

ELECTRONIC MUSIC DASHBOARD

[Data From Music Dataset Keggle](#)

[Spotify Playlist](#)

Capstone Project - Data Analyst

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Electronic Artist Track Analysis & Performance

Project synopsis

The project will present an analysis of the main KPIs that determine the performance of a musical artist in the alternative electronic genre, with a focus on sound data and composition metrics of the published tracks and the audience's social and DSP engagement.

Project presentation

Study of diffusion and listening trends of a musical artist in the market with data analysis by Record Label, genre, social, DSP, publication habits.

Data relating to 1900 artists all relating to similar musical genres chosen in alternative electronic music will be analysed, a focus on 1 significant artist for the analysis and a focus on a Record Label of interest for the analysis.

The data will be taken from Chartmetric, online data and public data sources of interest.

Goal of the project

Design a data-driven artist promotion strategy based on market trends, identifying the key characteristics of the compositions, publications and listening habits of the public of this genre.

Technologies used: Excel, Looker.

About Dataset

This is a rebuilt version and subset of The Million Song Dataset¹. It was built up with lastfm-spotify-tags-sim-userdata² (The Echo Nest Taste Profile Subset³ & lastfm-dataset-2020⁴), tagtraum genre annotations⁵, and Spotify API⁶. This dataset including:

Music Info: 50683 songs (tracks); User Listening History: 9711301 records; MP3-Example: 100 song per genre, 15 genres, 1500 songs in total; Acknowledgements & References; The Million Song Dataset; lastfm-spotify-tags-sim-userdata; The Echo Nest Taste Profile Subset; lastfm-dataset-2020; tagtraum genre annotations; Spotify API. (Attribution-NonCommercial 4.0 International (CC BY-NC 4.0)- DOI citation)

Chartmetric

SPOTIFY PLAYLIST

Play Playlist



Aèhex Twin - Latest Release

ELECTRONIC MUSIC DASHBOARD

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[Spotify Playlist](#)

The columns in this dataset are:

name - the name of the song

album - the name of the album

release_date - the day month and year the album was released

track number - the order the song appears on the album

id - the Spotify id for the song

uri - the Spotify uri for the song

acousticness - A confidence measure from 0.0 to 1.0 of whether the track is acoustic. 1.0 represents high confidence the track is acoustic.

danceability - Danceability describes how suitable a track is for dancing based on a combination of musical elements including tempo, rhythm stability, beat strength, and overall regularity. A value of 0.0 is least danceable and 1.0 is most danceable.

energy - Energy is a measure from 0.0 to 1.0 and represents a perceptual measure of intensity and activity. Typically, energetic tracks feel fast, loud, and noisy. For example, death metal has high energy, while a Bach prelude scores low on the scale. Perceptual features contributing to this attribute include dynamic range, perceived loudness, timbre, onset rate, and general entropy.

instrumentalness - Predicts whether a track contains no vocals. "Ooh" and "aah" sounds are treated as instrumental in this context. Rap or spoken word tracks are clearly "vocal". The closer the instrumentalness value is to 1.0, the greater likelihood the track contains no vocal content. Values above 0.5 are intended to represent instrumental tracks, but confidence is higher as the value approaches 1.0.

liveness - Detects the presence of an audience in the recording. Higher liveness values represent an increased probability that the track was performed live. A value above 0.8 provides strong likelihood that the track is live.

loudness - The overall loudness of a track in decibels (dB). Loudness values are averaged across the entire track and are useful for comparing relative loudness of tracks. Loudness is the quality of a sound that is the primary psychological correlate of physical strength (amplitude). Values typically range between -60 and 0 db.

speechiness - detects the presence of spoken words in a track. The more exclusively speech-like the recording (e.g. talk show, audio book, poetry), the closer to 1.0 the attribute value. Values above 0.66 describe tracks that are probably made entirely of spoken words. Values between 0.33 and 0.66 describe tracks that may contain both music and speech, either in sections or layered, including such cases as rap music. Values below 0.33 most likely represent music and other non-speech-like tracks.

tempo - The overall estimated tempo of a track in beats per minute (BPM). In musical terminology, tempo is the speed or pace of a given piece and derives directly from the average beat duration.

valence - A measure from 0.0 to 1.0 describing the musical positiveness conveyed by a track. Tracks with high valence sound more positive (e.g. happy, cheerful, euphoric), while tracks with low valence sound more negative (e.g. sad, depressed, angry).

popularity - the popularity of the song from 0 to 100

duration_ms - The duration of the track in milliseconds.

year

artist

tags

Electronic Alternative Genre Analysis on Tags and Tracks Audio Characteristics

Data From Music Dataset Keggel
Spotify Playlist

Total Artits
1,474

Total Tracks
1,918

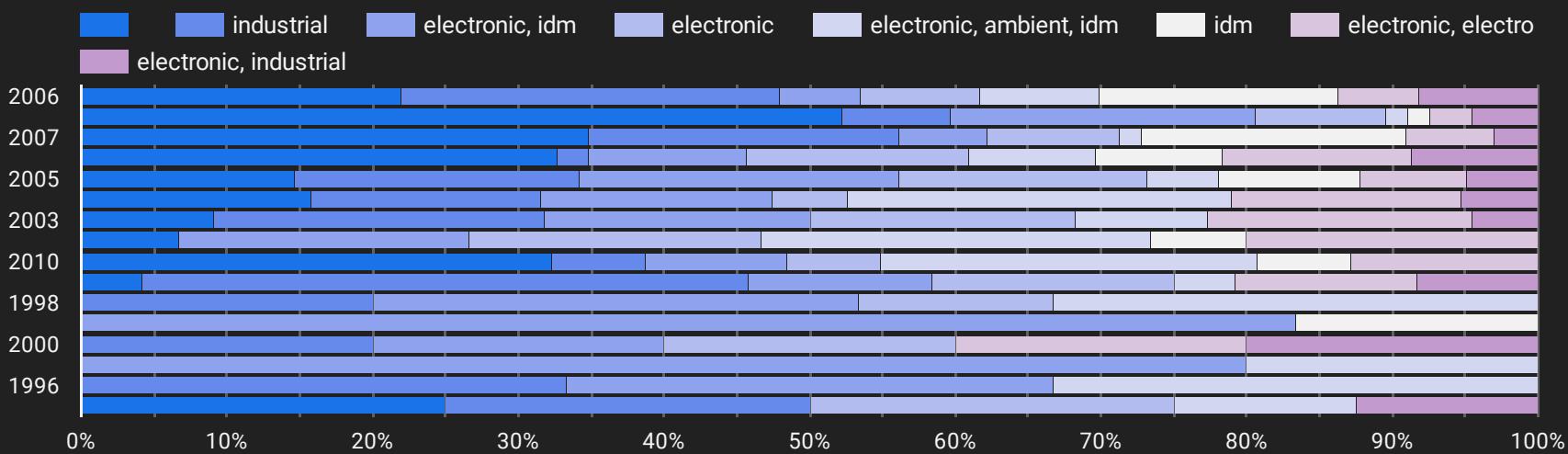
Average Danceability
0.55

Average Energy
0.7

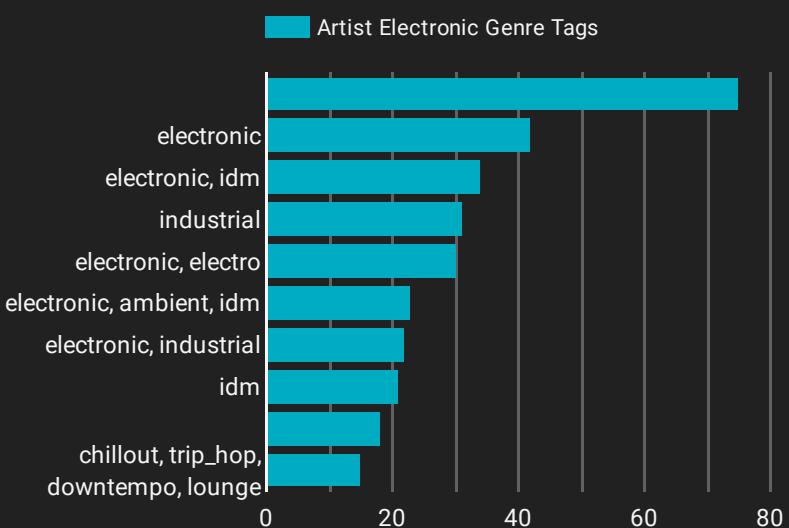
Average Valence
0.4

Tags distributor by the Year of Release of the tracks

Is there a music tag trend over the years?



Which tag is mostly used in Electronic music genre? Tags help platforms categorize music.

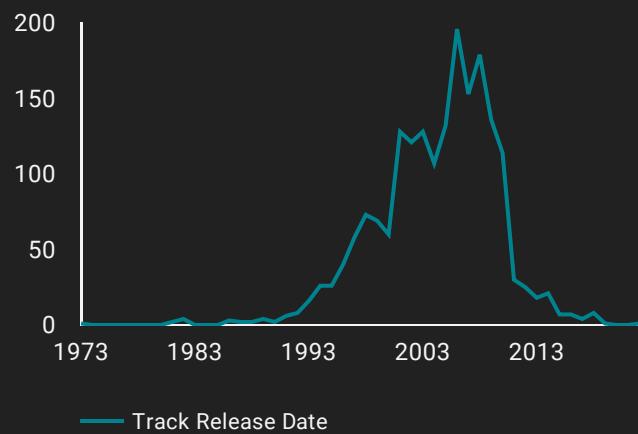


Artists Audio Main Characteristics

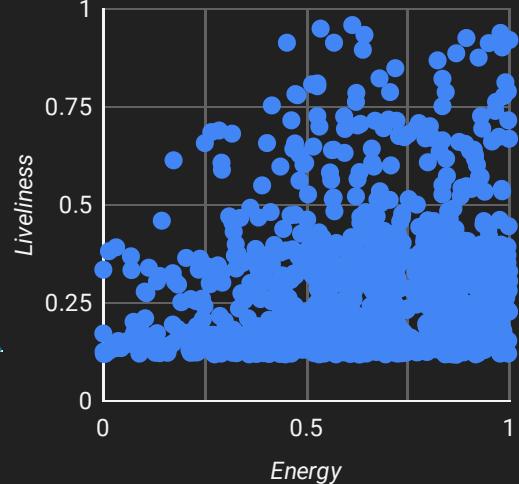
Artist ...	T...	Dura...	Gen...	Energy	Danc...	Valen...
1. Autechre	81	6.03	29	0.62	0.53	0.32
2. Boards ...	63	4.01	36	0.42	0.47	0.25
3. Squarep...	46	4.36	38	0.64	0.42	0.38
4. Massive ...	32	4.95	23	0.55	0.55	0.36
5. Air	27	4.1	23	0.46	0.44	0.29
6. Amon T...	25	4.68	23	0.71	0.5	0.28
7. Thievery...	25	4.03	14	0.59	0.69	0.54
8. Aphex T...	24	4.65	18	0.64	0.61	0.38
9. M83	23	5.56	19	0.34	0.24	0.11

1 - 100 / 554 < >

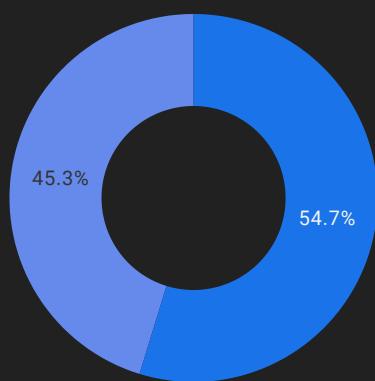
Tracks Release Date



Energy Vs Liveliness



Major or Minor Mode?



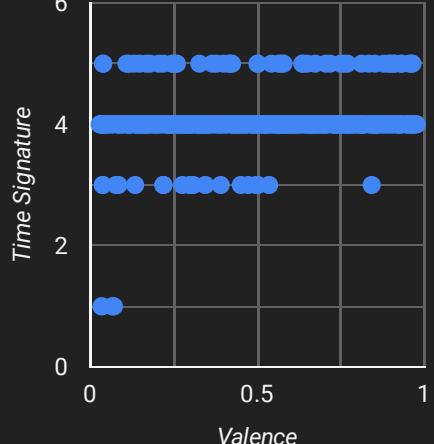
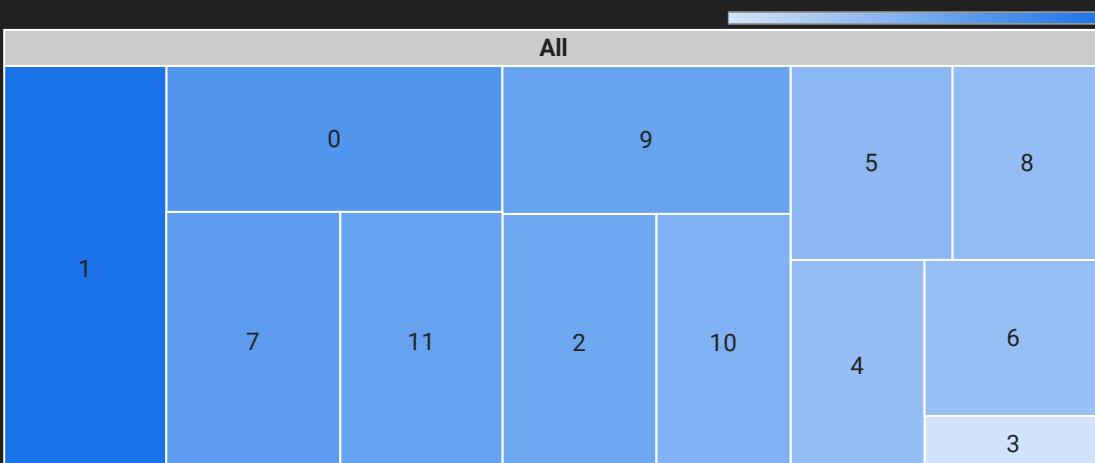
Tempo Loudness Speechiness Liveliness Acousticness Danceability Energy Valence Instrumentalness

123.56 -10.95 0.08 0.2 0.25 0.55 0.7 0.4 0.58

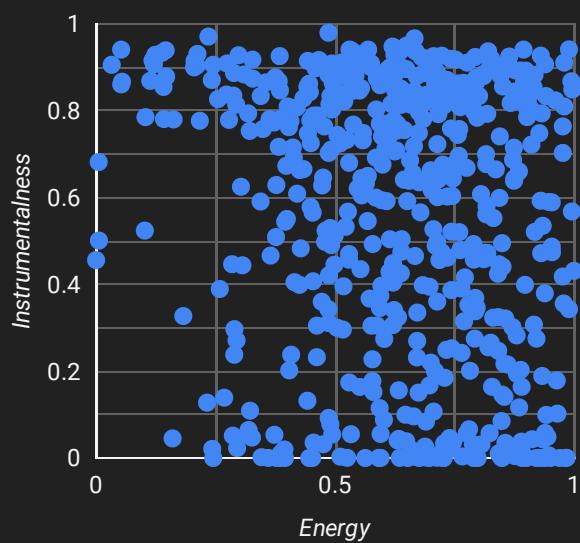
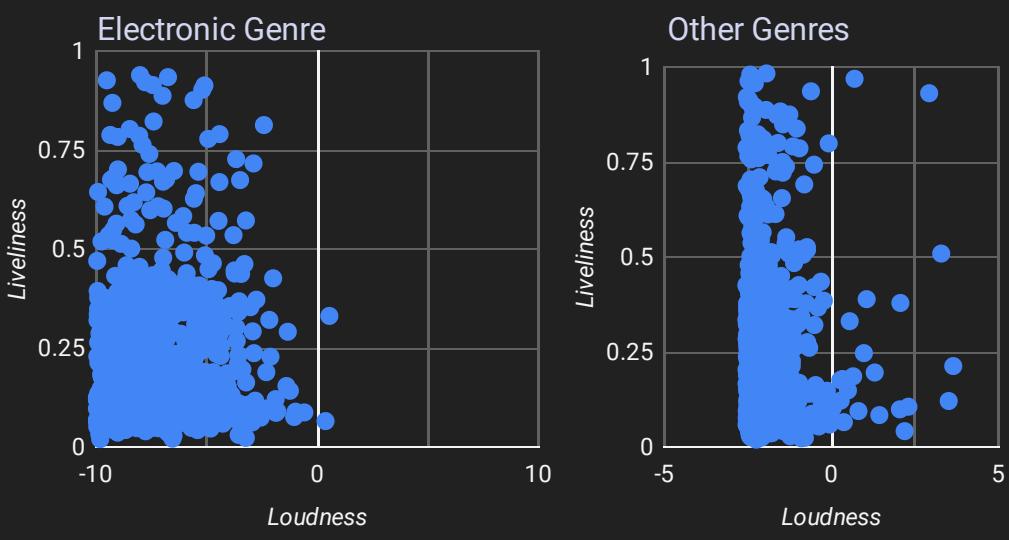
Artist and Tracks Audio Characteristics

	Artist	M..	Track	T...	Tempo	Dance...	Energy	Instrum...	Valence	Loudn...	Live...	Ac...	Spe...
1.	平沢進	1	The girl i...	4	119.98	0.52	0.8	0	0.47	-7.85	0.24	0.45	0.04
2.	Ólafur Arnal...	1	Fok	4	139.76	0.26	0.29	0.24	0.07	-12.7	0.05	0.46	0.04
3.	Émilie Simon	0	Le Vieil ...	4	135.98	0.73	0.4	0.01	0.38	-13.24	0.11	0.06	0.04
4.	Émilie Simon	0	The Froz...	4	120	0.66	0.58	0.18	0.14	-10.64	0.06	0.3	0.04
5.	μ-Ziq	1	Carpet ...	4	155.83	0.59	0.87	0.5	0.74	-8.4	0.05	0.43	0.07
6.	μ-Ziq	1	Approac...	4	175.75	0.52	0.93	0.3	0.26	-3.93	0.13	0	0.24
7.	μ-Ziq	0	Lunatic ...	4	192.83	0.48	0.95	0.79	0.66	-6.8	0.22	0.05	0.05
8.	μ-Ziq	0	Blainville	4	111.86	0.68	0.81	0.92	0.32	-7.77	0.11	0.02	0.04

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Valence Vs Time Signature**Key distribution in Tracks****Mode Vs Key**

Mode	1	0	7	9	11	2	10	4	5	8	6	3
1	129	108	103	65	49	84	31	30	46	66	41	20
0	56	43	46	73	84	46	72	71	53	31	56	23

Energy Vs Instrumentalness**Loudness in Electronic Genre Vs Other Genres**

SPOTIFY OVERVIEW

Analisis on Artist: Aphex Twin

Main Artist of a the main Electronic Record Label Warp

Spotify Popularity



Spotify Playlists
420,262

Spotify Playlist Total Reach
71,878,512

Track

315

Release Date

74

Years of activity

31

Record Label

31

Select to see specific details

Popularity, Genres, Track or Record Label

Spotify P...



Genres

Equals

Enter ...

Record Label

Equals

Enter ...

Track

Equals

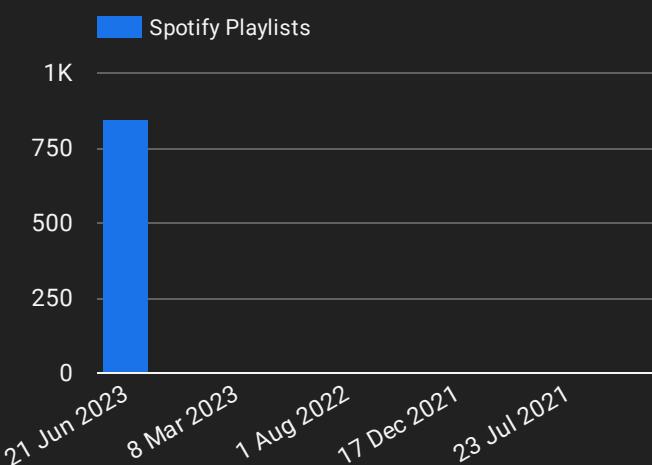
Enter ...

Track Record Label, Release Date and Key Indicators

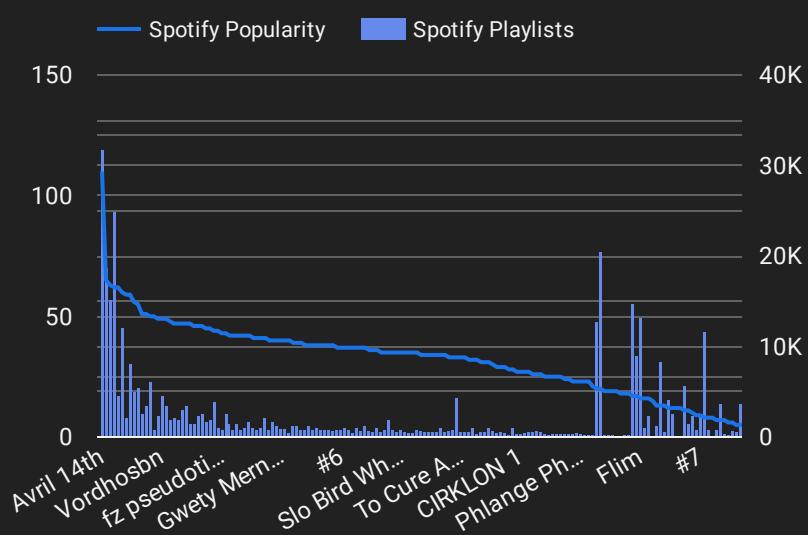
Track	Genres	Record L...	Release ...	S...	Spo...
1.. syro u473t8...	Electronic,Alte...	Warp Reco...	19 Sept 20...	39	1,322
2.. snar2	Electronic,Alte...	Warp Reco...	23 Jan 20...	null	192
3.. s950tx16wa...	Electronic,Alte...	Warp Reco...	19 Sept 20...	41	2,112

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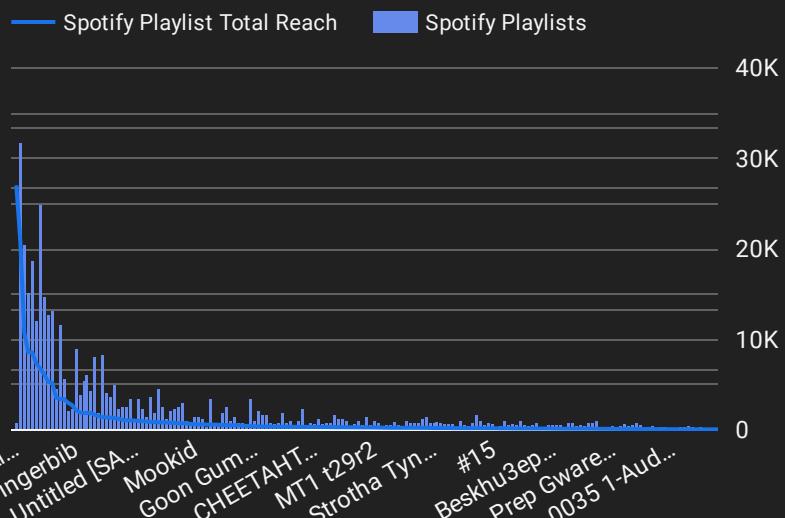
Spotify Playlists by Release Date



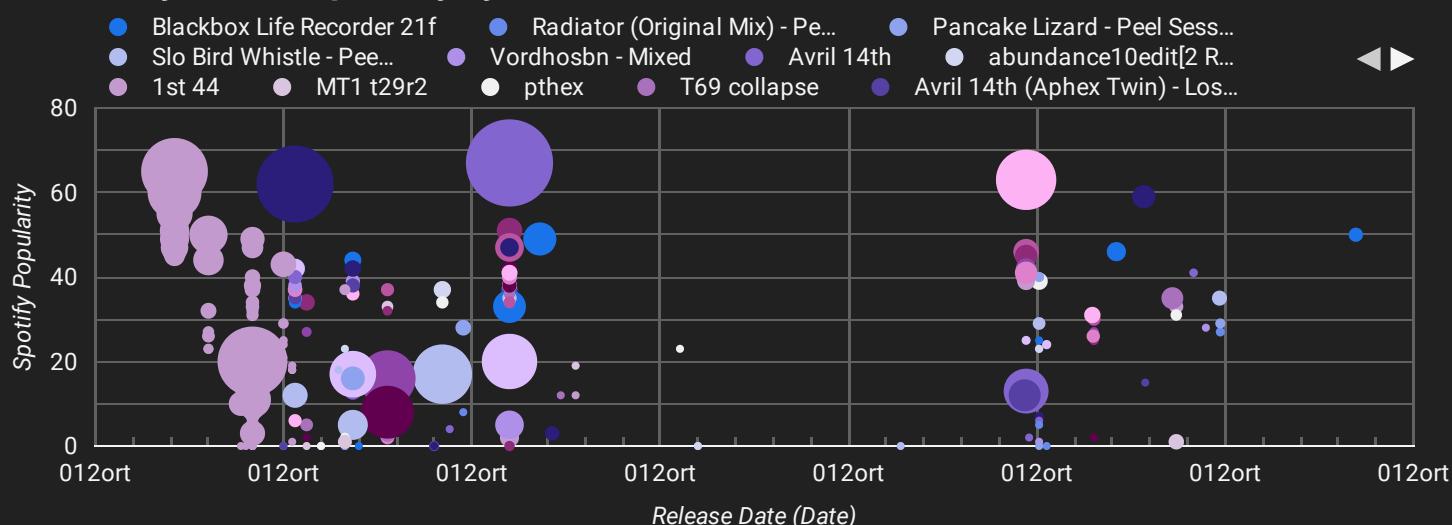
Popularity Vs Playlist



Playlist Total Reach Vs Playlist Number



Playlist Vs Popularity by Release Date



RECORD LABEL OVERVIEW

Analysys on Artist: Aphex Twin

Detail on a specific Record Label Performance

Select a Record Label to view all the specific Performance Details



Tracks
315

Spotify Playlists
420,262

Spotify Popularity
50

YouTube Views
308,577

YouTube Playlists
56

Total Shazams
3,223

Amazon Playlists
180

Apple Music Playlists
723

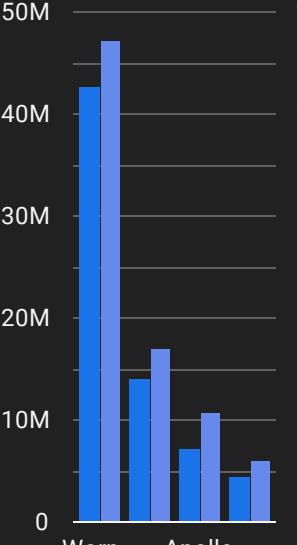
Deezer Playlists
220

Deezer Playlist Total Reach
1,785,856

Pandora Stations
146,514

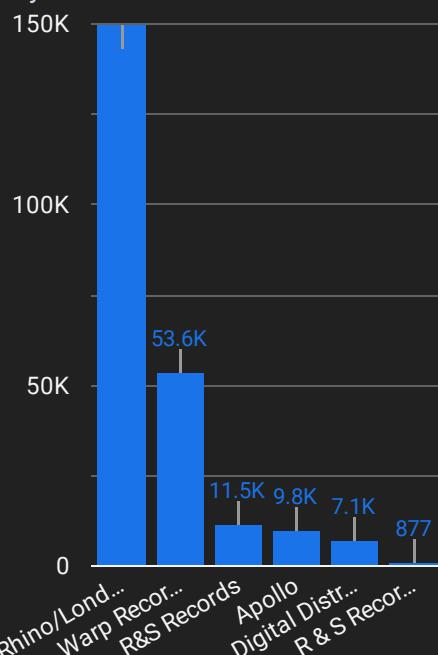
TikTok Videos
233,051

Spotify
Playlist Vs Total Reach



Tik Tok Videos

By Track or Record Label



Main Genre

Genres	Track
Techno, Electronic	1
Soundtracks	1
Rock, Techno, Ambient	1

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Youtube

Views Vs Playlist

