Genre-Based Analysis of IMDb Ratings to Online Streaming Platform Data-Driven Decisions

Google Data Analytics Capstone Project

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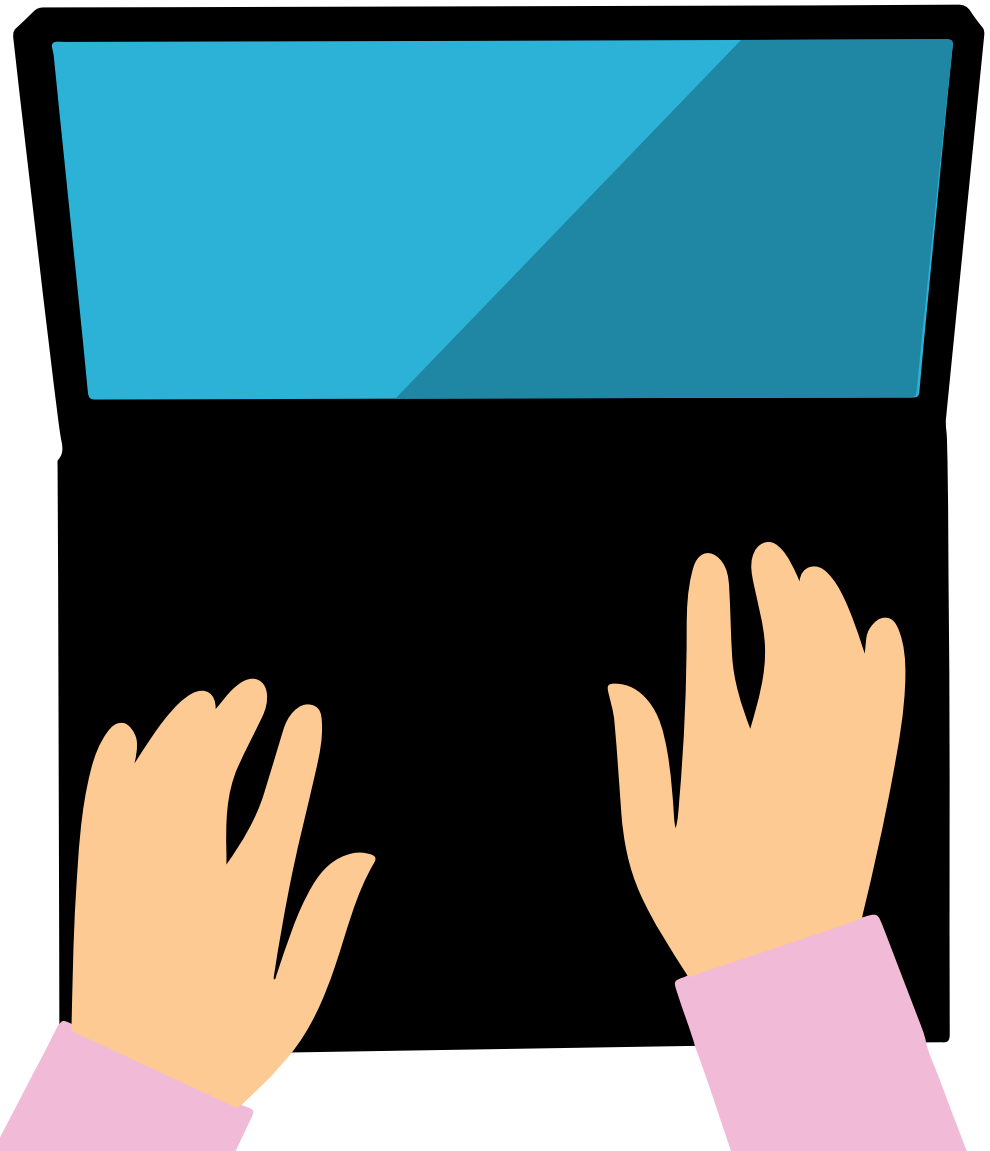
Which movie genres are most likely to receive highly positive reviews?

Action?
Adventure?
Fantasy?
Horror?



IMDb, originally known as the **Internet Movie Database**, is an online database that provides comprehensive information about films, television series, podcasts, home videos, video games, and streaming content.

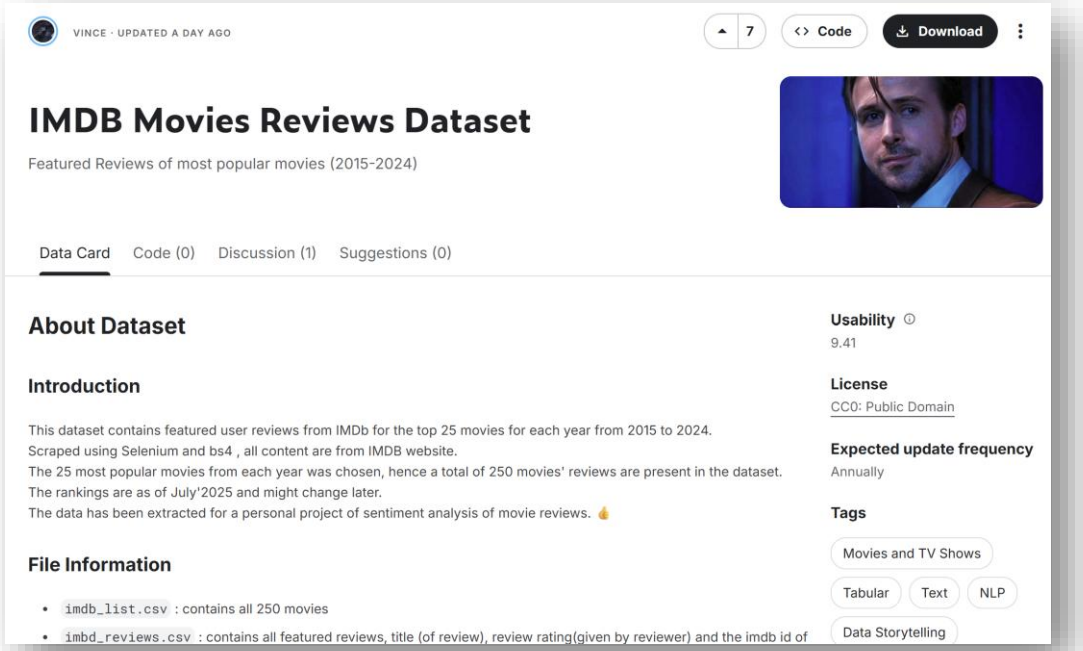
Business Task?

Identify which movie genres will receive the most positive reviews, to guide the online streaming platforms and the director's data-driven decision on what genre of exclusive movies to pursue.

Data?

"Popular Movies IMDB Reviews Dataset" by user VINCE on Kaggle.

https://www.kaggle.com/datasets/shivvm/popular-movies-imdb-reviews-dataset



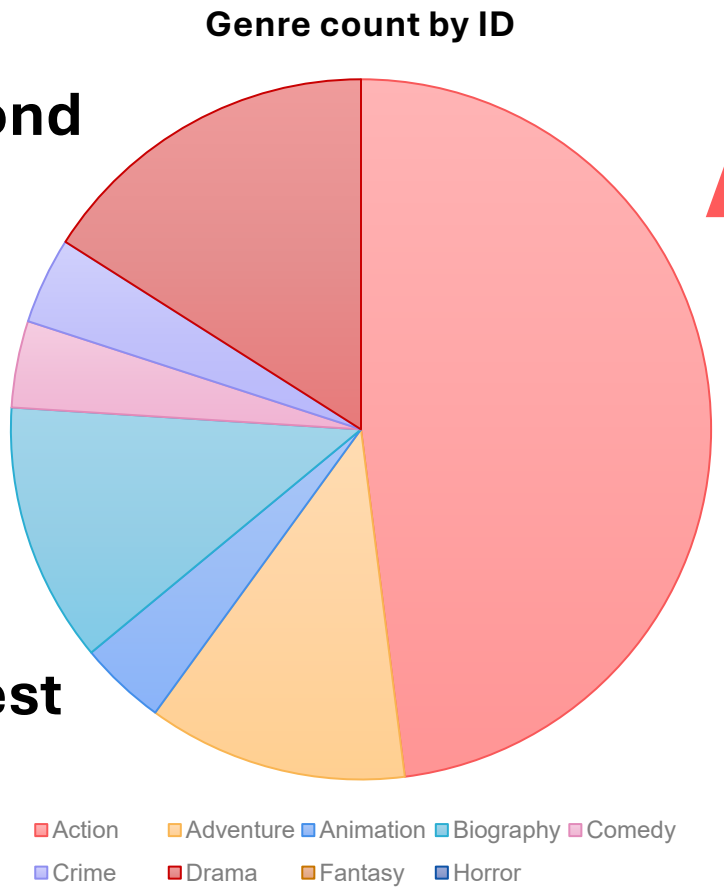
id	title	rating	genre_1	genre_2	genre_3	year
tt0369610	Jurassic World	6.9	Action	Adventure	Sci-Fi	2015
tt3774694	Love	6.1	Drama	Romance	N/A	2015
tt2361509	The Intern	7.1	Comedy	Drama	N/A	2015
tt2381249	Mission: Impossible - Rogue Nation	7.4	Action	Adventure	Thriller	2015
tt3460252	The Hateful Eight	7.8	Crime	Drama	Mystery	2015
tt1392190	Mad Max: Fury Road	8.1	Action	Adventure	Sci-Fi	2015
tt3397884	Sicario	7.7	Action	Crime	Drama	2015
tt1596363	The Big Short	7.8	Biography	Comedy	Drama	2015
tt3659388	The Martian	8	Adventure	Drama	Sci-Fi	2015
tt1663202	The Revenant	8	Adventure	Drama	Western	2015
tt2140379	Self/less	6.5	Action	Mystery	Sci-Fi	2015
tt2494362	Bone Tomahawk	7.1	Drama	Horror	Western	2015
tt4263482	The Witch	7	Drama	Fantasy	Horror	2015
tt2395427	Avengers: Age of Ultron	7.3	Action	Adventure	Sci-Fi	2015
tt3569230	Legend	6.9	Biography	Crime	Drama	2015
tt1895587	Spotlight	8.1	Biography	Crime	Drama	2015
tt1638355	The Man from U.N.C.L.E.	7.2	Action	Adventure	Comedy	2015
tt2488496	Star Wars: Episode VII - The Force Awakens	7.8	Action	Adventure	Sci-Fi	2015
tt3464902	The Lobster	7.1	Drama	Romance	Sci-Fi	2015

Visualization

Drama is second

Action is hot picked!

Crime is the lowest

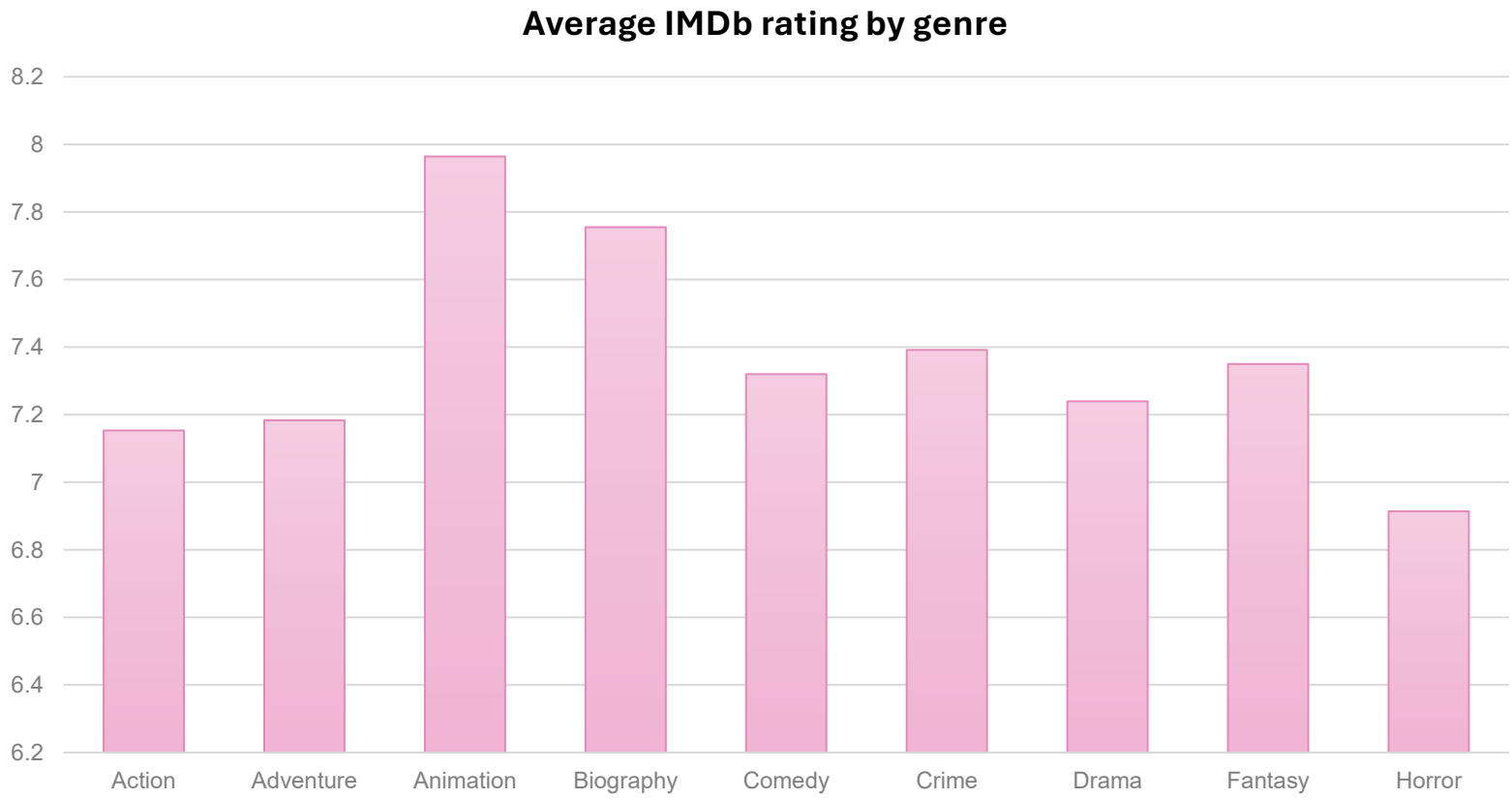


Visualization

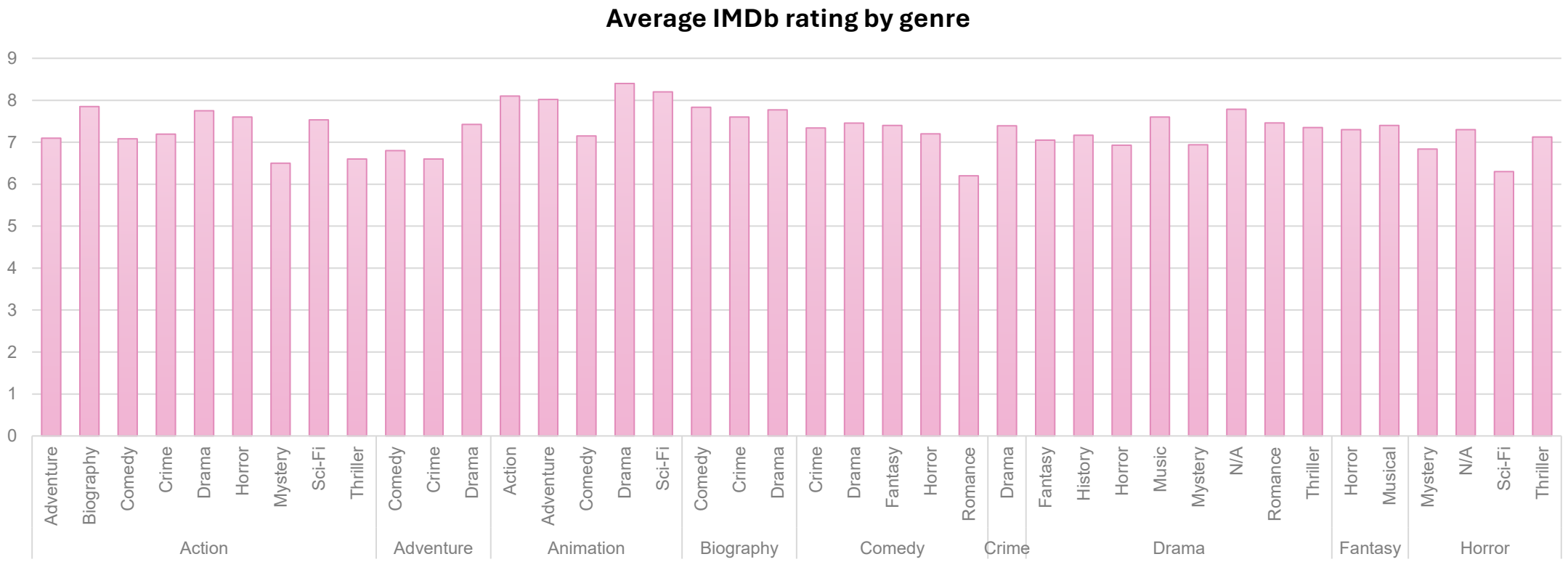
Animation is the highest average IMDb rated

Biography is the second highest

Horror is meh



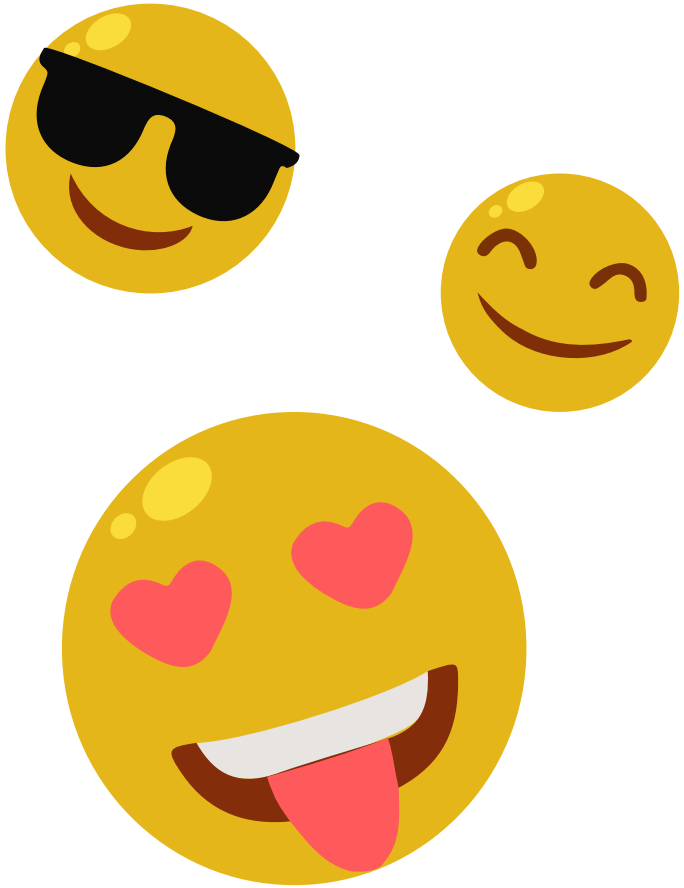
Visualization



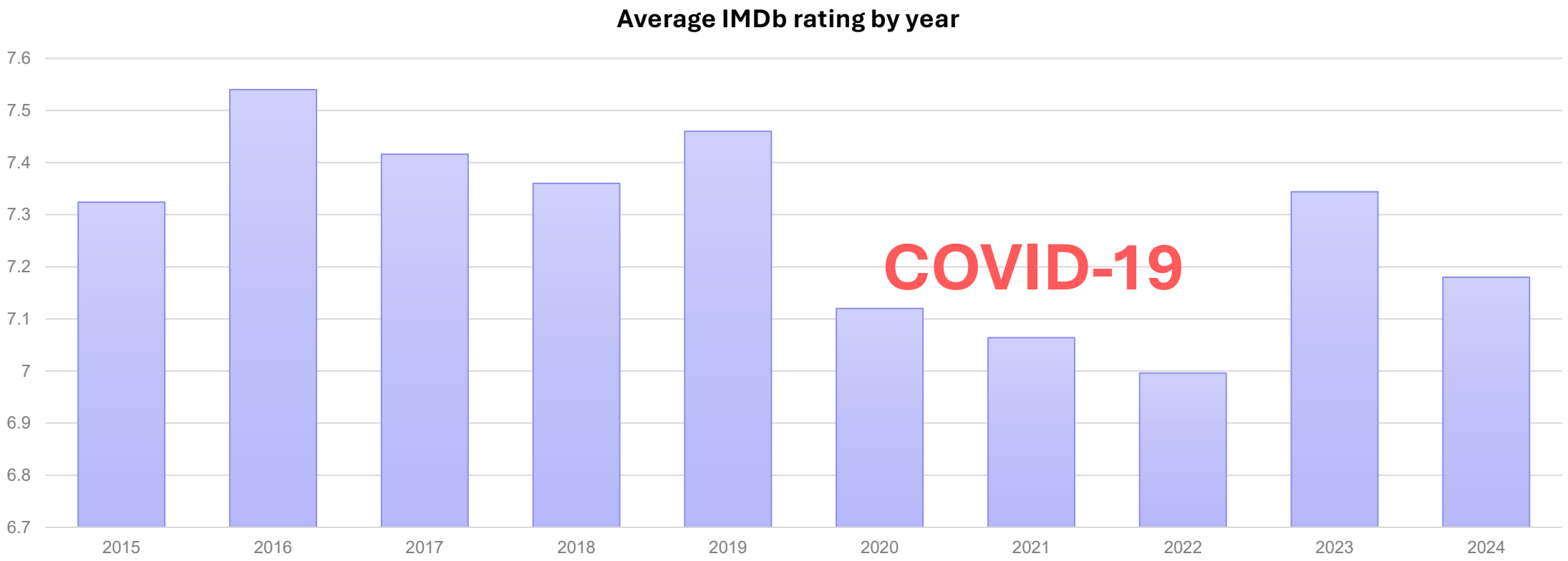
Second genre doesn’t change the average rating much

What does it mean?

This dataset reveals key insights about audience. **Animation and Biography** genres had the highest average IMDb ratings, which suggesting strong viewer appreciation. In the other hand, **Horror** films consistently received the lowest average IMDb ratings, showing weaker reception. While **Action** was the most frequently occurring genre in the dataset, it did not perform as well in terms of average ratings.



Visualization (Extra)



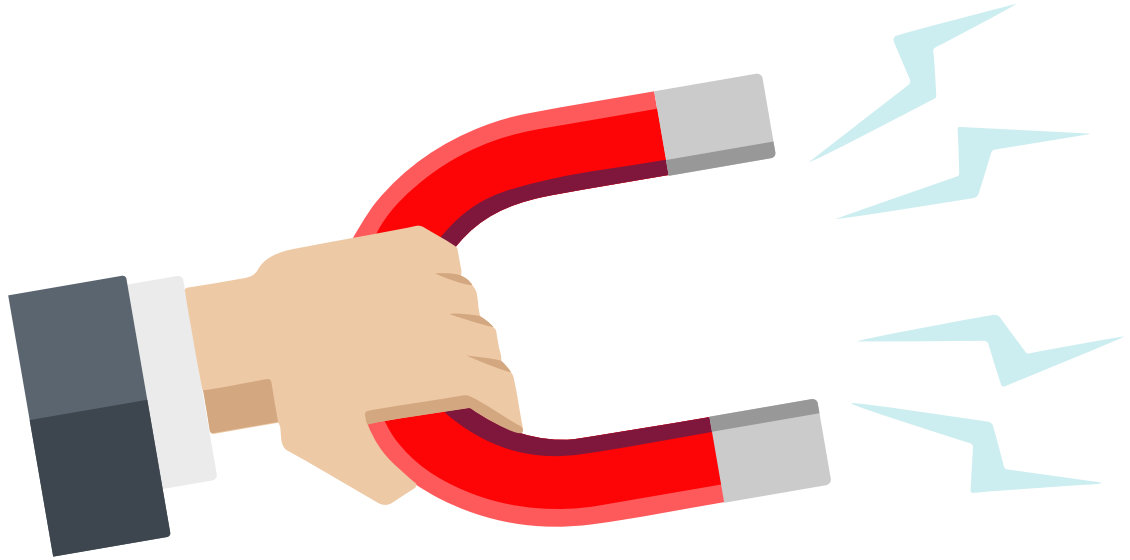
Not relevant, but important!

Next steps

- Shortlist potential concepts in the Animation or Biography genres.
- Conduct further analysis on more specific audience segments.
- Begin market testing to validate interest in the chosen genre.
- Consider analyzing competitors or recent performance for added context.

Additional Data?

- Additional demographic data to better understand audience segments.
- Online streaming viewership data to measure performance alongside ratings.
- Sentiment analysis on user reviews for deeper qualitative insights.
- Production details to analyze what factors contribute to high ratings within top genres.



THANK YOU FOR LISTENING!

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