

Executive Summary

This project analyzes a digital music store database using SQL to extract actionable business insights related to employees, customers, sales performance, music preferences, and geographic trends. The objective of the analysis was to support data-driven decision-making for marketing strategies, customer targeting, and revenue optimization.

Key Findings & Insights

- **Organizational Insight:**
The senior-most employee was identified based on job level, providing clarity on leadership hierarchy within the organization.
- **Revenue & Sales Performance:**
Invoice analysis revealed the countries generating the highest number of purchases, highlighting key international markets. Additionally, the city contributing the highest total invoice revenue was identified, making it an ideal candidate for hosting promotional events such as a music festival.
- **Customer Value Analysis:**
The analysis identified the **best customer**, defined as the individual with the highest total spending. This insight helps in recognizing high-value customers and designing loyalty or retention programs.
- **Music Preferences & Genre Analysis:**
Rock music emerged as a significant genre, with detailed identification of:
 - Rock music listeners and their contact details for targeted marketing
 - Top 10 artists producing the most Rock tracks
 - Tracks longer than the average duration, indicating potential premium or niche content
- **Advanced Revenue Attribution:**
A detailed breakdown of customer spending per artist was performed, focusing on the best-selling artist. This analysis required combining multiple tables and calculating revenue at the invoice-line level, ensuring accurate artist-level earnings.
- **Geographic & Genre Trends:**
The most popular music genre was determined for each country based on purchase volume. The analysis also accounted for ties, ensuring fairness and completeness in results.
- **Top Customers by Country:**
For each country, the customer with the highest music spending was identified,

including scenarios where multiple customers shared the top position. This insight supports region-specific marketing and personalized engagement strategies.

Business Impact

This analysis enables the music store to:

- Identify high-performing markets and cities for promotional campaigns
- Recognize and reward high-value customers
- Optimize artist partnerships based on revenue contribution
- Tailor genre-specific marketing strategies by country
- Make informed strategic decisions using reliable, query-driven insights

Conclusion

The Music Store SQL Analysis demonstrates strong proficiency in SQL, including joins, aggregations, subqueries, window functions, CTEs, and recursive queries. The project effectively transforms raw transactional data into meaningful business intelligence, making it a valuable asset for strategic planning and commercial growth.