

MUSIC STORE DATA ANALYSIS PROJECT

Objective

Main objective of this project is to analyze music stores sales data and provide them with insights and opportunities to increase their sales, which will help businesses understand the past trend and help in business growth.



Basic Analysis

In basic analysis, we will try to understand which top 3 country has the highest invoices generated and Music stores have decided to host a promotional music festival for the top 3 cities that generated the maximum sales and decided to give 'The Best Customer' award to the customer with the most purchases. From **Table 1**, we observed that USA, Canada and Brazil had the highest invoices generated and Prague, Mountain View and London are the top 3 cities with maximum sales. Therefore, the promotional music festival will be held in these cities.

	total_invoice bigint	billing_country character varying (30)		billing_city character varying (30)	total double precision
1	131	USA	1	Prague	273.24000000000007
2	76	Canada	2	Mountain View	169.29
3	61	Brazil	3	London	166.32

Table 1

According to Table 2, R Madhav gets 'The Best Customer' award. A music store's strategy of promoting new records and expressing gratitude for buyers by hosting a music festival and honoring the best customer is an effective way to ensure buyer satisfaction and loyalty. However, there is an opportunity for improvement, instead of organizing music festivals in the top three revenue generating cities, they can organize festivals in the top two cities, with the third city being where sales are low and can be boosted by a promotional music festival.

	customer_id [PK] integer	first_name character	last_name character	sum numeric (100,2)
1	5	R	Madhav	144.54

Table 2

Further investigation revealed that the majority of buyers worldwide are fans of the 'Rock' genre. As a result, we recommend that music stores invite the rock band that has made the most rock music to our promotional music festival. Music stores can select rock bands from Table 3, which has a list of the finest rock bands based on the number of songs they have written. Music stores should choose bands wisely because they cannot spend all of their profits on the music festival.

	artist_id [PK] character varying (50)	name character varying (120)	no_of_songs bigint
1	22	Led Zeppelin	114
2	150	U2	112
3	58	Deep Purple	92
4	90	Iron Maiden	81
5	118	Pearl Jam	54
6	152	Van Halen	52
7	51	Queen	45
8	142	The Rolling Stones	41
9	76	Creedence Clearwater Revival	40
10	52	Kiss	35

Table 3

Advanced Analysis

We shall observe the trend of genres in different countries, the most popular music and artists in each country, and the revenue earned by the most popular genre per country in advanced analysis. According to **Table 4**, 'Rock' genre is the most liked genre worldwide and has produced the highest number of purchases. As a result, music stores should prioritize the purchase of new songs in the 'Rock' genre because they are more likely to increase the number of sales for the stores and therefore boost overall income.

	country character varying (50)	name character varying (120)	purchases_per_genre bigint
1	USA	Rock	561
2	United Kingdom	Rock	166
3	Sweden	Rock	60
4	Spain	Rock	46
5	Portugal	Rock	108
6	Poland	Rock	40
7	Norway	Rock	40
8	Netherlands	Rock	33
9	Italy	Rock	35
10	Ireland	Rock	72

Table 4

Table 5 displays the top 5 customers that have spent the most on music for each country. Music stores can consider providing some offers to these customers on next purchases as they are considered to be valuable for the store which would ensure customer satisfaction and such customers would recommend this store to others for purchasing music records.

	customer_id integer	first_name character	last_name character	billing_country character varying (30)	max_spending double precision
1	5	R	Madhav	Czech Republic	144.54000000000002
2	46	Hugh	O'Reilly	Ireland	114.83999999999997
3	58	Manoj	Pareek	India	111.86999999999999
4	1	Luís	Gonçalves	Brazil	108.89999999999998
5	34	João	Fernandes	Portugal	102.96000000000001

Table 5

According to **Table 6**, USA, Canada, France, Brazil and Germany are the top 5 cities that generate the most revenue for the genre 'Rock' and **Table 7** displays the most famous artist worldwide based on number of records sold. Music stores should aim to boost their sales in other nations while maintaining their current sales in top countries by using various campaigns, ads, and in-store purchase offers. Because the majority of buyers are 'Rock' fans, music stores have the opportunity to increase sales in other genres. Music retailers can also attempt setting up a playstation where buyers can listen to certain tracks of interest in store, encouraging them to check out other genres and artists and thus improving sales. Stores may also try selling records online to see if it helps them improve sales, hence boosting its profitability.

	billing_country character varying (30) 🔒	name character varying (120) 🔒	revenue double precision 🔒
1	USA	Rock	555.39000000000036
2	Canada	Rock	329.67000000000155
3	France	Rock	208.89000000000044
4	Brazil	Rock	202.95000000000004
5	Germany	Rock	192.06000000000003

Table 6

	name character varying (120) 🔒	total_songs_sold bigint 🔒
1	Queen	192
2	Jimi Hendrix	187
3	Red Hot Chili Peppers	130
4	Nirvana	130
5	Pearl Jam	129
6	Guns N' Roses	124
7	AC/DC	124
8	Foo Fighters	121
9	The Rolling Stones	117
10	Metallica	106

Table 7

Conclusion

To summarize, we analyzed data to provide insights and opportunities to increase music stores sales and help businesses understand the past trend and help in business growth. When we looked into data we found out that the stores generated maximum revenue for the 'Rock' genre, hence its important that stores prioritize the purchase of new songs in the 'Rock' genre because they are more likely to increase the number of sales for the stores. Stores strategy to host promotional music festivals in top revenue generating cities ensures customer satisfaction. Music stores can try setting up a playstation which would promote users to try out different genres and artists, ensuring a boost in sales. Stores can also experiment with selling music online to see whether it benefits them. Furthermore, boosting profitability should not compromise buyer's satisfaction. Businesses can find long-term success in a highly competitive environment by implementing data-driven strategies for higher number of sales and revenue analysis.