Reducing Customer Churn at SyriaTel

A Data-Driven Strategy for Proactive Retention

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Executive Overview

❏ Customer churn leads to significant revenue loss

❏ Retaining customers is cheaper than acquiring new ones

❏ Goal: Identify customers at risk of leaving

❏ Outcome: Enable proactive and targeted retention strategies

Business Problem

❑ SyriaTel lacks a predictive system to identify at-risk customers

❑ Retention efforts are currently reactive

❑ Missed opportunities lead to preventable revenue loss

❑ **Key Question:**
Can customer behavior patterns predict churn?

Data Understanding

❑We analyzed customer data including:

❑Day, evening, night, and international call usage

❑Customer service interactions

❑Plan subscriptions (international & voicemail)

❑Billing and usage patterns

❑**Purpose:** Identify behavioral signals linked to churn.

Modeling Approach

❑ Tested multiple predictive models

❑ Compared performance using business-relevant metrics

❑ Prioritized identifying churners (recall)

❑ Selected the most balanced and reliable model

Model Performance

❑Selected Decision Tree Model:

❑62% of churners correctly identified

❑82% of flagged customers truly at risk

❑92% overall accuracy

❑**Business Meaning:**

❑Most at-risk customers are detected

❑Retention efforts are efficient

❑Minimal wasted marketing spend

Key Drivers of Churn

❑ **Top factors influencing churn:**

❑ High daytime call usage

❑ Frequent customer service calls

❑ International plan usage

❑ **Implications:**

❑ Heavy users may be sensitive to service or pricing

❑ Frequent complaints signal dissatisfaction

❑ International users may be price-sensitive

Business Recommendations

❑ Integrate predictive model into CRM system

❑ Proactively contact customers flagged as high-risk

❑ Improve service quality for frequent support callers

❑ Review pricing and value proposition for international plans

❑ Offer targeted loyalty incentives to high-usage customers

Next Steps

❑ Deploy model into operational systems

❑ Monitor churn prediction performance monthly

❑ Retrain model periodically

❑ Track retention campaign success

THANK YOU

Questions?