

# Driving Subscription Growth for Ted & Poppy

Enhancing Customer Retention and Implementing Strategies to Boost Subscription Numbers and Business Growth

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## Ted & Poppy

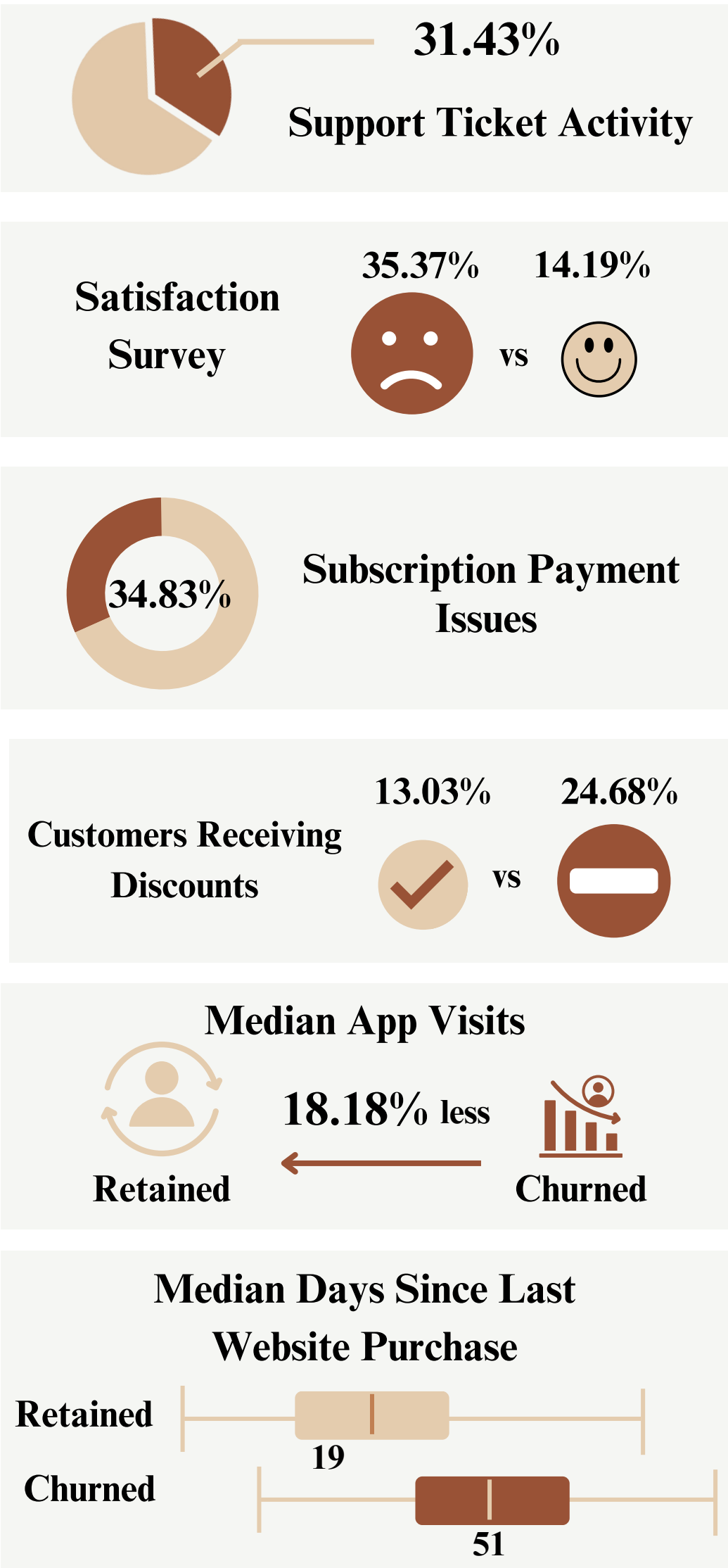
## Introduction

- Ted & Poppy Pet Shop aims to analyze and reduce churn in their dog food subscription service to improve customer retention.
- The business seeks actionable insights on factors affecting churn, such as customer behavior, subscription patterns, and engagement.

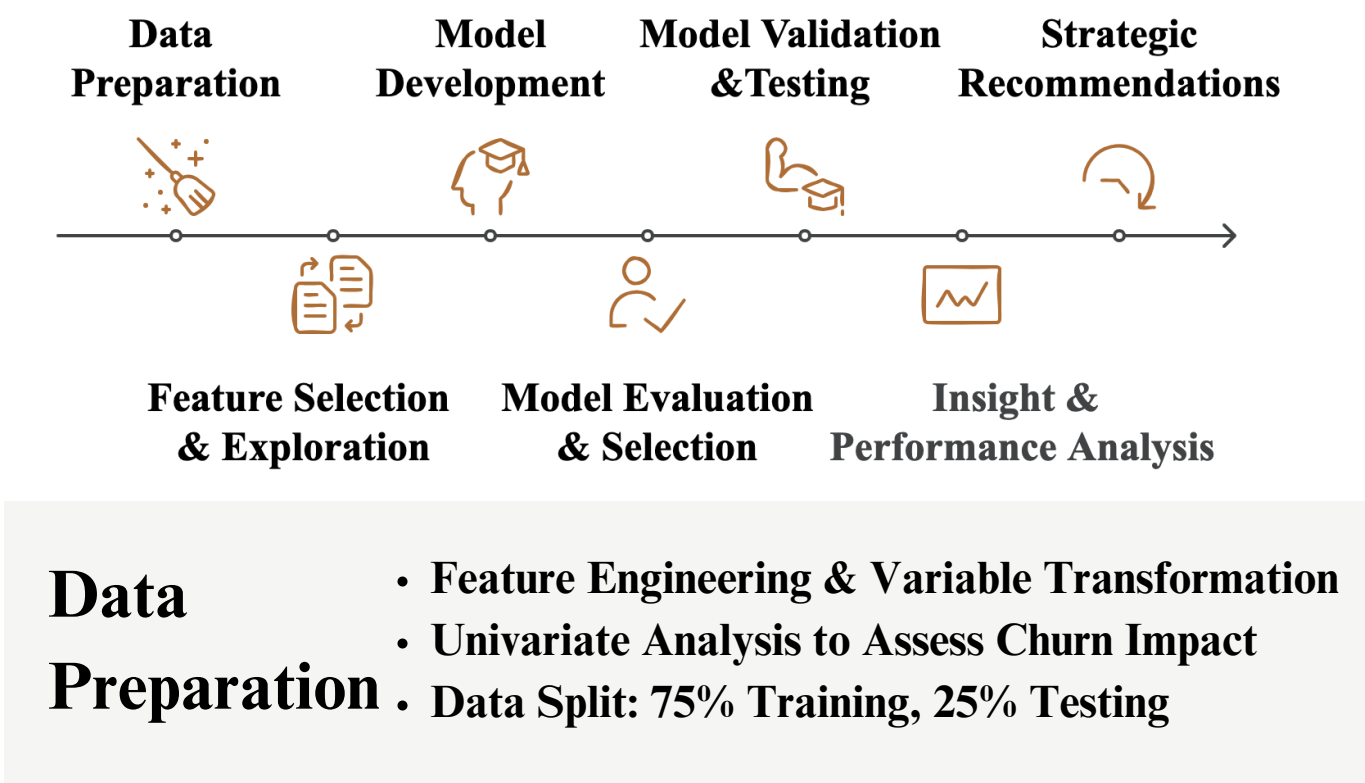
## Dataset Overview

Total Variables: 29	Sample Size: 200,000 ( Q4 / 2024 )	Retained	Churned
Selected Variables: 12	Target Variable: Churn Status	84.09 %	15.90 %

## Observation

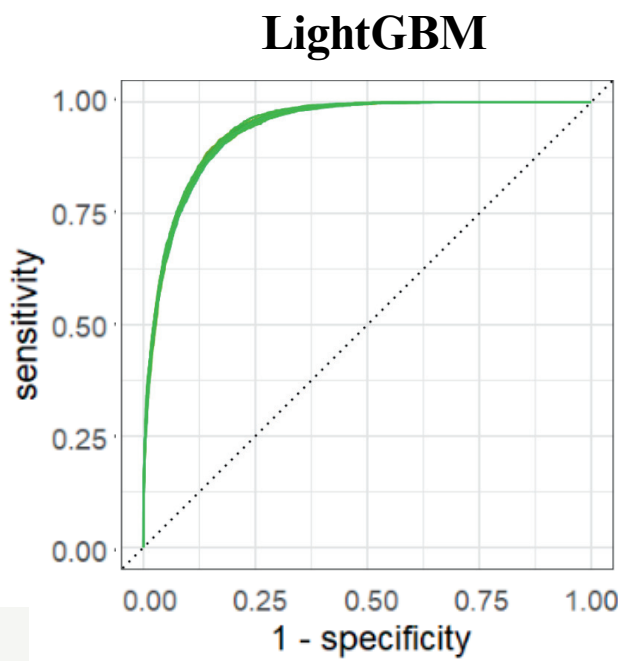


## Methodology

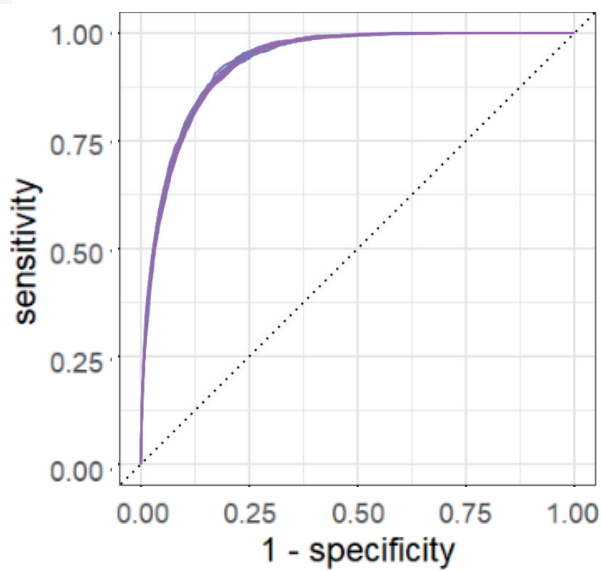


## Model Comparisons

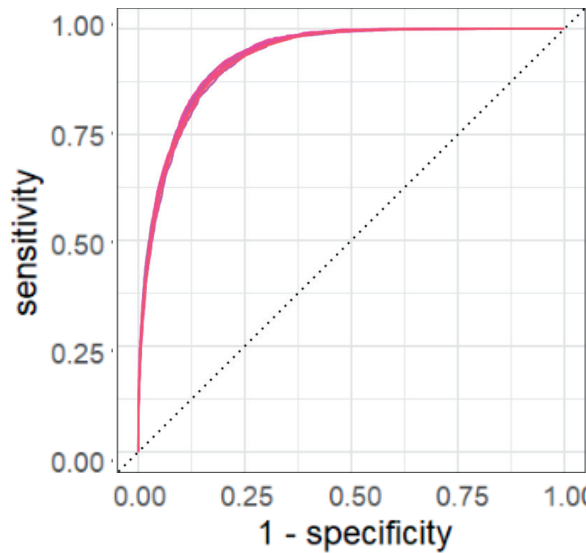
### ROC Curve



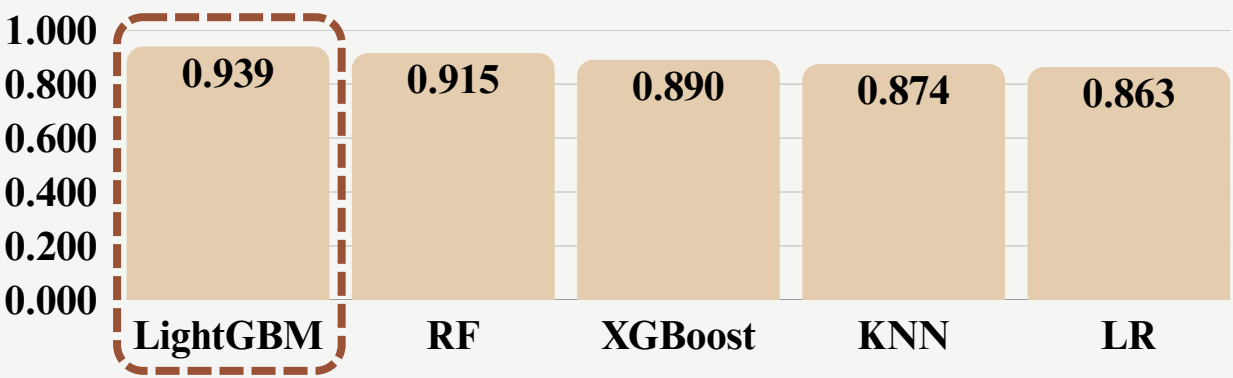
### Random Forest



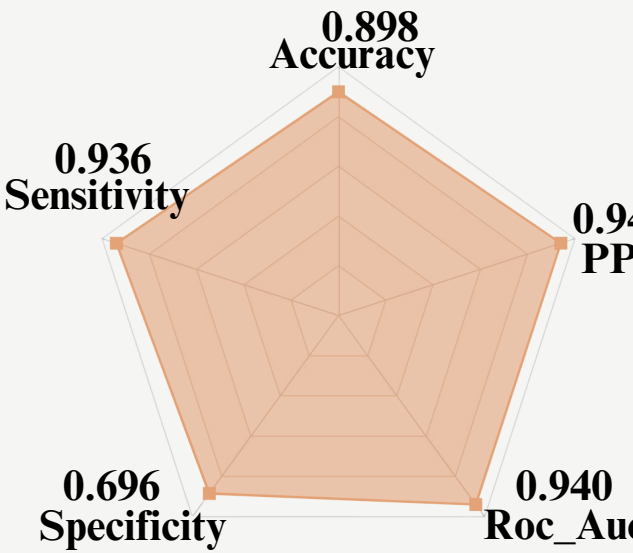
### XGBoost



## Model Training: Sensitivity Analysis



## LightGBM Model Performance on Test Data



## Confusion Matrix Evaluation on Test Data

True Positive 5,538	False Positive 2,414
False Negative 2,689	Ture Negative 39,360

## Recommendation

### 1. Customer Behavior & Engagement

- Encourage repeat purchases with personalized emails, reminders, and loyalty programs.
- Boost engagement through push notifications and website/app enhancements.



### 2. Customer Support, Satisfaction & Payment Issues

- Speed up responses, add self-service, and fix recurring issues. Gather feedback, address complaints, and improve service.
- Identify at-risk customers and offer flexible payments.



### 3. Price Sensitivity

- Offer discounted long-term plans, exclusive perks, and flexible pricing to boost retention.
- Smart discounts encourage commitment and reduce churn.



### 4. Data-Driven Customer Risk Management

- Use customer data to identify at-risk users early.
- Reduce churn with targeted re-engagement, special offers, and proactive outreach.



#### References:

1. Kumar, V., & Shah, D. (2004). Building and sustaining profitable customer loyalty for the 21st century. *Journal of Retailing*, 80(4), 317-330. <https://doi.org/10.1016/j.jretai.2004.10.007>

2. Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69-96. <https://doi.org/10.1509/jm.15.0420>

\*Note: The dataset utilized in this project was synthetically generated for analytical purposes.