**Project Title: Spotify Trend Analysis** 

Tool: Tableau

Technologies: Data Collection & Data Visualization in Tableau

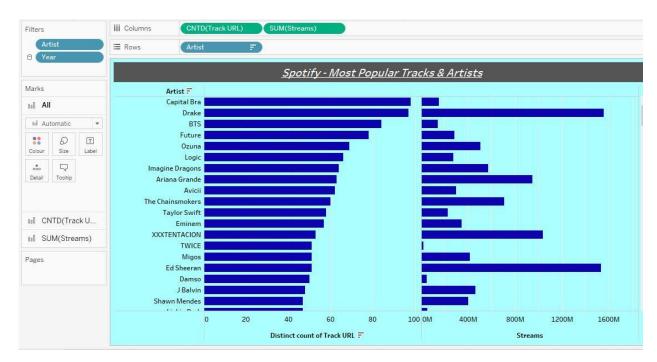
#### **Bring it into Tableau:**

- 1. Download the Spotify Trend Analysis Data set and convert it into Excel file for performing data cleaning and save it as Spotify Trend Analysis.
- 2. Open Tableau. In the <u>Connect pane</u>, select "**Text file**" and open the Spotify Trend Analysis data set Excel we just saved.
- 3. Drag the Spotify Excel onto the Canvas.

## Most popular tracks and artists

Let's start by analyzing the most popular tracks in Spotify's Top 200 list. Note that we'll be using the **Track URL** field as a unique identifier when we're doing distinct counts of tracks since some songs may be named the same thing.

- 1. Drag **Track URL** to Columns. Change the Measure to Count (Distinct). We quickly see that there are over 50,000 tracks within the data set.
- 2. Drag the **Artist** field to Rows. Sort from greatest to least to see the artist with the most tracks in the data set. Just because an artist has the most tracks in the list doesn't mean they have the most streams. We can see this in the screenshot below.



3. Since we're showing the relationship between two variables, let's see this in a scatterplot view instead. Now we can see that Drake consistently has a lot of tracks in the Top 200 and these tracks get a lot of stream time.



Now that we've seen the most popular artists, let's do the same with songs.

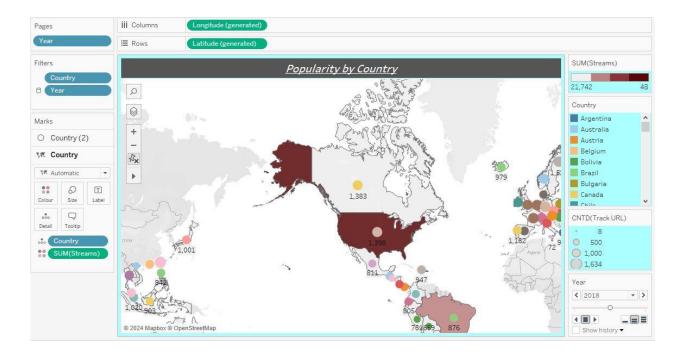
- 1. Create a new sheet. Add **SUM(Streams)** to Columns and **Track URL** to Rows.
- 2. Sort greatest to least.
- 3. Add **Track Name** next to **Track URL** on Rows.
- 4. Hide **Track URL** header by right clicking on the pill in Rows and deselecting "Show Header." It looks like Ed Sheeran's "Shape of You" has over 3.6 billion streams!



# **Popularity by country**

It's always interesting to see how listening habits differ from country to country. Let's analyze **Streams** by country using a map in Tableau.

- 1. Double click the **Country** field in the Data Pane. Tableau knows that this is a geographic field so it plots the data on a map.
- 2. Add longitude to the column and latitude to the row.
- 3. Drop the **Streams** field onto color to create a filled map. The darker shade represents more streams while the lighter shade represents fewer streams.
- 4. Tableau may show some unknown values in the lower right corner. Double click the error notification to see where we need to do some data cleanup. Any spelling error can manually correct that by matching it with the field in the data. It is also not recognizing the **Global** field. This field represents all of the countries in the dataset.



5. Add country and year to Filter to know the popularity of a particular country in particular year.

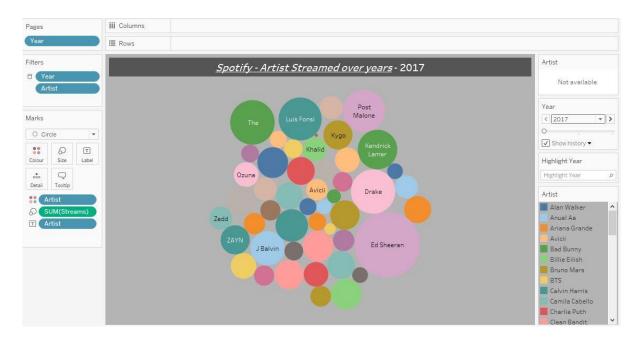


# **Streaming over time**

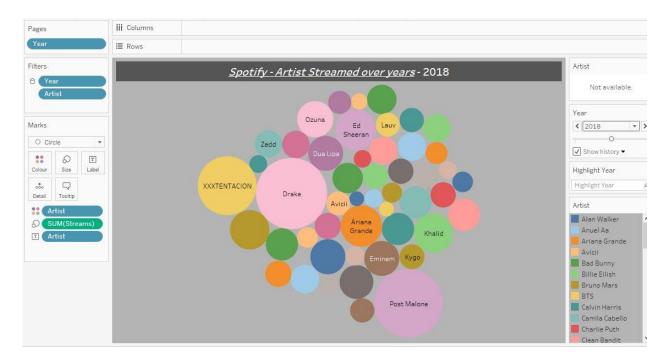
Let's look at streams over time. We'll use this later in our dashboard to get a comprehensive view of streams for each song and artist.

- 1. Add Artist to colours
- 2. Add Sum(streamed) to Size and
- 3. Add Artists to lables.
- 4. Add Years to Pages to find the artist streamed over year wise.

Most streamed Artist in 2017 is Ed Sheeran



#### Most streamed Artist in 2018 is Ed Darke

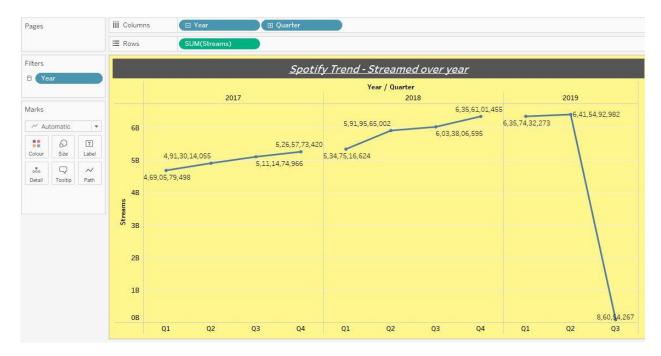


#### Most streamed Artist in 2019 is Billie Eilish



## **Spotify Trend over Years**

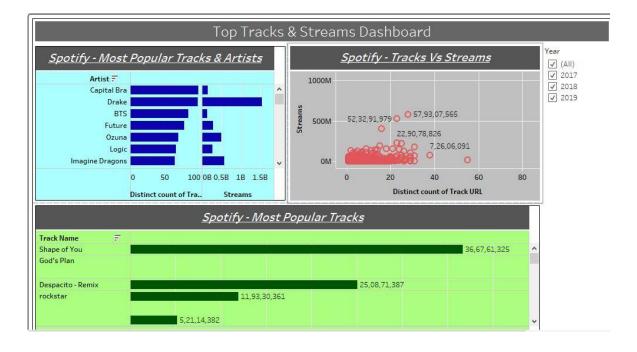
- 1. Create a new sheet. Add Hierarchy of years to column and sum streamed to rows
- 2. Select Trend chart to view the spotify trend over years
- 3. Spotify has upward trend from 2017 to 2019 and started to decline in 3rd quarter of 2019 due to Covid Pandemic.



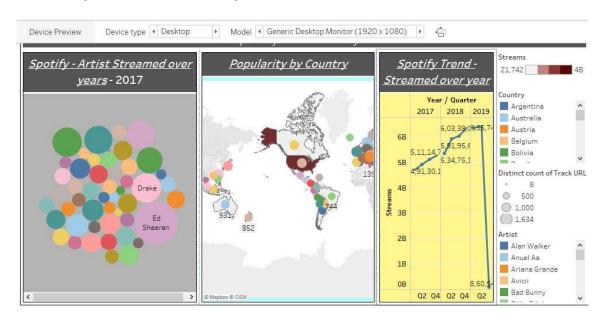
## Putting it all together in to a Dashboard

Now let's see how this data all relates by putting it into a dashboard.

- 1. Create a new dashboard.
- 2. Drag the sheets we created for our "Popular Track and Strems", "Tracks Vs Steams," and "Popular Track" along with Filter
- 3. Use years in Common filter.



# Spotify Trend Analysis Dashboard with most popular Artist and Country streamed over years



Finally Conclude the analysis with a story developed using the insights inferred from the worksheets.

#### Spotify Story

