Spotify Dashboard: Into Spotify users' thinking.



Introduction

The purpose of this report is to gain insights into Spotify's customer characteristics and preferences, which could be valuable information for Spotify to further understand their service performance and improve customer satisfaction. For these reasons, I split the dashboard into 2 tabs: (1) User-Characteristics and (2) User-Preference.

For the general look and feel of the dashboard, I decided to use the colors black and green as the main theme since they represent the colors of Spotify interface. The text color is black in the green background and white in the black background to ensure visibility and simplicity. The logo Spotify at the top of each tab is found at (1)

User Characteristics

75% zoom for optimal view. In the tab "User-Characteristics", I included a grouped bar chart for "Premium Plan Preference" that can be broken down into Spotify Usage Period/Gender/Age. This complies with the proximity principle since similar plan preference would be grouped together. It also follows the similarity as subcategory will have the same color (for example: in terms of gender, Female will be represented by red, male is green and other is blue). For Potential Premium User section, the pie chart by gender also had percentage notation to change blindness. The area element is used to represent proportion of a subgroup. For both the bar chart "Potential Premium User" by Age and "Music/Podcast Genre distribution" (at bottom), they follow the figure-ground principle where the smaller bars are at the front and the bigger grid and background are at the back.

User Preference

In the tab "User-Preference", I decided to represent music recommendation ratings and pod variety ratings as photos to introduce variety to the dashboard, both images can be found at (2) and (3). The color scale ratings for pod variety satisfaction involves preprocessing such as cropping and rotating. For the line chart "Ratings for Top 5", I chose 5

most popular in terms of count for podcast or music and plot their ratings 1-5. The line graph creates a sense of connectedness. Even though the x-axis is not time series, I think involving line chart will represent a sense of trend and pattern across genres. For example, with podcast, we can clearly see most users rate 3 or 4 for the most popular genre. The pie chart on the right hand side also follows the principle of changing blindness through the notation. Their proportion magnitude is represented by the area each type covers. For the bar chart below, it complies with the fire-ground principle. The count of each category is represented by length, which clearly highlights the preference level as well as making it easy for comparison.

In general, I tried to introduce dark theme into each plot to make sure they could be well combined with the black background. For the pie chart, I exported the plot as png image, crop the white horizontal space and include them as images in the dashboard. I tried to not include too many different color shades to avoid distraction and ensure simplicity. However, in terms of graphics, I included different types of charts to keep the audience engaged and diversify the look and feel. Except for the pie chart, users could hover to the chart to see the specific information.

Reference

- (1) https://storage.googleapis.com/pr-newsroom-wp/1/2018/11/Spotify_Logo_RGB_Green.png
- (2) https://commons.wikimedia.org/wiki/File:Rating stars 3.5.svg
- (4) Dataset: https://www.kaggle.com/datasets/meeraajayakumar/spotify-user-behavior-dataset