SLOAN SCHOOL OF MANAGEMENT

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To the attention of:

Digital Marketing Strategy of High Note

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EXECUTIVE SUMMARY

This analysis aims to develop a digital marketing strategy for High Note to increase premium service adoption while focusing on converting existing free users to the premium version and attracting new premium consumers without diminishing engagement.

RECCOMENDATIONS

Social Circle Premium Perks: Create a referral program that rewards users for expanding their social circles within the platform. Encourage existing premium subscribers to invite friends, offering both the referrer and the new user exclusive premium features such as artist messages, exclusive discounts for artists' merch, and more. These perks leverage social influence to drive more premium service adoptions.

Playlist Creation Challenge: Address the negative correlation between playlist creation and potential churn by launching a "Playlist Creation Challenge" while making the playlist creation experience easier using more oversized buttons and easier access to loved tracks with a recommendation based on song genre. Encourage users to revitalize their playlist creation habits through gamification, offering rewards such as premium trials, exclusive content, or personalized playlist recommendations based on their revived engagement. This strategy will ensure keeping free users on the app while giving them a taste of the premium version, leveraging the importance of loved tracks, and ensuring stickiness through a more significant playlist creation activity on the app.

High Note Ambassador: Create an ambassador program that selects people with the highest friend count and adds them to exclusive groups with different status levels. Silver Listener gives a lifetime discount on the premium version, Gold Music Lover provides exclusive early access to artist's albums, and Diamond Sound Legend offers discounts on selected concert tickets. To reach a higher level, the ambassador must earn points awarded as soon as a new person subscribes to the premium version using the ambassador's dedicated code.

QUANTITATIVE FINDINGS

Various analytics models were employed to identify critical elements influencing consumer adoption of premium services.

The logistic regression and the random forest highlighted critical factors as the most influential for the app. The level of engagement illustrated by loved tracks and songs listened to is a crucial stickiness factor. Moreover, the model underlined other critical aspects related to the network and connections, emphasizing the strong influential power of friends on the app.

The correlation analysis conducted revealed significant associations among various variables. Notably, there is a positive correlation between the count of friends and the diversity of countries those friends originate from, suggesting a trend where users with more friends tend to have a more globally diverse social network. Furthermore, an observed positive correlation exists between the total number of friends and the subset of friends who are paying subscribers, indicating a potential influence of social circles on premium service adoption. Conversely, a negative correlation

emerged between the variables representing playlists and delta2_playlists. This correlation may illustrate a loss of interest with the creation of fewer playlists and, thus, a higher risk of churning.

The use of propensity score matching in this analysis aims to mitigate the influence of confounding variables that may affect premium service adoption and user engagement. The analysis isolates the effect of premium adoption by achieving an improved balance in covariates between premium and non-premium users. The analysis confirms the previous findings, where the critical impact factors are loved tracks, playlists, posts, shouts, and tenure, all underlining the importance of the user's networks and their engagement with app features.

SUCCESS STORIES

In freemium models, several companies exemplify a distinct ability to convert free users to premium ones. Spotify's success is grounded in its user-friendly interface and the seamless conversion of free users to premium subscribers through the allure of an ad-free experience and enhanced features such as unlimited playlist creation or an even more comprehensive yearly "Spotify Wrapped." Higher quality sounds and the possibility of downloading and listening to music anywhere are also critical features of the app's premium version. Another example is YouTube's unparalleled content diversity, which has solidified its freemium triumph, offering users a platform to upload, view, and share videos for free. YouTube Premium provides exclusive access to some content and an offline viewing experience. As an additional key player in the music industry, SoundCloud's strategy centers on a vast music library, empowering creators and listeners alike. It entered the freemium model through SoundCloud Go, adding offline listening and an ad-free environment. One last example is Twitch, whose success in the freemium space lies in its vibrant community engagement, interactive live streaming, and the additional perks Twitch Prime offers for a premium viewing experience. These platforms collectively showcase the efficacy of freemium models, balancing free access with strategic premium offerings and continually adapting to meet the evolving needs of users in the dynamic digital landscape.

CONCLUSION

This analysis lays out key moves for a winning digital marketing plan to boost premium service sign-ups using an appealing referral program, a fun playlist challenge, a playlist creation process optimization, and an exclusive ambassador group to grab existing users and attract new premium fans. Our data supports a user preference for loved tracks, playlists, and social connections when transitioning to premium services. Drawing inspiration from industry leaders such as Spotify and YouTube, our strategic approach aims to achieve a delicate equilibrium, offering enticing perks for premium subscriptions while preserving the accessibility of free features.

EXHIBITS

Note: The predictive models shown in the following Exhibits (1, 2, and 3, specifically) do not consider future data on user engagement or user behavior, noted by "delta2" column headings. This was done to ensure that future data was not used to make predictions based on current user behavior, as this information would not be known to the High-Note marketing or management teams. Upon collection of this data, as time progresses, it is recommended that all predictive and propensity score matching models are retrained, with subsequent analysis also being repeated to ensure accurate and up-to-date interpretation of model coefficients and variable importance.

Exhibit 1: Logistic Regression Model

	Estimate	Std. Error	z value	Pr(>|z|)
age	0.0294305	0.0052435	5.6127561	0.0000000
male	0.3531735	0.0766958	4.6048574	0.0000041
friend_cnt	-0.0029127	0.0010037	-2.9018810	0.0037093
avg_friend_age	0.0288054	0.0056676	5.0824641	0.0000004
avg_friend_male	0.1838387	0.0946200	1.9429159	0.0520263
friend_country_cnt	0.0351803	0.0075337	4.6697122	0.0000030
subscriber_friend_cnt	0.0900041	0.0190974	4.7129059	0.0000024
songsListened	0.0000058	0.0000010	5.5133922	0.0000000
lovedTracks	0.0006662	0.0000912	7.3047309	0.0000000
posts	0.0006277	0.0003248	1.9323060	0.0533217
playlists	0.0153370	0.0089351	1.7164846	0.0860734
shouts	-0.0002156	0.0002302	-0.9363879	0.3490735
delta1_friend_cnt	-0.0167789	0.0065383	-2.5662430	0.0102807
delta1_avg_friend_age	-0.0374796	0.0285751	-1.3116204	0.1896483
delta1_avg_friend_male	1.1525885	0.6105325	1.8878413	0.0590473
delta1_friend_country_cnt	0.1303561	0.0463028	2.8152988	0.0048732
delta1_subscriber_friend_cnt	-0.0241134	0.0480422	-0.5019215	0.6157228
delta1_songsListened	0.0000700	0.0000134	5.2366395	0.0000002
delta1_lovedTracks	0.0034453	0.0009489	3.6307318	0.0002826
delta1_posts	-0.0004772	0.0100173	-0.0476386	0.9620043
delta1_playlists	-0.3721813	0.1532442	-2.4286804	0.0151539
delta1_shouts	0.0040169	0.0020658	1.9444513	0.0518410
tenure	-0.0020570	0.0015960	-1.2888866	0.1974375
good_country	-0.3738612	0.0744386	-5.0224116	0.0000005
delta1_good_country	-0.7072256	0.8970279	-0.7884098	0.4304570

Figure 1A: Logistic Regression model coefficients, note that significant variables are like those deemed important from Random Forest model in Exhibit 2, additionally, positive coefficients indicate an increased likelihood of conversion if variable value increases, vice versa for negative coefficient values.

Exhibit 2: Random Forest Results

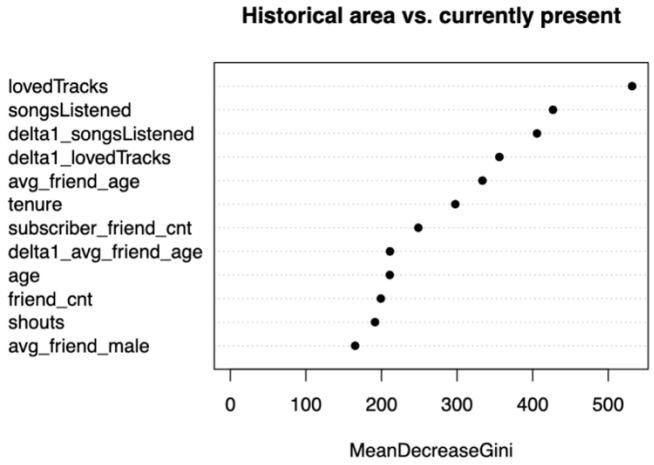

Figure 2A: Variable Importance Plot based on raw data, for out of sample testing. Note that higher x-axis values indicate more impact in segmenting users into adopter and non-adopter groups. The gini index (x-axis) is an evaluation metric generally used for tree-based models, not specific to this analysis.

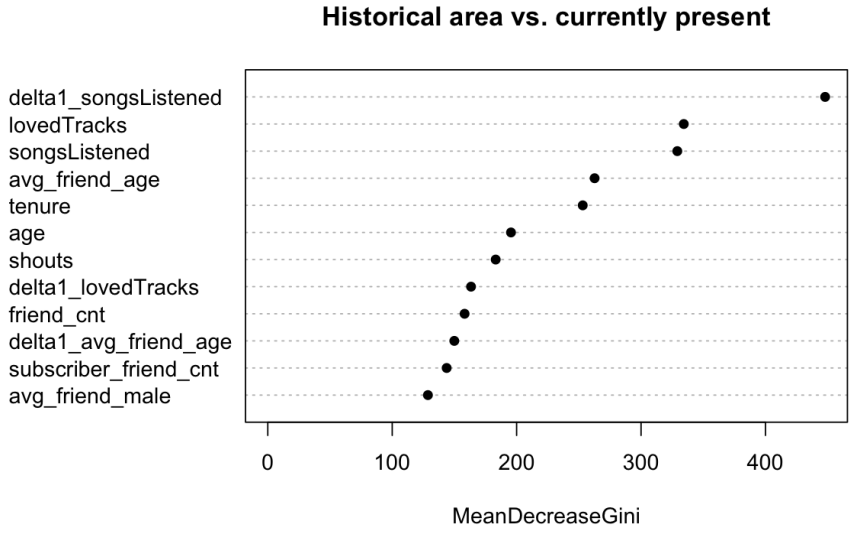

Figure 2B: Variable Importance Plot based on propensity score matches, showing similar results as the raw dataset, estimating a causal impact from the more important variables. Note that higher x-axis values indicate more impact in segmenting users into adopter and non-adopter groups. The gini index (x-axis) is an evaluation metric generally used for tree-based models, not specific to this analysis.

Exhibit 3: Comparing Model Performance

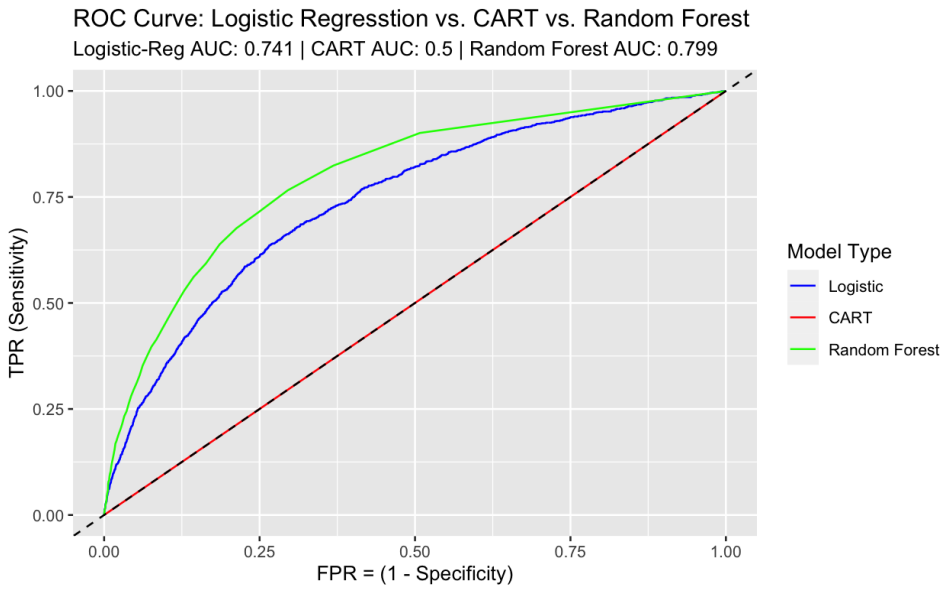

Figure 3A: Plotting out-of-sample ROC curve for Logistic Regression (Exhibit 1), CART (not shown due to poor results), and Random Forest (Exhibit 2). Note that higher values are more indicative of powerful predictive performance of user conversion. Additionally, these AUC calculations were made based off of raw data, not data from propensity score matching groups.

Exhibit 4: Correlation Map

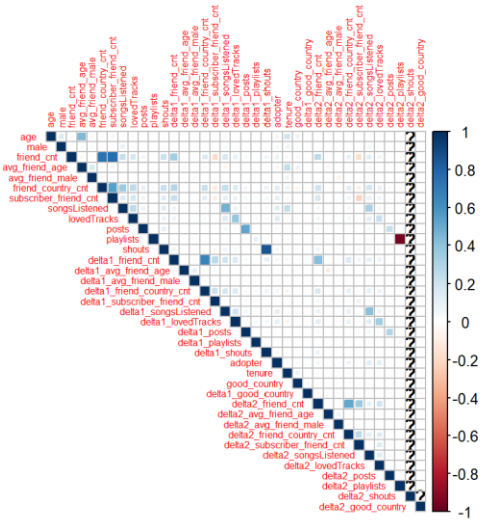

Figure 4A: Correlation matrix plot, note that variables with more defined colors are highly correlated, with blue representing positive correlations, red representing negative correlations

Exhibit 5: Propensity Matching

Balance Measures

	Type	Diff.Un	Diff.Adj
distance	Distance	0.2871	0.0002
lovedTracks	Contin.	0.2357	-0.0014
posts	Contin.	0.0560	0.0250
playlists	Contin.	0.0291	0.0108
shouts	Contin.	0.0605	0.0201
tenure	Contin.	0.1064	-0.0679

Figure 5A: Results of 1:1 propensity score matching, focusing on balance measures between groups. Balanced groups can lead to more precise and reliable estimates of the treatment effect. The analysis is less susceptible to bias, allowing for a more accurate assessment of the causal impact of the treatment.

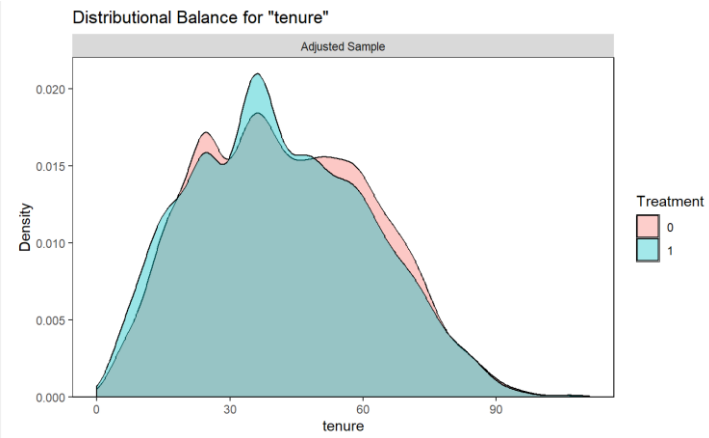

Figure 5B: A similar distribution between the treatment and no treatment balance entails that the observed characteristics of individuals in the treated group closely resemble those in the untreated group.

Exhibit 6: Comparing Freemium Services

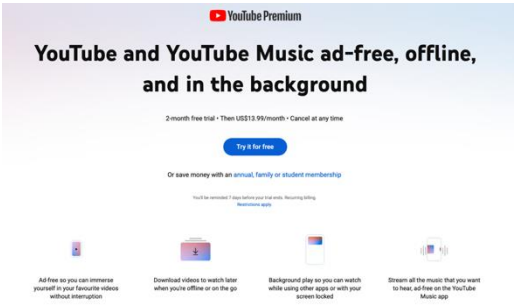

Figure 6A: Providing an example of YouTube and YouTube Premium, a comparable freemium service platform to High-Note

Exhibit 7: Spotify User Base

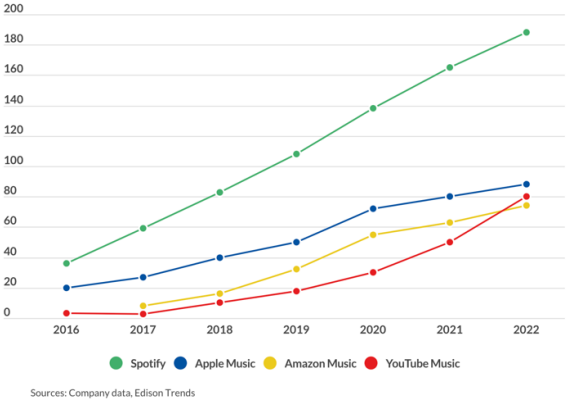

Figure 7A: Displaying Spotify's user base numbers in comparison to other freemium services. Spotify is one of the most successful music streaming companies. It has managed to strike a balance between offering high quality exclusive content to premium users and still offering a wide range of appealing services to free listeners to capture both markets.

Exhibit 8: Ambassador marketing statistics[1]

The following statistics are intended to paint a picture of the current state of ambassador marketing.

- 92% of consumers trust word of mouth recommendations over any other form of advertising
- 76% of people say that they're more likely to trust content shared by "normal" people than by brands.
- 82% of consumers seek referrals from peers before making a purchasing decision.
- 83% of consumers say word of mouth has an influence on their purchasing decisions.
- 67% of consumers report they are more likely to purchase a product after a friend or family member shared it on social media or email.
- 89% of marketers say influencer marketing is effective.

[1] https://socialladderapp.com/blog/ambassador-marketing/#:~:text=Ambassador%20marketing%20statistics,-The%20following%20statistics&text=76%25%20of%20people%20say%20that,influence%20on%20their%20purchasing%20decisions.