XYZ: Freemium to Premium Campaign

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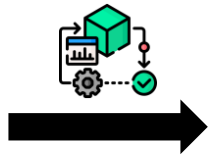
Freemium to Premium – Devising An Optimized Marketing Campaign

Identifying High Potential Premium Subscribers to maximize ROI through advanced analytics

Freemium



Premium

Website XYZ follows the freemium business model, offering basic services for free and unlocking premium capabilities through a monthly subscription fee.

The goal is to identify non-subscribers with the *highest likelihood* of converting to premium users during the next 6 months.

Optimize promotional campaigns to target the right audience effectively for the next six months.

Maximize user conversions through personalized marketing strategies.

Devise marketing strategies with the comprehension of pivotal attributes that propel subscriptions.

** ROI : Return on Investment*

Predictive Model Delivers **53%** Reduction[1] in Customer Acquisition Costs

By Optimizing promotional campaign, we could target more rewarding customers there by increasing conversion rate[2]

53%↓
Reducing customer acquisition cost

1.8x↑
Increase in conversion rate[2]

8↑
top drivers for subscriptions identified

But...

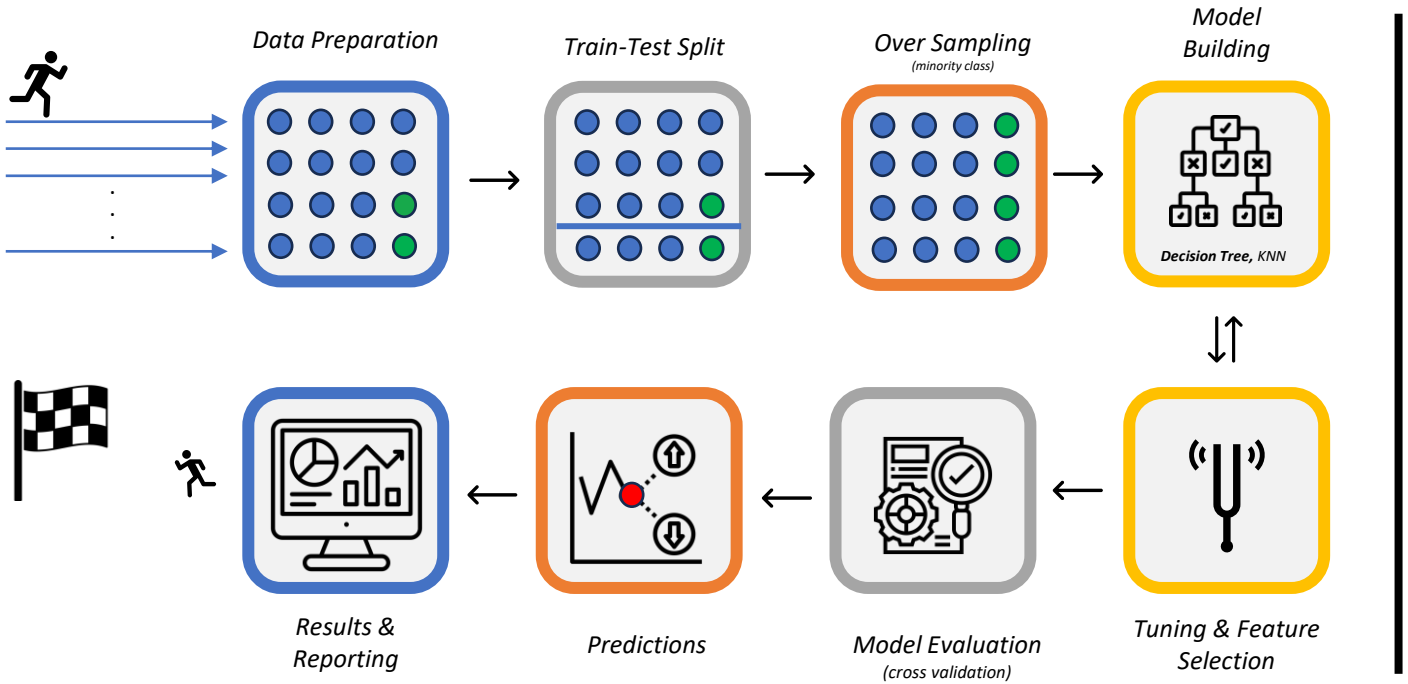
** 1 – Assuming the dataset provided was using a broadcast marketing approach (targeted complete population), now a restricted approach will reduce costs by 53%, 2 – Conversion rate = Number of adopters / Number of people targeted by the campaign*

Thank You

- Meng Han, Praveen Kumar G, Lingyu Liu, Hamza Hamayun, Vineeth Gorla

From data to decisions - Predicting Premium Subscribers with Machine Learning

Decision Tree triumphs the path to premium subscription with ~81% recall*



Model Results

	Actual Non-Subscribers	Actual Subscribers
Predicted Non-Subscribers	4,336	58
Predicted Subscribers	3.664	250

Recall = 250 / (58+250) = ~80%
Out of all the actual subscribers, ~80% of them are correctly identified as potential subscribers.

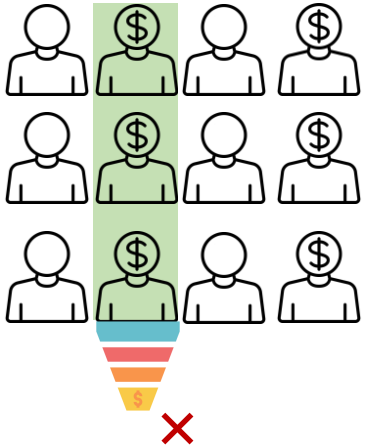
Precision = 250 / (250 + 3664) = ~6%
Out of all the predicted potential subscribers, ~6% of them actually subscribed.

**Recall – It measures the proportion of subscribers that are correctly identified by the model from all the actual subscribers*

We prioritized **Recall**[1] as the evaluation metric in model selection to ensure we capture all potential subscribers and eliminate any chances of missed opportunities

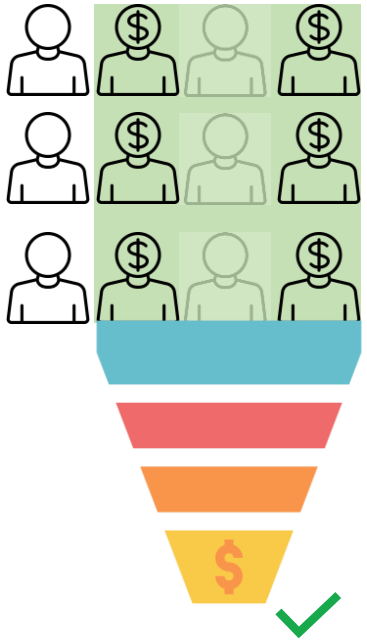
We further identified *Age, Friend Country Count and Change in subscriber friend count* are top 3 drivers to propel subscriptions

Precision



Capturing limited users, Missed opportunities

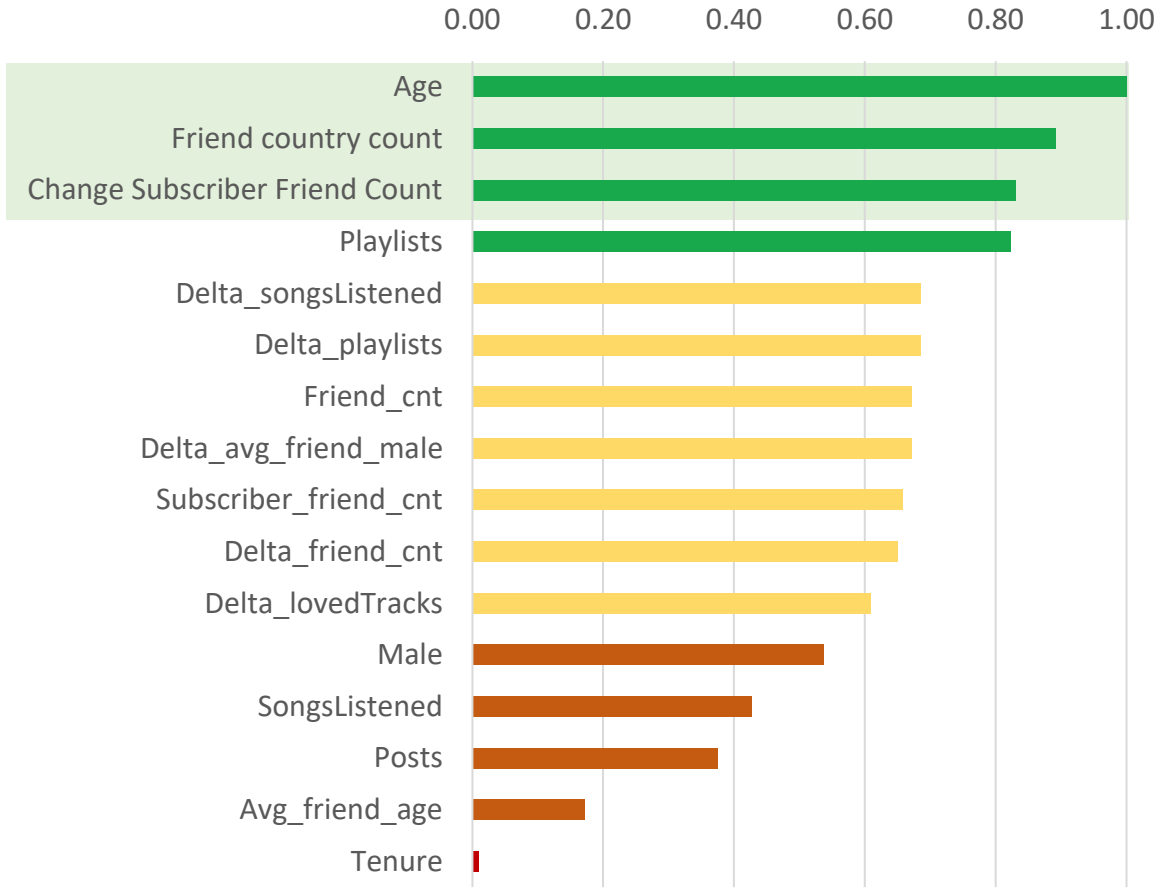
Recall



Maximizing Opportunities, Trading off precision

Opting for *recall* over precision to allow more users to progress through the marketing **conversion funnel,** even if it entails targeting less likely candidates in the campaign

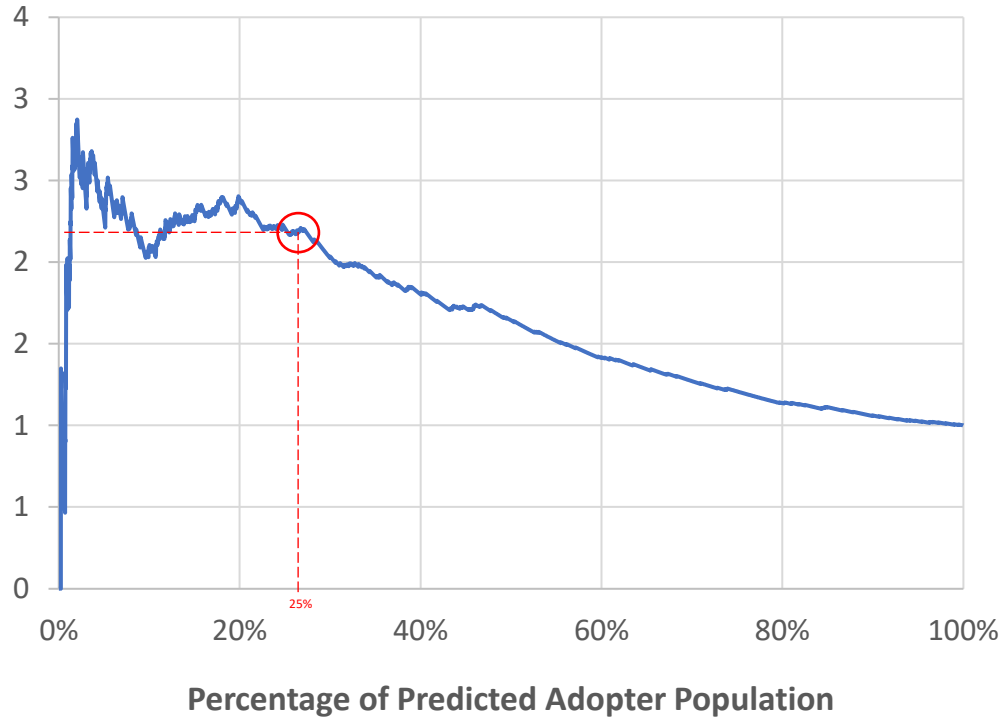
Top Drivers of Subscriber Count[2]



**1 – Recall: It measures the proportion of subscribers that are correctly identified by the model from all the actual subscribers, 2 – Only limited features are selected to plot, 3 - : User with high potential to buy Premium & : Standard Freemium only user*

With a campaign targeting 25% of the predicted adopters, the model outperforms the Naïve Model* by ~2.5 times.

Lift Curve: Times Model Improvement vs Percentage of Predicted Adopter Population



This means, the model is ~2.5 times better at identifying potential customers as compared to randomly selecting customers for marketing.

Key Takeaways

XYZ now can significantly boost their marketing spend per customer by 1.8x, assuming their marketing cost is fixed. This move can potentially increase the conversion rate by 1.8x thereby *optimizing marketing efficiency.*

Potentially achieve an 53% reduction in acquisition cost by targeting exclusively high-rewarding users rather than the entire population

Create focused marketing initiatives aimed at boosting the number of songs listened and playlists, as they play a crucial role in successfully converting freemium users into subscribers

** Naïve model refers to a model that randomly selects one of the target variables, where the outcomes can be either a user becoming a subscriber or not. Essentially, it is as effective as flipping a coin to make predictions.*