Project Overview

This project simulates a digital media company (similar to iTunes) and is built upon a structured PostgreSQL database and a custom-designed star schema.

Agenda

The core agenda behind this project is to deliver insights about the company's performance to support data-driven decisions, in order to help prioritize investment decisions and strategic actions.

Provided insights

To support this agenda, the report provides answers to the following key business questions:

- Which regions generate the highest revenue?
- Is revenue increasing or declining over time?
- What is the trend in customer demand?
- Which genres and products are most popular, and whether current inventory and engagement meet customer demand?

These insights enable smarter decisions around marketing allocation, regional expansion, and identifying growth opportunities or weak points in the business model.

Project goals

1. **Enable Decision Making:** Provide stakeholders with clear, interactive visibility into critical business data.
2. **Deliver Actionable Insights:** Present strategic recommendations based on in-depth analysis, helping the company act effectively on the data.

Total Sales by country name
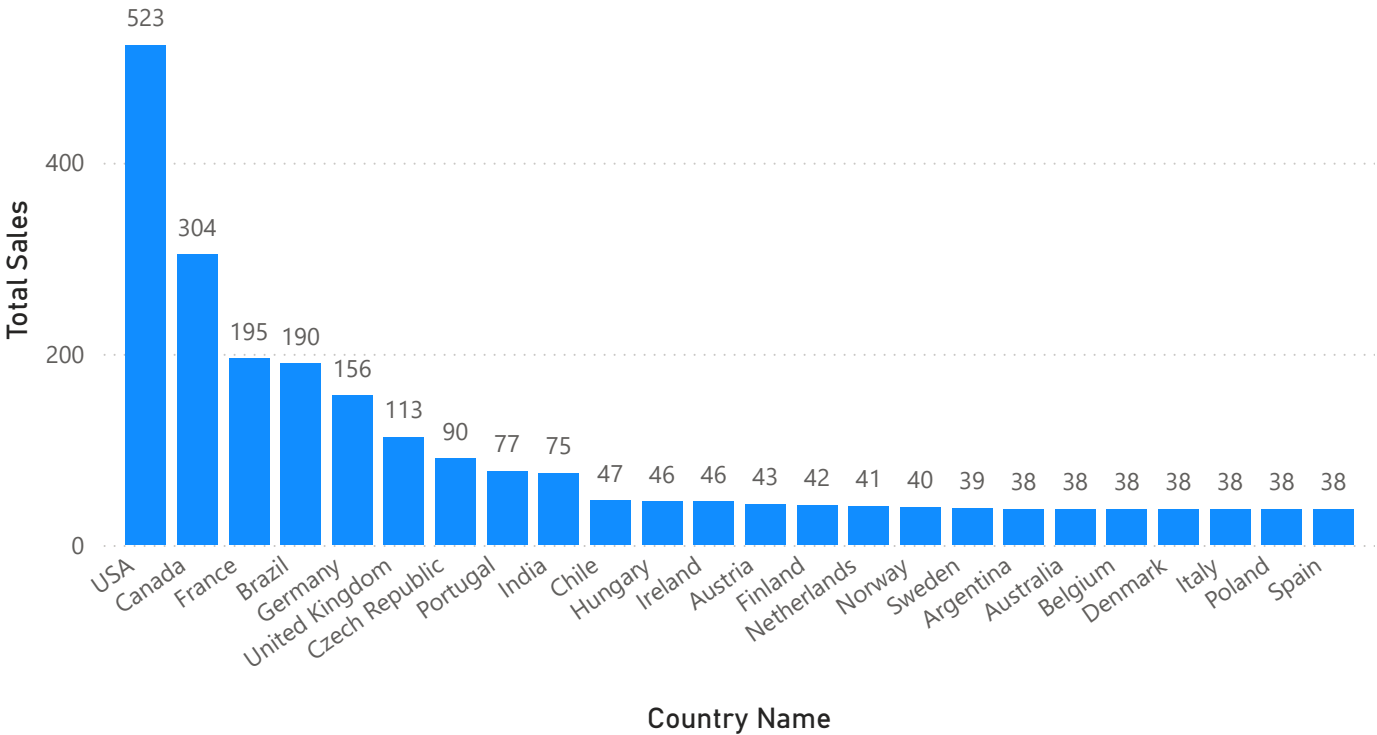
Genre Profitability & Popularity

genre_name ● Alternative ● Alternative & ... ● Blues ● Bossa Nova ● Classical ● Comedy ▶
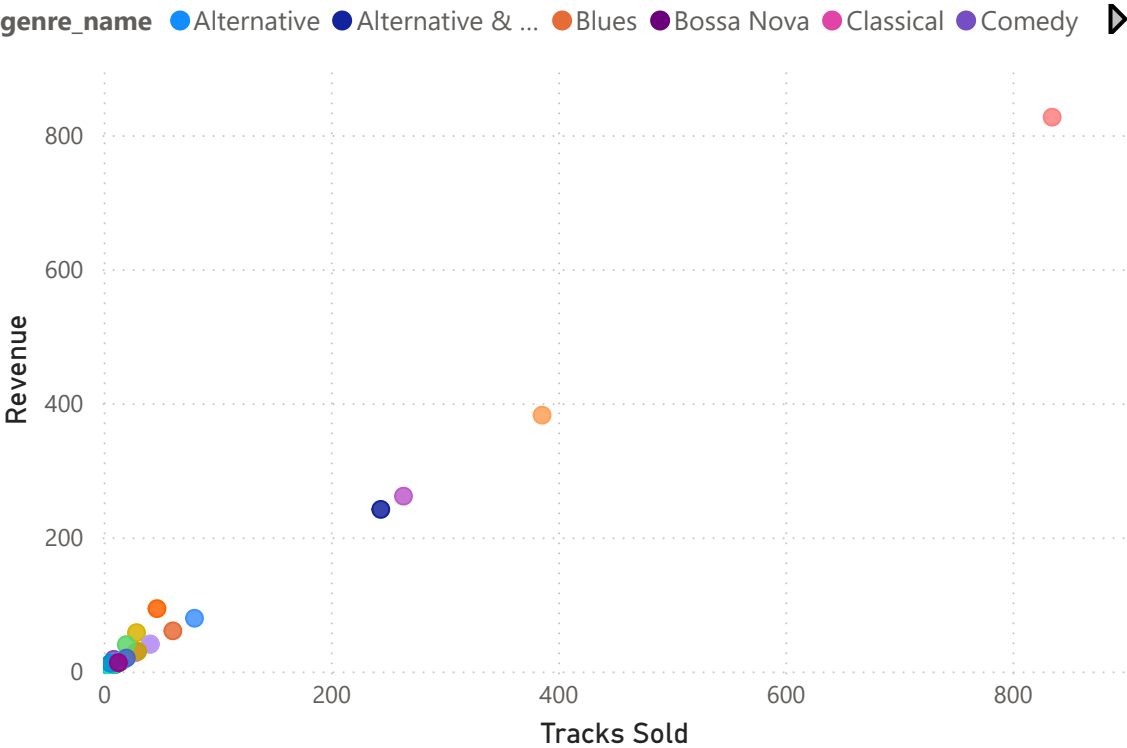
Top-Down Geography Analysis

Revenue by Region

country_name	2021	2022	2023	2024	2025	Total
⊞ Argentina		11.88	0.99		24.75	**37.62**
⊞ Australia	11.88	0.99	1.98	22.77		**37.62**
⊞ Austria	1.98	27.77		11.88	0.99	**42.62**
⊞ Belgium	6.93		24.75		5.94	**37.62**
⊞ Brazil	37.62	41.60	19.80	53.46	37.62	**190.10**
⊞ Canada	57.42	76.26	55.44	42.57	72.27	**303.96**
⊞ Chile	15.84	17.91	5.94	6.93		**46.62**
⊞ Czech Republic	10.89	9.90	12.87	19.83	36.75	**90.24**
⊞ Denmark	5.94	6.93		15.84	8.91	**37.62**
Total	**449.46**	**481.45**	**469.58**	**477.53**	**450.58**	**2,328.60**

Genre performance

year	2021			2022	
genre_name	Revenue	Avg Revenue per Sale	Tracks Sold	Revenue	Avg Revenue
Alternative				5.94	
Alternative & Punk	62.37	0.99	63	39.60	
Blues	10.89	0.99	11	10.89	
Bossa Nova	0.99	0.99	1	1.98	
Classical				13.86	
Comedy				3.98	
Drama				17.91	
Easy Listening	2.97	0.99	3	1.98	
Total	**449.46**	**0.99**	**454**	**481.45**	

Revenue Trend Over Time

year	Revenue	Tracks Sold
⊞ 2021	449.46	454
⊞ 2022	481.45	455
⊞ 2023	469.58	442
⊞ 2024	477.53	447
⊞ 2025	450.58	442
Total	**2,328.60**	**2240**

Top 5 Countries by Total Revenue

Total Revenue values by country:
- USA: $523.06
- Canada: $303.96
- France: $195.1
- Brazil: $190.1
- Germany: $156.48

Countries

country

- ☐ Brazil
- ☐ Canada
- ☐ France
- ☐ Germany
- ☐ USA

Brazil

5	$38.02	$0.89
Total Customers	Avg Spend of Customers	Spend Standard Deviation

Canada

8	$38	$0.74
Total Customers	Avg Spend of Customers	Spend Standard Deviation

France

5	$39.02	$1.14

The U.S. is our highest-paying and largest market, followed by Canada.

U.S. not only generates the most revenue but also had the highest spending per customer, reinforcing its strategic importance

Our customer spend is consistent across top markets, indicating reliable pricing strength.

Yearly Revenue by Country

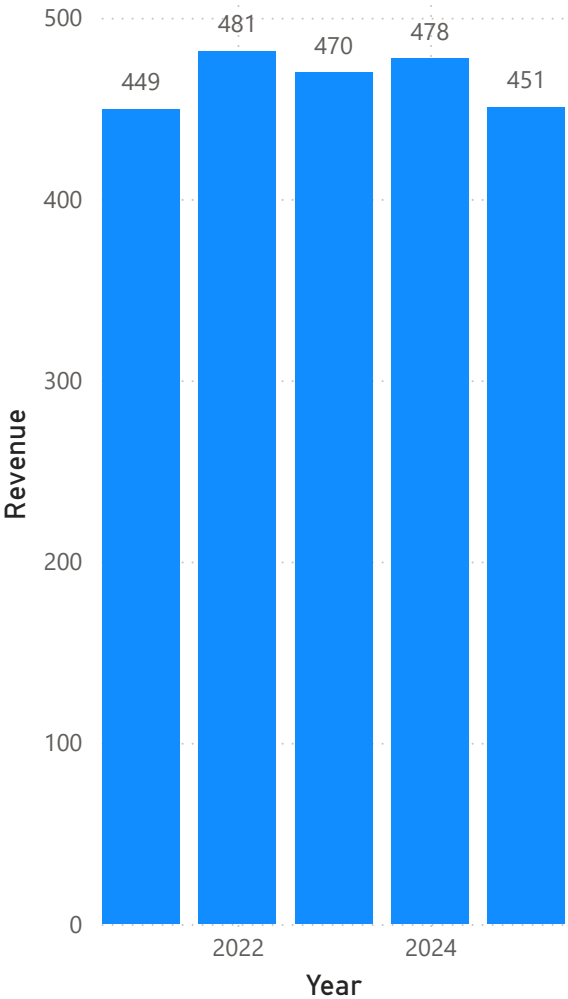country_name ●Brazil ●Canada ●France ●Germany ●USA
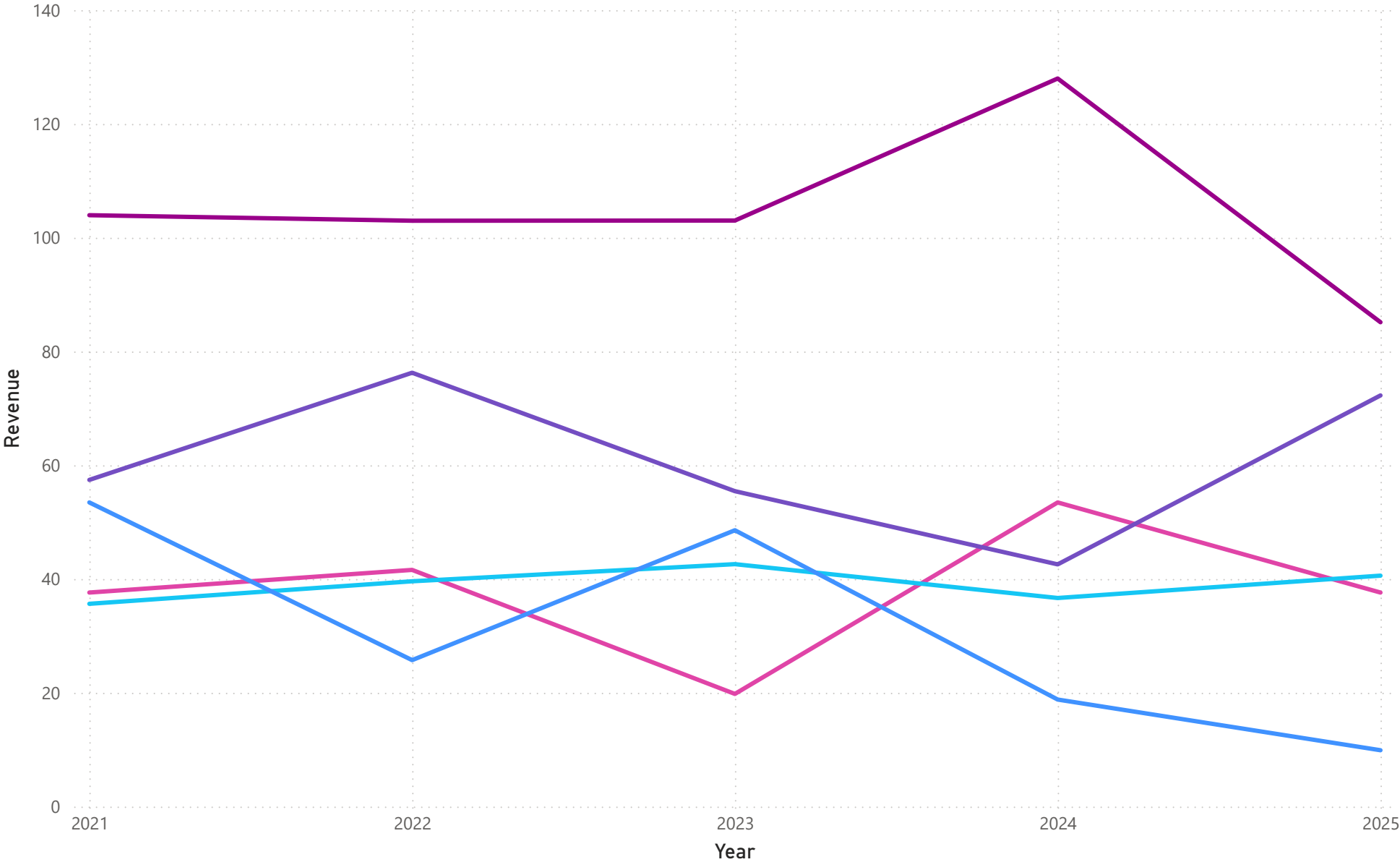
Revenue stability was dramatically disrupted in 2025, particularly in key markets like the U.S., Germany, and Brazil
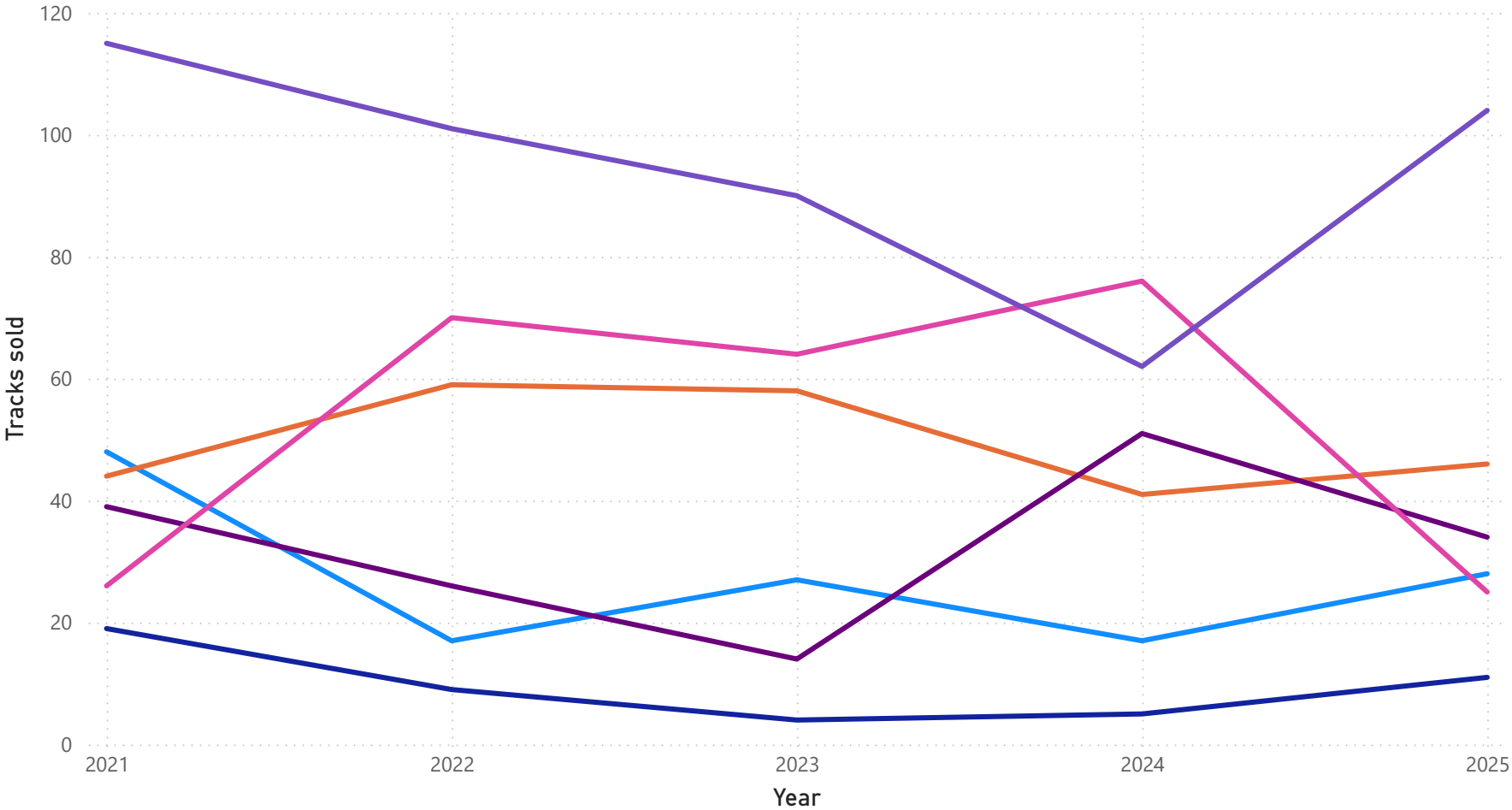
Country Names

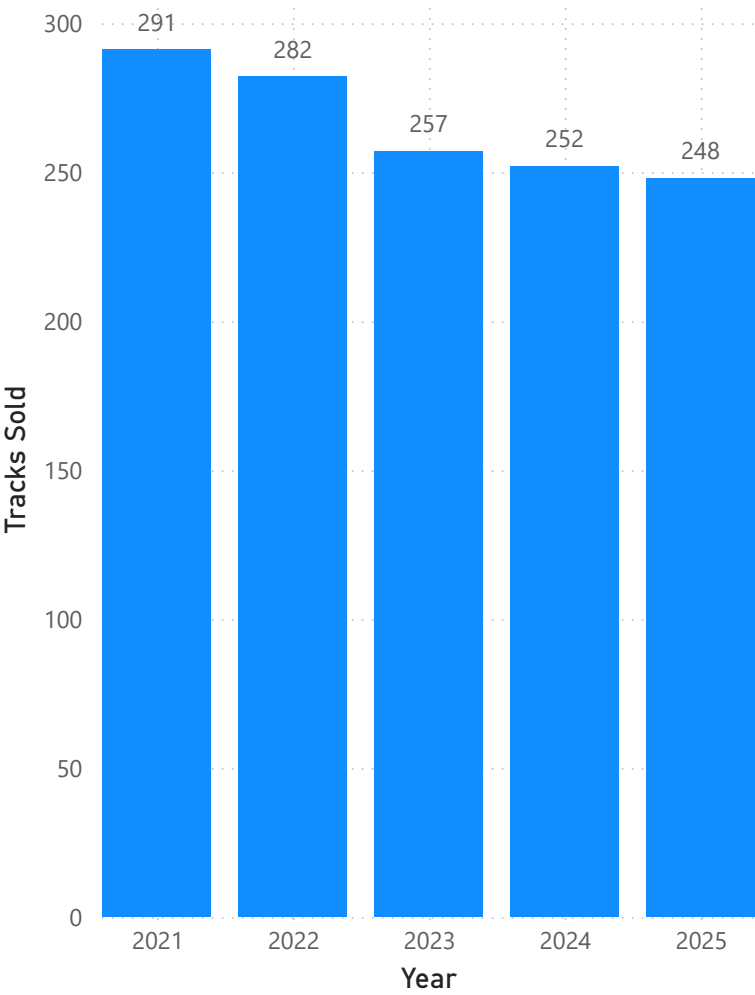- ☐ Brazil
- ☐ Canada
- ☐ France
- ☐ Germany
- ☐ USA

Revenue by Year

Genre Demand Over Time

Genre_Grouped ● Alternative & Punk ● Jazz ● Latin ● Metal ● Others ● Rock

Tracks sold by year

Music is our dominant category.
Current best-sellers are Rock, Latin, and Metal.
Customer preferences are shifting, highlighted by a significant drop in Metal popularity in Germany and France during 2025.
Furthermore, we're losing significant ground in Germany.

country ⌄

☐ Brazil

☐ Canada

☐ France

☐ Germany

☐ USA

Top-Selling Genres in 2025
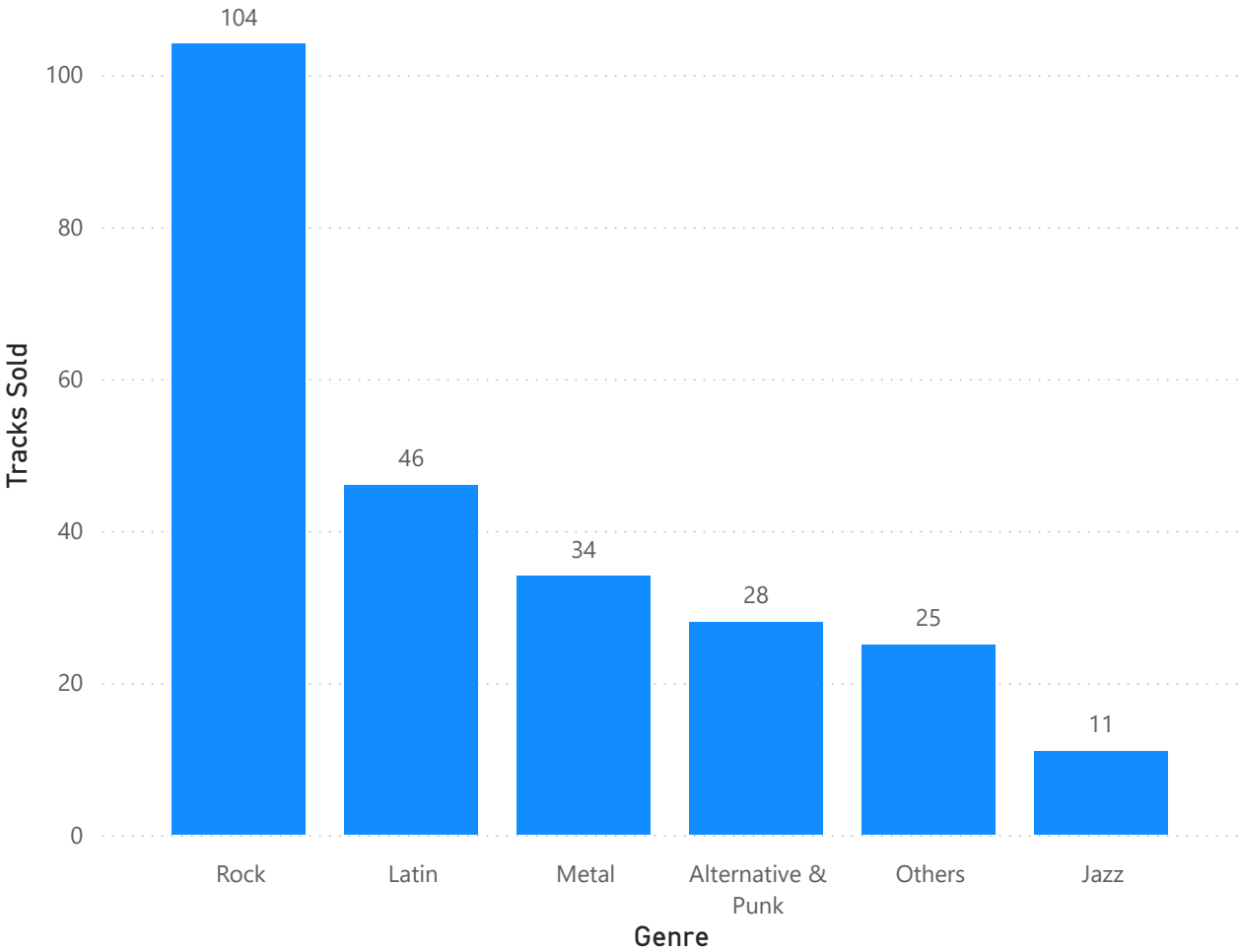
Avaliable Tracks by Genre
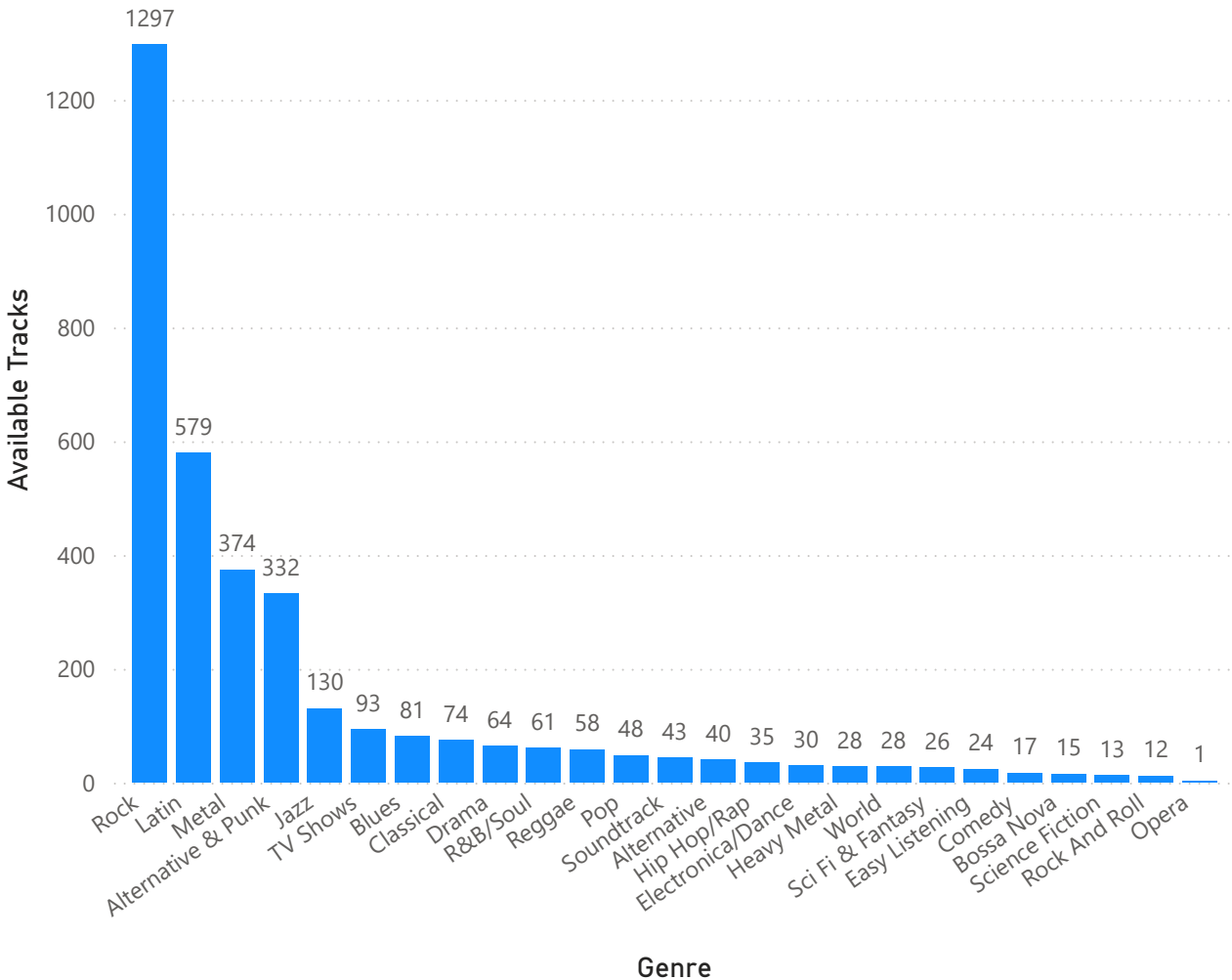
country ⌄

☐ Brazil
☐ Canada
☐ France
☐ Germany
☐ USA

Track variety directly impacts sales.
Countries experiencing declining revenue typically have limited variety in their most preferred genres.
This raises critical questions:
1) Is the revenue drop due to lack of content, or declining interest?
2) Specifically for movies, is there genuinely no demand, or are we just not offering enough variety?

Why Revenue is Declining and How We'll Fix It

Root Cause of Decline

Lack of content variety is directly reducing customer spending.

Customers **haven't lost interest**—they're simply **not finding** enough of what they love.

Critical genres (Rock, Latin, Metal) are underserved, significantly affecting top markets (**Germany & USA**).

Recommendations for next steps:

Immediate Action

Accelerate content expansion in key genres (Rock, Latin, Metal) to capture unmet demand in core markets.
Rebuild market presence in Germany through **focused advertising** campaigns, **genre-based promotions**, and **tailored offers** to win back valuable customers.

Short-Term Validation

Run an **A/B test** between two similar customer groups:
  • Group A gets increased variety immediately.
  • Group B remains unchanged (control group).
Measure the impact on revenue and customer retention.

Strategic Long-Term Stability

Operation side

Introduce quarterly **genre-demand reviews** to proactively adjust content offerings.
Implement a **personalization strategy** to align recommendations precisely with individual user interests, driving higher engagement.

Technical side

Enhance data tracking by adding a 'Date Added' field to the Track table, enabling **time-based performance analysis**.