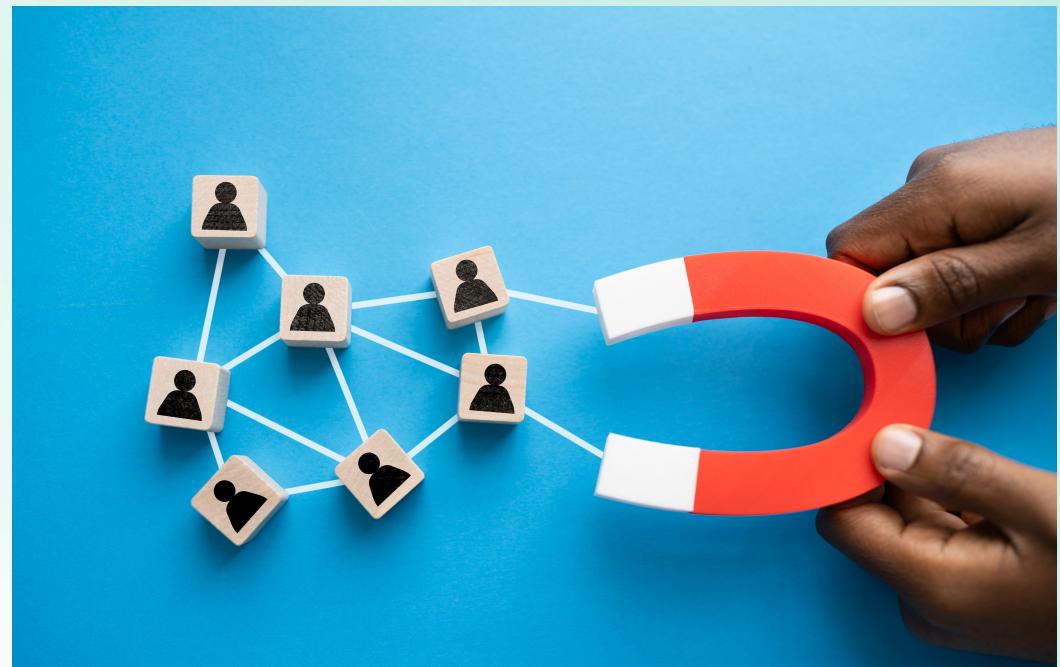


Telecom Customer Churn Analytics & Prediction

Business Insights and Risk Segmentation

Telecom Churn: Why It Matters



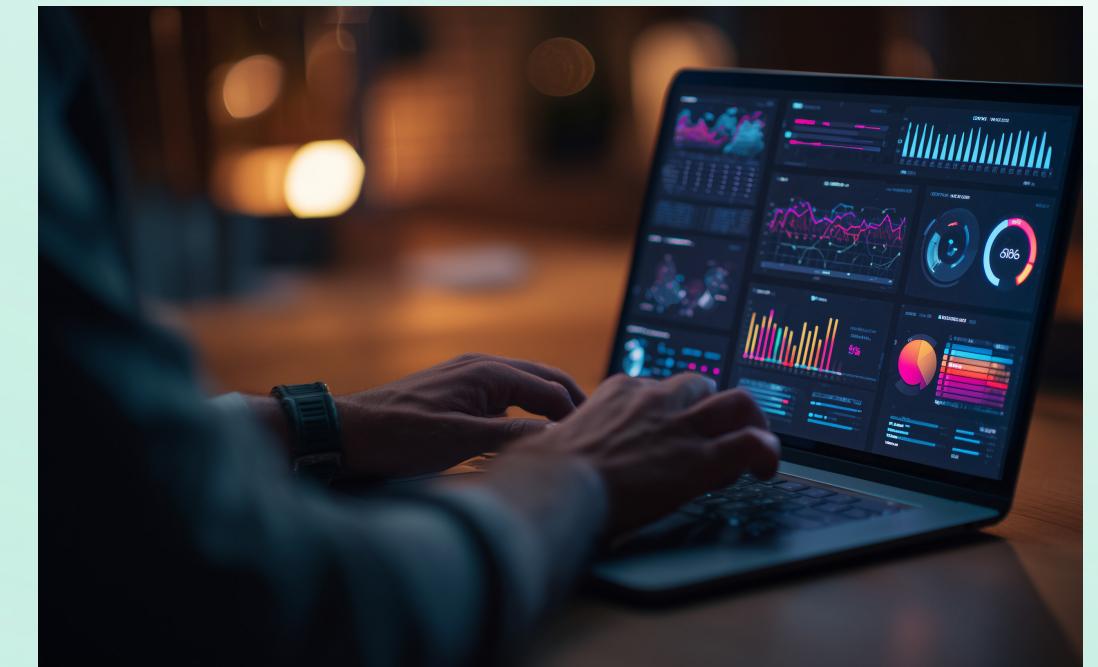
Customer churn impacts revenue

- 14.14% churn rate among telecom customers
- Over 1,400 customers lost from a 10,000 base



Behavioral insights drive retention

- Service calls and international plans are key churn drivers
- High usage and frequent calls signal higher risk



Analytics bridge data to action

- Predictive models identify high-risk customers
- Business-ready insights enable targeted retention

Churn Overview and Key Metrics



Customer Base Snapshot

10,000 total customers; 1,414 churned,
8,586 retained



Churn Rate Insights

Overall churn rate stands at 14.14%



State & Segment Variability

Churn rates differ across states and
customer segments

Behavioral Drivers of Churn

Driver	Churn Impact
Customer Service Calls	Churn rate rises sharply after 4+ calls
International Plan Usage	Higher churn risk for international plan users
High Usage Customers	Churned users have higher total minutes and charges

Usage and Revenue Insights



Retained Customers Drive Higher Usage

Average total minutes and charges are greater for retained users.



Churned Users Show High Usage Patterns

Churned customers often have elevated total minutes and charges.



Revenue Exposure Varies by State

State-level analysis highlights regions with higher average charges.

Risk Segmentation for Retention

Risk Segment	Probability Range	Recommended Action	Top States (High Risk Count)
Low Risk	<0.30	Monitor	
Medium Risk	0.30–0.70	Proactive Outreach	
High Risk	>0.70	Immediate Retention Offer	NJ (52), MD (44), WA (42)



Business Actions and Recommendations

Activate Retention After 3+ Service Calls

Initiate targeted retention workflow for customers with frequent support interactions.

Offer Discounts to International Plan Users

Provide special incentives to reduce churn among customers with international calling plans.

Proactively Monitor High-Usage & High-Risk Customers

Flag customers with high usage and risk for early intervention and personalized outreach.

Takeaways and Next Steps



Service Experience Drives Churn

Churn is linked to customer support interactions, not low usage.

Predictive Analytics Powers Retention

Model identifies high-risk customers for targeted outreach.

Operational Efficiency Through Automation

Batch inference and dashboard integration streamline actions.

Future Enhancements

Automated retraining, drift monitoring, and real-time scoring planned.