

Intelligent music streaming service

based on
the analysis of
Top streams Songs
and Artists
on Spotify

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Motivation

Spotify Investor Says Streaming Will Quadruple by 2025 — Any Questions?
Marsha Silva • January 25, 2018 • 2

TECH TRADER DAILY

Pandora, Spotify See Rising Song Costs; Scale is Essential, Says Evercore ISI

By Tiernan Ray • Updated Jan. 29, 2018 3:45 p.m. ET

- **The trend analysis** will give us to explore how artists and songs' popularity varies in time.



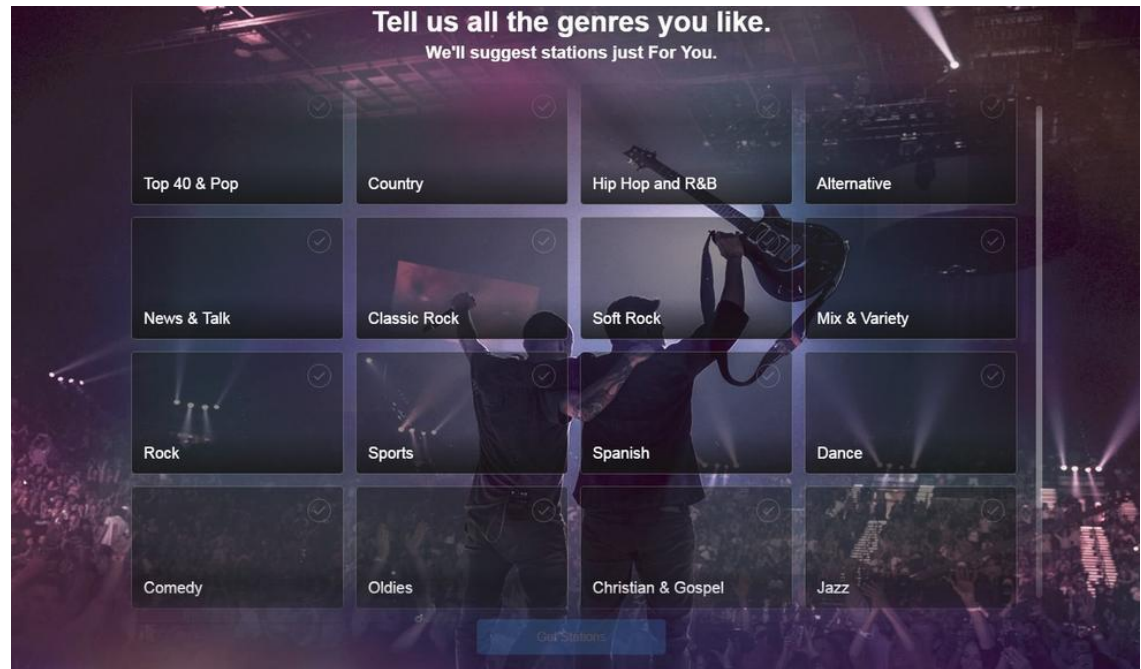
Insights

By using the daily ranking of the 200 most listened songs in 53 countries by Spotify users,

- Can you **PREDICT** what is the rank position or the number of streams a song will have in the future?
- Does people **SHARE** the very same top ranking songs on countries far away from each other?
- If then we can make some **BUSINESS MODELS** closely related to the tendency?
- How long time does a top ranking song takes to get into the ranking of neighbor countries?
- Make **A DISTRIBUTION MAP**, and **INFLUENCE MAP** by region, country, genre(music categories), and other information (such as season, weather, social event, etc)
- Check a possibility to develop **A Music Recommendation Service** based on user-preference?

Analysis points

- By Artist
- By Genre
- By Lyrics
- By Gender
- By Age
- By Weather condition
- By Social effect



Data Sets

- `spotify-worldwide-daily-song-ranking.zip`
- `top-tracks-of-2017.zip`
- `top-tracks-of-2016.zip`
- `every-song-you-have-heard-almost.zip`
- As references,
 - SiriusXM Internet Radio
 - Apple Music
 - Amazon Music Unlimited
 - Google Play Music
 - Pandora Internet Radio



Limitation

- Data Set is Too huge to visualize
 - To find any statistical approach to guarantee the reliability of the reduced set

Future Work

- Analysis
 - Countryside spread
 - Worldwide spread
- Reference comparison
 - Web scraping
 - Data mining : Another Data Sets
- Develop Predict Model

Shinyapps.io

- <https://canslove.shinyapps.io/canslove/>

Appendix

Table

Analysis of Top Streamed Songs and Artists on Spotify

Sources

Insights

Analysis

Discovery

Limitation

Future Work

Countryside

Worldwide

Source code

Item in Dataset(1):

RANKING

Ranking (range) to see:

1

50

100

Date range (For DT, 1st date selection only)

2017-01-01

to

2017-01-31

☒ V for ARTIST(or TrackName)

ARTIST

Maroon 5

TRACK_NAME

Don't Wanna Know

Select variable to See

Ranking

Switch to checkbox-> Select Regions:

slider

From January to December in 2017:

1

3

5

7

9

11

12

(1) Table (2) Chart (3) Map (4) Word Cloud

Show 10 entries

Search:

RANKING	TRACK_NAME	ARTIST	STREAMS	DATE	REGION
1	Reggaetón Lento (Bailemos)	CNCO	19272	2017-01-01	ec
2	Chantaje	Shakira	19270	2017-01-01	ec
3	Otra Vez (feat. J Balvin)	Zion & Lennox	15761	2017-01-01	ec
4	Vente Pa' Ca	Ricky Martin	14954	2017-01-01	ec
5	Safari	J Balvin	14269	2017-01-01	ec
6	La Bicicleta	Carlos Vives	12843	2017-01-01	ec
7	Ay Mi Dios	IAmChino	10986	2017-01-01	ec
8	Andas En Mi Cabeza	Chino & Nacho	10653	2017-01-01	ec
9	Traicionera	Sebastian Yatra	9807	2017-01-01	ec
10	Shaky Shaky	Daddy Yankee	9612	2017-01-01	ec

Showing 1 to 10 of 50 entries

Previous 1 2 3 4 5 Next

Show 10 entries

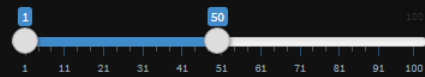
Search:

RANKING	TRACK_NAME	ARTIST	STREAMS	DATE	REGION
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Chart

Analysis of Top Streamed Songs and Artists on Spotify

Ranking (range) to see:



Date range (For DT, 1st date selection only)

2017-01-01 to 2017-01-31

☒ V for ARTIST(or TrackName)

ARTIST

Maroon 5

TRACK_NAME

Don't Wanna Know

Select variable to See

Ranking

Switch to checkbox-> Select Regions:

slider

From January to December in 2017:



(1) Table

(2) Chart

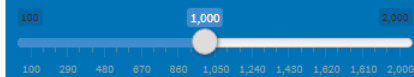
(3) Map

(4) Word Cloud

Select Plot type

Scatter

Height of plot (in pixels)



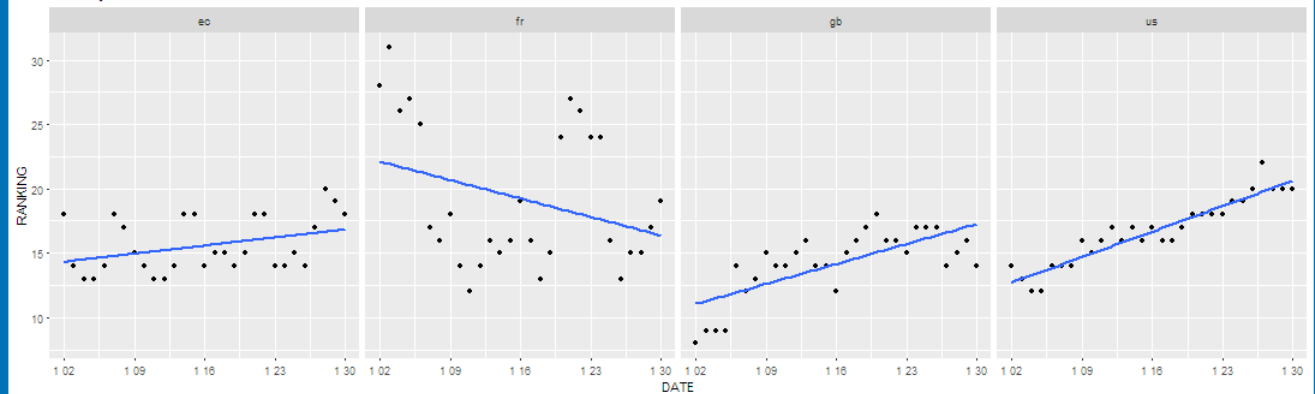
Facet Row

None

Facet Col

REGION

Rank by DATE - Maroon 5



Test : The data is Top100 ranked songs from Jan 2017 to Feb 2018 @ Spotify.

Preliminary

Map

Analysis of Top Streamed Songs and Artists on Spotify



Sources

Insights

Analysis

Discovery

Limitation

Future Work

Countryside

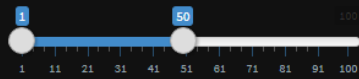
Worldwide

Source code

Item in Dataset(1):

RANKING

Ranking (range) to see:



Date range (For DT, 1st date selection only)

2017-01-01 to 2017-01-31

☒ V for ARTIST(or TrackName)

ARTIST

Maroon 5

TRACK_NAME

Don't Wanna Know

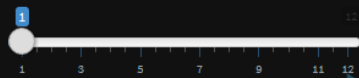
Select variable to See

Ranking

Switch to checkbox-> Select Regions:

slider

From January to December in 2017:



(1) Table

(2) Chart

(3) Map

(4) Word Cloud

Chart

Select to see :

- ☒ Average Ranking in every Region
- ☐ The day of highest ranked

TOP Ranks Music Distributed Regions



(4) Word Cloud

