



# Spotify Music Wrap

Global Listener Trends 2017 - 2021

Anna Barbara, Tanner Horton, Jonathan Michel,  
Bronwyn Milne & Victor Pang


November 1, 2022



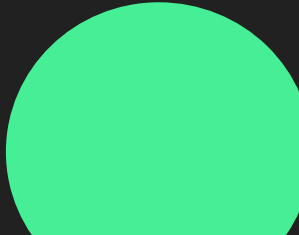


# Spoti-Facts:

- The world's most popular streaming service, with **456m users** across **183 regions**.
- North American listeners = **22%** of total subscribers (and have the highest average daily usage of the service).
- It revolutionized the music industry, delivering **faster** and **more precise statistics** about the popularity of artists (and their songs) than ever before.



Project Dataset: Spotify Charts 2017-2021:  
A dataset of all daily hit charts curated by Spotify



Hypothesis: The top streaming market will have a substantial influence over global charts.

Null:

The top streaming market will have no substantial influence over global charts.

Alternative:

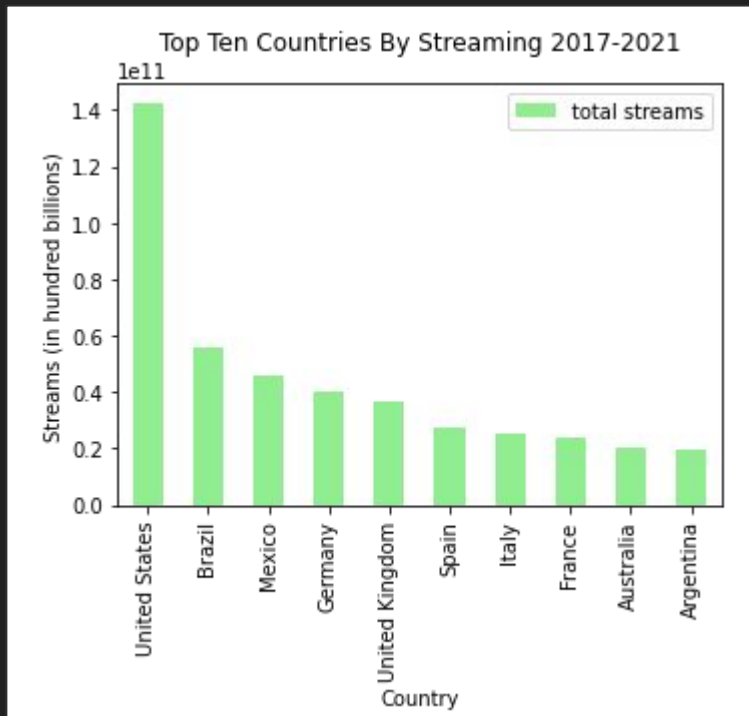
The top streaming market will have a substantial negative influence over global charts.

The slide features a dark background with four horizontal bars: a white bar at the top left, a red bar at the top right, a red bar at the bottom left, and a white bar at the bottom right. The text is centered in a light blue font.

Which countries were  
the most influential on  
the global Spotify  
market from 2017-2021?

# Top Streaming Countries

## 2017 - 2021



01 United States

06 Spain

02 Brazil

07 Italy

03 Mexico

08 France

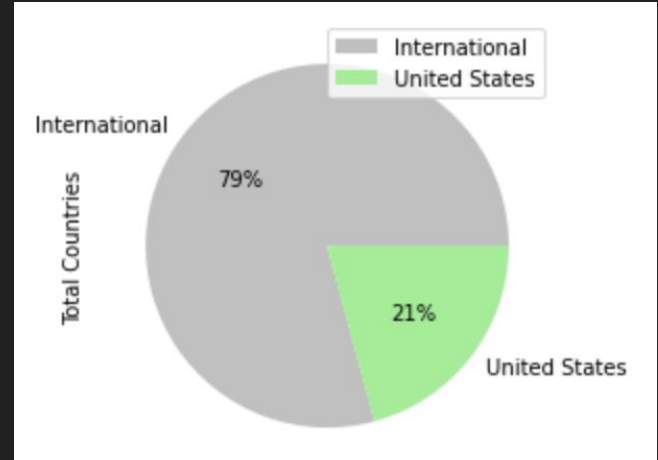
04 Germany

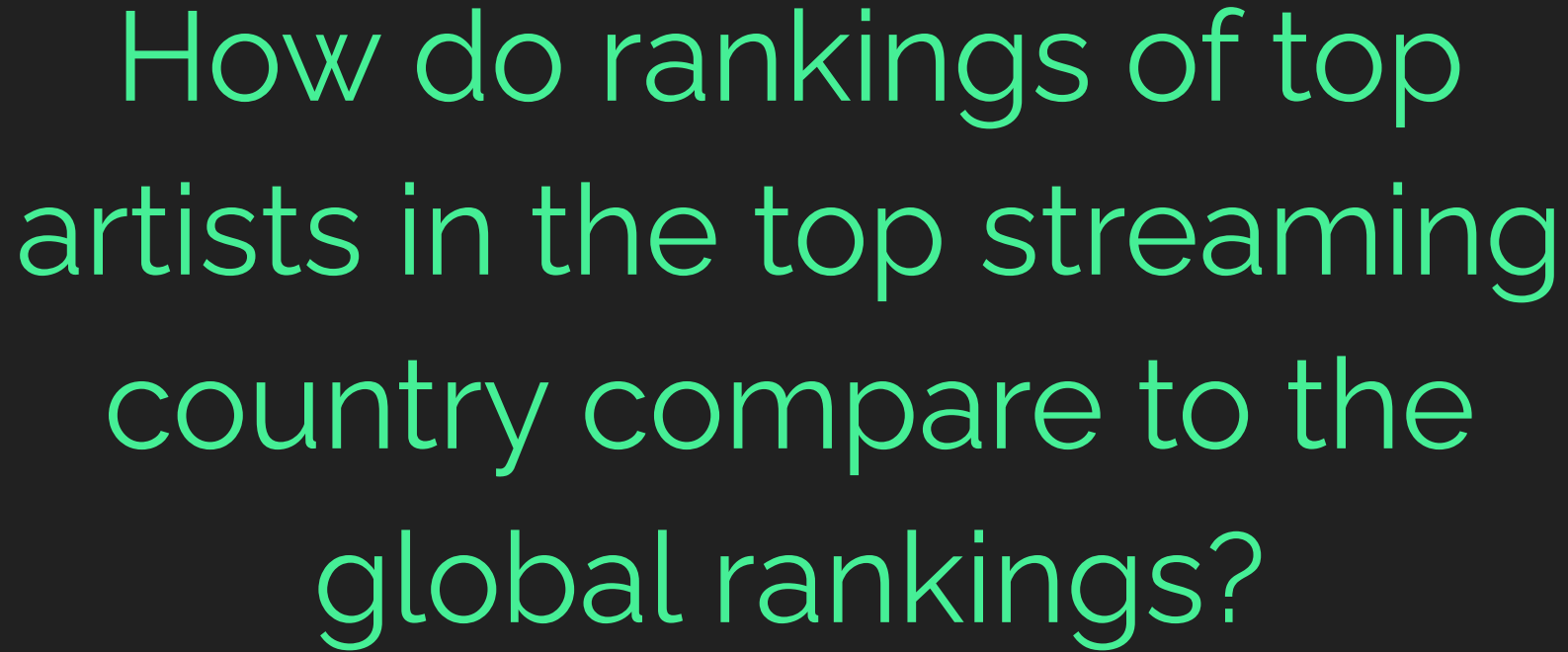
09 Australia

05 United Kingdom

10 Argentina

The U.S. market makes up 21% of the total global Spotify streams from 2017-2021.



The slide features a dark gray background. At the top, there are two horizontal bars: a white one on the left and a red one on the right. At the bottom, there are also two horizontal bars: a red one on the left and a white one on the right. The text is centered in the middle of the slide in a red, monospace-style font.

How do rankings of top  
artists in the top streaming  
country compare to the  
global rankings?

# Top 10 Artists Globally 2017-2021

01 Post Malone

02 Ed Sheeran

03 Drake

04 Bad Bunny

05 Billie Eilish

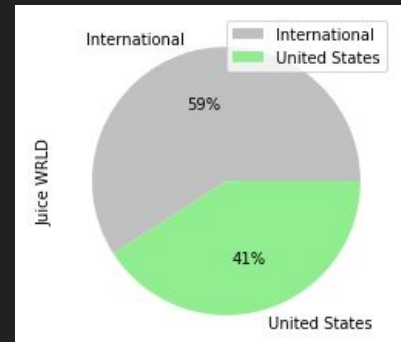
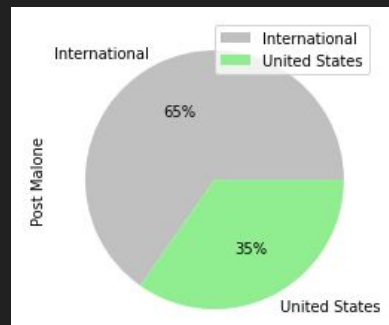
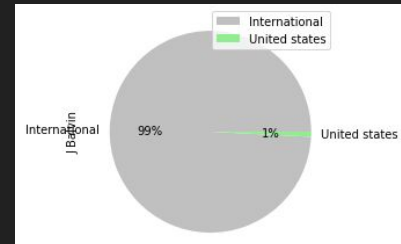
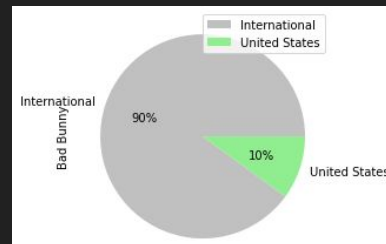
06 J Balvin

07 Ariana Grande

08 The Weeknd

09 Juice WRLD

10 Dua Lipa



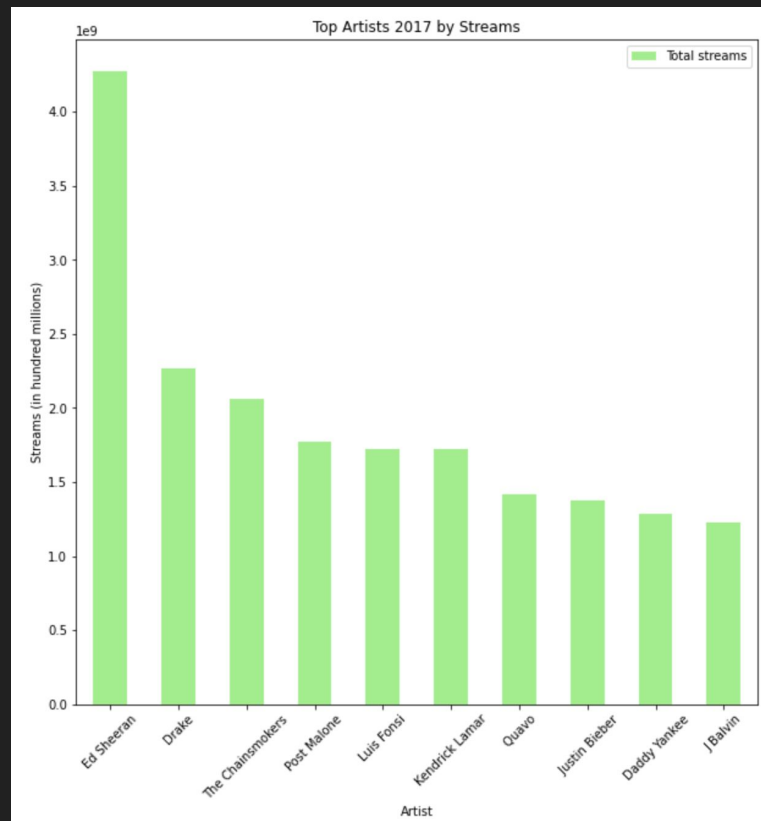


# Top 10 Artists Globally 2017

- |                            |                          |
|----------------------------|--------------------------|
| <u>01</u> Ed Sheeran       | <u>06</u> Kendrick Lamar |
| <u>02</u> Drake            | <u>07</u> Quavo          |
| <u>03</u> The Chainsmokers | <u>08</u> Justin Bieber  |
| <u>04</u> Post Malone      | <u>09</u> Daddy Yankee   |
| <u>05</u> Luis Fonsi       | <u>10</u> J Balvin       |

The top 10 artists in the US had 6 artists in common with the top 10 global artists of 2017

Global

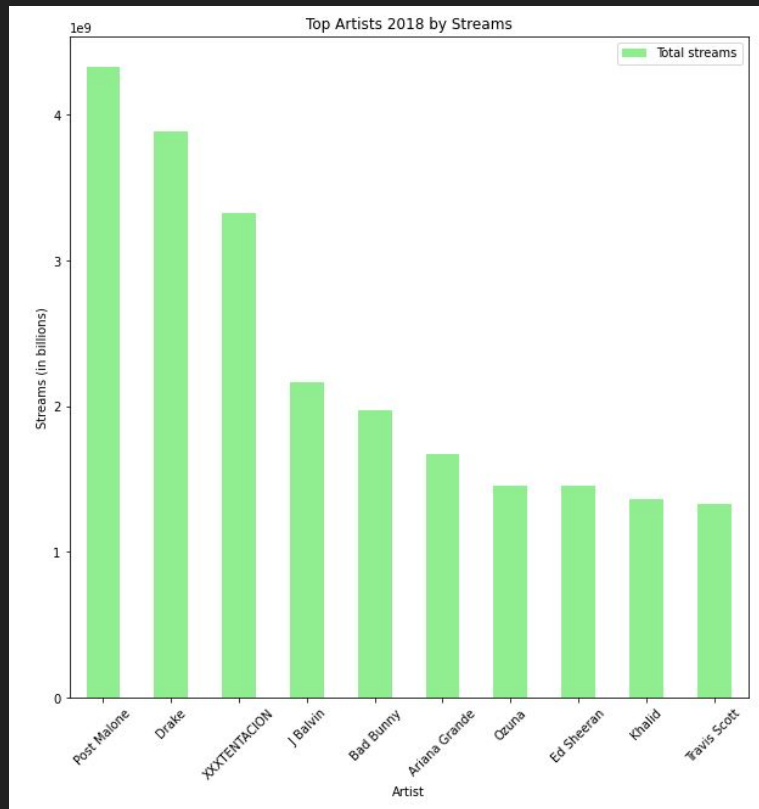


# Top 10 Artists Globally 2018

Global

- |                        |                         |
|------------------------|-------------------------|
| <u>01</u> Post Malone  | <u>06</u> Ariana Grande |
| <u>02</u> Drake        | <u>07</u> Ozuna         |
| <u>03</u> XXXTENTACION | <u>08</u> Ed Sheeran    |
| <u>04</u> J Balvin     | <u>09</u> Khalid        |
| <u>05</u> Bad Bunny    | <u>10</u> Travis Scott  |

The top 10 artists in the US had 5 artists in common with the top 10 global artists of 2018

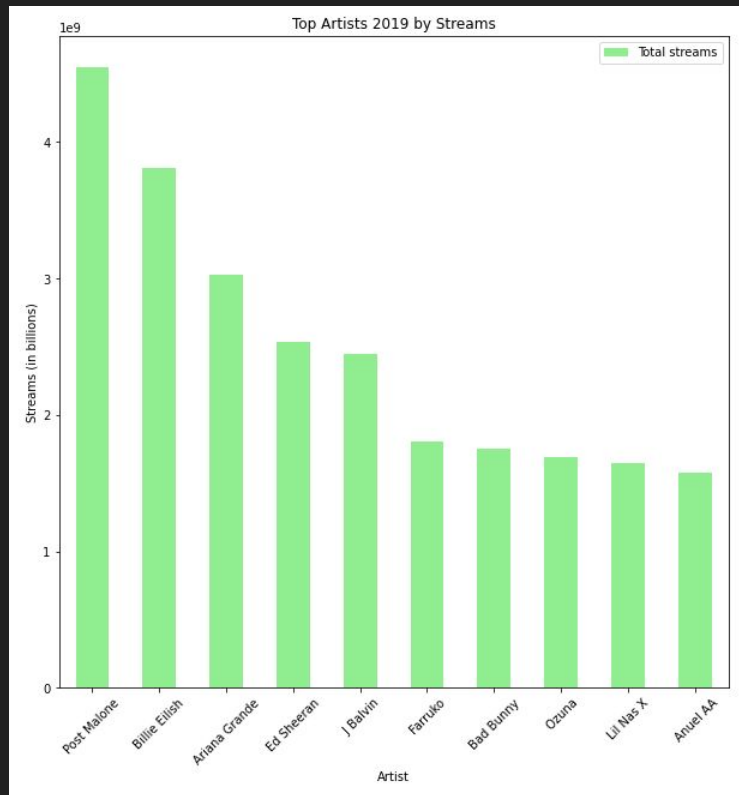


# Top 10 Artists Globally 2019

Global

- |           |               |           |           |
|-----------|---------------|-----------|-----------|
| <u>01</u> | Post Malone   | <u>06</u> | Farruko   |
| <u>02</u> | Billie Eilish | <u>07</u> | Bad Bunny |
| <u>03</u> | Ariana Grande | <u>08</u> | Ozuna     |
| <u>04</u> | Ed Sheeran    | <u>09</u> | Lil Nas X |
| <u>05</u> | J Balvin      | <u>10</u> | Anuel AA  |

The top 10 artists in the US had 4 artists in common with the top 10 global artists of 2019



# Top 10 Artists Globally 2020

Global

01 Bad Bunny

06 Harry Styles

02 Juice WRLD

07 Post Malone

03 The Weeknd

08 Pop Smoke

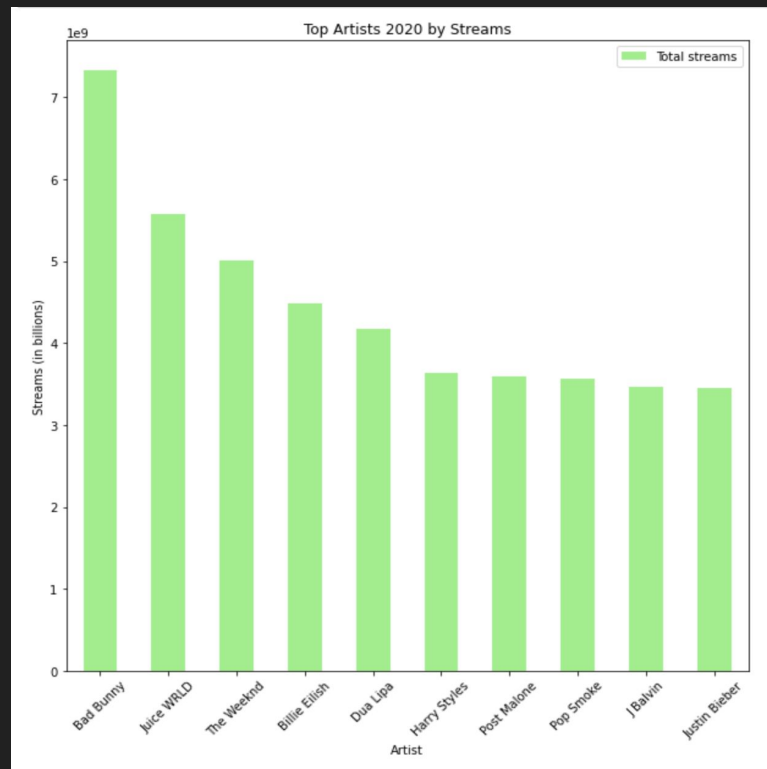
04 Billie Eilish

09 J Balvin

05 Dua Lipa

10 Justin Bieber

The top 10 artists in the US had 5 artists in common with the top 10 global artists of 2020



# Top 10 Artists Globally 2021

01 Olivia Rodrigo

06 Justin Bieber

02 Doja Cat

07 Dua Lipa

03 The Weeknd

08 Drake

04 Bad Bunny

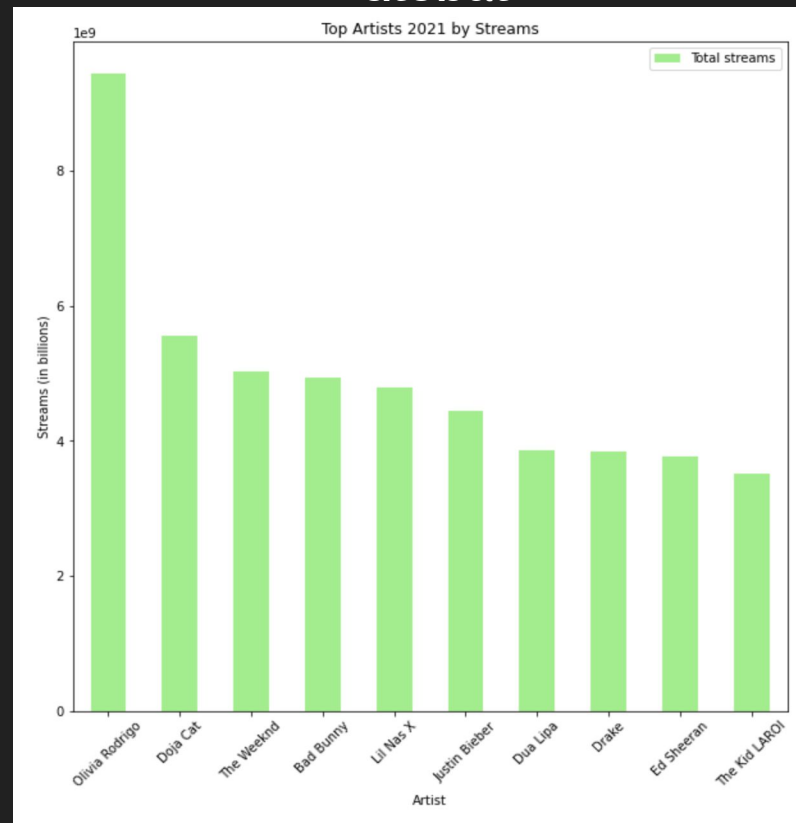
09 Ed Sheeran

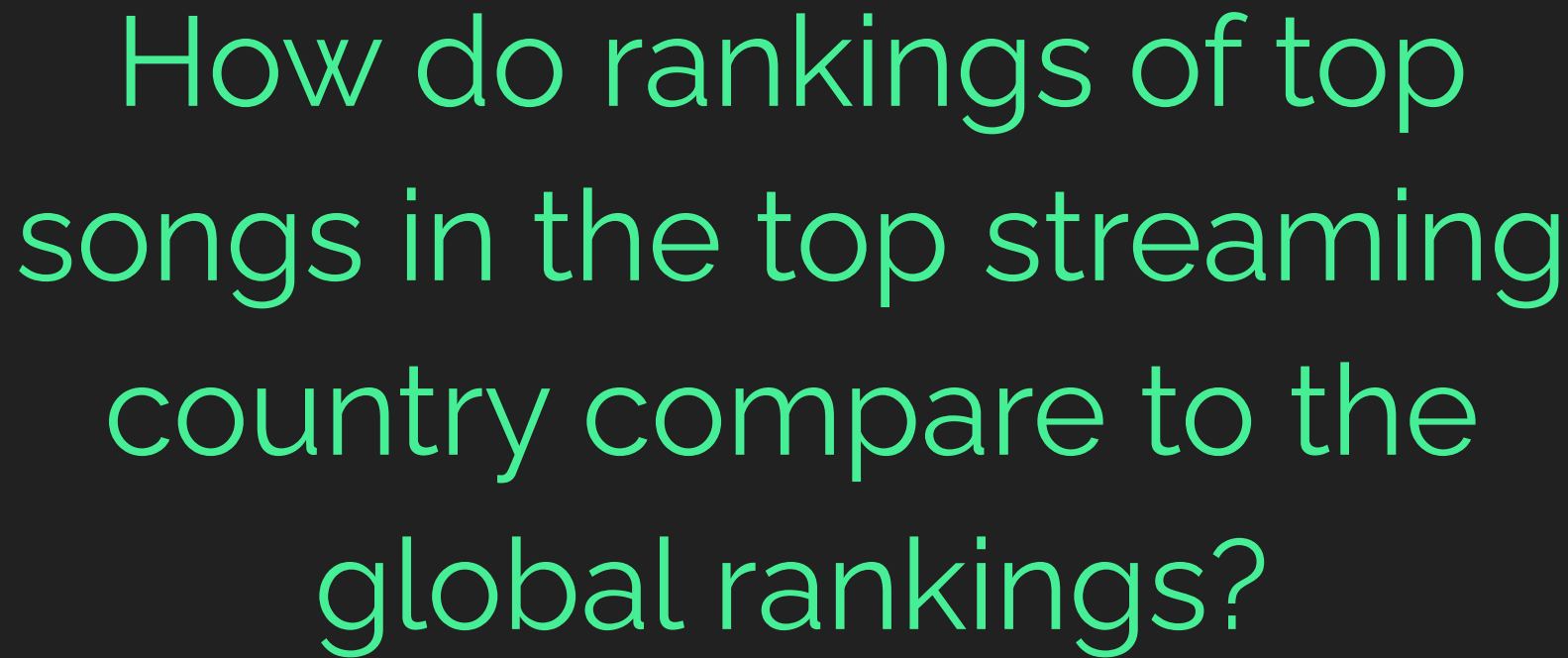
05 Lil Nas X

10 The Kid LAROI

The top 10 artists in the US had 5 artists in common with the top 10 global artists of 2021

## Global

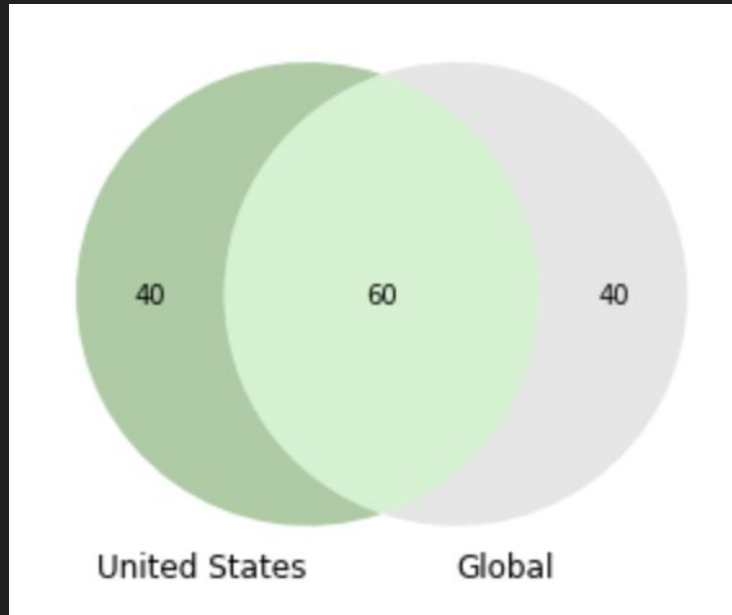


The slide features a dark gray background. At the top, there are two horizontal bars: a white one on the left and a red one on the right. At the bottom, there are two horizontal bars: a red one on the left and a white one on the right. The text is centered in the middle of the slide.

How do rankings of top  
songs in the top streaming  
country compare to the  
global rankings?

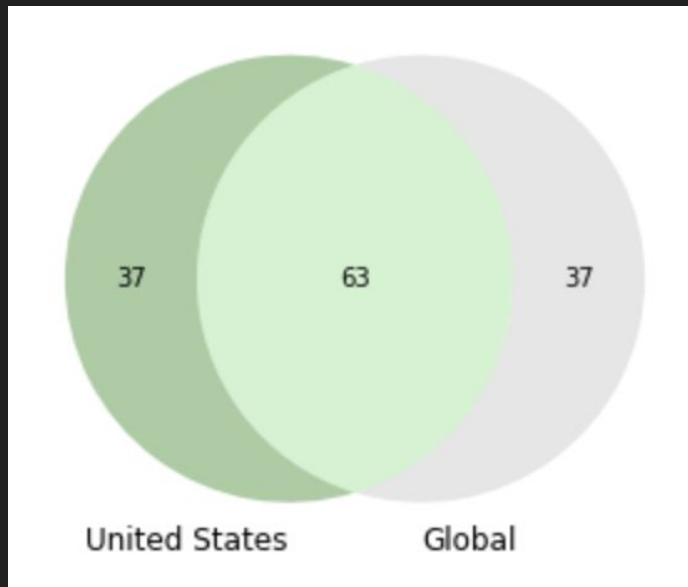
# Top Songs 2017

The US charts had 60% of the same top 100 songs as the global charts in 2017.



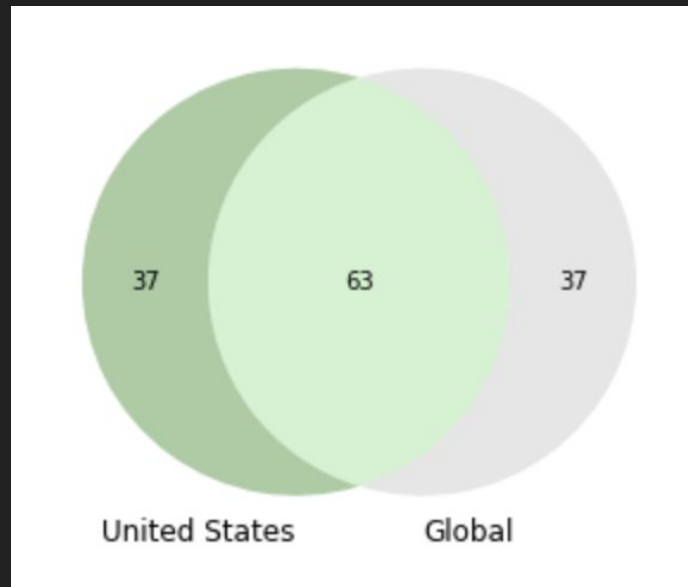
# Top Songs 2018

The US charts had 63% of the same top 100 songs as the global charts in 2018.



# Top Songs 2019

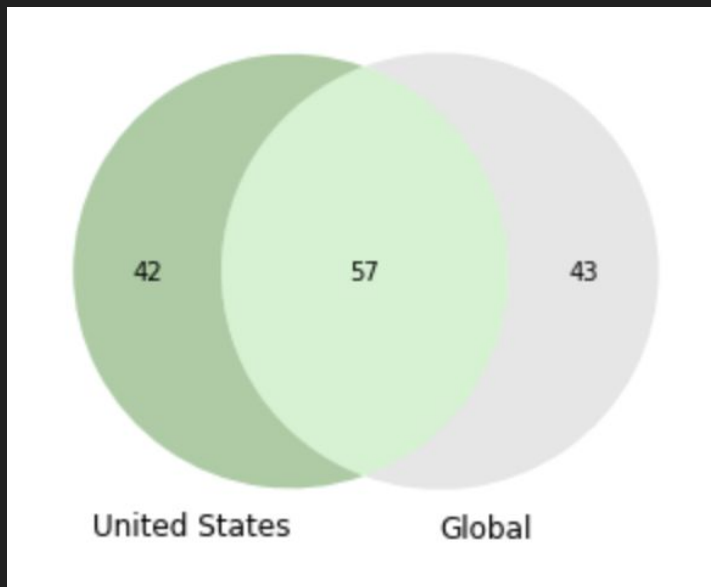
The US charts had 63% of the same top 100 songs as the global charts in 2019.





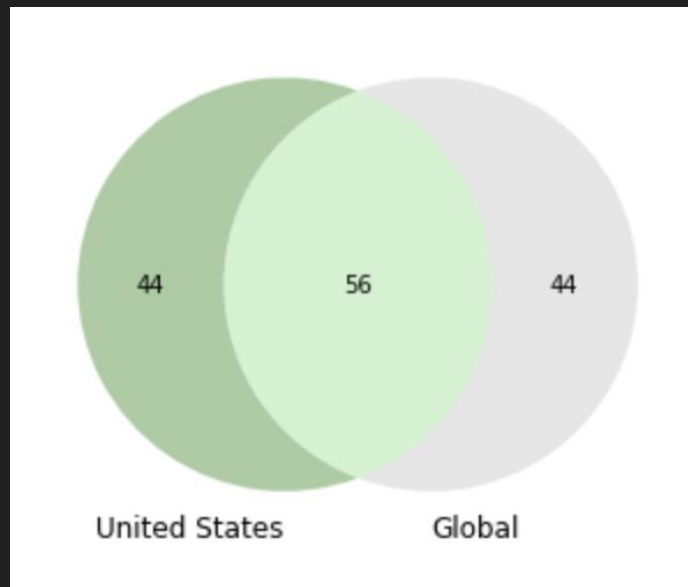
# Top Songs 2020

The US charts had 57% of the same top 100 songs as the global charts in 2020.



# Top Songs 2021

The US charts had 56% of the same top 100 songs as the global charts in 2021.




# Top Songs 2017-2021: Chi Squared


Since the chi square value of 73.84 exceeds the critical value of 3.84, we conclude that the results are statistically significant.

	observed (%)	expected (%)
United States	56	21
Other	44	79

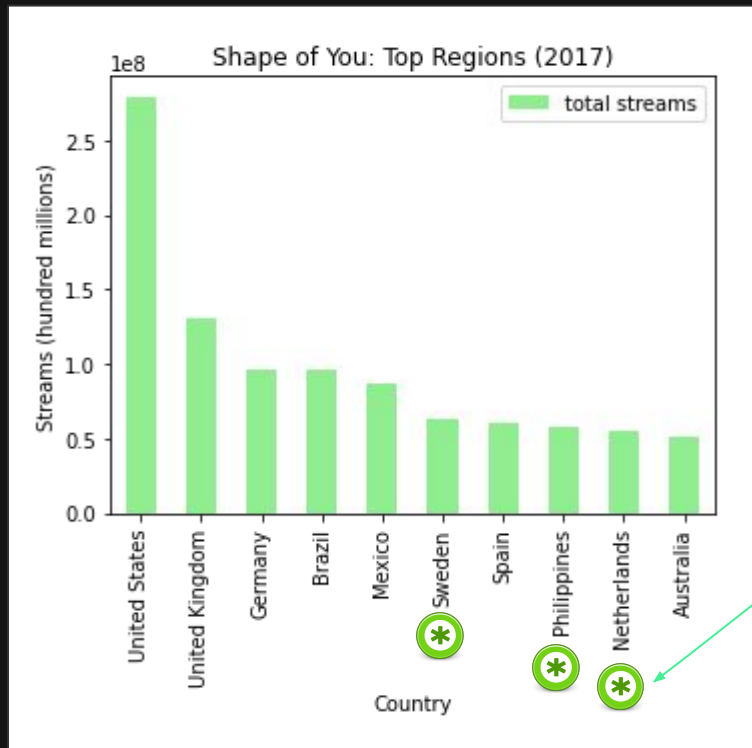
p-value: 8.47e-18



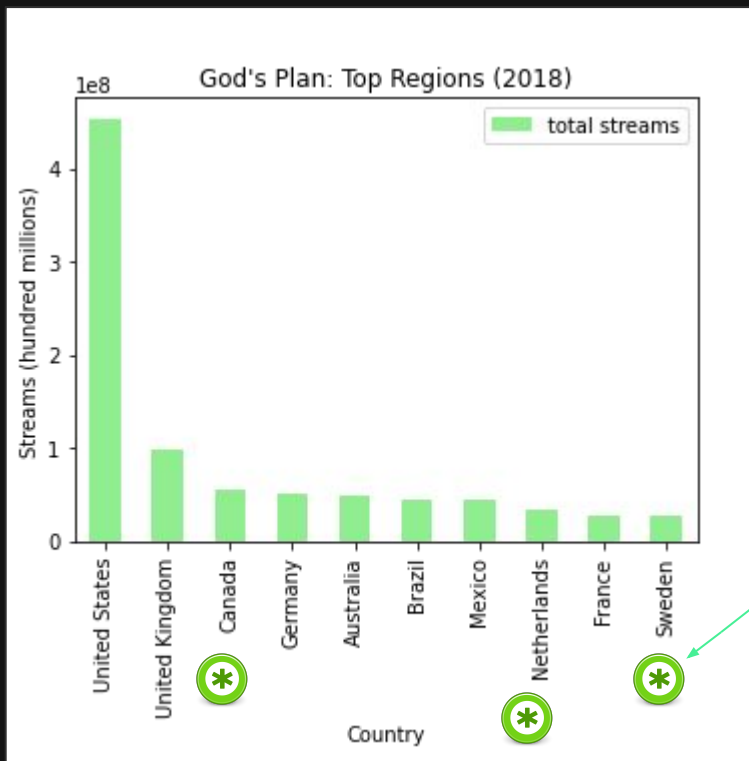
How did the United States and the other top Spotify markets contribute to the streams of the most popular song from each year in our dataset (2017-2021)?



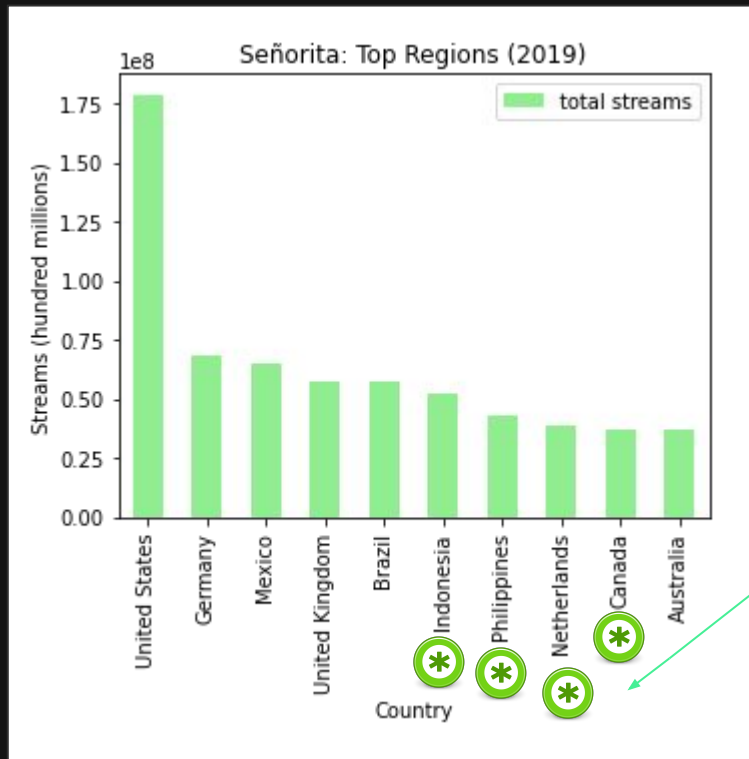
# Shape of You: Top Song of 2017



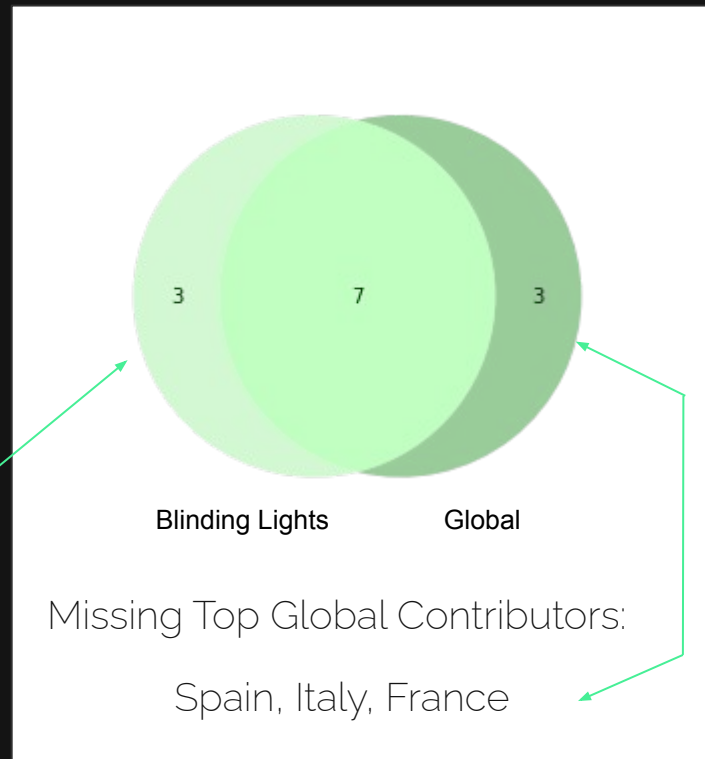
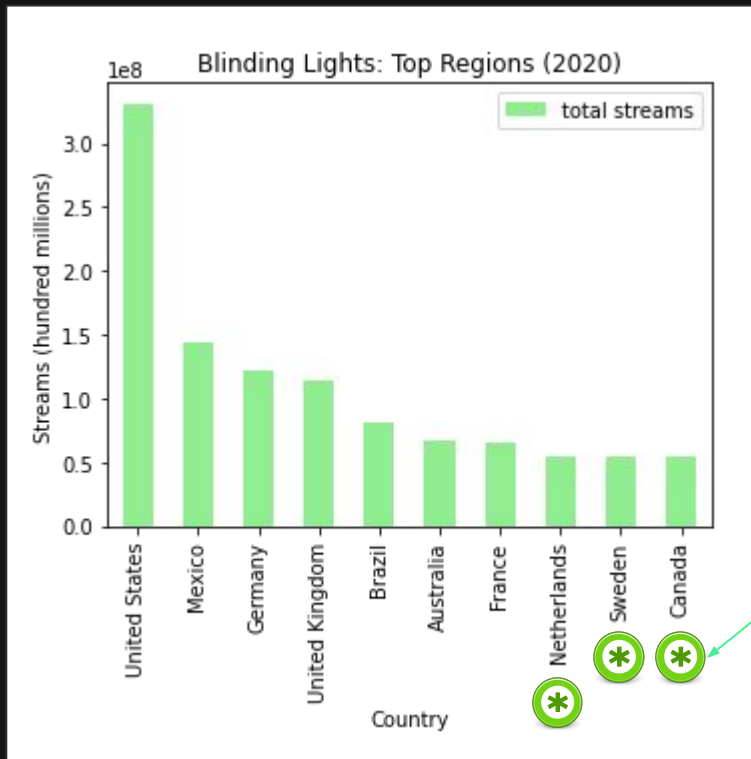
# God's Plan: Top Song of 2018



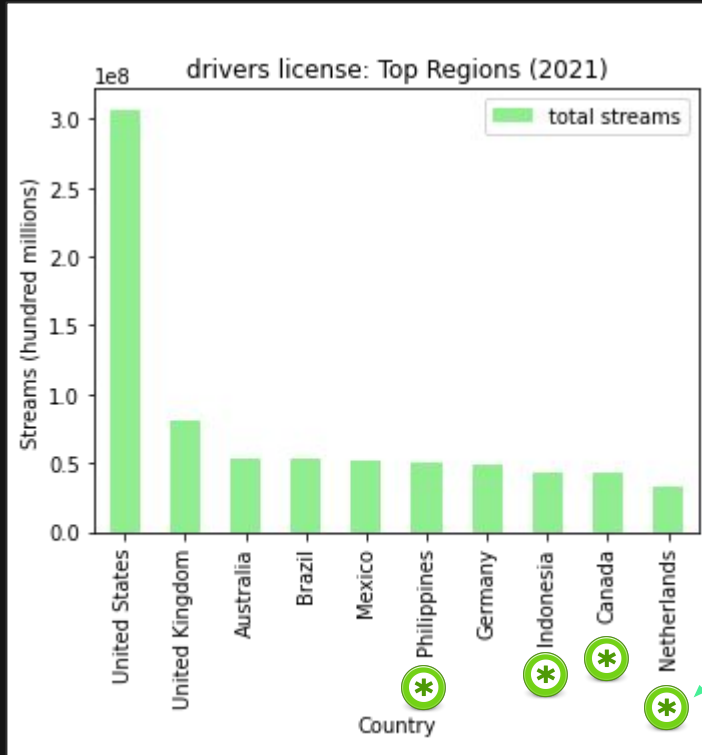
# Señorita: Top Song of 2019



# Blinding Lights: Top Song of 2020



# drivers license: Top Song of 2021







# Conclusion

The US did have a significant impact on global music trends  
from 2017 -2021

- The U.S. market makes up 21% of the total global Spotify streams from 2017-2021
- From 2017 - 2021, the U.S. top charts had at least 4 artists in common with the top 10 global artists.
- From 2017 - 2021, the U.S. top charts had at least 56% of the same songs as the global charts.
- The top song of each year had the highest number of streams from the US market.



# References

- <https://www.kaggle.com/datasets/dhruvildave/spotify-charts?resource=download>
- <https://www.kaggle.com/code/pavansanagapati/spotify-music-api-data-extraction-part1>
- <https://www.kaggle.com/code/tanersekmen/spotify-50-song-analysis>
- <https://seekingalpha.com/article/4516217-spotify-labels-interdependent>
- <https://www.demandsage.com/spotify-stats/#:~:text=256%20million%20of%20Spotify's%20monthly,precise%2C%20as%20of%20September%202022.>
- <https://www.rug.nl/news/2020/06/how-spotify-is-influencing-the-music-industry?lang=en>
- <https://www.bbc.com/news/newsbeat-43240886>
- <https://www.businessofapps.com/data/spotify-statistics/>
- <https://newsroom.spotify.com/company-info/>
- <https://www.bbc.com/news/business-60881567>
- <https://thetowerinfo.com/listen-spotify-china/>
- <https://worldpopulationreview.com/countries>