Spotify X Tune Buds

Business Analysis for Launching Christmas Limited Edition Tune Buds and Spotify Collaboration

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Project Scope

Company Background

Hack Ltd.

- Specializes in electronic consumer goods.
- ==Earbuds product line== consistently ranks as the best seller.

Project Concept

==**Christmas Limited Edition Hack Buds**==

Collaboration with Spotify, combining advanced audio technology with exclusive Spotify features.

Business Statement

Marketing Department:

Objective: ==Identify the most popular songs and hottest artists== from the last month to create a joint marketing campaign with Spotify.

Product Development Center:

Objective: Design product functions tailored to the ==features and genres of the top tracks.==

Data Analysis

Dataset Description

Spotify Top Tracks Dataset

• Snapshot taken in October 2022.

• Contains data on song popularity, artist rankings, and music genres.

Data Objectives

• Find Dataset

• Data Cleaning and Formatting

• Filter and Pivot

• Data Visualization

• Business Analysis

Methodology

Project Management: Utilize Agile methodologies and Trello Kanban for project management to ensure flexibility and time-frame.

Exploratory Data Analysis (EDA):

Summary Statistics/ Visualizations/ Relationship Between Variables

Constraints:

• Difficulty in finding the data with the most timeliness and includes all necessary elements for analysis.

• Limited time and skills to analyze a large dataset.

• Limited time and skills to use Spotify API.

Data Wrangling and Cleaning

Data Noise

- Missing values

- Inconsistency

- <mark>Special letters</mark>

- Numbers

- Filter and structure

Techniques

- Check and filling NaN: isnull().sum/fillna()

- Inconsistency: .str.replace()/str.title()

- <mark>UFT 8 encoding</mark>   Tit?? Me Pregunt??   Beyonc??

- Numbers: round ().

- Filter and structure: Filter()/Pivot_table

Obstacles

✓

✓

❗

✓

✓

Business Insights

Top Tracks with Popularity > 90

	Track Name	Artists	count Popularity	mean Popularity
0	Unholy (feat. Kim Petras)	Sam Smith;Kim Petras	2	100.0
1	Quevedo: Bzrp Music Sessions, Vol. 52	Bizarrap;Quevedo	1	99.0
2	I'm Good (Blue)	David Guetta;Bebe Rexha	3	98.0
3	La Bachata	Manuel Turizo	4	98.0
4	Me Porto Bonito	Bad Bunny;Chencho Corleone	4	97.0
5	Tit?? Me Pregunt??	Bad Bunny	4	97.0
6	I Ain't Worried	OneRepublic	3	96.0
7	Under The Influence	Chris Brown	2	96.0
8	Efecto	Bad Bunny	4	95.5
9	Ojitos Lindos	Bad Bunny;Bomba Est??reo	4	94.5
10	Moscow Mule	Bad Bunny	4	94.0
11	Glimpse of Us	Joji	1	94.0
12	As It Was	Harry Styles	2	93.5
13	Sweater Weather	The Neighbourhood	4	93.0
14	PROVENZA	KAROL G	2	93.0
15	Neverita	Bad Bunny	3	93.0
16	Another Love	Tom Odell	2	93.0
17	CUFF IT	Beyonc??	1	93.0
18	Calm Down (with Selena Gomez)	Rema;Selena Gomez	1	92.0
19	Left and Right (Feat. Jung Kook of BTS)	Charlie Puth;Jung Kook;BTS	2	92.0
20	Super Freaky Girl	Nicki Minaj	2	92.0
21	I Wanna Be Yours	Arctic Monkeys	3	92.0
22	LOKERA	Rauw Alejandro;Lyanno;Brray	2	91.0
23	Blinding Lights	The Weeknd	1	91.0

Conclusion:

There are a total of 24 songs with a popularity score above 90.

EDA method:

Summary Statistics

** The **popularity** of a track is a value between 0 and 100, with 100 being the most popular, which is calculated by algorithm and is based, in the most part, on the total number of plays the track has had and how recent those plays are. Generally speaking, songs that are being played a lot now will have a higher popularity than songs that were played a lot in the past.*

Business Insights

Features of Top Tracks with Popularity > 90

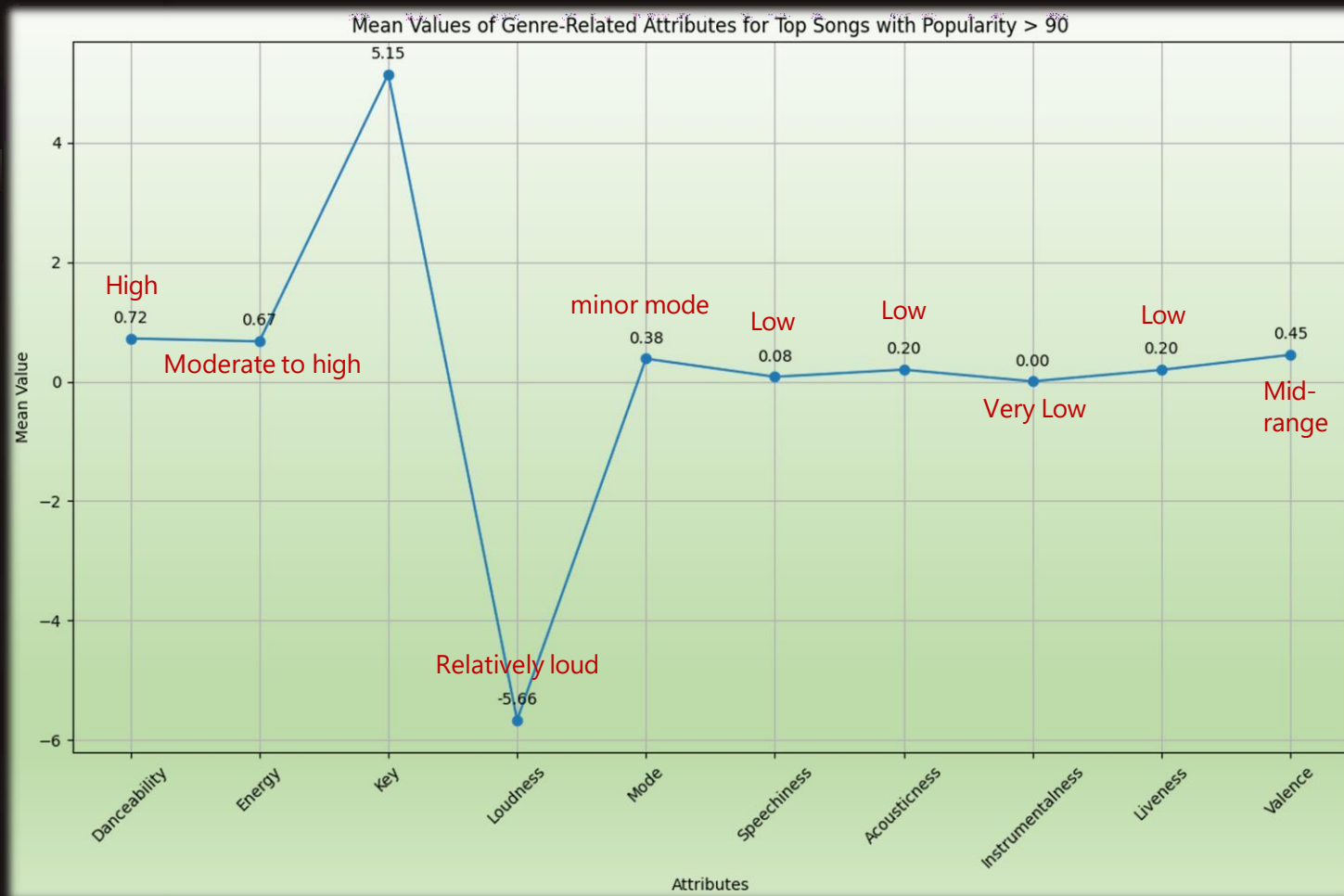Mean Values of Genre-Related Attributes for Top Songs with Popularity > 90

Conclusion:

Considering these attributes, the most fitting genres would be Dance Pop.

EDA method:

- Summary Statistics
- Line Chart

Business Insights

Top 10 Artists with the Most Popular Tracks
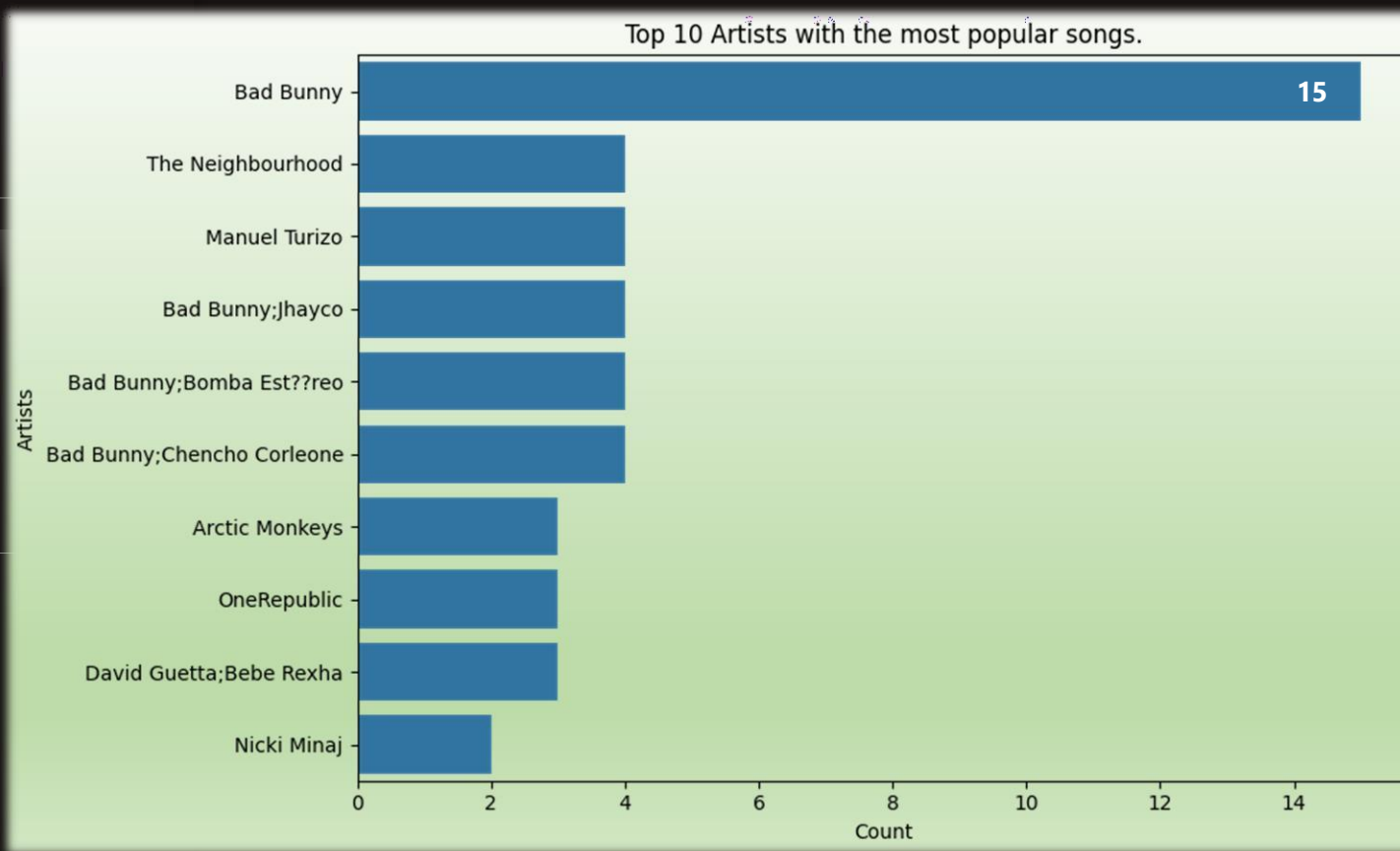

Top 10 Artists with the most popular songs.

Conclusion:
The most popular artist

EDA method:

- Summary Statistics

- Horizontal Bar Chart

Conclusion

Product Research

According to the analysis of the Spotify Top Tracks dataset, the following product functionalities are defined based on the music features – Dance Pop :

- Good Bass Response

- Balanced Sound

- Noise Isolation

- Comfortable Fit

- More functions to be defined

Joint-Marketing Campaign

Drawing from the Spotify Top Tracks data, it's evident that Bad Bunny was the most popular artist last month. This insight offers valuable direction for the marketing campaign to enhance brand visibility. For instance,

- Collaborative limited edition earbuds release

- Invitation for attending the product release event

- More campaigns to be defined

Thank You