

Music Analysis Report

Introduction

The increasing use of digital streaming services like YouTube, apple music, and Spotify, as well as technological advancements, have significantly changed the worldwide music industry in recent decades. These platforms have made it possible to access enormous music libraries in real time, which has altered how listeners consume music and changed how record labels, producers, and artists operate.

A new era of data accessibility has also been brought about by this change. Listeners produce useful data that reflects their musical tastes and engagement habits with each stream, skip, like, and playlist addition. This flood of data offers a unique analytical opportunity, empowering stakeholders to make data-driven choices in everything from genre development and user experience improvement to artist promotion.

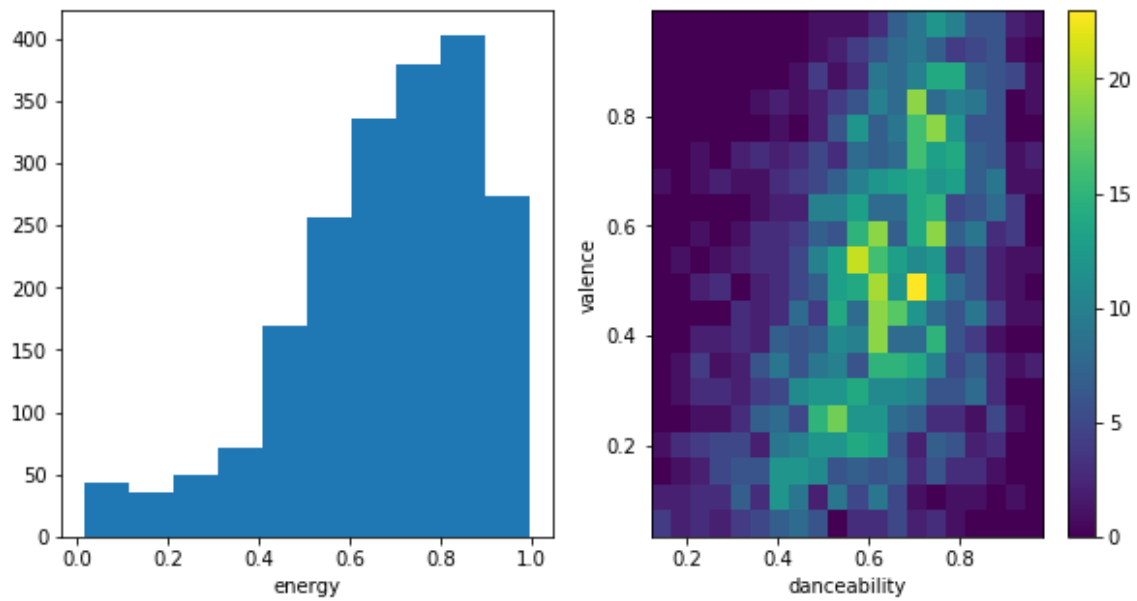
Objectives

- To assess the level of popularity of musicians and musical genres over several eras, emphasizing the styles that top the charts.
- Using popularity as a stand-in statistic, investigate relationships between song characteristics and audience choices.
- To determine how music production practices have changed over the past 20 years, particularly in light of the expanding role of digital music production and evolving listening habits.

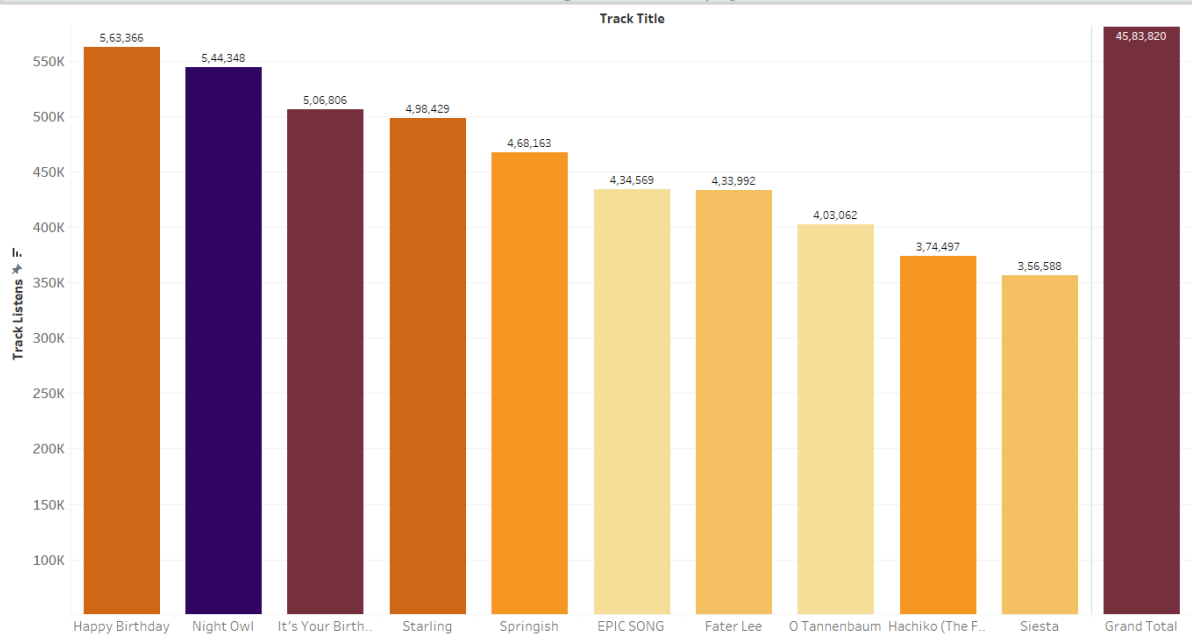
Analysis

- **Danceability vs. Valence:** One of the standout insights from this chart is the positive correlation between Danceability and valence. Tracks that score high in Danceability — meaning they have a rhythm and beat conducive to dancing — generally receive more attention and streams. This reflects the growing role of dance trends and club culture in shaping mainstream music.

Histograms



Tracks with highest number of plays



■ The Three Most Played Songs

1. Happy Birthday:

563,366 listens

the song with the most plays out of those on the list.

Because it is used in festivities everywhere, it is probably high.

2. Owl of the Night:

Nearly as popular as "Happy Birthday" with 544,348 listens.

Perhaps an ambient or often utilized track.

3. You Have a Birthday:

506,806 listens

such as "Happy Birthday," which has a celebratory mood.

Observation: Songs with a celebration theme take the top slots.

4. Songs with comparatively fewer plays

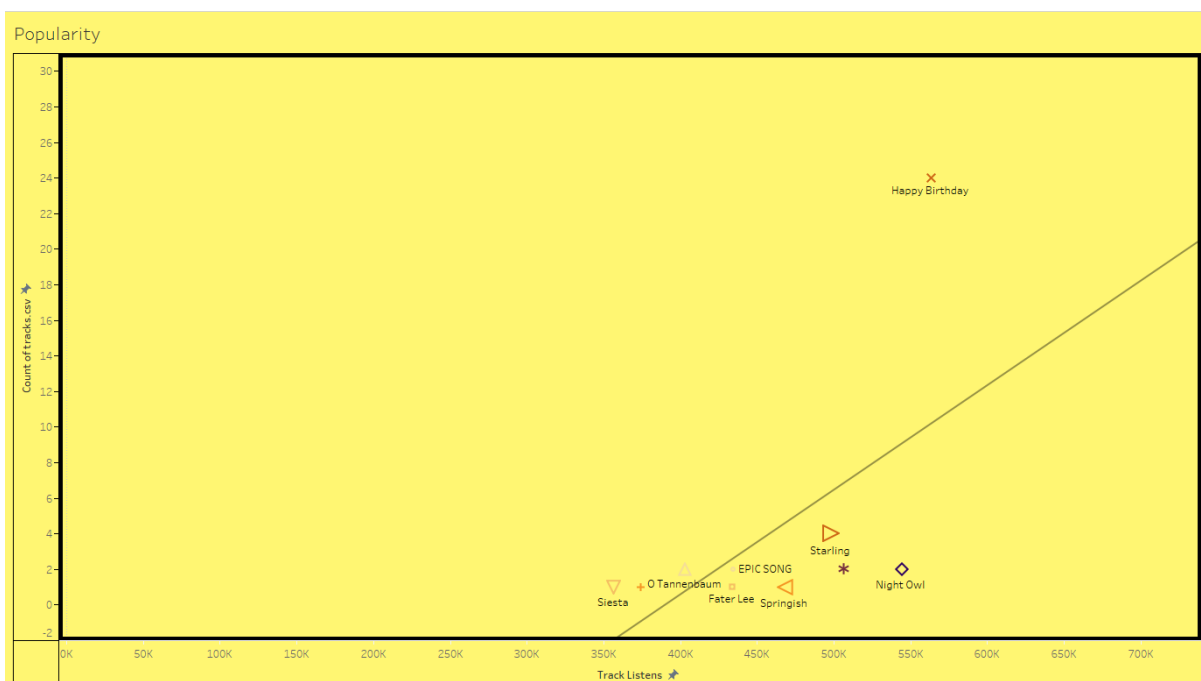
- Hachiko (The Faithful Dog): 374,497 O Tannenbaum: 403,062
Siesta: 356,588.
- When compared to the top tracks, these tracks exhibit a discernible decline in listens. Potential causes:
use according to the season (For instance, the Christmas hymn "O Tannenbaum"
Ambient or instrumental nature, or niche appeal.

■ Grand total

a total of 4,583,820 listens, this represents the total amount of plays for every song on the chart.

Key Facts

- More than half of the total—more than 2.5 million listens—come from the top 5 tunes alone.
- Songs with joyful or everyday themes—like birthdays—are more well-liked.
- The listener distribution has a Pareto-like trend, with a small number of tunes driving the majority of listens, and is quite top-heavy.



The "Popularity" scatter plot displays tracks according to two variables:

Track Listens (number of plays/listens) is the X-axis.

Y-axis: Track count (shows how many times a track occurs in a dataset; it may indicate availability, distribution, or usage across contexts such as users, albums, or playlists).

1. "Happy Birthday" is obviously an anomaly.

High on both axes:

Most-played song (about 563K listens)

The dataset's highest count (~30 entries)

Insight: This song is very well-liked and accessible; it is a good contender for universal appeal and is probably played on several playlists or at various times.

2. Songs with a lot of listens but few

Starling, Night Owl:

large number of plays (544K and 498K, respectively)

Very few tracks (less than five)

Observation: These are less scattered but heavily streamed. They could be songs that become viral or be included in particular albums or situations.

3. Low presence and moderate listening

Siesta, O Tannenbaum, Fater Lee, Springish, EPIC SONG:

Play counts close to the bottom of the Y-axis, between 350K and 450K,

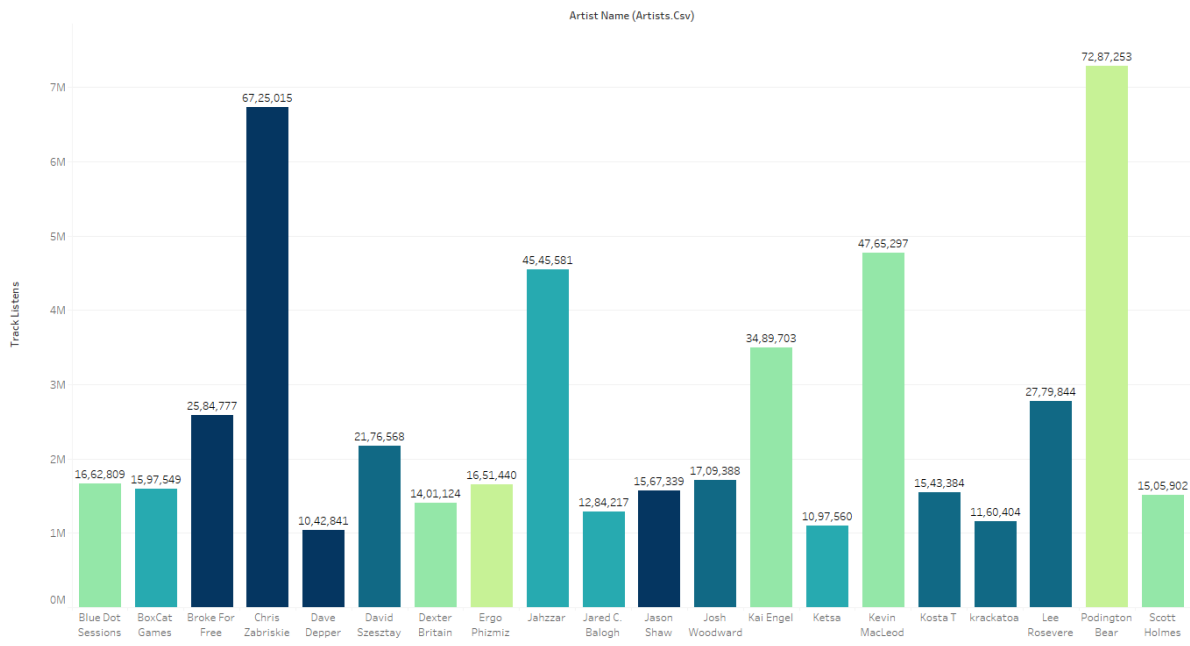
though not particularly common, these tracks are fairly popular; this suggests that they are either used in niche markets or are not widely available.

Key Takeaways

For identifying trends: Songs with a lot of listens but few counts could be a sign of rising fame or viral appeal.

Songs like "Happy Birthday" are excellent standards for broad, cross-context appeal in terms of usage diversity.

Popular Artist by Plays



1. The tracks with the most plays

Summary of the Chart:

Happy Birthday is the most played song, with 563,366 plays.

Songs with high individual play counts include "Night Owl" and "It's Your Birthday."

~4.58 million plays total for all of the top tracks.

2. Popularity (number of tracks compared to number of listens)

Summary of the Chart:

Total track listens is the X-axis.

Y-axis: Each artist's track count.

Happy Birthday is an anomaly, with fewer tracks yet extremely high listens.

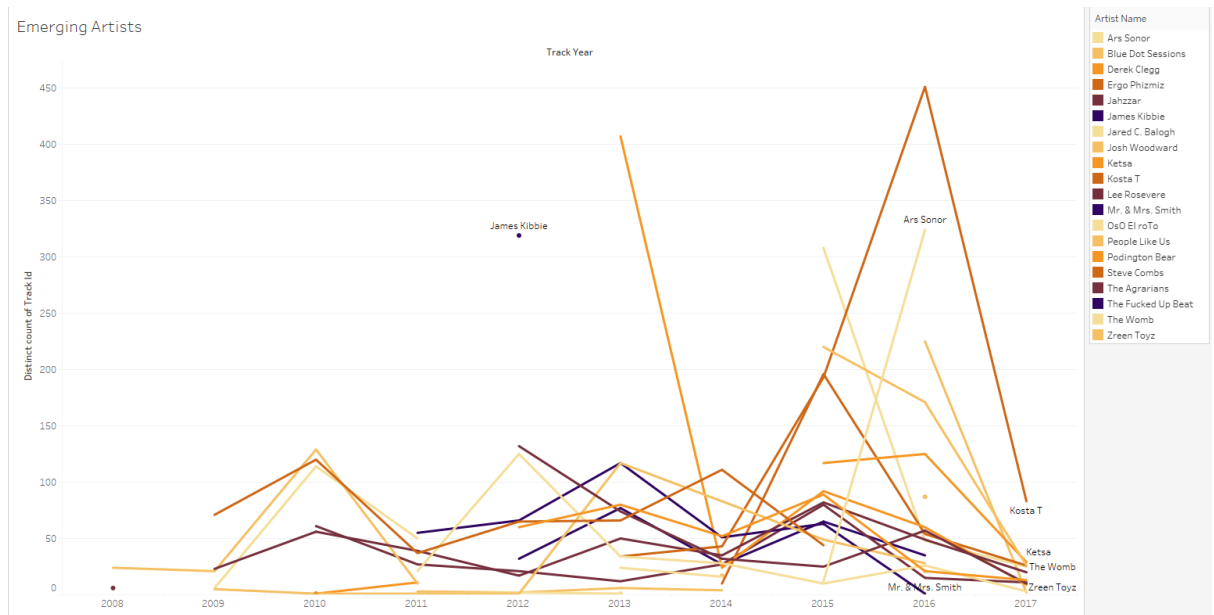
Others, such as Night Owl and Springish, feature comparatively fewer tracks but have high listen counts.

3. Well-known Performer by Plays

Summary of the Chart:

With 7.2M and 6.7M plays, respectively, Chris Zabriskie and Podington Bear are at the top of the ranking.

Lee Rosevere, Jahzzar, and Kevin MacLeod were also excellent performers.



New Artists: Comprehensive Evaluation & Growth Strategy

The "Emerging Artists" visualization shows how musicians have changed over time, showcasing musicians who produced a lot more unique songs between 2008 and 2017. This information is useful for identifying prolific creators as well as well-known musicians who may have impacted platform dynamics, listener behaviour, or genre trends.

Overview of the Chart

Y-axis:

shows how many separate tracks an artist released in a given year, or the distinct count of Track IDs.

X-axis:

represents the 2008–2017 track year.

Color-coded lines:

A separate artist from the dataset is represented by each line.

Artists are distinguished by their colors, which also make it easier to track their output patterns over time.

Important First Findings

1. With an enormous increase in productivity that peaked in 2015 with over 450 track releases, Ars Sonor is a glaring anomaly.
2. In 2012, James Kibbie had a notable, focused outburst of tracks that suggested a project-based drop or bulk release.

3. The track releases of other artists, such as Kosta T, Zreen Toyz, Mr. & Mrs. Smith, and The Womb, show more erratic or transient surges.
4. Some musicians (like Podington Bear and Blue Dot Sessions) produce work year after year, which suggests gradual growth as opposed to quick emergence.