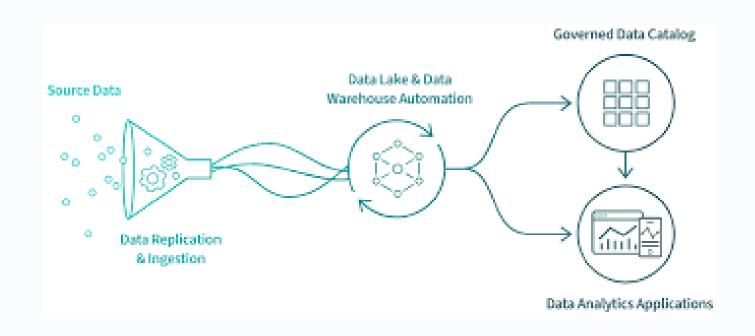
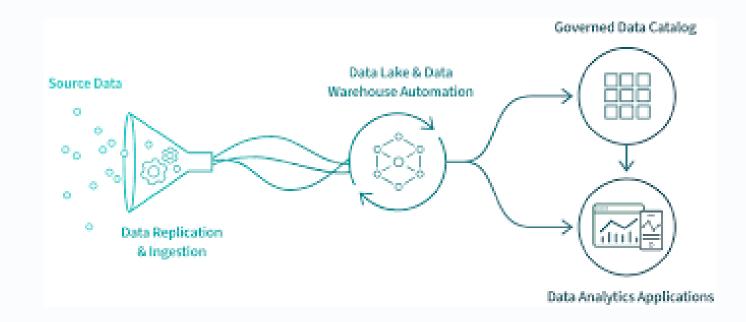
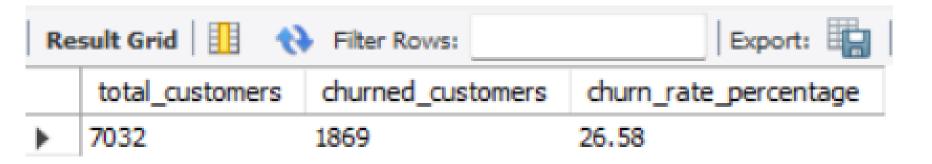
KEY ANALYTICAL INSIGHTS FROM DATA



Presented by Ronit Singha Roy





Key Insight

The company has a significant problem with customer retention. The overall churn rate of 26.58% means that approximately one in every four customers is leaving.

• Business Implication

This figure establishes the magnitude of the retention challenge. All subsequent analysis contract, services, tenure) must be viewed in the context of this high baseline, with the ultimate goal being to identify levers that can pull this rate down significantly.

	Contract	tenure_category	total_customers	churned	churn_rate
•	Month-to-month	New (<1 year)	1908	991	51.94
	Month-to-month	Mid-term (1-3 years)	1309	469	35.83
	Month-to-month	Loyal (>3 years)	658	195	29.64
	One year	Loyal (>3 years)	902	117	12.97
	One year	Mid-term (1-3 years)	469	41	8.74
	One year	New (<1 year)	101	8	7.92
	Two year	Loyal (>3 years)	1441	46	3.19
	Two year	Mid-term (1-3 years)	195	2	1.03
	Two year	New (<1 year)	49	0	0.00

InternetService	total_customers	churned	churn_rate
Fiber optic	3096	1297	41.89
DSL	2416	459	19.00
No	1520	113	7.43

• Service Quality and Value-Add

- Fiber Optic Fails Retention: Customers with Fiber Optic internet service churn at 41.89%, more than double the rate of DSL customers (19.00%) and five times the rate of customers with No Internet (7.43%). This strongly suggests a service quality or reliability issue with the Fiber Optic offering.
- Security and Support are Key: The combination of features is critical:
- The highest-churning service segment is Fiber Optic with No Online Security and No Tech Support, churning at a massive 55.01%.
- Conversely, having 6 Total Extra Services reduces the churn rate to just 7.10%, proving that service bundling significantly increases customer 'stickiness.'
- Inverse Relationship with Services: There is a clear, inverse relationship between the number of services and churn: customers with zero extra services have the highest churn rate at 52.24%.

The Biggest Predictors of Churn (Contract & Tenure)

- Contract Commitment is Paramount: The single largest factor influencing churn is the customer's contract type.
 - Month-to-month contracts have an extremely high churn rate of 42.71%.
 - o In sharp contrast, One-year contracts churn at 11.28%, and Two-year contracts churn at only 2.85%.
- The Early Exit Crisis: Churned customers have an average tenure of only 17.98 months, significantly lower than the 37.65 months for active customers. This confirms that customers who leave do so early in their relationship.
- The Highest Risk Segment: The most vulnerable group is New customers (tenure < 1 year) on a Month-to-month contract, with a churn rate of 51.94%.

PaymentMethod	total_customers	churned	churn_rate
Electronic check	2365	1071	45.29
Mailed check	1604	308	19.20
Bank transfer (automatic)	1542	258	16.73
Credit card (automatic)	1521	232	15.25

Financial and Behavioral Predictors

- Electronic Check is a Warning Sign: Customers using Electronic Check as a payment method churn at 45.29%, more than double the churn rate of Mailed Check (19.20%) and three times the rate of automatic payment methods (Bank Transfer at 16.73% and Credit Card at 15.25%). This method may indicate a less committed or more frustrated customer.
- High Charges, High Churn: Churn rate correlates directly with monthly spending:
 - High-Charge customers (>\$70) churn at 35.38%.
 - Low-Charge customers (<\$35) churn at only 10.90%.
 - This suggests higher-paying customers either have lower satisfaction or are more sensitive to the value they receive for their money.
- The Individual Risk: Customers who have No Partner and No Dependents are the most likely to churn (34.24%). Customers with both a Partner and Dependents are the most stable, churning at only 14.31%. Individuals are more flexible and willing to switch providers.

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Value_Segment	Risk_Segment	total_customers	churned	churn_rate
Low-Value	High-Risk (New)	1470	784	53.33
Low-Value	Low-Risk (Established)	2918	610	20.90
High-Value	Low-Risk (Established)	2644	475	17.97

Key Insight

The analysis clearly identifies the Low-Value, High-Risk (New) segment as the absolute highest priority for churn reduction, with a staggering churn rate of 53.33%. This segment comprises customers with low *Total Charges* (meaning low total spend/value so far) and short *tenure* (≤6 months).

Recommendation

- Triage and Fix: While this group is currently "low-value," their high volume (1470) and high churn rate mean they represent the greatest future revenue leak. Retention efforts should focus on fixing the poor *initial experience* that causes them to leave so quickly.
- The Missing Segment: Note that the High-Value, High-Risk (New) segment is missing from the top results, likely because this group has a lower overall count. The next query, Query 13, directly targets this group's characteristics.

Highest-Priority Retention Target List

Query: Identifying High-Value (High Monthly Charges), High-Risk (Month-to-month, No Security, No Tech Support) customers who haven't churned yet.

Key Insight

This list (truncated to 16 rows in the image) provides the ultimate "Fire Alarm" list for the retention team. These customers:

- 1. Are currently active (Churn = 'No' is implied).
- 2. Are paying high monthly fees (all above \$\$\$104.35).
- 3. Are on a flexible, high-risk Month-to-month contract.
- 4. Lack key retention features (No Online Security & No Tech Support).

The customer with the highest monthly charge on the list is 3761-FLYZI at \$\$\$108.80.

Recommendation

- Immediate Outreach: This list should be handed directly to a specialized retention team for immediate, high-touch, personalized outreach.
- Value-Added Offer: The call should not be a discount offer, but a proactive value-add. For example: "As a valued customer paying over \$\$\$100/month, we'd like to thank you by offering Tech Support and Online Security free for 12 months to ensure you get the most out of your premium service." This addresses their high-risk attributes without requiring a contract renewal first.



Based on these findings, the company should immediately focus its retention budget and efforts on the following areas:

1. Contract & Early Life Intervention (Highest Impact)

Mandatory Contract Incentives: Prioritize converting all Month-to-month customers to 1- or 2-year contracts, focusing heavily on new customers (< 1 year tenure). Offer substantial discounts or a free premium service (like Tech Support) to secure the commitment.

Improve Onboarding: The high average churn tenure (17.98 months) points to early frustration. Implement a high-touch, 3-month post-signup follow-up program to ensure service satisfaction.

2. Fiber Optic and Value Bundling Fixes

Fiber Quality Assurance: Immediately dedicate resources to diagnose and resolve the underlying Fiber Optic service or support issues driving the \$41.89\%\$ churn rate.

Integrate Security/Support: Make Online Security and Tech Support mandatory or heavily incentivized (even free for a period) for all Fiber Optic customers, especially those on a Month-to-month plan, to raise the number of extra services and "stickiness."

3. High-Risk Customer Targeting

Target Electronic Check Users: Investigate why customers who pay via Electronic Check are so unhappy. A simple change in the payment process or a special outreach to this group could significantly reduce the 45.29% churn.

Retention Focus on Individuals: Create a specialized loyalty program for customers with No Partner, No Dependents—perhaps a referral bonus or flexible upgrade paths—to make them feel valued and less inclined to switch.

Thankyou