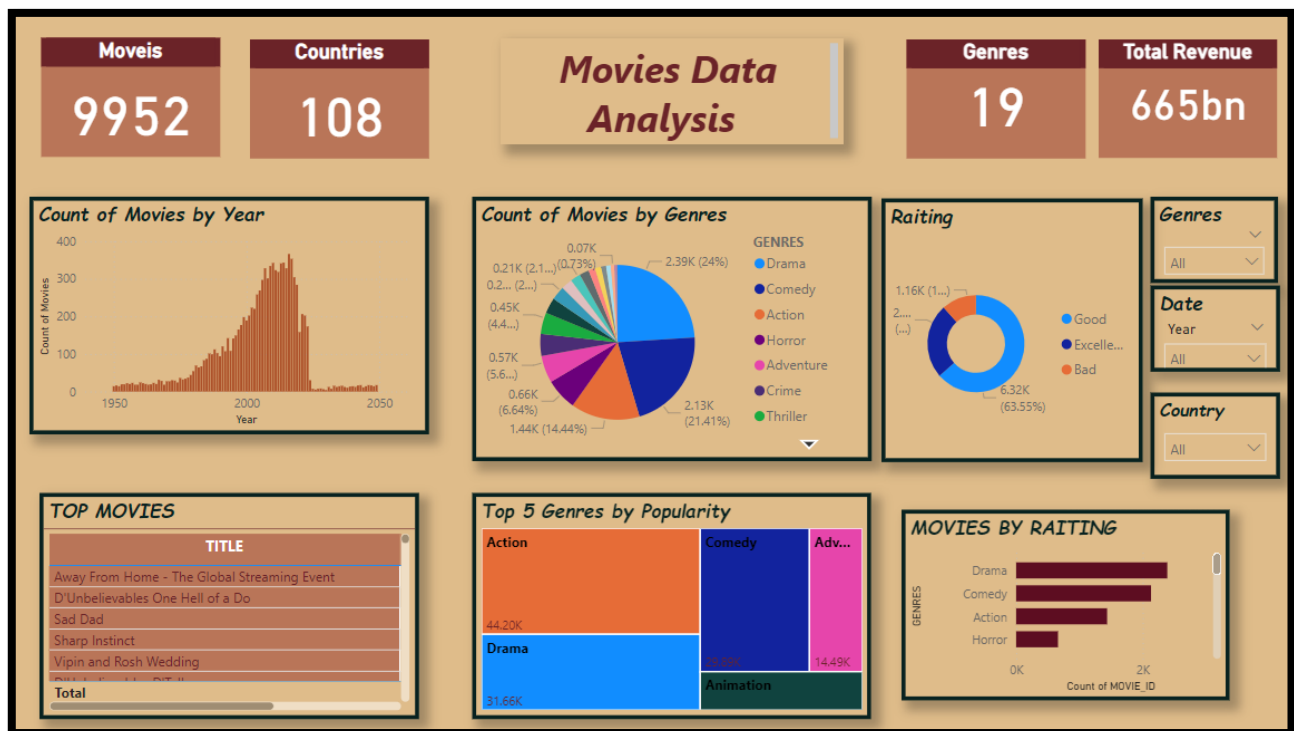**Movies Data Analysis**

In this report, I will answer a set of questions such as: the most popular genres, the countries that produce the most films, and the relationship between ratings and revenues to help me understand the film industry and audience preferences. The goal of this report is to simplify the information and provide useful insights for filmmakers and interested audiences.

**Dashboard:**

# Questions

— How many movies were released each year?

- What is the most common genre of movies?

- What are the top five highest-rated movies, and what are their ratings?

- What are the top 10 countries producing the most movies?

- Which movies have the highest average votes for each genre?

- Which countries produce the most "excellent" movies?

- Which movies have high revenues despite being rated "bad"?

- What is the average difference between revenues and budgets for each genre?

- Which original language has the highest average rating?

- What are the most popular release dates with the highest revenues in India, and how many movies were released on those dates?

- What are the most popular movies that did not generate high revenues?

- What is the most popular genre?

- Rank the top 10 "excellent" movies by their revenues.

**How many movies were released each year?**

```sql
select EXTRACT(year from release_date) RELEASE_YEAR,
count( movie_id) Movies
from movies
group by EXTRACT(year from release_date)
ORDER BY release_year DESC ;
```

| | RELEASE_YEAR | MOVIES |
|---|---|---|
| 1 | 2024 | 25 |
| 2 | 2023 | 172 |
| 3 | 2022 | 201 |
| 4 | 2021 | 204 |
| 5 | 2020 | 156 |
| 6 | 2019 | 283 |
| 7 | 2018 | 302 |

**What is the most common genre of movies?**

```sql
select genres,count(movie_id)genres_count
from movies
group by genres
order by genres_count desc;
```

| | GENRES | GENRES_COUNT |
|---|---|---|
| 1 | Drama | 2388 |
| 2 | Comedy | 2131 |
| 3 | Action | 1437 |
| 4 | Horror | 661 |
| 5 | Adventure | 565 |
| 6 | Crime | 457 |
| 7 | Thriller | 445 |
| 8 | Animation | 324 |
| 9 | Romance | 292 |

**What are the top five highest-rated movies, their ratings, and their release years?**

```sql
select title, EXTRACT(YEAR FROM RELEASE_DATE)YEAR,
vote_average RATE
from movies
order by vote_average DESC
FETCH FIRST 5 ROWS ONLY;
```

| | TITLE | YEAR | RATE |
|---|---|---|---|
| 1 | Away From Home - The Global Streaming Event | 2021 | 9.8 |
| 2 | Vipin and Rosh Wedding | 2012 | 9.5 |
| 3 | Sad Dad | 2017 | 9.5 |
| 4 | Sharp Instinct | 2023 | 9.5 |
| 5 | D'Unbelievables One Hell of a Do | 2011 | 9.5 |

**What are the top 10 countries producing the most movies?**

```sql
select production_countries "Country", count(movie_id)Movies
from movies
group by production_countries
order by movies desc
FETCH FIRST 10 ROWS ONLY;
```

| | Country | MOVIES |
|---|---|---|
| 1 | United States of America | 5317 |
| 2 | India | 642 |
| 3 | United Kingdom | 620 |
| 4 | France | 476 |
| 5 | Canada | 421 |
| 6 | Germany | 283 |
| 7 | Russia | 194 |
| 8 | Australia | 173 |
| 9 | Japan | 162 |
| 10 | China | 156 |

**Which movies have the highest average votes for each genre?**

```sql
SELECT genres,round(AVG(vote_average),2) Avg_Rate
FROM movies
GROUP BY genres
ORDER BY avg_rate DESC;
```

| | GENRES | AVG_RATE |
|---|---|---|
| 1 | War | 6.5 |
| 2 | Western | 6.4 |
| 3 | Crime | 6.38 |
| 4 | History | 6.36 |
| 5 | Adventure | 6.33 |

**Which countries produce the most "excellent" movies?**

```sql
select production_countries "Country",Raiting,
count(movie_id)Movies
from movies
Group by production_countries, Raiting
HAVING RAITING = 'Excellent'
order by movies desc
```

| | Country | RAITING | MOVIES |
|---|---|---|---|
| 1 | United States of America | Excellent | 1232 |
| 2 | United Kingdom | Excellent | 191 |
| 3 | India | Excellent | 173 |
| 4 | France | Excellent | 147 |
| 5 | Canada | Excellent | 77 |
| 6 | Germany | Excellent | 74 |
| 7 | Japan | Excellent | 72 |

**Which movies have high revenues despite being rated "Bad"?**

```sql
select title,vote_average, raiting,TO_CHAR(revenue, '999,999,999')Revenue
from movies
WHERE raiting = 'Bad' AND vote_average >0
ORDER BY   REVENUE DESC;
```

| | TITLE | VOTE_AVERAGE | RAITING | REVENUE |
|---|---|---|---|---|
| 1 | The Last Airbender | 4.6 | Bad | 319,713,881 |
| 2 | Batman & Robin | 4.3 | Bad | 238,207,122 |
| 3 | Fantastic Four | 4.4 | Bad | 167,977,596 |
| 4 | Speed 2: Cruise Control | 4.5 | Bad | 164,508,066 |
| 5 | Jack and Jill | 4.3 | Bad | 149,673,788 |
| 6 | Inspector Gadget | 4.4 | Bad | 134,400,000 |
| 7 | Nutty Professor II: The Klumps | 4.9 | Bad | 123,307,945 |
| 8 | The Devil Inside | 4.7 | Bad | 101,758,490 |

**What is the average difference between revenues and budgets for each genre?**

```sql
select  genres, ROUND(AVG(revenue - budget), 2)avgerage
from movies
group by genres
having avg(revenue-budget) > 0;
```

| | GENRES | AVGERAGE |
|---|---|---|
| 1 | Comedy | 28626947.17 |
| 2 | Crime | 21265478.75 |
| 3 | Drama | 20601872.31 |
| 4 | Action | 70273372.76 |
| 5 | Music | 28639521.13 |
| 6 | Horror | 30706738.04 |
| 7 | Animation | 108903397.18 |

**Which original language has the highest average rating?**

```sql
select original_language,max(vote_average) Average
from movies
group by original_language
ORDER BY AVERAGE DESC
FETCH FIRST 1 ROWS ONLY ;
```

| | ORIGINAL_LANGUAGE | AVERAGE |
|---|---|---|
| 1 | en | 9.8 |

**What are the most popular release dates with the highest revenues in India, and how many movies were released on those dates?**

```
select  TO_CHAR(release_date, 'Month')Month ,
TO_CHAR(MAX(revenue), '999,999,999,99')Revenues,
COUNT(MOVIE_ID) MOVIES
from movies
WHERE PRODUCTION_COUNTRIES = 'India'
group by TO_CHAR(release_date, 'Month')
ORDER BY REVENUES DESC
```

| | MONTH | REVENUES | MOVIES |
|---|---|---|---|
| 1 | December | 3,946,382,58 | 54 |
| 2 | April | 2,759,473,13 | 51 |
| 3 | November | 2,752,934,50 | 46 |
| 4 | June | 1,952,434,11 | 50 |

**What are the most popular movies that did not generate high revenues?**

```
SELECT title, popularity, revenue
FROM movies
WHERE popularity > (SELECT AVG(popularity) FROM movies)
AND revenue < (SELECT AVG(revenue) FROM movies)
ORDER BY popularity DESC;
```

| | TITLE | POPULARITY | REVENUE |
|---|---|---|---|
| 1 | Retribution | 1547.22 | 12905464 |
| 2 | Saw X | 949.967 | 29300000 |
| 3 | Expend4bles | 484.627 | 15000000 |
| 4 | After Everything | 474.472 | 3280152 |
| 5 | Strays | 419.527 | 32000000 |
| 6 | Adipurush | 349.287 | 43000000 |
| 7 | Ruby Gillman, Teenage Kraken | 321.777 | 43716515 |

**What is the most popular genre?**

```
select genres,max( popularity)  popularity
from movies
group by genres
order BY popularity desc
FETCH FIRST 1 ROWS ONLY;
```

| | GENRES | POPULARITY |
|---|---|---|
| 1 | Action | 2994.357 |

**Rank the top 10 "excellent" movies by their revenues.**

```sql
select rank()over (order by revenue desc)"Rank", title ,
TO_CHAR(revenue, '999,999,999,999')Revenue
from movies
where raiting = 'Excellent'
FETCH FIRST 10 ROW ONLY ;
```

| Rank | TITLE | REVENUE |
|---|---|---|
| 1 | Avatar | 2,923,706,026 |
| 2 | Avengers: Endgame | 2,800,000,000 |
| 3 | Avatar: The Way of Water | 2,320,250,281 |
| 4 | Titanic | 2,264,162,353 |
| 5 | Star Wars: The Force Awakens | 2,068,223,624 |
| 6 | Avengers: Infinity War | 2,052,415,039 |
| 7 | Spider-Man: No Way Home | 1,921,847,111 |
| 8 | The Lion King | 1,663,075,401 |
| 9 | The Avengers | 1,518,815,515 |