# GLOBAL MUSIC SALES AND TRENDS ANALYSIS

Experience, Learn, Thrive

**PRESENTED BY**

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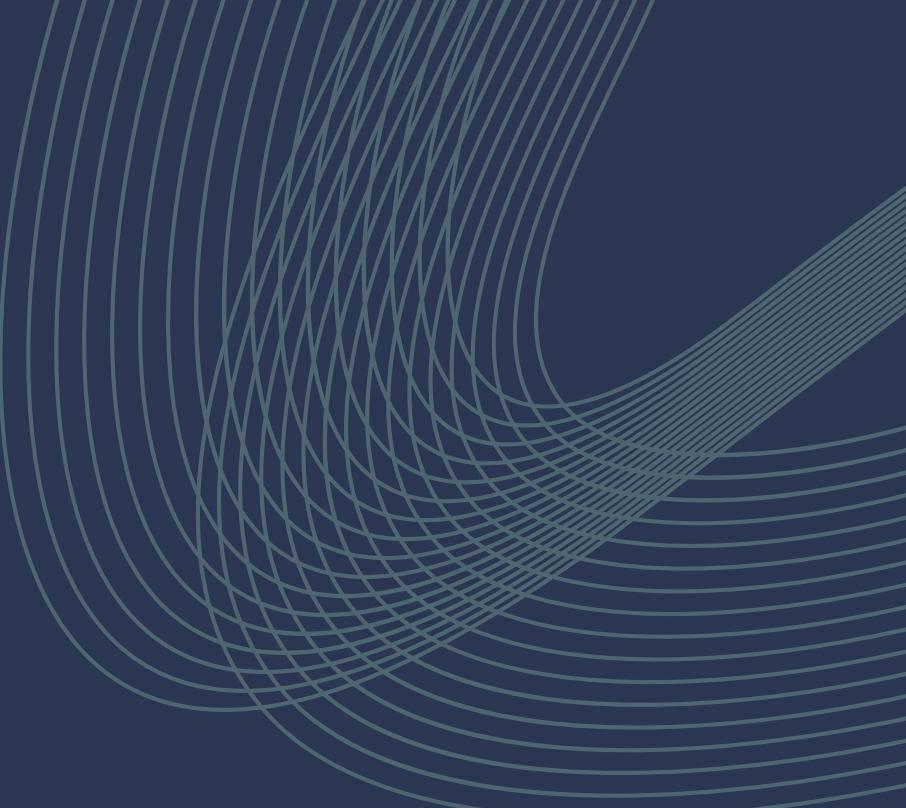
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# EXECUTIVE SUMMARY

THIS ANALYSIS EXAMINES GLOBAL MUSIC SALES PATTERNS AND CUSTOMER BEHAVIOR USING THE COMPANY'S TRANSACTIONAL DATABASE. THE GOAL WAS TO UNCOVER INSIGHTS INTO TOP MARKETS, CUSTOMER SEGMENTS, AND MUSIC TRENDS TO INFORM STRATEGIC MARKETING, EVENT PLANNING, AND PRODUCT FOCUS.

## KEY INSIGHTS

- The **United States** generated the highest number of invoices.

- **Prague** recorded the largest total invoice amount.

- **František Wichterlová** emerged as the highest-spending customer.

- **Rock** music dominates sales globally, highlighting its enduring popularity.

- **Argentina** diverges from this global trend, where **Alternative and Punk** genres are most frequently purchased.

## BUSINESS IMPLICATIONS

- Continue emphasizing Rock music in global marketing and playlist curation.

- Tailor localized campaigns in Argentina around Alternative and Punk to match consumer preferences.

- Develop customer retention strategies for top spenders, focusing on personalized engagement.

- Explore event partnerships or promotions in Prague, leveraging its strong customer base and spending levels.

## SUMMARY

The analysis reveals Rock as the dominant global genre, Prague as a key city for sales growth, and the United States as the most active market. By aligning marketing and customer engagement strategies with these insights, the business can strengthen its global presence and maximize future revenue potential.

# OBJECTIVE

The goal of this project is to analyse and interpret global music sales data to uncover insights into customer behaviour, regional performance, and music genre trends. These insights aim to guide business decisions such as targeted marketing, event planning, and customer engagement strategies.

# TOOLS AND TECHNOLOGIES

- SQL – Data extraction and query execution
- Microsoft Excel – Data cleaning
- pgAdmin 4 – Software used to run SQL queries and create visualizations
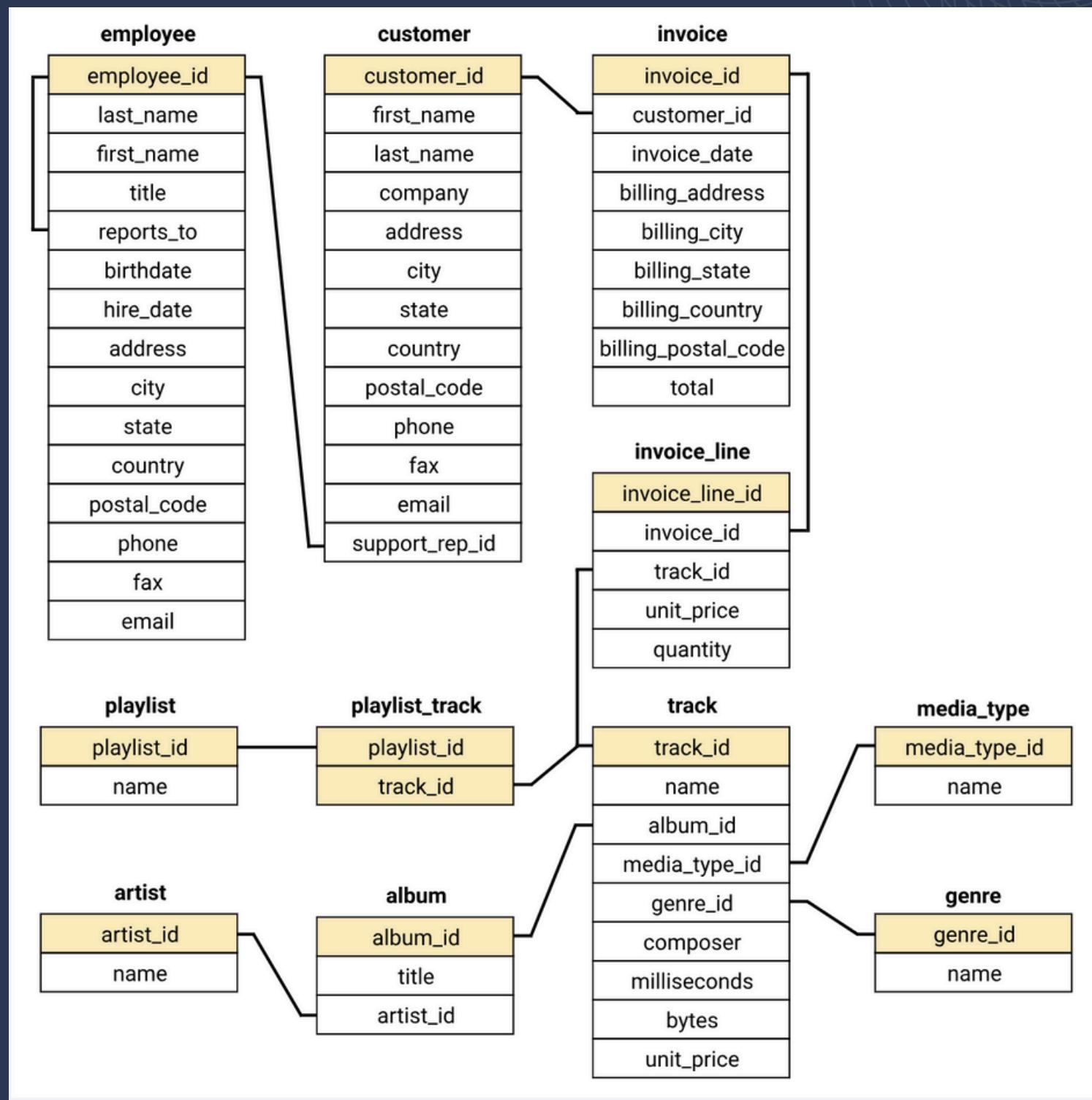
# DATASET

The dataset originates from a music store database containing transactional and customer information.
Tables include, but are not limited to, Customers, Invoices, Invoice Lines, Tracks, Playlists, Albums, Artists, and Genres.
It holds purchase details from various countries and cities, with each record representing one transaction (invoice line).

# METHODOLOGY
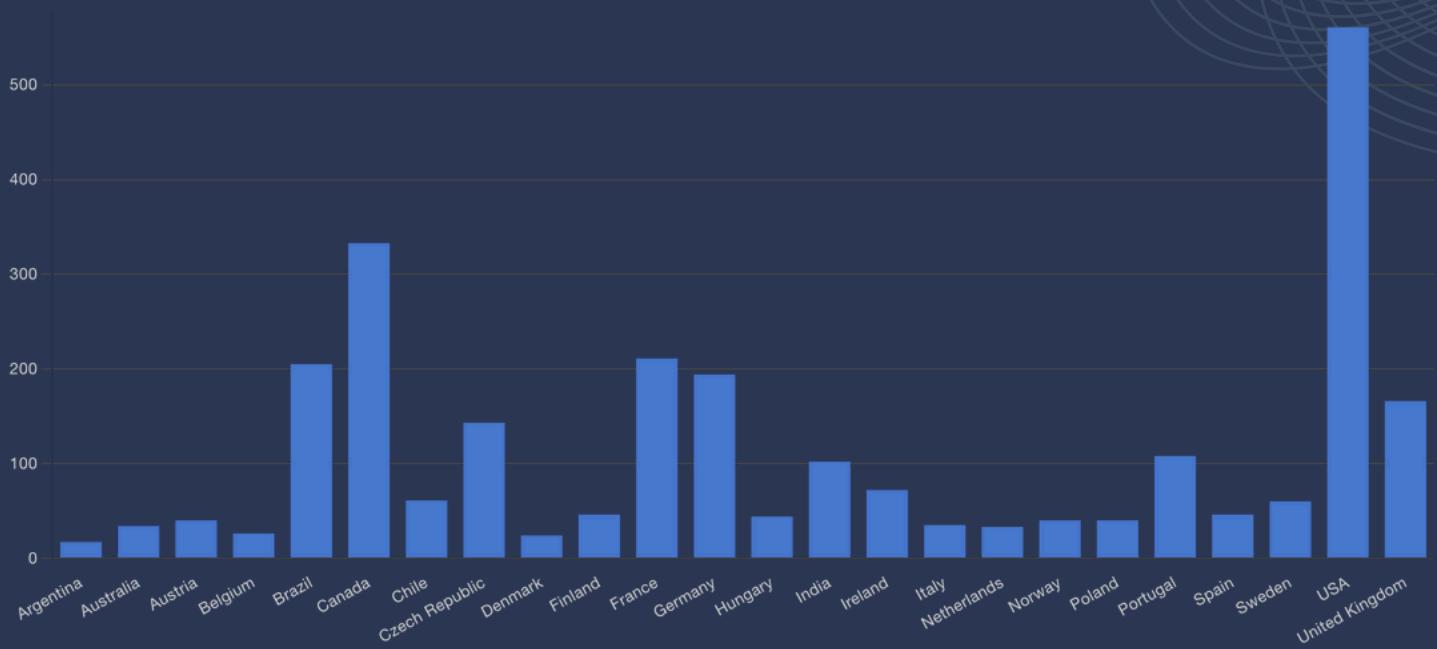
- Data Extraction: Imported relevant tables (Customer, Invoice, Track, Genre) using SQL queries.
- Data Cleaning: Checked for missing or inconsistent entries in Excel.
- Data Transformation: Joined multiple tables using keys like CustomerId, InvoiceId, and TrackId.
- Analysis: Developed SQL queries to extract insights on customer spending, top-performing cities, and popular genres.
- Visualization: Represented key findings through summary tables and charts in Excel.
- Interpretation: Converted data findings into actionable business insights and recommendations.

# DATABASE ARCHITECTURE
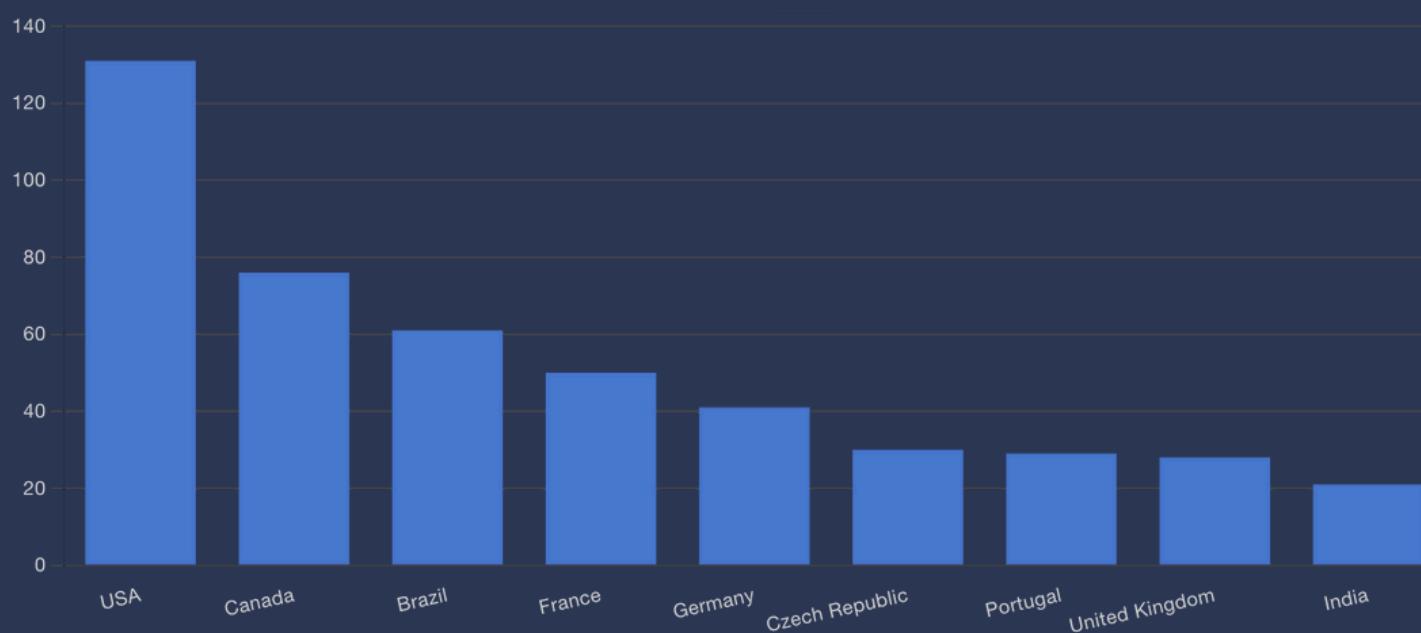
# VISUALIZATIONS

## Number of purchases by country
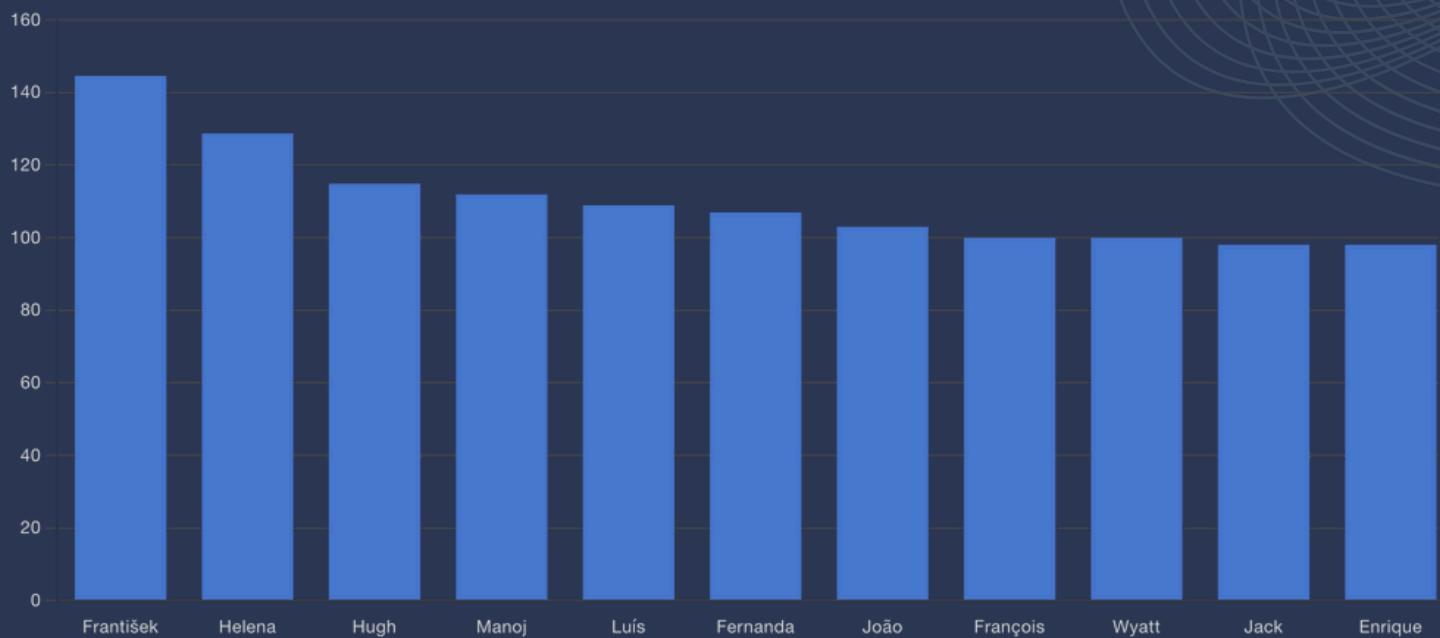


## Countries with highest number of invoices
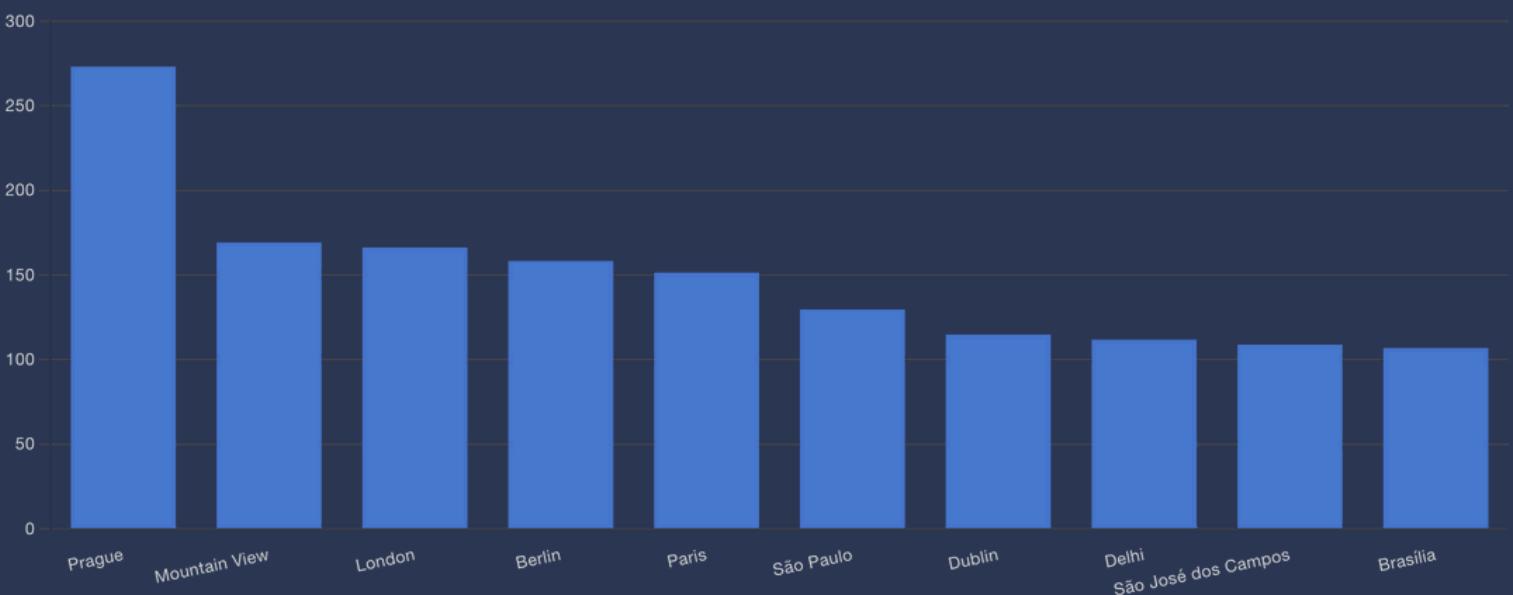
# VISUALIZATIONS

## Customers with highest total invoice



## Cities with highest invoice amount

# KEY INSIGHTS

The analysis of global music sales data revealed several notable patterns across customers, locations, and genres that provide a strong foundation for strategic business planning.

1. Market Performance by Geography

The **United States** recorded the highest number of invoices, indicating that it remains the store's largest and most active market. This suggests a strong brand presence and a high level of customer engagement within the U.S. consumer base. However, a deeper analysis also shows that Central Europe, particularly Prague, generates the highest total invoice value, revealing that even smaller markets can contribute significantly in terms of revenue. This could be due to higher per-customer spending.

2. Customer Behavior

Customer analysis shows that spending patterns vary notably across regions. **František Wichterlová**, a customer from the Czech Republic, has the highest lifetime spend of $144.54, highlighting a segment of high-value customers who make multiple or higher-value purchases. Such customers represent an opportunity for loyalty programs or early access offers.

Additionally, the data suggests that a majority of purchases come from individual track sales rather than bulk purchases, indicating that customers prefer flexibility and personalized music selection over full album purchases.

3. Genre Preferences and Music Trends

Across nearly all countries, **Rock** emerged as the most purchased genre, confirming its strong global appeal and consistent commercial success. This makes Rock music a reliable category for continued marketing and promotional investment.

 However, Argentina stands out as a key regional outlier, where Alternative and Punk genres outperform Rock in purchase count. This variation demonstrates that local musical preferences can differ significantly from global trends, reinforcing the need for region-specific marketing strategies.

# BUSINESS RECOMMENDATIONS

Drawing on the insights, several data-driven recommendations can help enhance business growth, customer engagement, and marketing efficiency.

1. Strengthen Global Rock Marketing Strategy
Since Rock consistently performs well across most markets, resources should be allocated toward promoting this genre globally. Marketing campaigns featuring classic and contemporary Rock artists can help sustain demand, particularly in high-sales regions such as the United States and Europe. Bundled offers, curated playlists, or artist collaborations could further boost sales.

2. Develop Localized Marketing Campaigns
Given that Argentina's audience favors Alternative and Punk, marketing in that region should emphasize local genre preferences. This could include regional playlists, localized email promotions, and targeted social media ads that highlight artists within those genres. Customization will help build stronger customer resonance and higher conversion rates.

3. Leverage High-Spending Customers
Implement loyalty and retention programs aimed at repeat customers like František Wichterlová. Offering exclusive discounts, early access to new releases, or invitation-only events can encourage continued spending and build stronger brand loyalty among top-tier customers.

4. Capitalize on Prague's Market Potential
Given Prague's high total invoice value, consider organizing music-related events, limited edition releases, or city-based campaigns there. Collaborations with local distributors or event organizers could strengthen the company's footprint in Central Europe.

5. Encourage Cross-Genre Exploration
While Rock dominates, promoting secondary genres such as Alternative and Jazz could diversify sales and attract new audience segments. Recommendation algorithms or personalized marketing could nudge Rock listeners toward related genres, increasing overall transaction frequency.

# CONCLUSION

The analysis of the music store database has provided meaningful insights into sales performance, customer behavior, and musical preferences across countries. Through systematic querying, data transformation, and interpretation, the project successfully translated raw transactional data into business-relevant insights.

The results highlight that the United States serves as the most active market in terms of transaction volume, indicating a large and consistent customer base. In contrast, Prague in the Czech Republic leads in total invoice value, revealing a smaller but higher-spending audience. These two findings together demonstrate that market size and market value do not always align — an important observation for shaping region-specific marketing and pricing strategies.

From a customer perspective, the identification of František Wichterlová as the top-spending customer underscores the importance of tracking and engaging with high-value individuals. Developing retention strategies such as personalized recommendations or loyalty rewards can help sustain long-term revenue.

Genre-level analysis confirmed that Rock continues to dominate global music sales, serving as a reliable driver of engagement and revenue across most countries. However, the Argentinian market's strong preference for Alternative and Punk highlights the need for cultural and regional differentiation in marketing. These contrasting patterns suggest that a "one-size-fits-all" approach to promotion would not be optimal for a business operating in diverse international markets.

Overall, the findings emphasize the value of data-driven decision-making in the music retail industry. By understanding which genres, cities, and customers contribute most to revenue, the business can optimize resource allocation, focus marketing efforts where they are most effective, and tailor strategies to different audience segments.
From a professional perspective, this project reinforced the analytical process — from data cleaning and SQL querying to insight generation and storytelling. It demonstrated how structured data exploration can lead to actionable outcomes that align directly with business objectives.

In conclusion, this project not only uncovered valuable insights for the company but also exemplified how analytical rigor, contextual understanding, and data visualization can together transform raw information into strategic advantage.