

# Customer Retention and Risk Analysis

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*Leveraging Data Insights to Drive Business Growth*

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# Executive Summary

This Report presents a comprehensive analysis of customer retention and risk analysis for Aerius Telecom.

The study aimed to identify key factors influencing customer churn, and provide actionable insights to inform revenue growth and strategic retention decisions

## Key Questions

- What are the Primary Factors contributing to customer churn
- Which Customer segments are at Risk
- What new strategies can we implement to replace churn and improve customer loyalty



# Introduction

In today's competitive business landscape, customer retention is a critical component of any successful growth strategy. Acquiring new customers can be costly, more expensive than retaining existing ones.

Furthermore, loyal customers not only drive revenue growth but also provide valuable feedback, referrals and advocacy.

Despite its importance, customer retention remains a significant challenge for many organizations. With increasing competition, evolving customer expectations, and rapidly changing markets conditions businesses must proactively adapt to retain their customer base

# Dataset

Customer Retention.xlsx - Excel

Search

BE

File Home Insert Draw Page Layout Formulas Data Review View Developer Help Power Pivot Table Design

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F1 tenure

	A	B	C	D	E	F	G	H	I	J	K	L	
1	customerID	gender	SeniorCitizen	Partner	Dependents	tenure	PhoneService	MultipleLines	InternetService	OnlineSecurity	OnlineBackup	DeviceProtection	TechSup
2	7590-VHVEG	Female	0	Yes	No	1	No	No phone service	DSL	No	Yes	No	No
3	5575-GNVDE	Male	0	No	No	34	Yes	No	DSL	Yes	No	Yes	No
4	3668-QPYBK	Male	0	No	No	2	Yes	No	DSL	Yes	Yes	No	No
5	7795-CFOCW	Male	0	No	No	45	No	No phone service	DSL	Yes	No	Yes	Yes
6	9237-HQITU	Female	0	No	No	2	Yes	No	Fiber optic	No	No	No	No
7	9305-CDSKC	Female	0	No	No	8	Yes	Yes	Fiber optic	No	No	Yes	No
8	1452-KIOVK	Male	0	No	Yes	22	Yes	Yes	Fiber optic	No	Yes	No	No
9	6713-OKOMC	Female	0	No	No	10	No	No phone service	DSL	Yes	No	No	No
10	7892-POOKP	Female	0	Yes	No	28	Yes	Yes	Fiber optic	No	No	Yes	Yes
11	6388-TABGU	Male	0	No	Yes	62	Yes	No	DSL	Yes	Yes	No	No
12	9763-GRSKD	Male	0	Yes	Yes	13	Yes	No	DSL	Yes	No	No	No
13	7469-LKBCI	Male	0	No	No	16	Yes	No	No	No internet service	No internet service	No internet service	No internet service
14	8091-TTVAX	Male	0	Yes	No	58	Yes	Yes	Fiber optic	No	No	Yes	No
15	0280-XJGEX	Male	0	No	No	49	Yes	Yes	Fiber optic	No	Yes	Yes	No
16	5129-JLPIS	Male	0	No	No	25	Yes	No	Fiber optic	Yes	No	Yes	Yes
17	3655-SNQYZ	Female	0	Yes	Yes	69	Yes	Yes	Fiber optic	Yes	Yes	Yes	Yes
18	8191-XWSZG	Female	0	No	No	52	Yes	No	No	No internet service	No internet service	No internet service	No internet service
19	9959-WOFKT	Male	0	No	Yes	71	Yes	Yes	Fiber optic	Yes	No	Yes	No
20	4190-MFLUW	Female	0	Yes	Yes	10	Yes	No	DSL	No	No	Yes	Yes
21	4183-MYFRB	Female	0	No	No	21	Yes	No	Fiber optic	No	Yes	Yes	No
22	8779-QRDMV	Male	1	No	No	1	No	No phone service	DSL	No	No	Yes	No
23	1680-VDCWW	Male	0	Yes	No	12	Yes	No	No	No internet service	No internet service	No internet service	No internet service
24	1066-JKSGK	Male	0	No	No	1	Yes	No	No	No internet service	No internet service	No internet service	No internet service
25	3638-WEABW	Female	0	Yes	No	58	Yes	Yes	DSL	No	Yes	No	Yes
26	6322-HRPFA	Male	0	Yes	Yes	49	Yes	No	DSL	Yes	Yes	No	Yes
27	6865-JZNKO	Female	0	No	No	30	Yes	No	DSL	Yes	Yes	No	No
28	6467-CHFZW	Male	0	Yes	Yes	47	Yes	Yes	Fiber optic	No	Yes	No	No

01 Churn-Dataset

PivotTable

Welcome

ChurnDashbord

CustomerRiskAnalysis

+

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Ready Accessibility: Investigate

Average: 32.37114866 Count: 7044 Sum: 227990

-

+

100%





✕ ✓  $f_x$



Two year

# Customer Risk Analysis

\$16,056,169

Yearly Charges

• DSL	2421	34.37%
• Fiber optic	3096	43.96%
• No	1526	21.67%

Service Type	Value
DSL	\$140,665
Fiber optic	\$283,284
No	\$32,167

Access Method	No (%)	Yes (%)
DSL	19%	81%
Fiber optic	42%	58%
No	7%	93%

628	1788
Fiber Optic	
Admin Ticket	TechTicket
205	383
DSL	

Time Period	Number of People
Month-to-month	3875
One year	1473
Two years	1695

<6 Years

Duration of Illness	Number of Cases
<1 Year	1070
<2 Years	738
<3 Years	683
<4 Years	602
<5 Years	697
<6 Years	1384

Payment Method	No (%)	Yes (%)
Bank transfer (automatic)	83%	17%
Credit card (automatic)	85%	15%
Electronic check	55%	45%
Mailed check	81%	19%

Payment Method	Count
Bank transfer (automatic)	664
Credit card (automatic)	654
Electronic check	739
Mailed check	690
Average	517

Duration	Percentage
Month-to-month	57%
One year	89%
Two year	97%

# Key Metrics Overview

**\$16.06M**

**Yearly Charges**

Total revenue  
generated  
annually

**7,403**

**Total Customers**

Represents the  
total number of  
customers served

**\$456,177**

**Monthly Charges**

Total revenue  
generated  
monthly

**3,632**

**Admin Tickets**

Number of  
administrative  
issues reported

**2955**

**Technical Tickets**

Number of  
technical issues  
reported

**26.54%**

**Churn Rate**

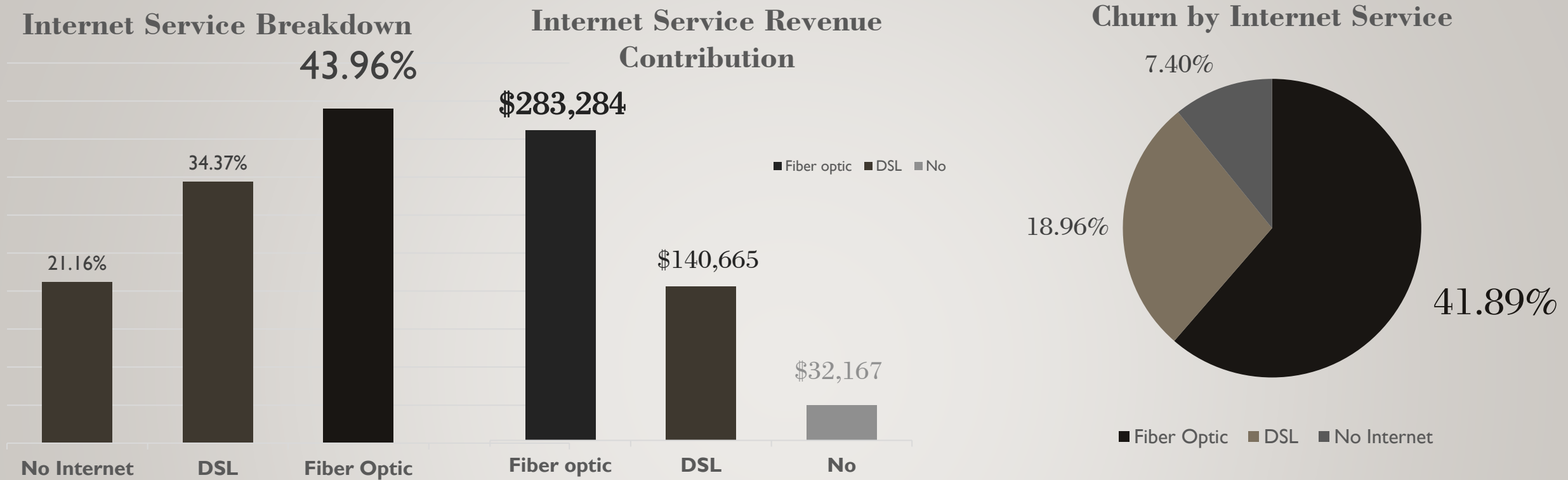
Indicates the  
percentage of  
customers lost

We have over 7,000 customers, with a churn rate of **26.54%**. Revenue is significant at **\$16.06 million** annually,

but **churn poses** a **major risk to long-term revenue growth**.

These numbers set the foundation for deeper analysis into churn and customer behavior.

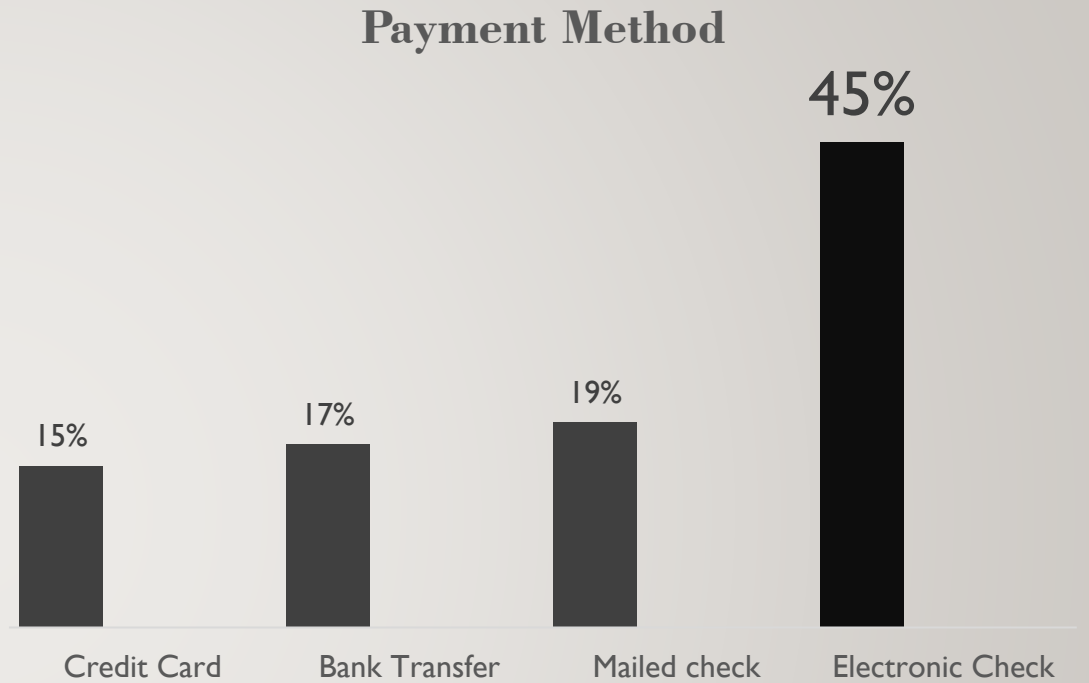
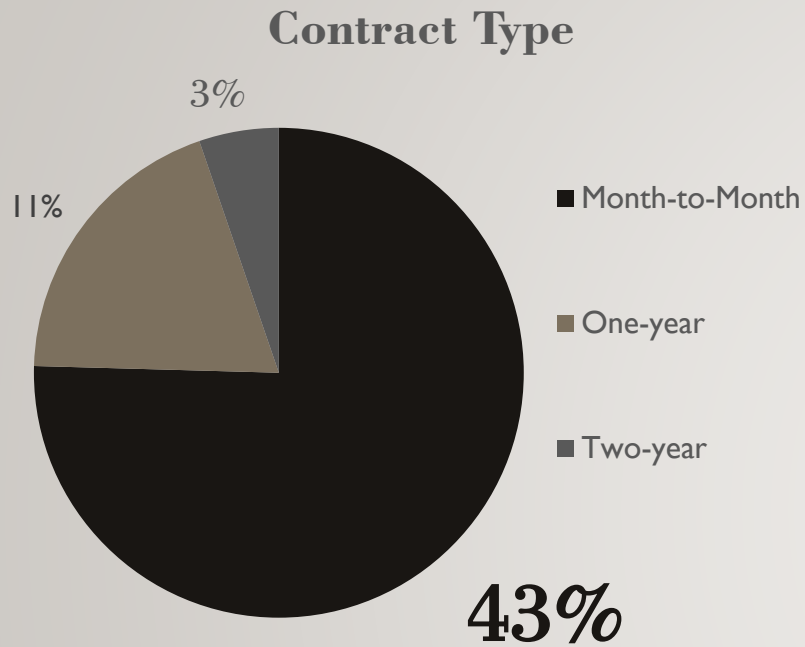
# Internet Service and Customer Behavior



**Fiber Optic** services are popular and contribute to the most revenue with a total of **\$283,284** monthly charges, but also have the highest churn rate at nearly **42%**. This highlights a potential quality or satisfaction issue that needs to be addressed.



# Contract Type and Payment Method Insights



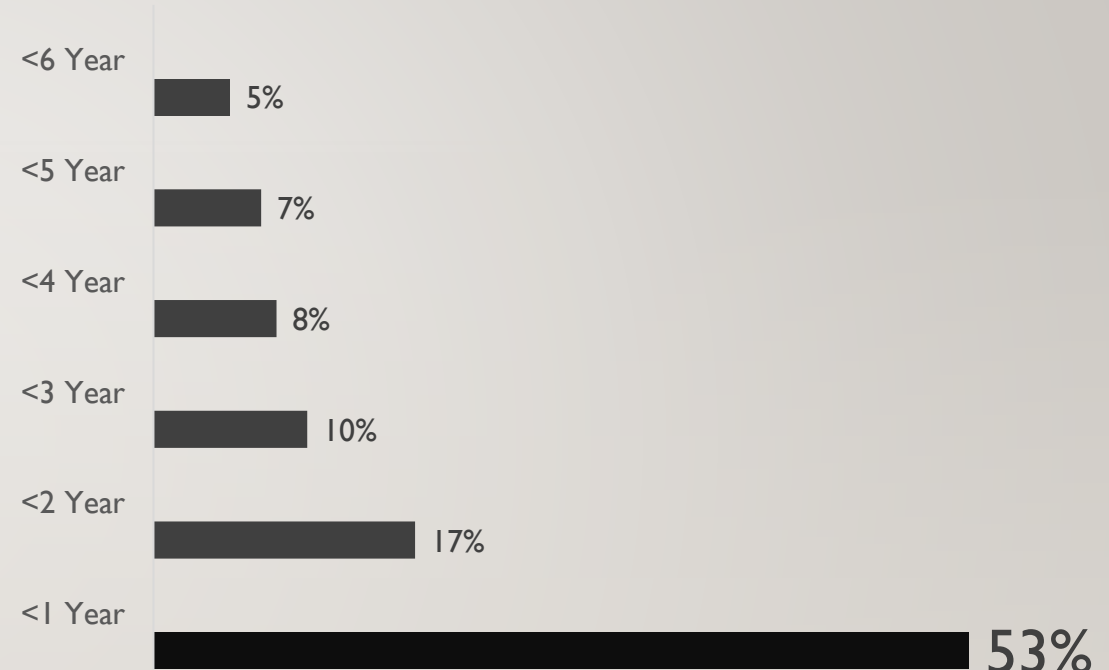
Month-to-month contracts show significantly higher churn rates compared to long-term contracts. Additionally, **electronic check** users have the highest churn of **45%**, suggesting an area for improvement, while **credit card** payments exhibit strong retention of **15%** Churn

# Subscription Duration and Retention

Early retention is critical, as nearly **53%** of churn occurs in the **first year**.

Retention strategies need to focus on engaging and retaining customers during the first two years.

Subscription Duration by Churn rate



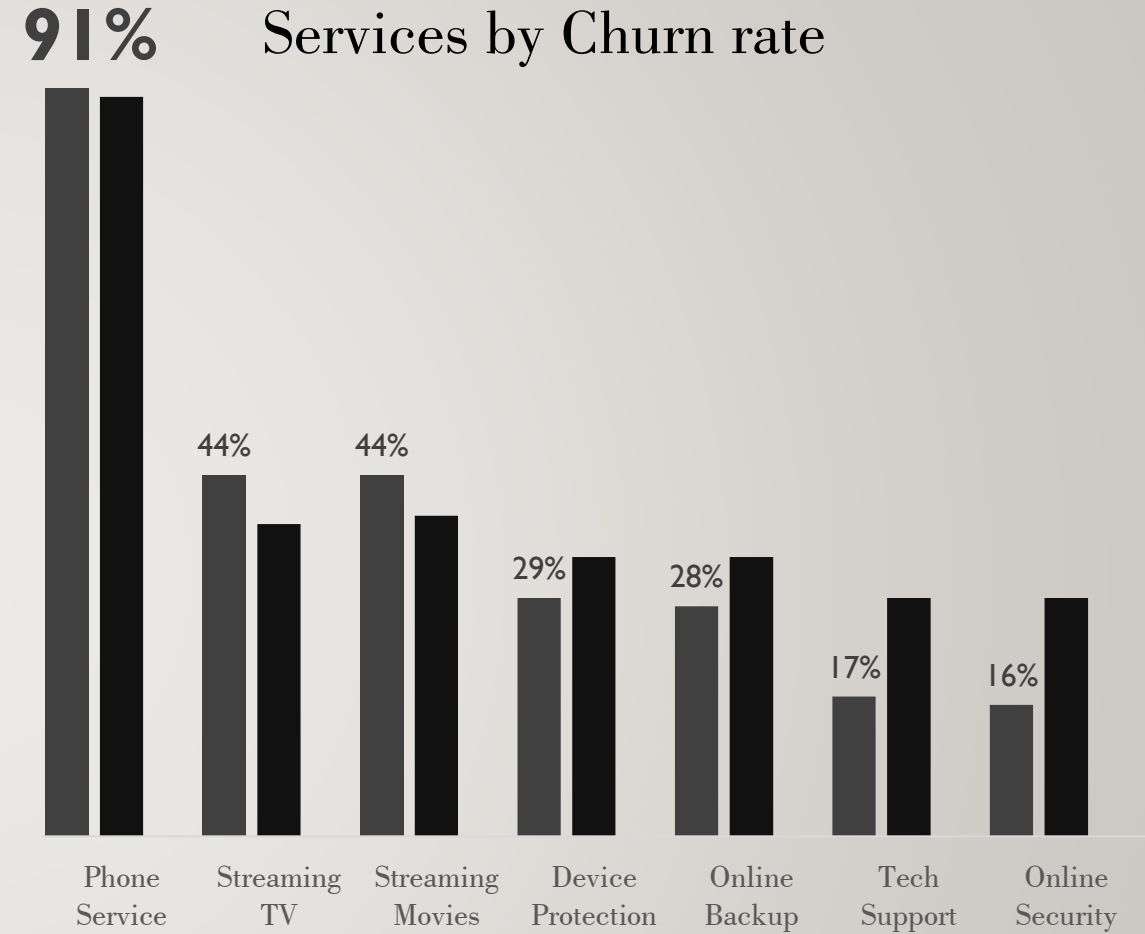
Customers staying longer than **3 years** exhibit **very low churn rates**

# Demographics and Service Engagement

Gender →  
49.8% 50.2%  
Male Female

Service engagement is strong for phone services, but also exhibit higher churn rate **91%**, indicating opportunities for improvement in customer retention

other services like Online Backup and Device Protection show room for growth in engagement and satisfaction.



Senior Citizens Partner Dependants

25%

36%

*17%*

# Insights

- High Churn for Fiber Optic Internet Service: 42%
- High churn for month-to-month contracts: 43%
- First-year customers at higher risk: 53% churn rate
- High churn for electronic payment users: 45%
- Low engagement in Tech Support and Online Security
- High churn for customers with Partner: 36%



# Recommendations

Based on our insights, we recommend focusing on **high-risk** and **high-value** customers, **improving service quality**, and transitioning users to **better payment methods**. These strategies will help improve retention and long-term revenue.

## Retain High-Risk Customers:

- Discounts/incentives for long-term contracts or creation of a new quarterly Contract
- Loyalty programs for early engagement.

## Improve Service Quality:

- Examining issues associating with Fiber Optic service to see if performance issues are resulting in poor customer experience.
- Promote underutilized services like Online Security, streaming etc by offering bundling at reduced rate.

## Optimize Payment Methods:

- Transition electronic check users to more secure payment methods.



# Conclusion

In summary, improving retention requires focusing on high-risk areas like **month-to-month contracts** and **Fiber Optic services**. By targeting these segments with tailored strategies, we can reduce churn and improve customer satisfaction

- Month-to-month contracts and fiber optics drive high churn.
- Early engagement strategies are critical to reduce first-year churn.
- Data-driven strategies target high-impact areas

**THANK YOU**

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