Drifting Upstream: Capstone 2 Project Proposal

Problem statement

Can Regression Records generate 300M Spotify streams for each of 3 songs, by choosing 3 songs from its catalog with sonic features that most strongly relate to higher stream count, and running exclusive promotional campaigns for these songs?

Context

Regression Records (RR) is an up and coming record label in Austin, Texas. Having attained success in 2023 with hit songs “You Put the Mu in Music” by The Mean Population, and “It All Adds Up” by Sigma, RR has been granted additional promotional budget for the 2024 year. RR wants to efficiently use these funds to promote the songs that are most likely to succeed in the coming year. As streaming revenue accounted for 67% of all recorded music revenue in 2022[1], total streams is the label’s marker for success. Since Spotify is the world’s leading streaming service by subscribers[2], it is the selected platform to measure total streams. By analyzing various sonic qualities of 2023’s top-streamed songs (such as tempo, key, and danceability), assessing how strongly each of these qualities contributes to the total stream count, and selecting songs from its own catalog that have similar levels of sonic features, RR might most effectively allocate promotional budget toward songs that are likely to generate streams in 2024.

Criteria for success

RR will run promotional campaigns for the selected 3 songs throughout Q2 and Q3 of 2024, aiming to generate 300M Spotify streams per song by the end of the year.

Scope of solution space

The promotional campaigns will be exclusively applied to the 3 songs determined to be most similar in audio features to Spotify’s 950 most-streamed songs of 2023, as indicated by the data source. This includes promotional marketing of the affiliated artist(s) and album / EP (if applicable) for said songs. Promotions include investment in press releases, playlist curation, song synchronization, and touring.

Constraints

Focusing promotions primarily on 3 songs might undermine some of RR’s other songs and artists. However, as the abundance of available content in today’s music era is perpetuated by the prevalence of streaming, the goal here is to place more emphasis upon a few select tracks so that they might rise above the highly saturated market. The elevated status of the label will in turn serve to elevate its constituents. Additionally, the

[1] https://globalmusicreport.ifpi.org/

[2] https://www.businessofapps.com/data/music-streaming-market/

analysis of which features associate with higher stream count, is based on the sonic interpretation as provided by the data source. The subsequent analysis of the sonic features of RR's songs will be conducted separately, and thus is subject to interpretive errors in regards to what signifies a given sonic feature. This will be mitigated by the careful study by RR's sonic analysis team of 2023's top streamed songs and their respective sonic features, as interpreted in the data source. It should also be noted that trends shift over time, and the qualities of a popular song in 2023 might differ from those of 2024. In order to align with possible shifts in listener preferences, a time series analysis will be conducted across the 2023 year to determine if popular songs that were released throughout the year demonstrate a discernible shift in sonic qualities as the year progressed. This might help predict future trends to further base RR's top 3 song selection upon.

Stakeholders

Chief Data Officer
Sonic Analysis Team
Promotions Officer
Head of Artist Branding

Data source

CSV file read as Pandas Data Frame:

https://www.kaggle.com/datasets/nelgiriyewithana/top-spotify-songs-2023