

This report summarizes the analysis conducted on the hip-hop streaming dataset. The analysis focuses on various metrics, including revenue generated, views, and performance of individual artists and playlists. The key findings are supported by visualizations that illustrate trends and patterns in the data, providing insights into the current state of hip-hop streaming.

## 2. Data Overview

The dataset consists of **[insert number]** records with **[insert number]** columns. Each row represents a unique entry related to hip-hop streaming, capturing key metrics such as:

- **Playlist Name:** The name of the playlist featuring hip-hop tracks.
- **Album Playlist:** The specific album to which the playlist belongs.
- **Views:** The total number of views or streams for each track.
- **Estimated Revenue:** The revenue generated from the streams.

Data was collected from **[insert source, e.g., Spotify, YouTube]** and spans **[insert time period]**. The dataset underwent a thorough cleaning process to ensure accuracy and relevance for analysis.

## 3. Analysis Methodology

The analysis was conducted using a combination of tools and methodologies to ensure comprehensive insights:

- **Tools Used:**
  1. **Python:** The primary programming language for data analysis.
  2. **Pandas:** A data manipulation library for handling and cleaning data.
  3. **Jupyter Notebook:** An interactive coding environment for executing Python code and visualizing results.
  4. **Visual Studio Code:** Used for coding and running scripts, particularly for creating visualizations with Matplotlib.
- **Steps Taken During the Analysis:**
  1. **Data Cleaning Process:**
    - Removed duplicates and irrelevant entries.
    - Handled missing values by either filling them with appropriate values or removing rows with excessive missing data.
    - Formatted data types for consistency (e.g., converting revenue to float).
  2. **Revenue Analysis:**
    - Calculated total revenue generated from streams.
    - Analyzed revenue distribution across different artists and playlists.
    - Identified trends in revenue over time.
  3. **View Analysis:**
    - Summarized total views and average views per artist.
    - Evaluated views across various playlists to identify popular tracks.

#### 4. Playlist Performance Evaluation:

- Compared the performance of playlists based on revenue and views.
- Identified top-performing playlists and potential opportunities for artists.

#### 4. Key Findings

- **Total Revenue Generated:** The total revenue generated from the dataset is **[\$196,407,226.6]**, indicating a strong performance in the hip-hop streaming market.
- **Top-Performing Artists and Playlists:**
  - The top artists based on revenue include:
    - **[Cardi B]: [81,776,160.7]**
    - **[Travis Scott]: 30,439,874.2[]**
    - **[Drake]: 26,216,580.52[]**
  - The top playlists by views and revenue include:
    - **[Best of Cardi B â™« Playlist â™« Official Music Videos]: [17,637,348,175 views and \$35,274,696.35]**
    - **[Best of Cardi B â™« Playlist â™« Official Music Videos]: [17,637,348,175 and \$7,953,702.01]**
- **Average Revenue per Artist:** The average revenue per artist from the dataset is **[435,530.6559]**, which highlights the economic potential for artists in the hip-hop genre.