SYRIATEL CUSTOMER CHURN ANALYSIS

DATA DRIVEN INSIGHTS FOR CUSTOMER LOYALTY

BY

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CORE OBJECTIVE: IDENTIFY RISK, PRESERVE REVENUE
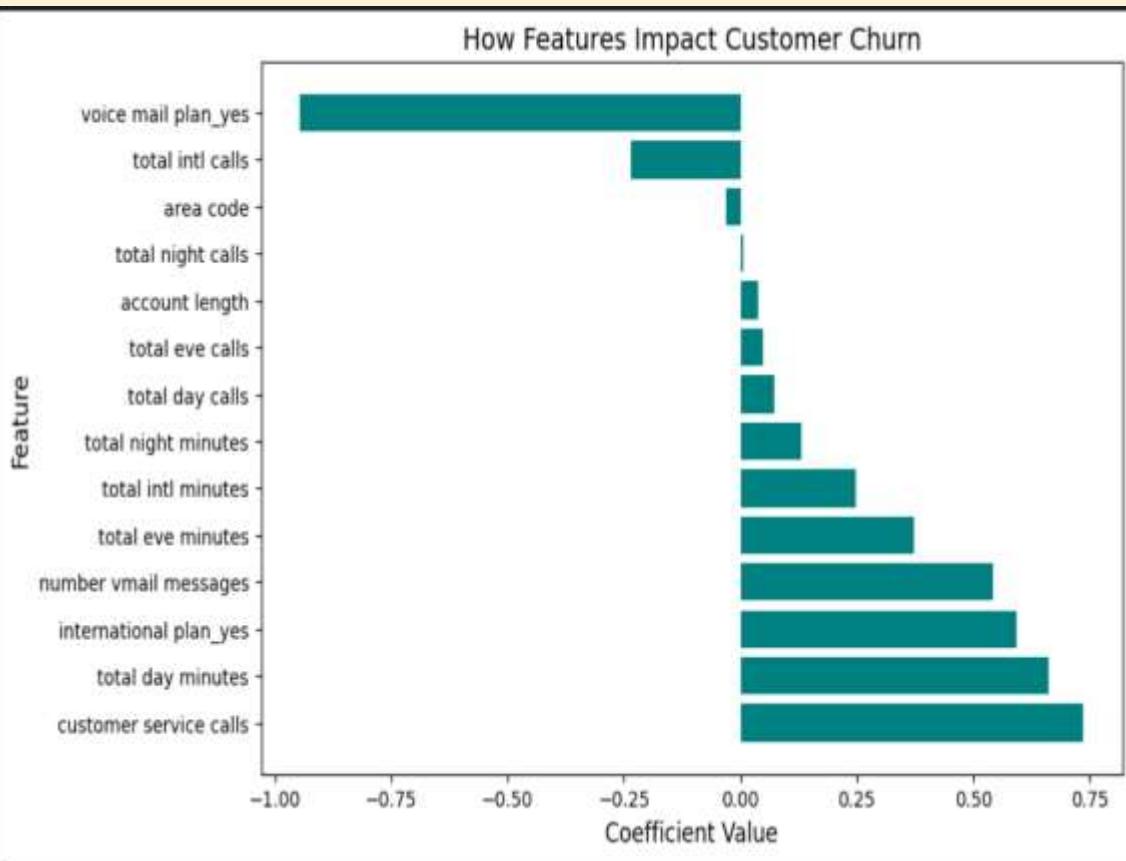
- *Objective*: The aim is to focus on identifying the specific customer behaviors and service friction points that result in account cancellations (churn).

- *Goal*: To provide a set of data-driven recommendations designed to help SyriaTel proactively intervene and retain high-value customers.

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ANALYZING SYRIATEL DATA

- **SOURCE: SyriaTel Customer Churn Dataset (Cleaned and Feature-Engineered).**

- **METRIC: The primary risk measure is Target Recall (Churn). This measures the model's actual success in catching at-risk customers before they leave, rather than just looking at overall accuracy.**

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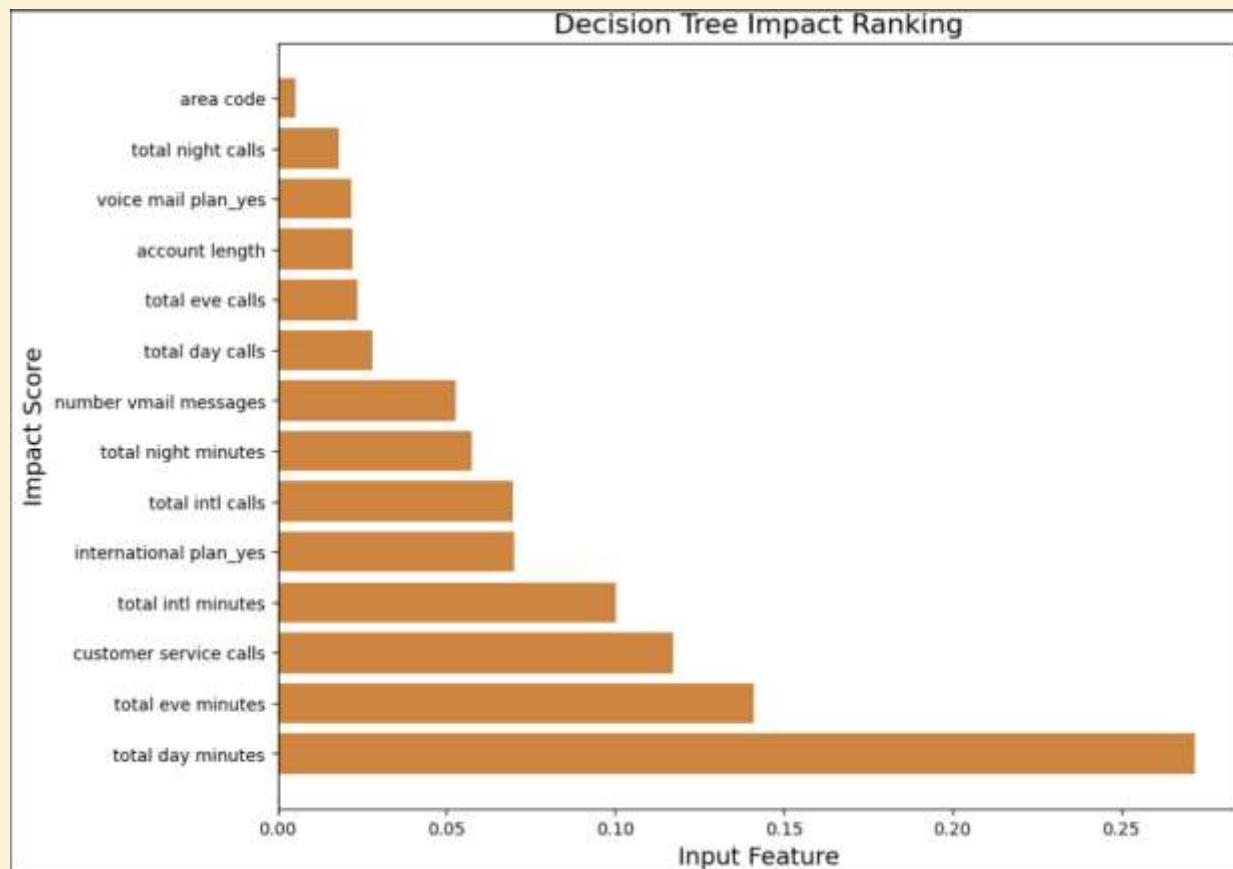
ANALYSIS AND KEY FINDINGS

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FINDING 1: THE SERVICE INTERACTION BREAKING POINT

How Features Impact Customer Churn

- *Observation*: Customer churn risk is most heavily influenced by the volume of Customer Service Calls.

- *Statistics*: This feature emerged as the strongest positive predictor of churn. Each additional call represents an unresolved friction point that exponentially increases the probability of a customer leaving.

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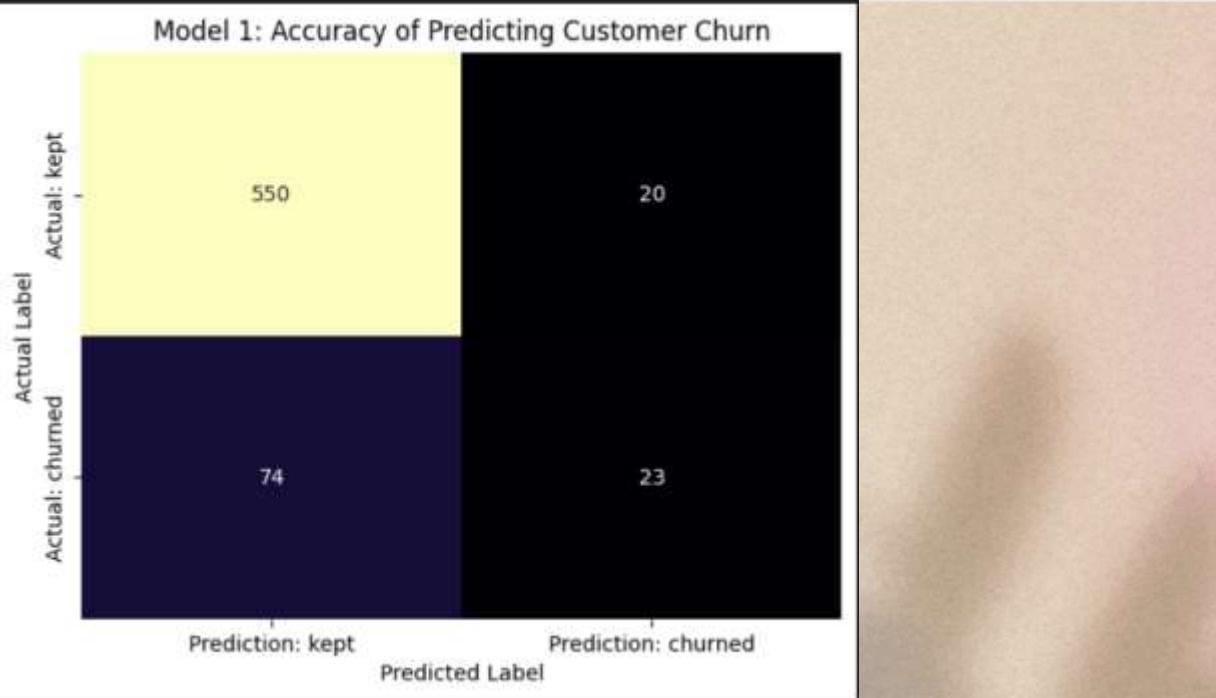
FINDING 2: THE HIGH-USAGE ATTRITION RISK

Decision Tree Impact Ranking

Observation: There is a high-volume risk associated with total day minutes

Statistic: SyriaTel most active daytime users are most likely to churn.

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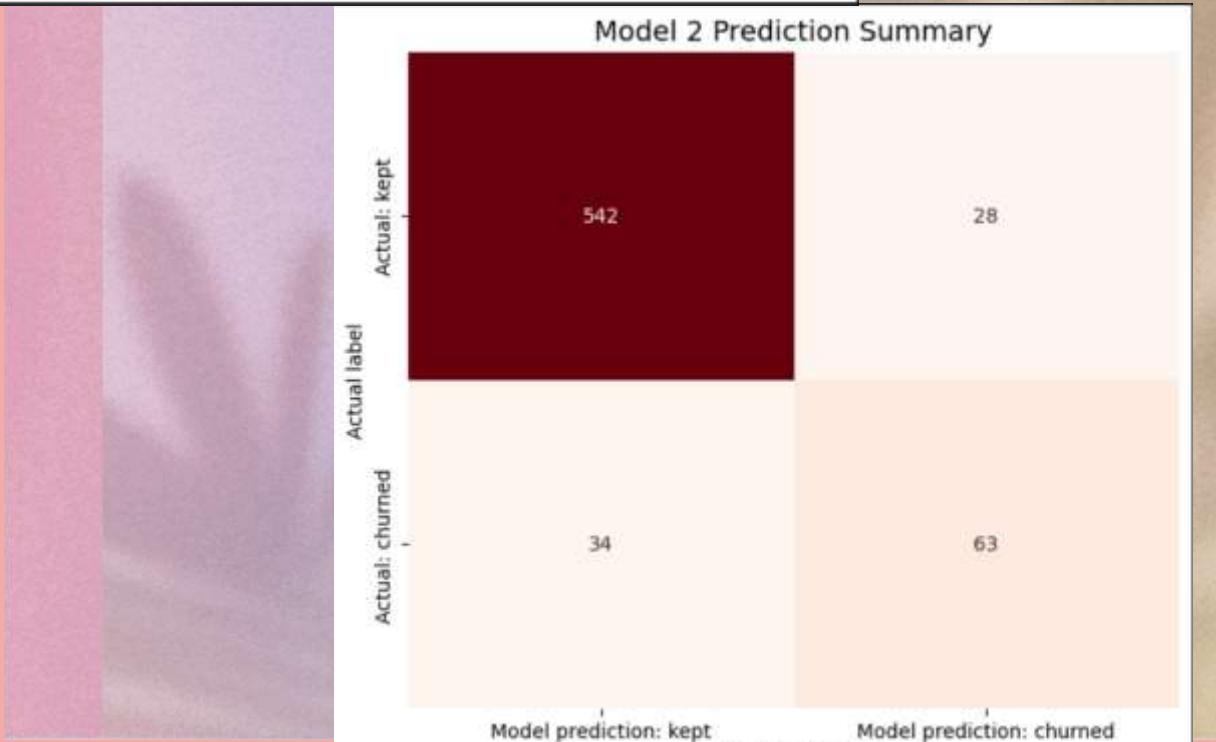
Model 1: Accuracy of Predicting Customer Churn

Model 2 Prediction Summary

FINDING 3: MODEL OPTIMIZATION SUCCESS

Observation: The baseline Logistic Regression model suffered from an accuracy trap missing most of the at-risk customers.

Statistics: By switching to the Decision tree model, Recall improved from 24% to 65%.m

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RECOMMENDATIONS

(ACTIONABLE STRATEGY)

PROACTIVE SERVICE INTERVENTION

Action: Call an automated Loyalty Outreach to any customer with more than 3 service interactions in one billing cycle.

This will eliminate friction before the customer achieves the breaking point that was established in the data.

HIGH-VALUE RETENTION

Action: Develop a special loyalty program to top volume daytime users (Top 10% of Day Minutes).

Competitive pricing is directed to the particular group who is most likely to find better rates elsewhere.

MODEL DEPLOYMENT

Action: Embark the Decision Tree classification logic into the CRM.

Guarantees the marketing team concentrates funds on the 65% of the clientele who are actually at risk, as opposed to expenditure on the loyal accounts.

CONCLUSION

To sum up, these evidence-based recommendations will enable SyriaTel to shift to retention instead of damage control, which will greatly reduce the risk of losing high-value accounts.

THANK YOU