SPOTIFY TRENDS

OVERVIEW:

This report provides a clear example of data storytelling. Users can view trends and insights related to the Spotify streaming app.

This analysis looks mainly at trends around streams overtime on Spotify platform:

- The most trending music artists
- The most trending songs that are streamed over this platform
- Distribution of streams globally which can be drilled to a detailed view for an individual country
- Top genres of songs streamed
- Detailed view of trends for an artist with their most trending songs overtime

This report is broken down into yearly data. Users can select which year they want to analyse with the slicer at the top of the page. Slicer values update based on selection.

Card visualisations are used to present key pieces of information.

Clustered bar charts are used to show Top 5 Popular Artists Streamed and Songs Streamed worldwide.

The Map visualisation was used to visualise total streams based on location.

Although funnel visualisations are optimal to visualise a linear process that has sequential, connected stages. I chose to use a funnel to present a breakdown of Genres streamed. This was a visually appealing way to show the data I wanted to visualise.

Line charts are used to show 'Streams Overtime' and 'Genres Streamed Overtime' over time. This was key for 'Genres Streamed Overtime' as this data had multiple groups (Genres).

DATA GATHERING:

Both the Charts data set and the Spotify Song (Genres) data set was sourced from Kaggle: https://www.kaggle.com/datasets/dhruvildave/spotify-chartshttps://www.kaggle.com/datasets/mrmorj/dataset-of-songs-in-spotify

IMPORTING DATA:

The dataset is held on a csv. file I loaded the data onto Power BI Desktop using the 'Get Data' option available.

TRANSFORMING DATA:

Charts Data:

Deleting Columns: A total number of 4 columns were deleted trend, chart, url and rank. I would not be needed this data for analysis.

Creating Date Table: A new source of data was imported 'Blank Query'. I then used the Advanced Editor in the 'Query' tab. I deleted the data in the query and copy and pasted my Date Table Code

which is written in MCODE. I chose to use a Date Table as they allow for useful time intelligence calculations and allows for precise date information.

Renaming and Grouping Tables and Queries: I renamed all queries to make them clear and easily understandable to any user. I also grouped them in folders.

Genre Data:

Deleting Columns: A total number of 20 columns were deleted. Only genre and song_name remained in this table.

DATA MODELLING:

After data was transformed into the Power BI desktop. I double checked all relationships between my tables. Power BI had already established a 1 to 1 relationship between the relevant Box Office Data Tables and the relevant Image URL Tables.

DATA MODELLING:

After data was transformed into the Power BI desktop. A new date table was created which allowed for a new relationship to be available between my Dates Table and my Financials Table. A 1 to Many relationships was established between both Dates.

A many to many relationships was also created between the Charts and Genre table linking Song Title's. Ideally would have preferred to have a unique column to create a relationship but the data set did not allow for this.

VISUALISING THE DATA:

Creating Measures Using DAX: I created 3 measures, Total Artists, Total Songs and Total Streams.

Creating New Table/Grouping Tables: I created a new table 'Key Measures' which was used to store all my measures. I grouped all my new measures into this table before deleting the default column1 table.

Card visualisations: 3 card visualisations were created to present the DAX measures created.

Slicer: I created a slicer using the data. Slicers are a great choice when you want to: display important filters on the report canvas for easier access. I changed the slicer settings to horizontal.

Clustered bar charts: Top 5 Popular Artists Streamed and Top 5 Popular Songs Streamed are tracked in two charts. I included a filter to filter both charts to show the top 5 values by 5 Total Streams.

I also edited the interactions of the Top 5 Popular Songs Streamed to ensure that only songs from selected artists are shown. If the user selects an artist from the Top 5 Popular Artist clustered bar chart.

Map visualisation: I used the map to visualise total streams based on location.

Funnel visualisations: I used a funnel visualisation to show Genres Streamed in a visually appealing way.

Line charts: 2-line charts were used to show 'Streams Overtime' and 'Genres Streamed Overtime' over time.

Reformatting data: Lastly, I reformatted all the data to make my report more visually appealing.

CONCLUSION:

This report helps drive a lot of action. Users can view trends and insights related to the Spotify streaming app. Would have liked to be able to establish a more meaningful relationship between both data sets. Song names are not unique which could have an impact on my report.