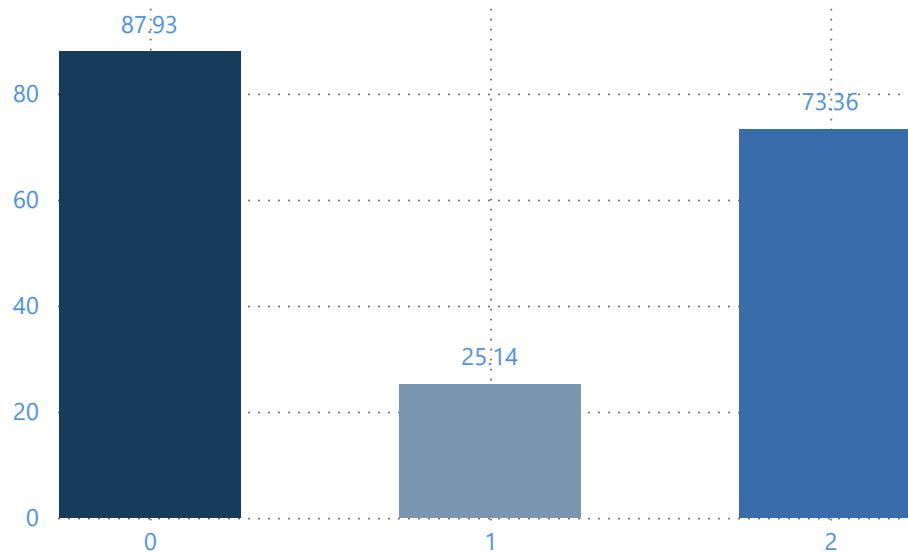
Contract Type Distribution by Cluster



Churn Rate by Cluster

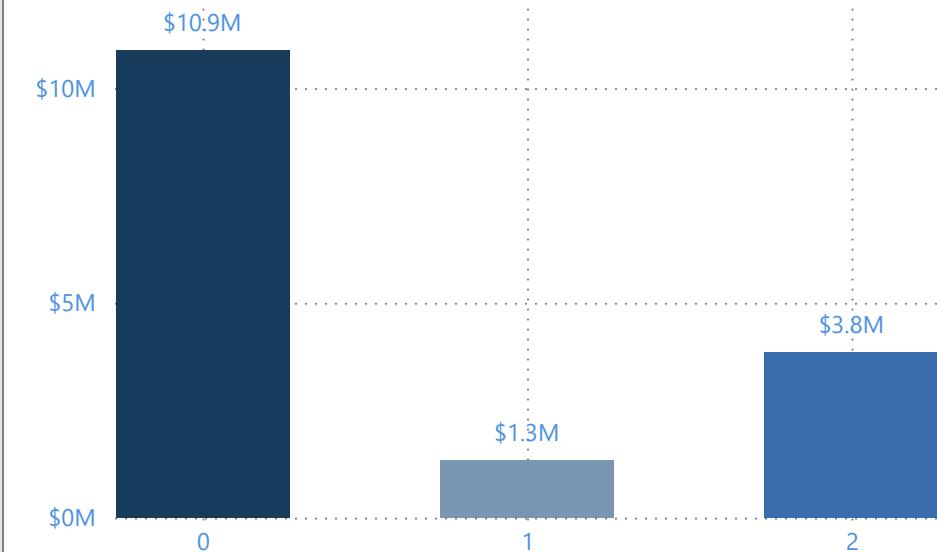


Average monthly charges by cluster



1. Cluster 2 shows the highest churn, driven by month-to-month contracts.
2. Cluster 0 generates the highest revenue and has the low churn.
3. Fiber optic customers typically pay more but show higher churn risk.
4. Contract structure strongly influences customer loyalty and revenue.

Total Revenue by cluster



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Cluster

All

Contract

All

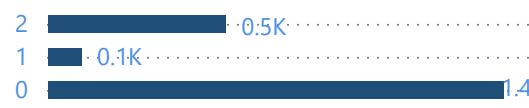
Average Tenure (Months)	Avg Lifetime Value (LTV)
32	550.79
Avg Monthly Charges	Avg Services Used
64.76	2.04
Senior Citizen %	Male Customers %
16.21%	50.48%
Customers with Partner	Customers with Dependents
48.30%	29.96%

1. Fiber optic customers contribute higher revenue but display increased churn risk.
2. Electronic check payment method is strongly associated with churn across clusters.
3. Customers using auto-pay options (credit card or bank transfer) show better retention.
4. Payment behavior is a key lever for churn reduction strategies.

Online Backup Adoption by Cluster



Tech Support Usage by Cluster



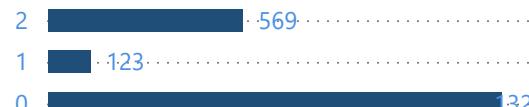
Streaming TV Usage by Cluster



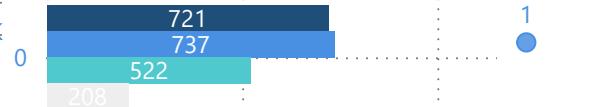
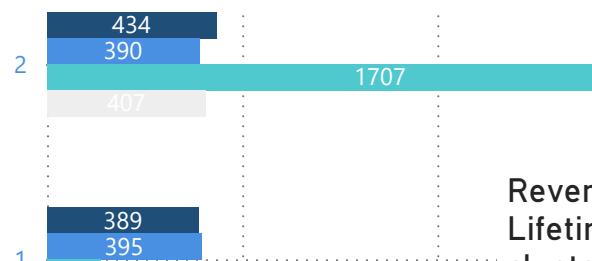
Streaming Movies Usage by Cluster



Online Security Adoption by Cluster



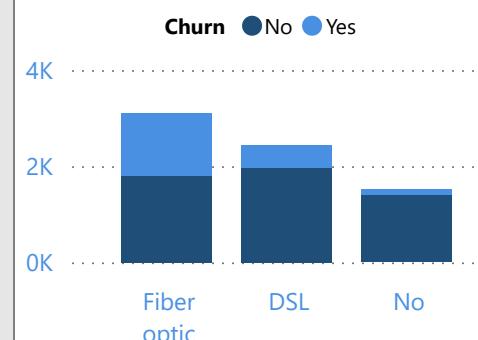
Payment Method Preference by Cluster



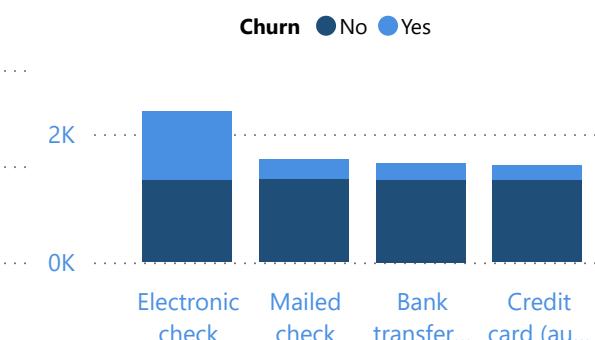
PaymentMethod ● Bank transf... ● Credit card ... ● Electronic ... ● Mailed che...

1. Cluster 0 shows high adoption across all services, indicating strong engagement and loyalty.
2. Cluster 1 selectively uses streaming services but avoids security add-ons, increasing churn risk.
3. Cluster 2 uses minimal services, limiting revenue growth but showing lower churn sensitivity.

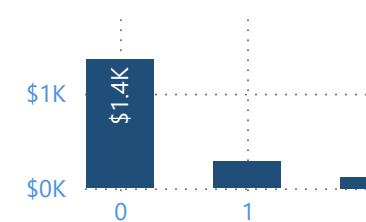
Churn by Internet Service Type



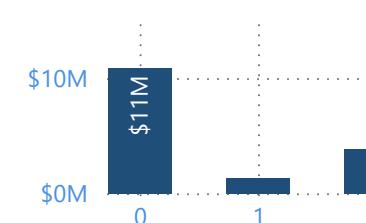
Churn Distribution by Payment Method



Average Lifetime Value (LTV) by Cluster



Total Revenue Contribution by Cluster

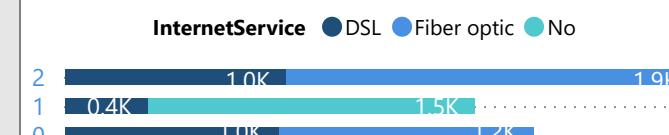


1. Highest revenue and lifetime value contribution
2. Long-term contracts with high service adoption
3. Lowest churn rate across all clusters
4. Business Action: Focus on loyalty rewards and premium upsell (**Cluster 0**)

1. Moderate to high monthly charges but short tenure
2. Dominated by month-to-month contracts
3. Highest churn risk despite strong revenue potential
4. Business Action: Introduce contract lock-in incentives and payment nudges (**Cluster 1**)

1. Lowest monthly charges and limited service usage
2. Moderate tenure with low churn risk
3. Minimal revenue growth opportunity
4. Business Action: Maintain low-cost service model and basic bundles (**Cluster 2**)

Internet Service Distribution by Cluster



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Total Churned Customers

1869

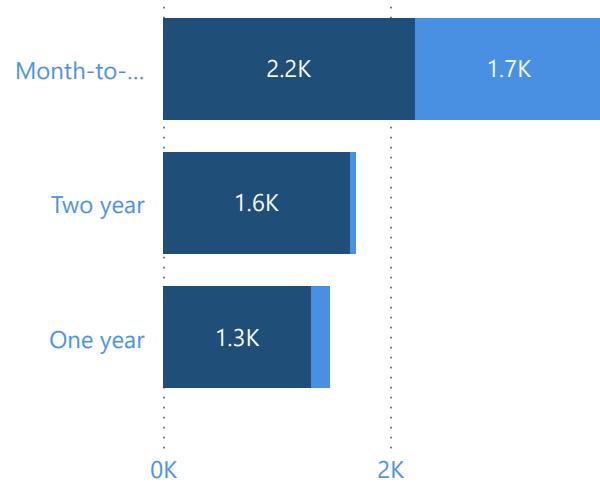
Overall Churn Rate

26.54%

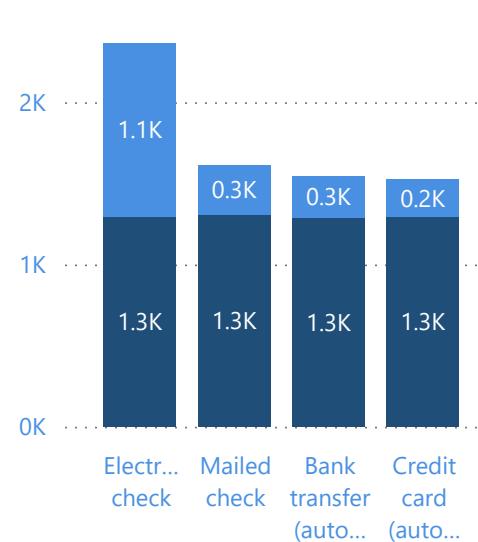
Revenue at Risk (LTV)

\$3,90,235.7

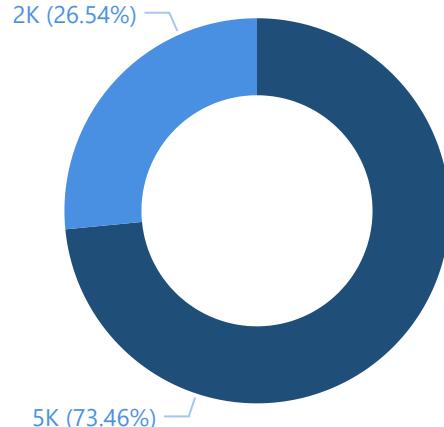
Churn by Contract Type



Churn by Payment Method



Churn Distribution



Churn
● No
● Yes

1. Month-to-month contracts are the largest contributor to churn.
2. High-paying customers with short tenure pose maximum revenue risk.
3. Electronic check payment method is a strong churn indicator.
4. Priority action: migrate high-risk customers to long-term contracts and auto-pay.

Monthly Charges vs Revenue Loss



High-Risk Revenue Loss Table

Count of customer ID	Cluster	Sum of tenure	Sum of MonthlyCharges	Sum of LTV	Churn
274	0	13871	26,711.60	2,49,025.90	Yes
1395	2	18171	1,06,692.15	1,26,777.20	Yes
200	1	1561	5,727.10	14,432.60	Yes
1869	33603		1,39,130.85	3,90,235.70	

Churn Hotspots by Cluster & Payment Method

Cluster	Bank transfer (automatic)	Credit card (automatic)	Electronic check	Mailed check	Total
0	77	68	115	14	274
1	28	19	19	134	200
2	153	145	937	160	1395
Total	258	232	1071	308	1869