

Project Proposal:

Overview:

Korean pop(K-pop) has been garnering attention in Korea and in Asian countries. More recently, however, it grew in popularity, generating annual revenue of \$10B for Korea (AFM Editorial Office). As the global music market welcomes its new titan, it is important to be able to gauge music popularity. More specifically for streaming platforms, such as Spotify, whose one of many strengths is its ability to recommend quality music to listeners before the song becomes popular, being able to predict songs' popularity based on a feature is critical. With the rise of other competitors, further reinforcing Spotify's strength is more important than ever. What opportunity is there for Spotify to increase its popularity prediction in the US and in Korea by 9% by January 1st, 2023?

Problem Statement:

What opportunity is there for Spotify to improve its popularity prediction in the US and in Korea by 9% by January 1st, 2023?

Criteria for Success:

Spotify will improve its popularity prediction in the US and in Korea by 9% by January 1st, 2023.

Specifications(Methods and Data Sources):

Datasets containing rankings and features of top charting US songs and top charting K-pop songs during 2000- 2019 were obtained from Kaggle. Said datasets will be used to identify a feature with the highest correlation with popularity to build a predictive model.

First, features in top charting songs in the US will be analyzed to identify the feature most strongly correlated with popularity and to develop a predictive model based on analysis. The model will then be tested on K-pop datasets to test and improve its accuracy.

The model will then be tested for its efficacy over next month.

Milestones:

Initial model

Initial model based on Top US charting songs analysis will be developed and implemented. It will then be tested on Top Korean music charts to evaluate its efficacy.

Final model

After iterations with Korean music datasets, the predictive model will be built. It will then be tested by evaluating its predictive prowess the following month.

Datasets:

K-Pop trends: <https://www.kaggle.com/code/sberj127/general-trend-in-kpop>

K-Pop hits 2021: <https://www.kaggle.com/datasets/jesseleee/kpophits2021>

Spotify Data- US trends (2000-2019):

<https://www.kaggle.com/code/harshapalnitkar/eda-on-spotify-top-hits-from-2000-2019>

Spotify- US trends 2021 January:

<https://www.kaggle.com/code/kaushalbinjola/eda-on-weekly-top-30-spotify-songs-from-1st-jan-21/data>