



MOVIE RECOMMENDATION SYSTEM >







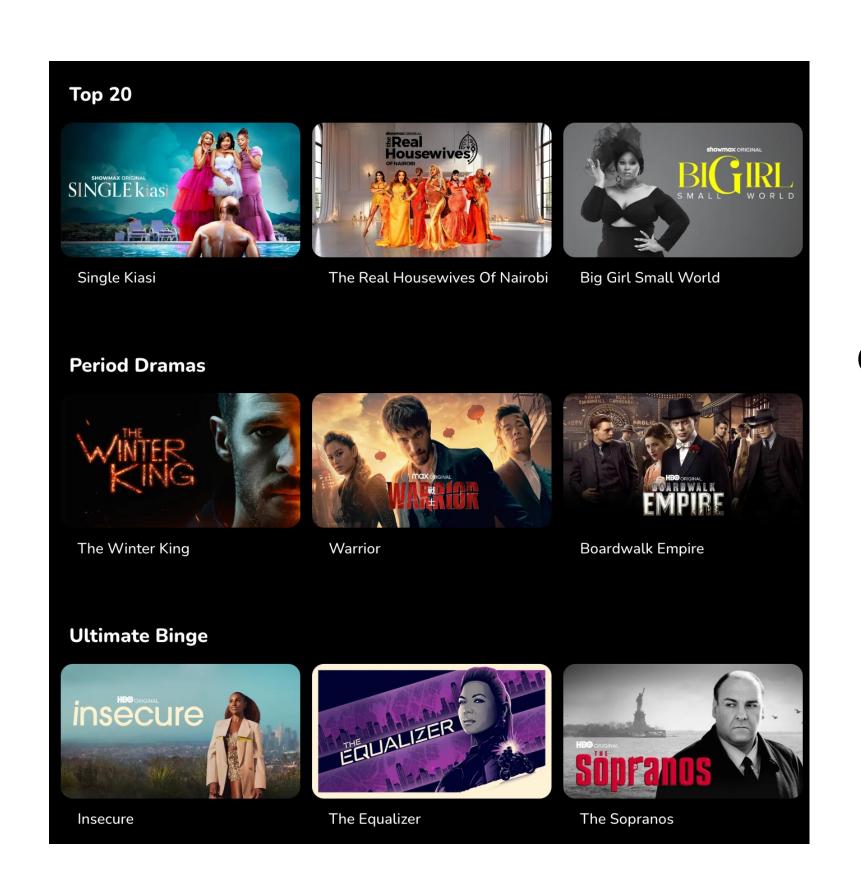
Overview

RMX consultancy created a user based and item based collaborative filtering methods on movie lens dataset to create a movie recommendation system for Showmax to:

- Accurately recommend top 5 movies
- Provide insights and recommendations to Showmax



BUSINESS UNDERSTANDING



Personalized movie recommendations are important for Showmax to enhance user engagement, retention, and satisfaction. Netflix sets the industry standard by offering top 10 movies or series in a user's country and personalized recommendations based on viewing history and ratings. By using collaborative filtering, Showmax can develop targeted strategies to improve user retention, helping them compete more effectively with Netflix.



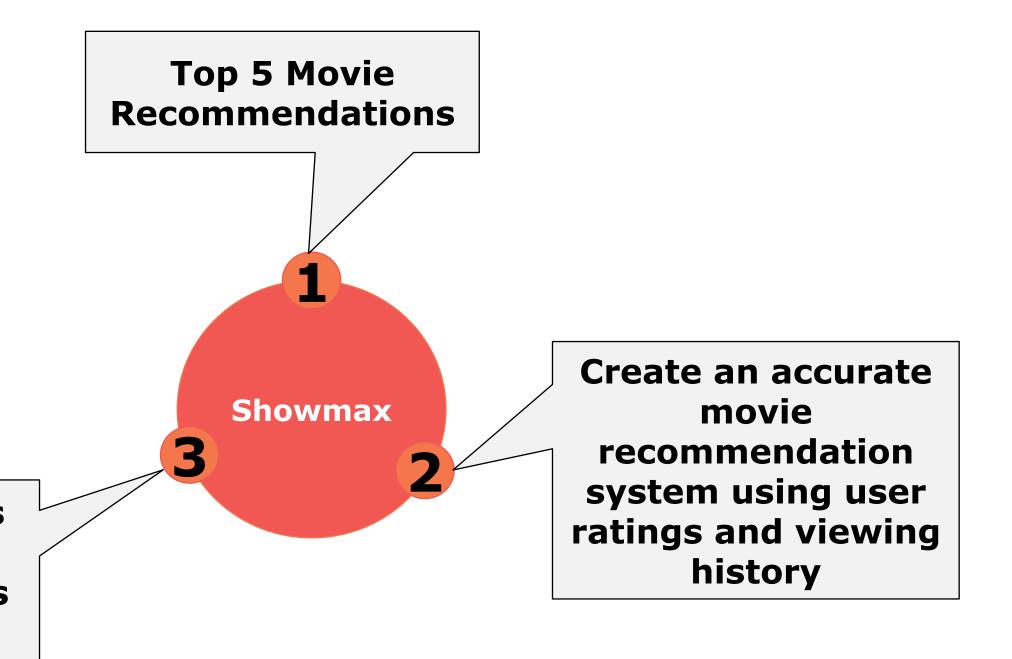
PROBLEM STATEMENT

RMX Consultancy X Showmax

Showmax has tasked RMX Consultancy to enhance its competitive edge against Netflix by implementing a personalized movie recommendation system. The goal is to recommend the top 5 movies to users based on their ratings and viewing history, leveraging collaborative filtering techniques to deliver a superior viewing experience.







Generate Insights and Recommendations for Showmax



Data

The dataset describes 5-star rating and free-text tagging activity from MovieLens, a movie recommendation service. It contains the following:

Ratings 100,836

Tags 3,683

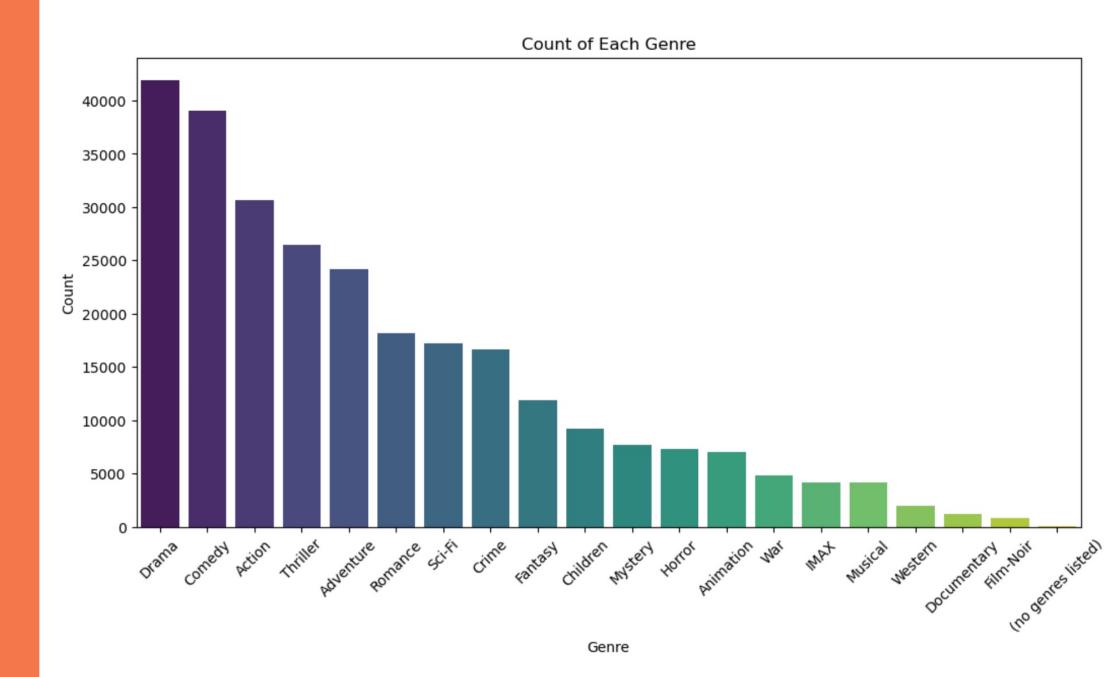
Movies 9,742

Users 610



Movie Genres Count

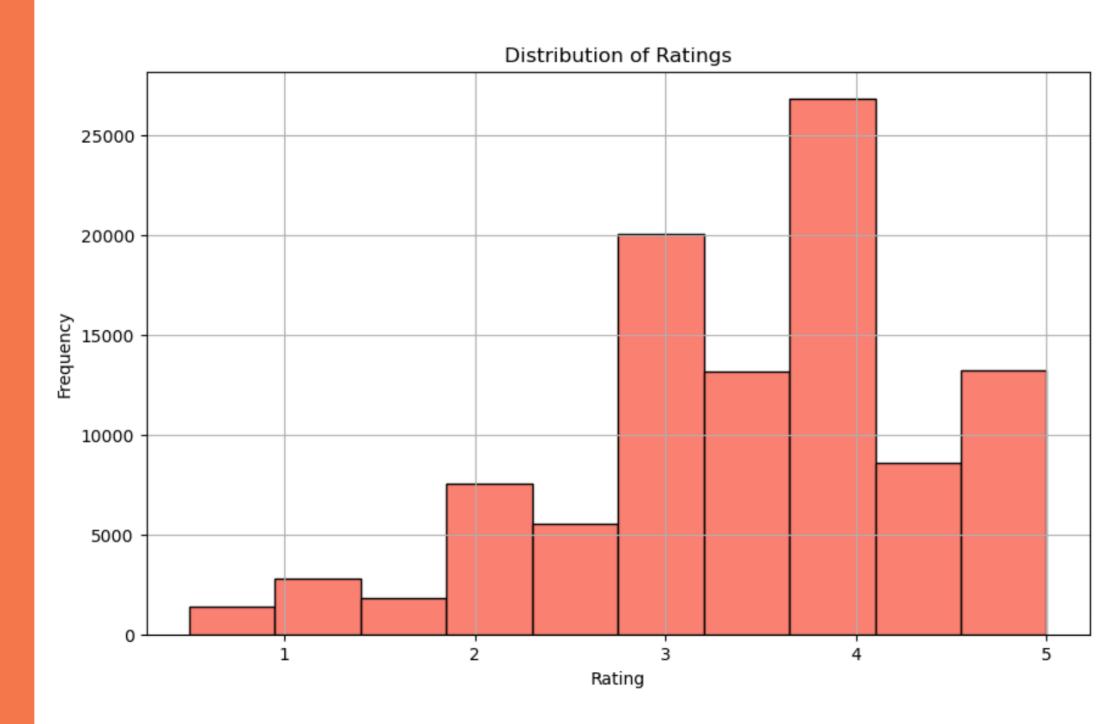
Drama was the most common genre with a count of 40,000+ while Film noir being the least common with a count of less than 1000





Ratings Distribution

Majority of the movies had a rating of between 3.5 and 4



Tags Frequency

For tags used, Netflix, queue, funny, quirky, atmospheric, surreal and superhero are the most common tags used by the users



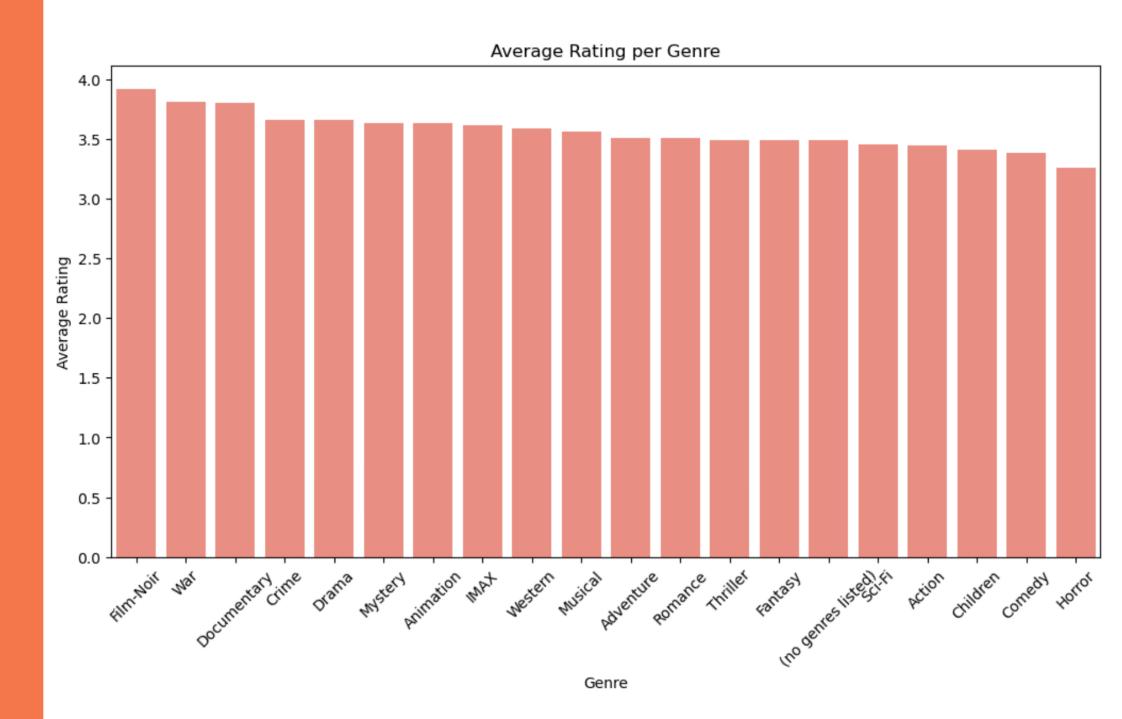
Word Cloud of Tags (Excluding "NoTag" Tag)





All the genres had an average rating of more than 3.0 with only Horror having an average rating of less than 3.5

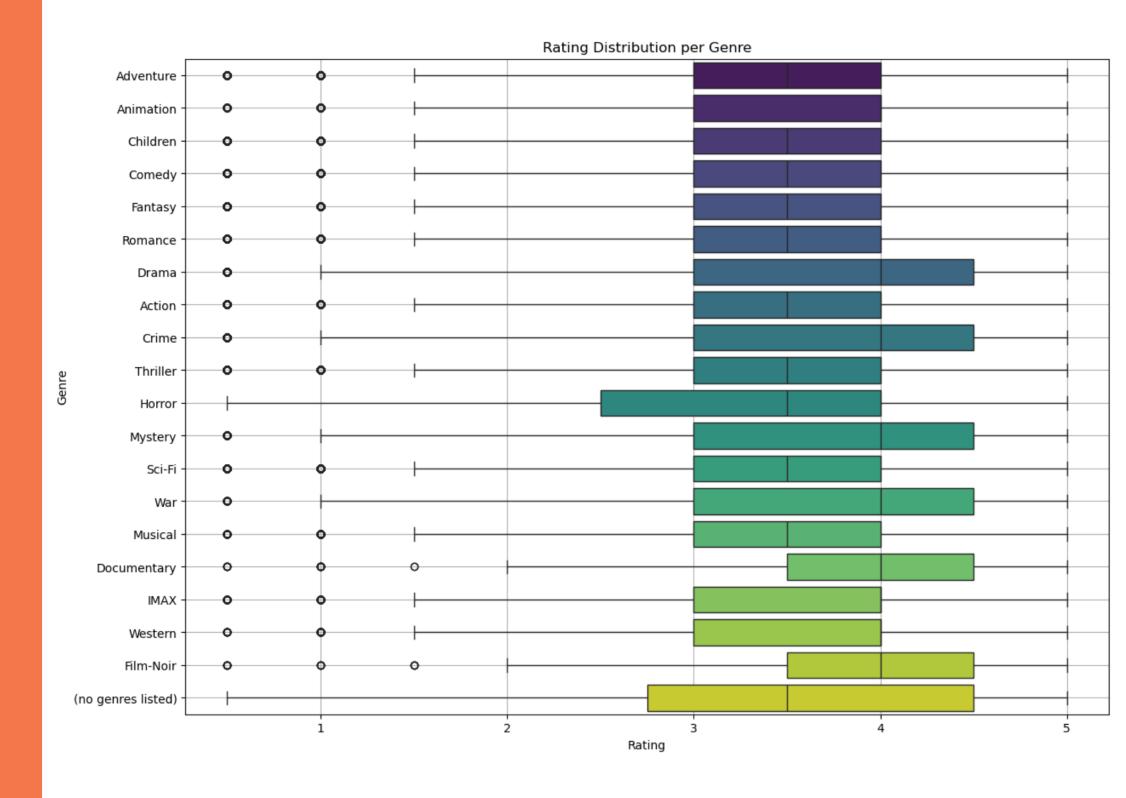






Most of the genres has a rating of between 3 and 4

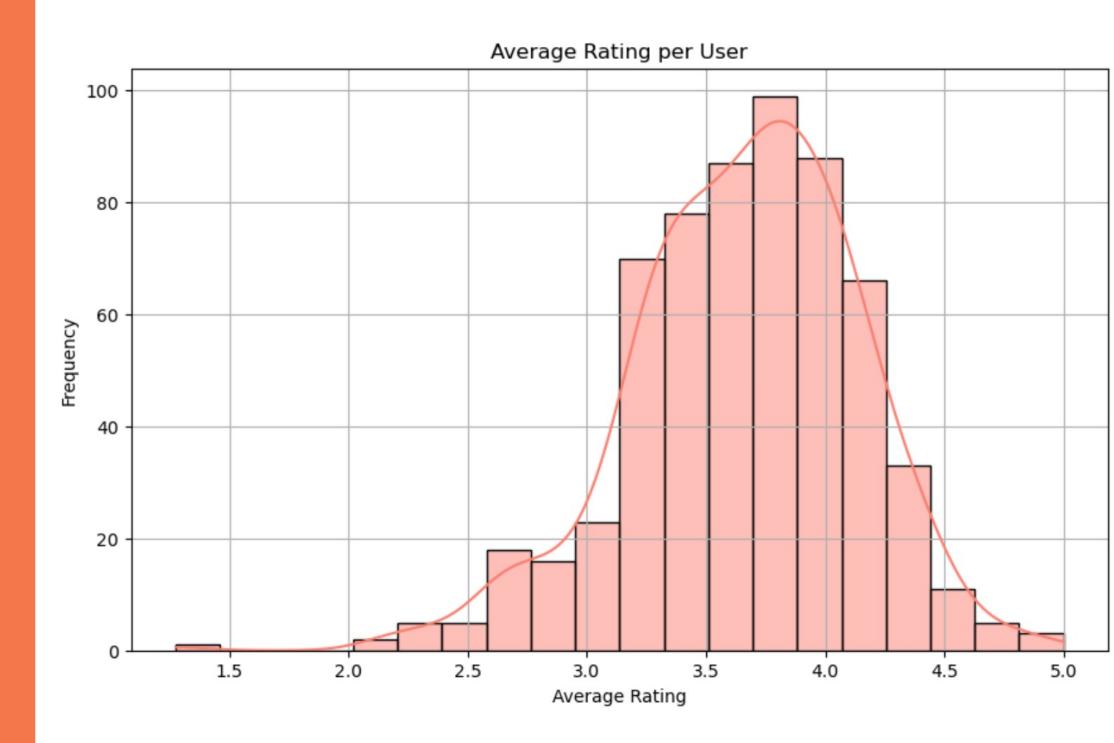






Most users gave the movies ratings of between 3.5 and 4

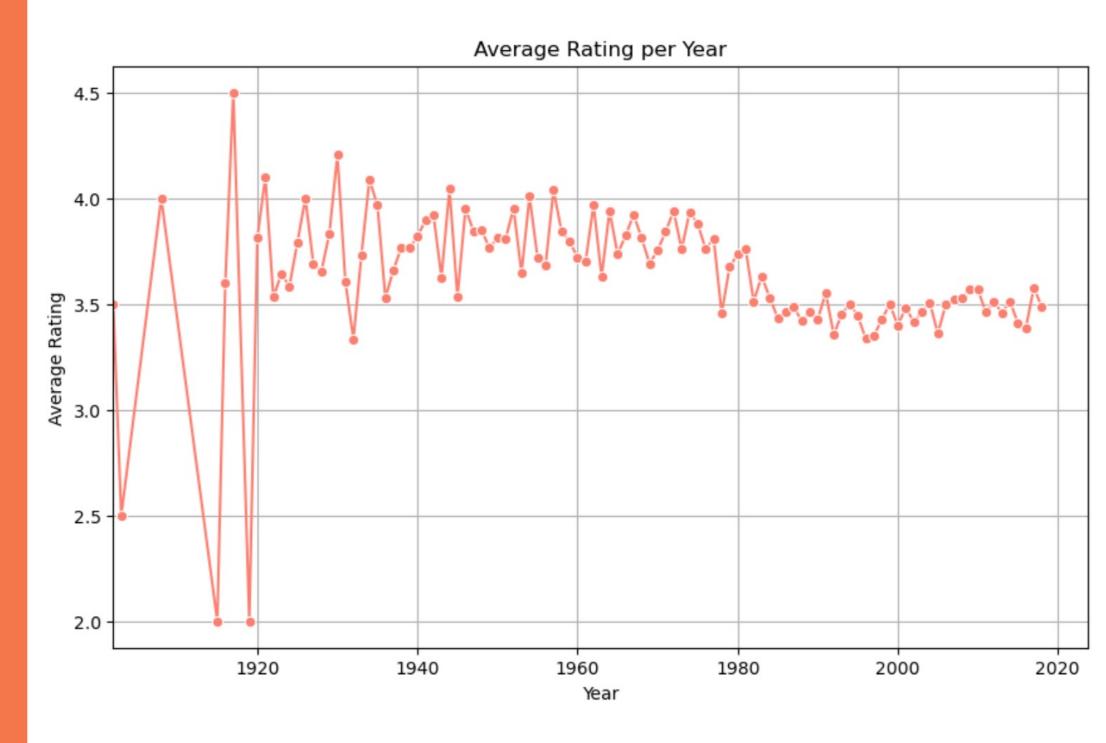






Movies produced after 1980 seems to have generally lower ratings compared to movies produced before 1980

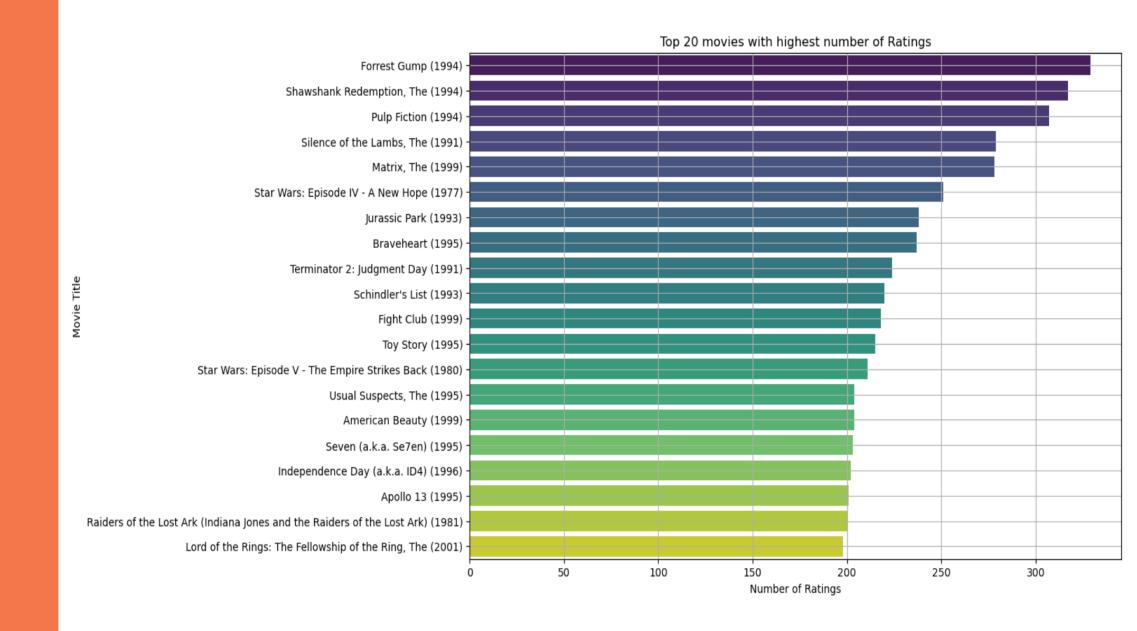




Top 20 movies with the highest number of ratings

Most rated movie was Forest Gump (1994) and the movie with the lowest number of ratings is Lord of Rings: The Fellowship of the Ring (2001)

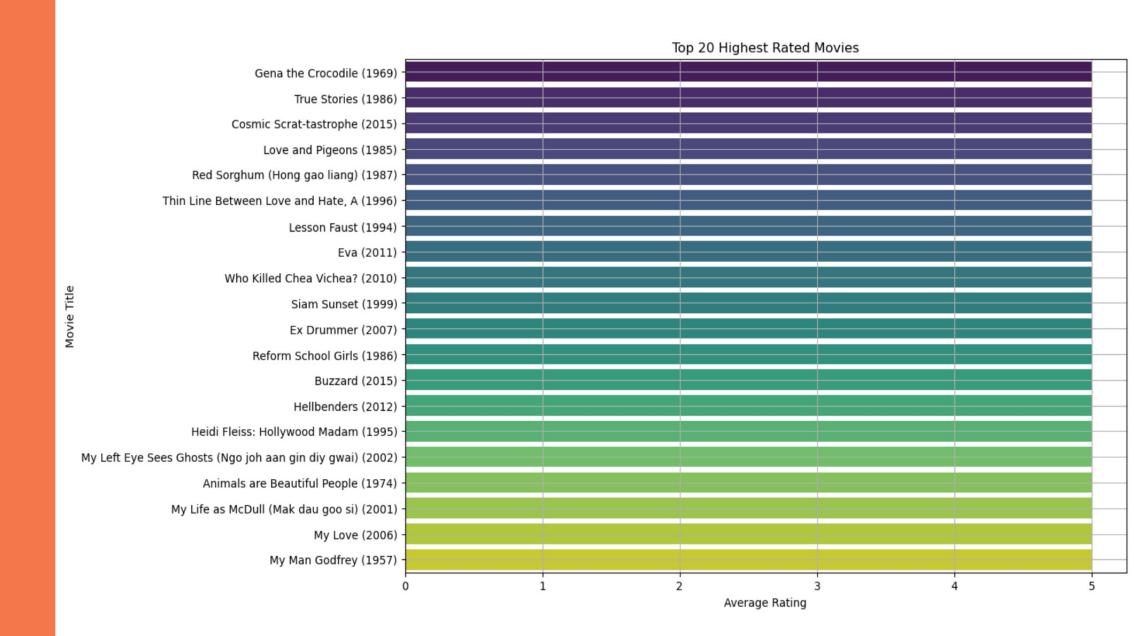




Top 20 highest rated movies

All top 20 highest rated movies had a rating of 5

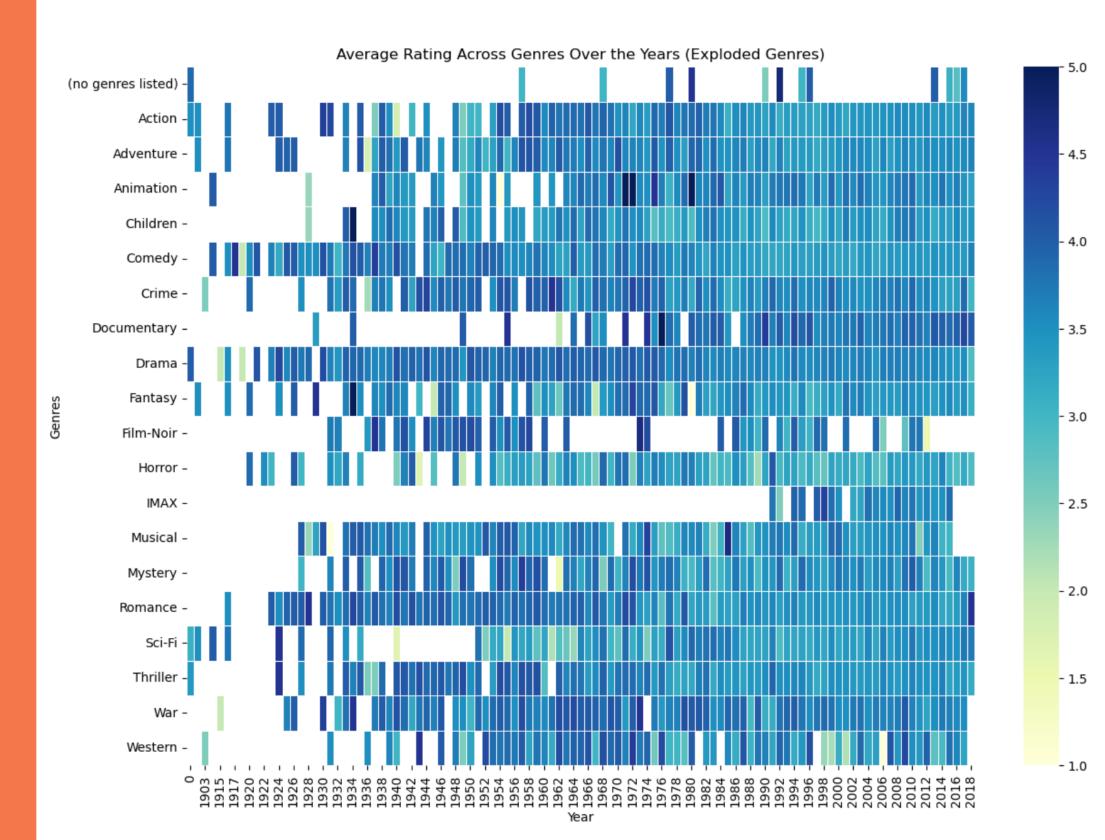




Average Rating Across Genres Over the Years

Drama, comedy and musical received higher average ratings in early to mid-20th century. Animation and Fantasy have become popular in recent years. Genres like Documentary, Film-Noir have maintained consistently high ratings over time.





Recommendations

Focus on showing common genres such as Drama, comedy and Action and add less Documentary or Film-Noir movies

Collect More Data on why the user rated the movie high or low. This will help to enhance user experience

Diversify the recommendation: Provide a mix of popular and less well-known movies to keep users engaged.

Improve Customer Experience: Showmax app improvement for better user experience



Personalized Marketing Campaigns: evelop personalized marketing campaigns based on the model insights to increase engagement and reduce churn rates.



Curated Content Lists: Create curated content lists based. For example, "Top Movies for Action Lovers"



Partnerships and Collaborations:

Collaborate with content creators and influencers to promote exclusive content



Content Accessibility and Localization:

Enhance content accessibility by providing subtitles, dubbing options for a broader audience.

Next Steps





Thank youx

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