ASSIGNMENT 3: [C] REPORT ON ANALYTIC SOLUTION

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ABOUT THE DATASET

We analyzed an **open-source Spotify dataset from 2020 to 2023** using Power BI. This dataset includes:

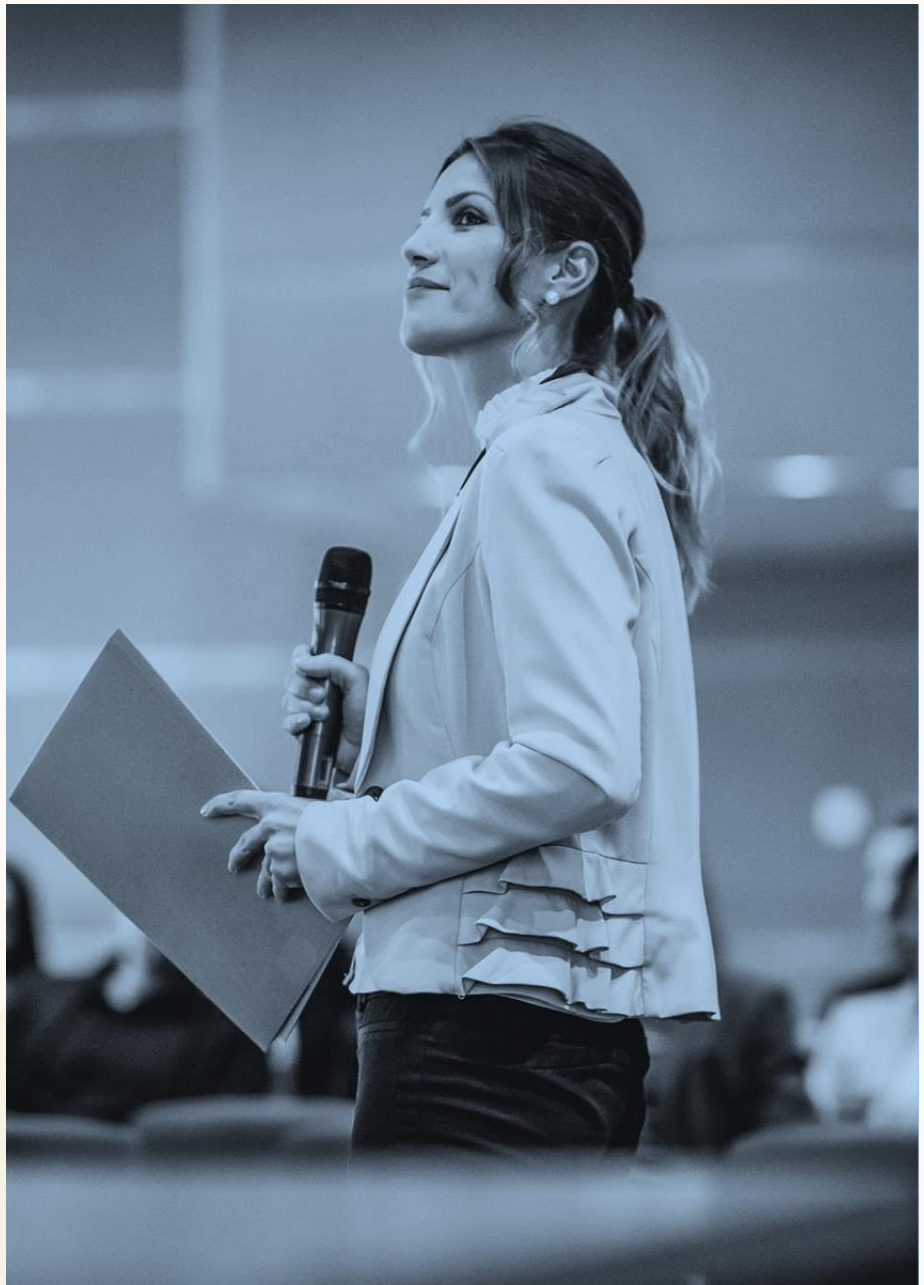
i. Song details (track names, artists, release dates)
ii. Streaming data (total streams, playlist appearances)
iii. Audio features (danceability, tempo, energy, loudness, etc.)

Purpose & Goals

The goal of this project was to understand what makes a song popular by analyzing streaming trends, artist success, and how audio features impact a song's performance.

KEY QUESTIONS WE EXPLORED

1. Which songs were the most streamed from 2020-2023?
2. Who were the most streamed artists?
3. Which year had the most popular songs?
4. How has music popularity changed over time?
5. How do song characteristics (danceability, tempo, energy) affect streams?



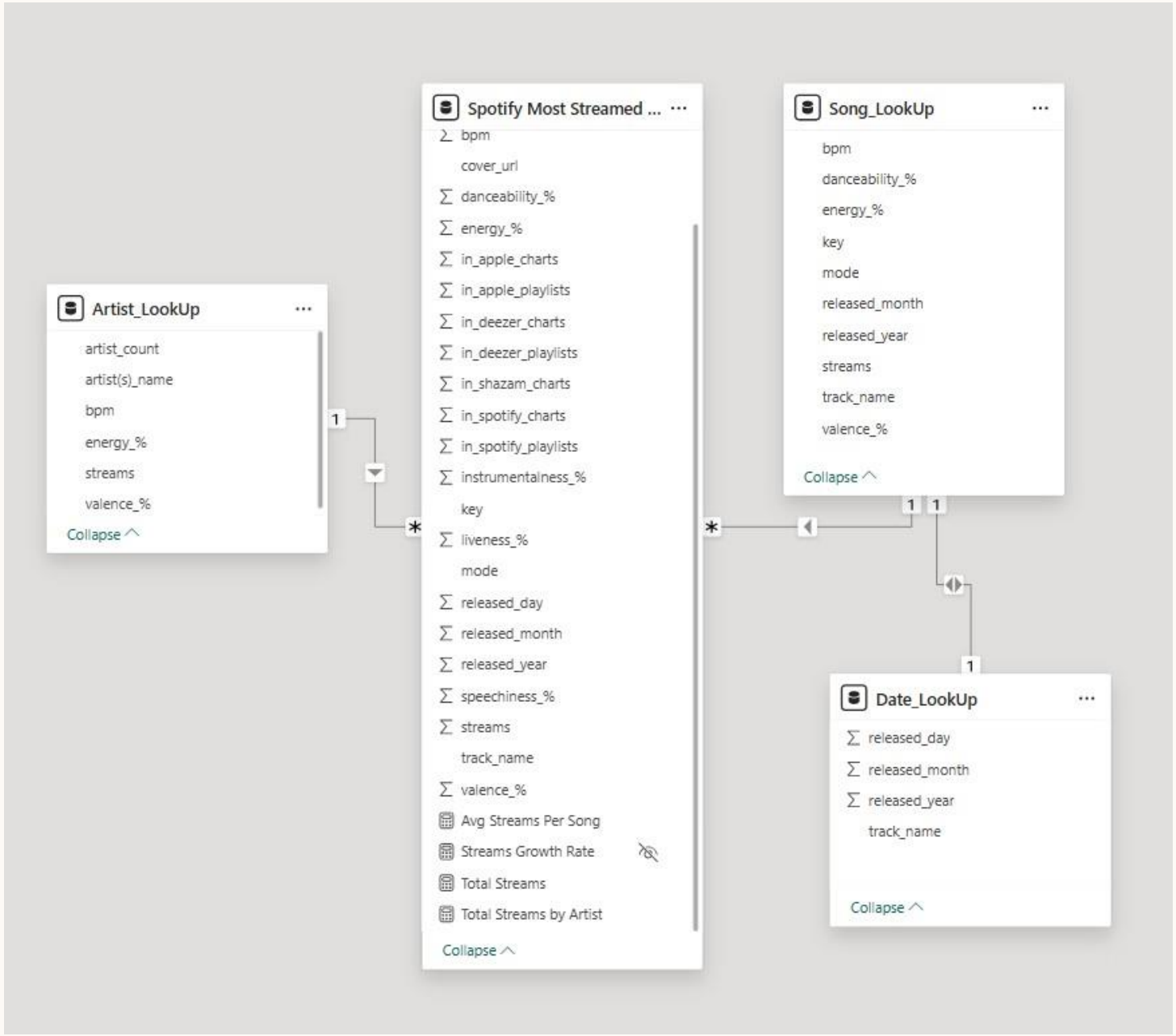
ENGAGING THE AUDIENCE

- Make eye contact with your audience to create a sense of intimacy and involvement
- Weave relatable stories into your presentation using narratives that make your message memorable and impactful
- Encourage questions and provide thoughtful responses to enhance audience participation
- Use live polls or surveys to gather audience opinions, promoting engagement and making sure the audience feel involved

METRICS & KPIS WE FOCUSED ON

- **Total Streams** – Measuring song popularity
- **Most Streamed Artists & Songs** – Identifying top performers
- **Average Streams per Song** – Understanding consistency in success
- **Correlation Between Audio Features & Streams** – Finding patterns in song popularity

ERD DIAGRAM


Artist_LookUp
artist_count
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bpm
energy_%
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Collapse
1
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Spotify Most Streamed ...
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Date_LookUp
released_day
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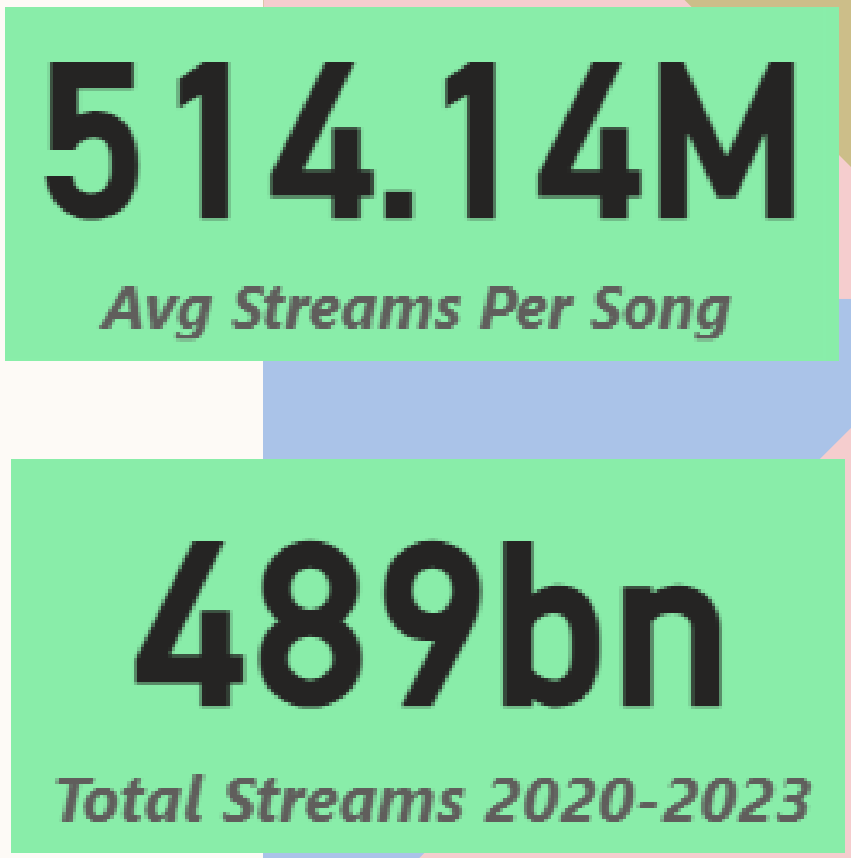
track_name
Collapse

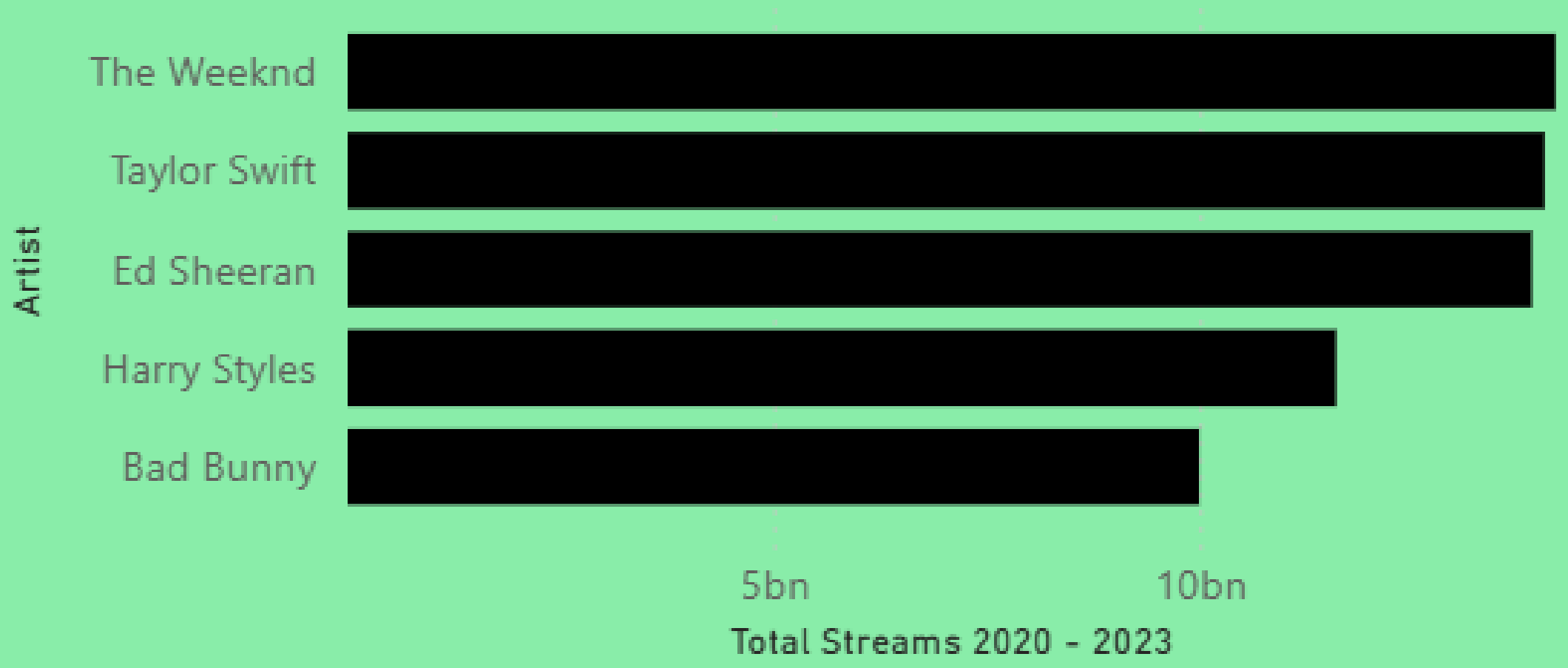
POWER BI VISUALS

Total Streams & Average Streams per Song

- **489 billion total streams (2020-2023)** – This represents the combined number of times songs were streamed on Spotify over the analyzed period.
- **514.14 million average streams per song** – This shows the average number of streams per track, helping us understand how songs performed on a per-track basis.



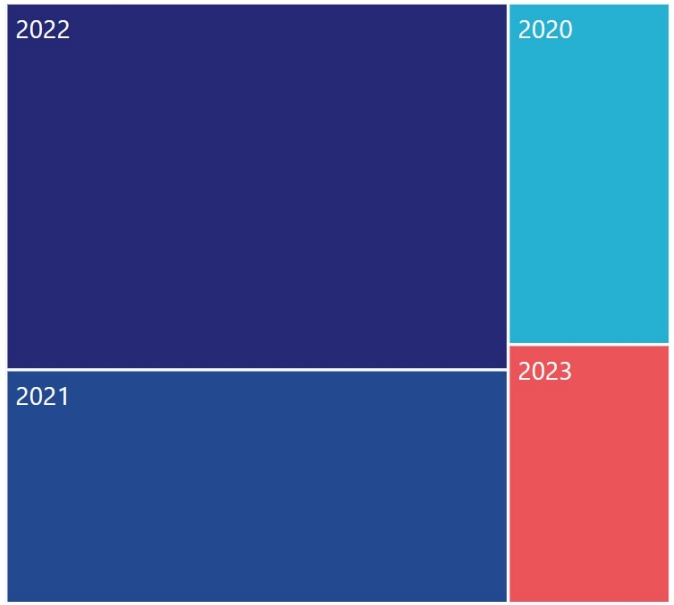
Top 5 Most Streamed Artists



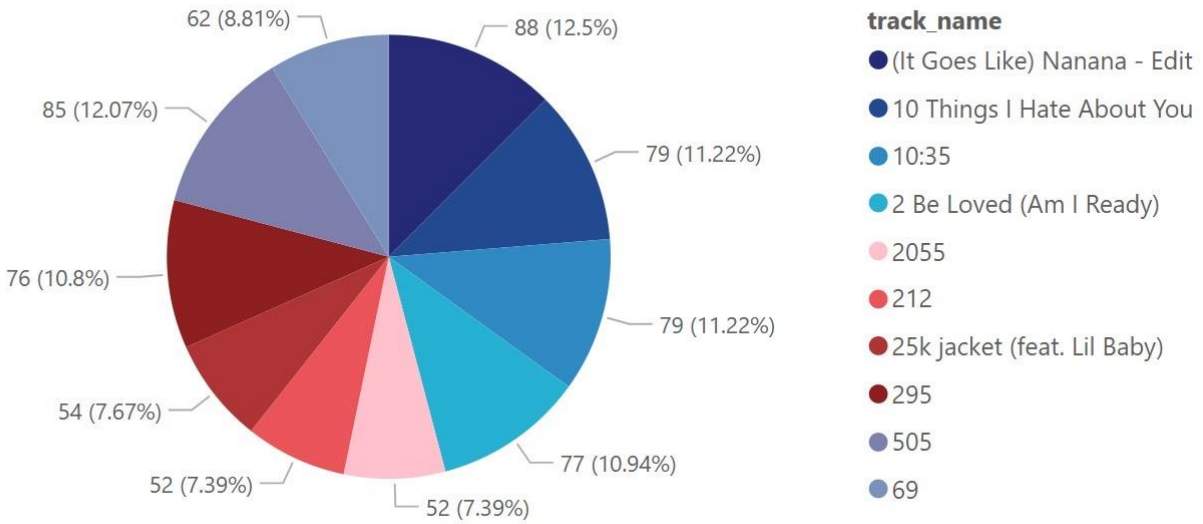
Top 5 Most Streamed Songs

Artist	Blinding Lights	Dance Monkey	Shape of You	Someone You Loved	Sunflower	Total
The Weeknd	3703895074					**3703895074**
Ed Sheeran			3562543890			**3562543890**
Lewis Capaldi				2887241814		**2887241814**
Tones and I		2864791672				**2864791672**
Post Malone, Swae Lee					2808096550	**2808096550**
Total	**3703895074**	**2864791672**	**3562543890**	**2887241814**	**2808096550**	**15826569000**

Most Popular Release Years



Top 10 Most Energetic Songs



HOW WE STRUCTURED THE DATA

1. The dataset was organized into three key areas:

- **Artist Data** (Artist Lookup) – Tracks streaming counts, playlist/chart appearances.
- **Song Data** (Song Lookup) – Includes BPM, energy, valence, and release details.
- **Date Data** (Date Lookup) – Helps analyze trends based on release day, month, and year.

RESULTS

🎶 **Streaming patterns evolved over time** – Certain years saw higher engagement.

🎤 **Some artists consistently dominated the charts**, outperforming others.

📊 **Songs with high energy, BPM, and valence** had a stronger correlation with high streaming numbers.

🗓️ **Release timing matters** – Songs released in certain months performed better.

CONCLUSION

Our analysis revealed that streaming trends are influenced by artist popularity, song characteristics, and playlist placements. High-energy and upbeat songs tend to perform better, while strategic releases and playlist features significantly boost streaming numbers. Understanding these trends helps artists and industry professionals make data-driven decisions to enhance their success in the music industry.

THANK YOU