

Apple iTunes Music App Data Analysis Using MySQL and Power BI

Objective

To analyze the iTunes music dataset using SQL and visualize key metrics in Power BI. The project aims to uncover trends in track sales, customer behavior, genre popularity, and playlist insights.

Tools Used

- SQL (MySQL) for data cleaning, loading, and analysis
- Power BI for visualization and dashboard creation

Dataset Tables Used

artist, album, track, genre, media_type, customer, employee, invoice, invoice_line, playlist, playlist_track

Key SQL-Based Insights

1. Top 10 Artists by Album Count

The artist with the most albums is the most productive contributor. Insight: The top artist contributed 13+ albums.

2. Top Revenue-Generating Tracks

Tracks with the highest total sales revenue.

3. Revenue by Country

Identified the most profitable regions. Insight: USA, Canada, and France generated the most revenue.

4. Genre Popularity

Insight: Rock is the most common genre, followed by Latin and Classical.

5. Media Type Usage

Insight: The most used format is MPEG audio file, indicating wide support.

6. Top Customers by Spend

Insight: Customers like Luís Gonçalves and František Wichterlová are the top spenders.

7. Playlist Track Count

Insight: The “Music” playlist contains the most tracks.

Power BI Dashboard Highlights

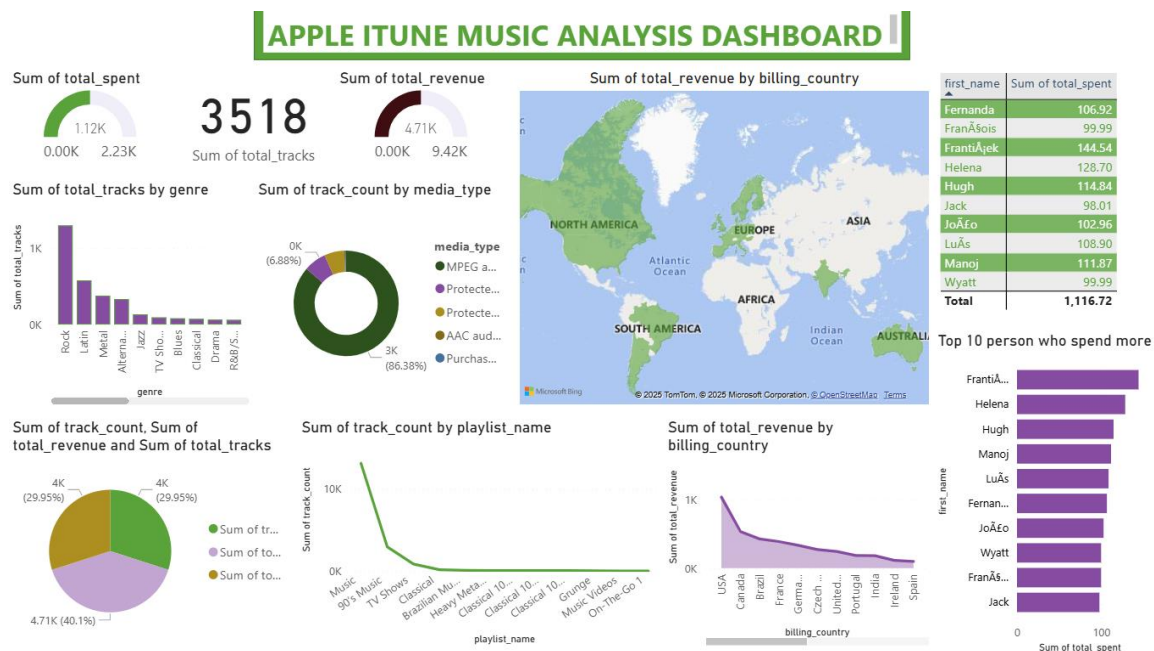
- KPIs: Total Revenue, Tracks, Top Spender
- World Map: Revenue by Country
- Genre Distribution: Bar Chart
- Media Type Share: Donut Chart
- Top 10 Customers: Table and Bar Chart
- Playlist Comparison: Column Chart
- Combined Summary: One-screen interactive dashboard

Conclusion

The iTunes Music App analysis revealed key patterns in media consumption:

- Rock music dominates the genre space.
- A few loyal customers contribute significantly to revenue.
- Most sales come from North America and Europe.
- A small number of playlists hold the majority of track content.

The project demonstrates strong skills in SQL-based analysis and dashboarding in Power BI — ideal for business decision-making.



My power Bi dashboard screen shot also included.