

A black and white photograph of a man in a fedora and suit, seen from behind, looking down a dark staircase. He is leaning against a wall with a floral patterned wallpaper. The scene is dimly lit, creating a mysterious atmosphere.

A PROJECT BY
GROUP 4

RECOMMENDATION SYSTEM

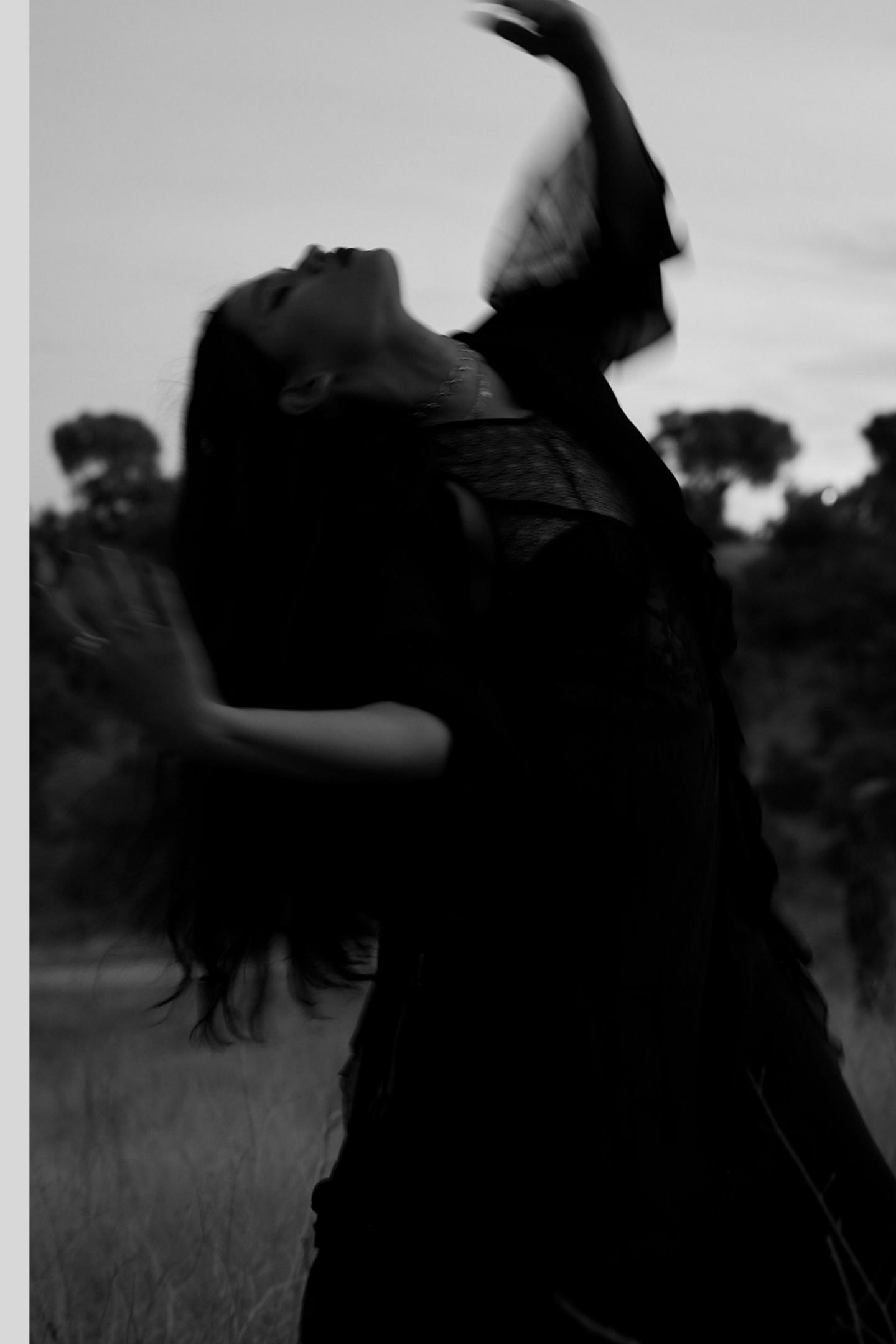
ENHANCING USER EXPERIENCE WITH
PERSONALIZED RECOMMENDATIONS



BLUE SAMURAI
PRODUCTIONS

TABLE OF CONTENTS

- Project Overview
- Business Understanding
- Problem Statement
- Patterns and Findings
- Recommendation Models
- Conclusion

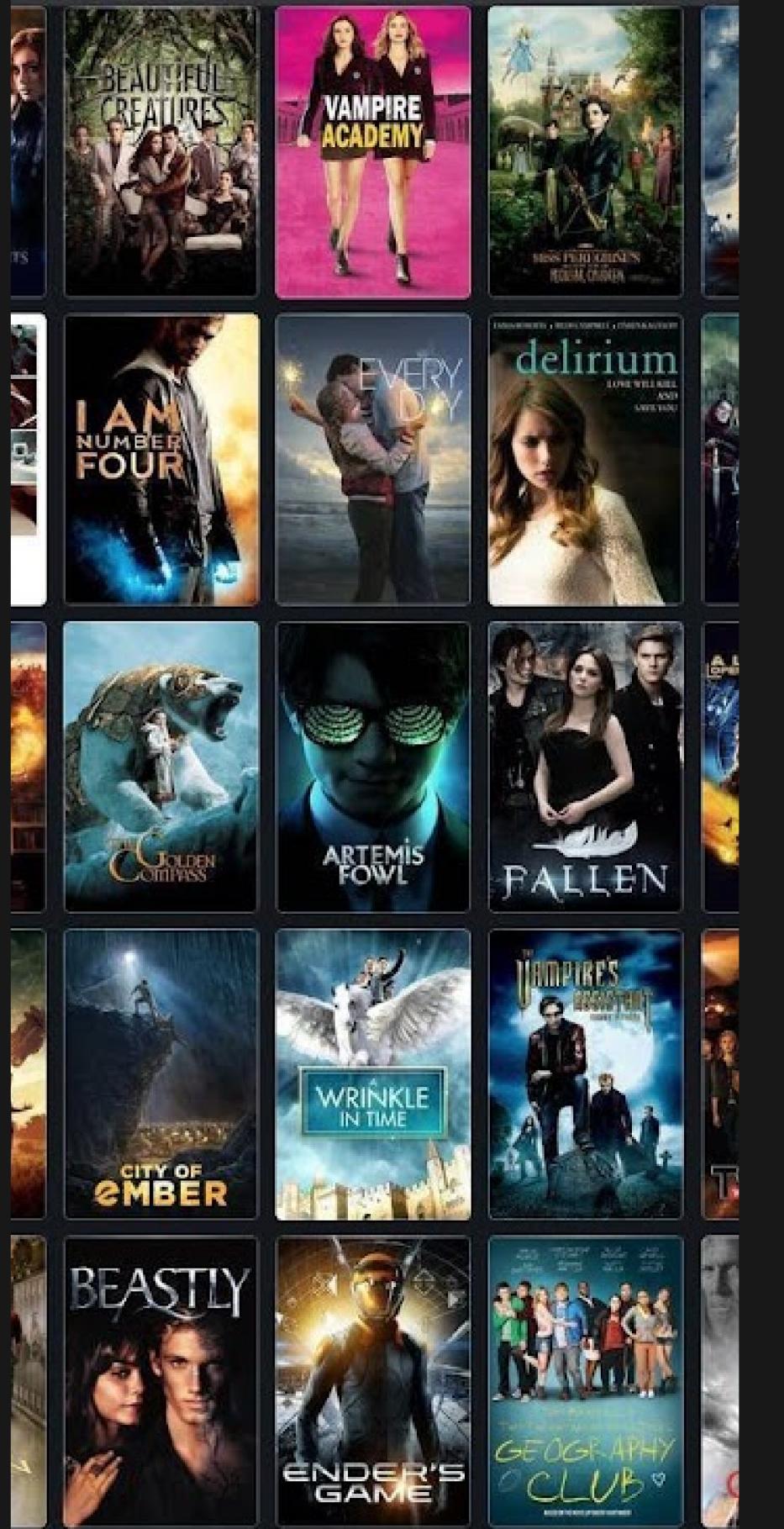


Brief Overview of Recommendation Systems



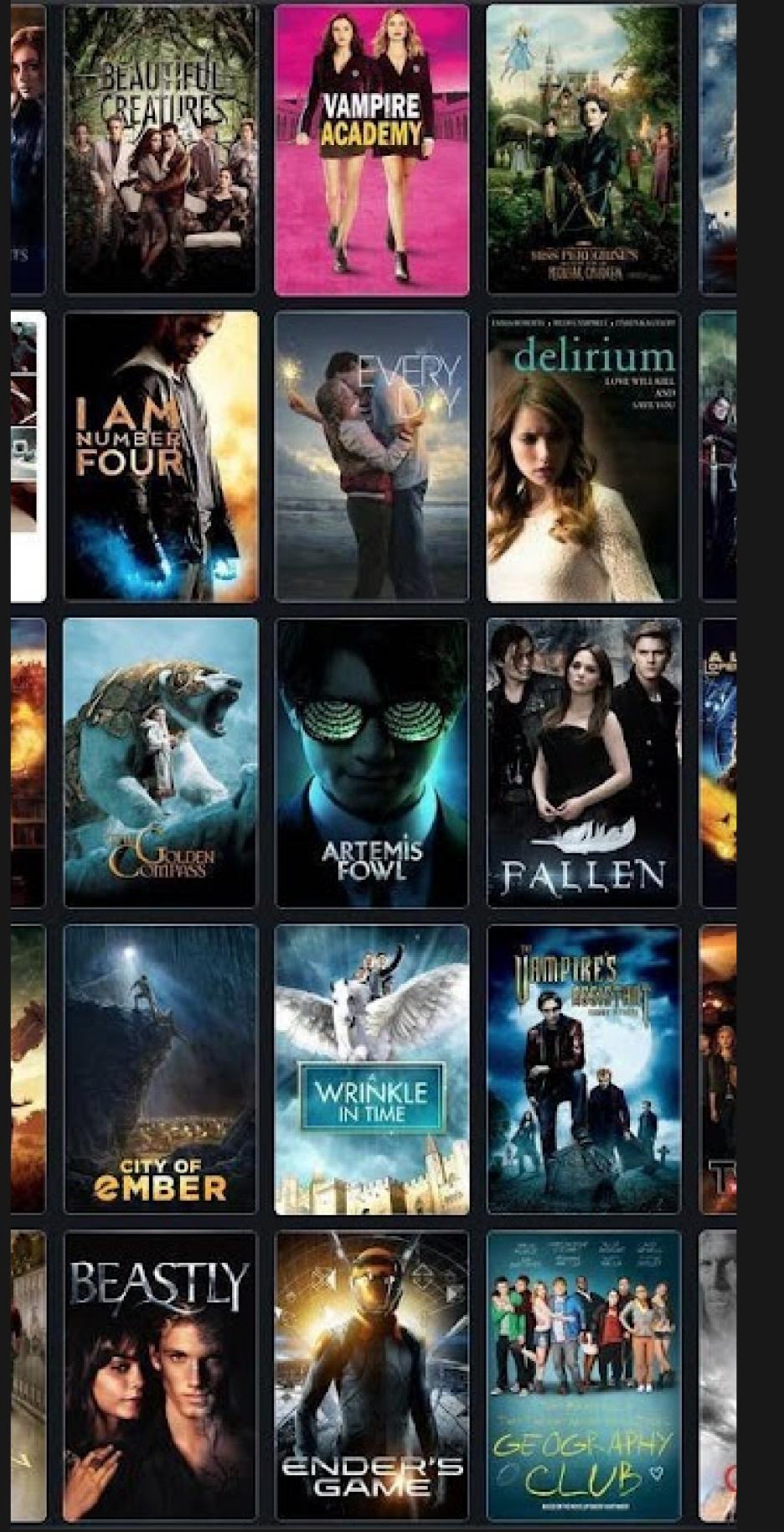
- **Definition:** Recommendation systems are algorithms that suggest items or actions to users based on their preferences, behavior, or past interactions.
- **Types:** Collaborative Filtering, Content-Based Filtering, and Hybrid Approaches.
- **Applications:** E-commerce, Entertainment, Social Media, Music Streaming, Online Content Platforms, and more

BUSINESS UNDERSTANDING



Recommendation systems are crucial for businesses as they utilize algorithms to analyze user data, providing personalized suggestions that enhance user experience, drive engagement, and ultimately contribute to business growth and success.

PROBLEM STATEMENT

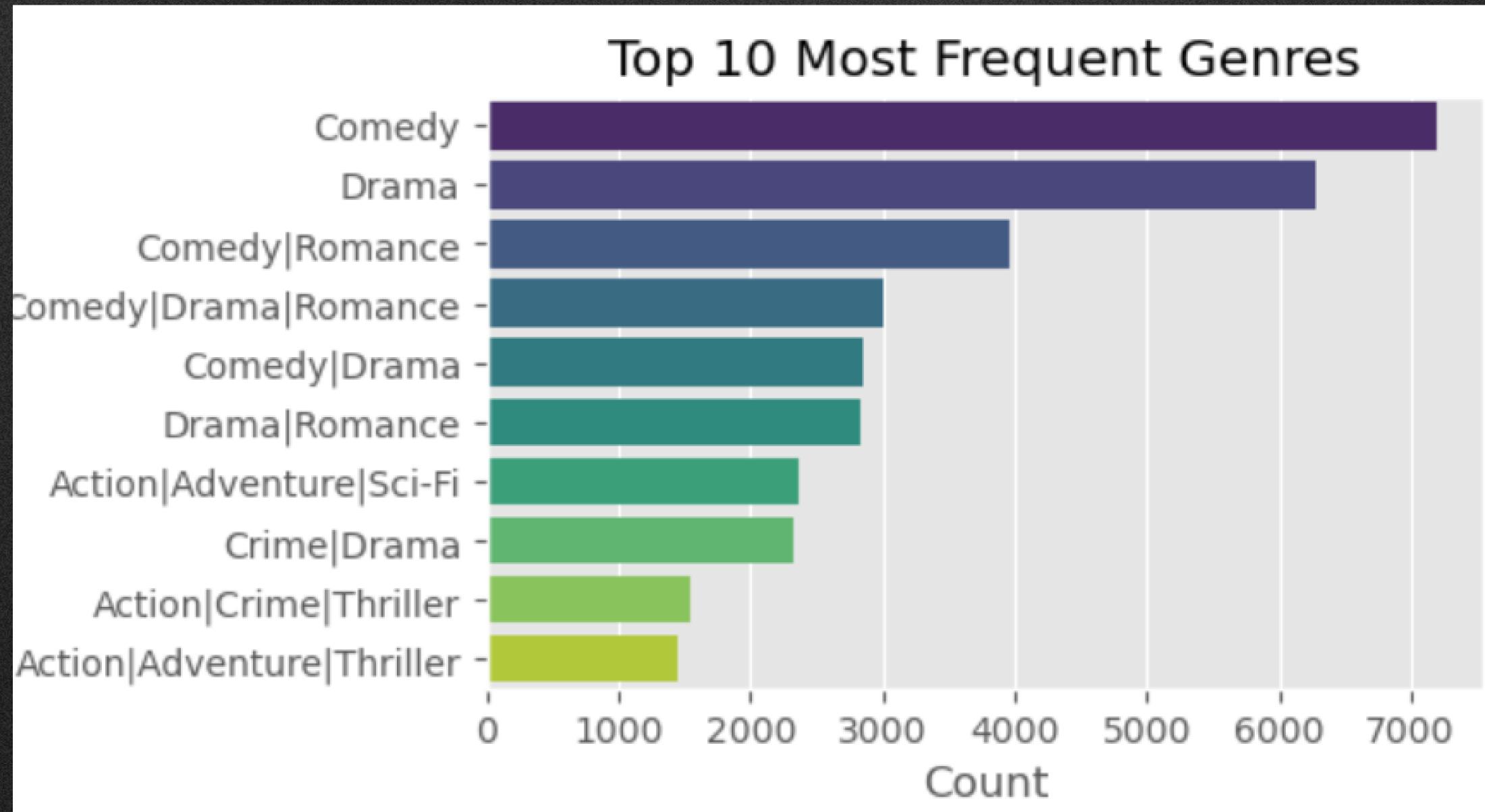


The problem statement revolves around the need to develop and implement an effective recommendation system for movies, leveraging collaborative filtering and potentially hybrid approaches, to provide users with personalized movie recommendations based on their preferences and behavior, thereby enhancing user engagement and satisfaction.



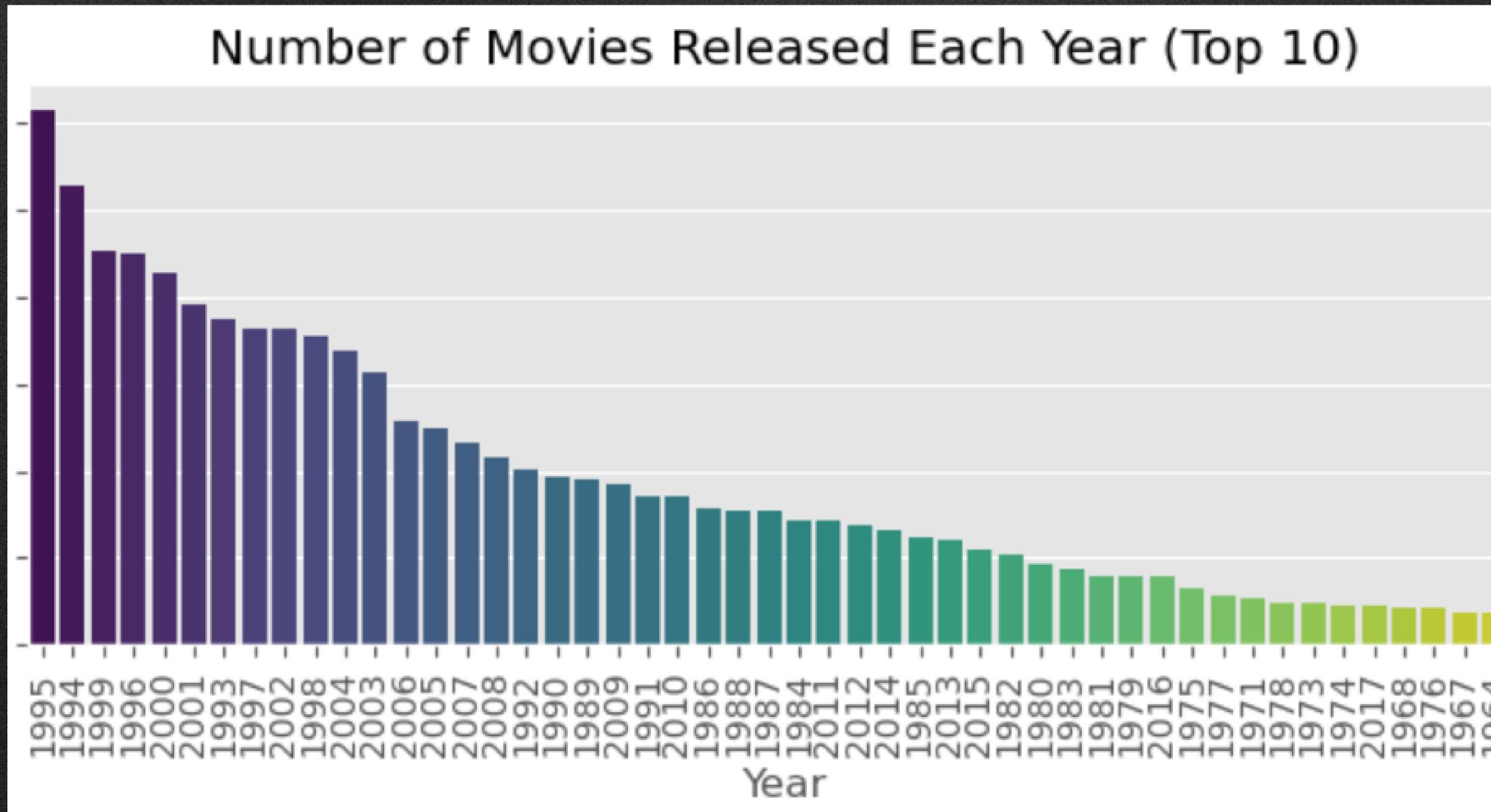
Patterns & Findings

MOST FREQUENT GENRES



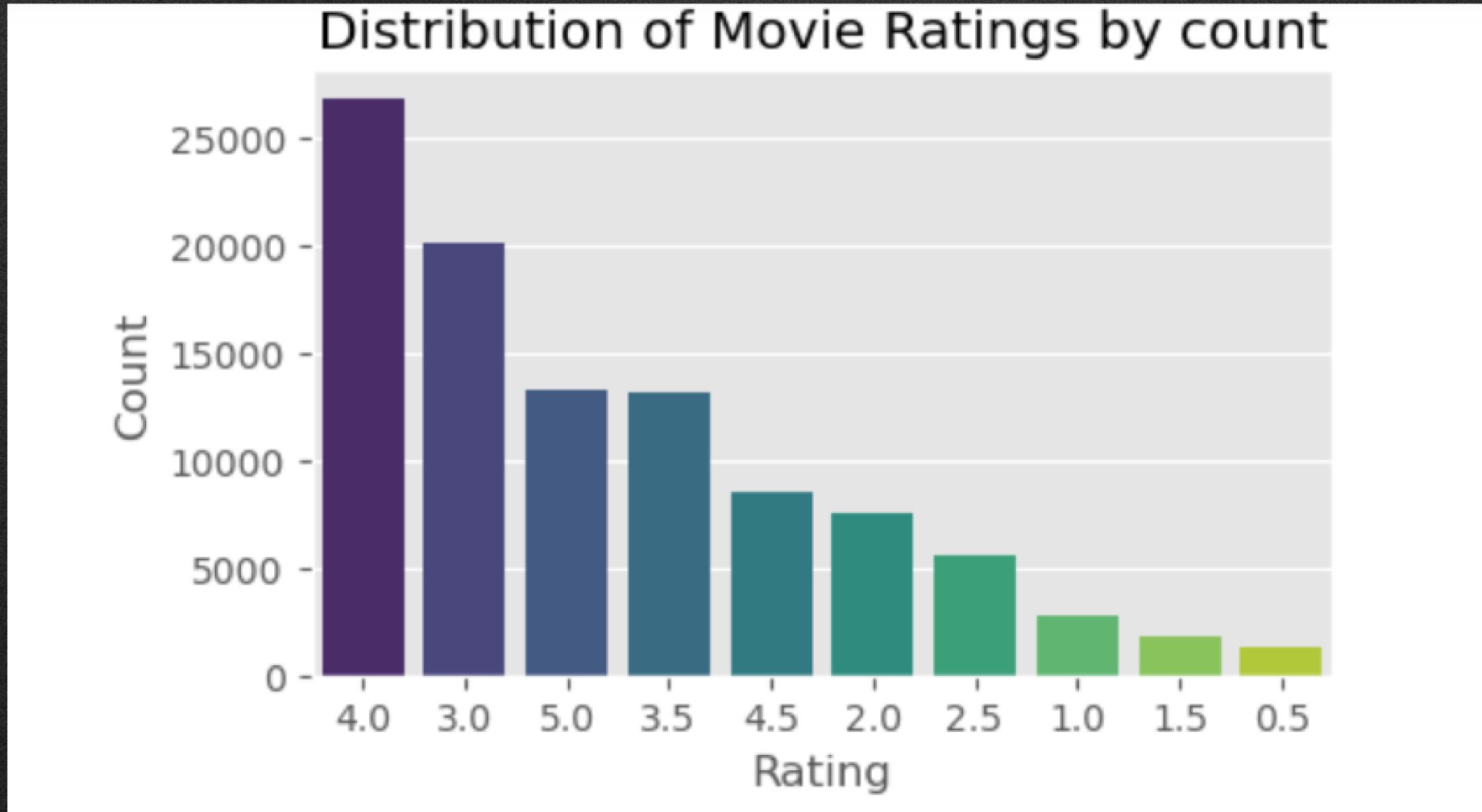
The most frequent Genres are Comedy, Drama and a combination of both with Romance, while the unpopular genres are Action, Crime and Thriller.

NO OF TOP MOVIES RELEASED EACH YEAR



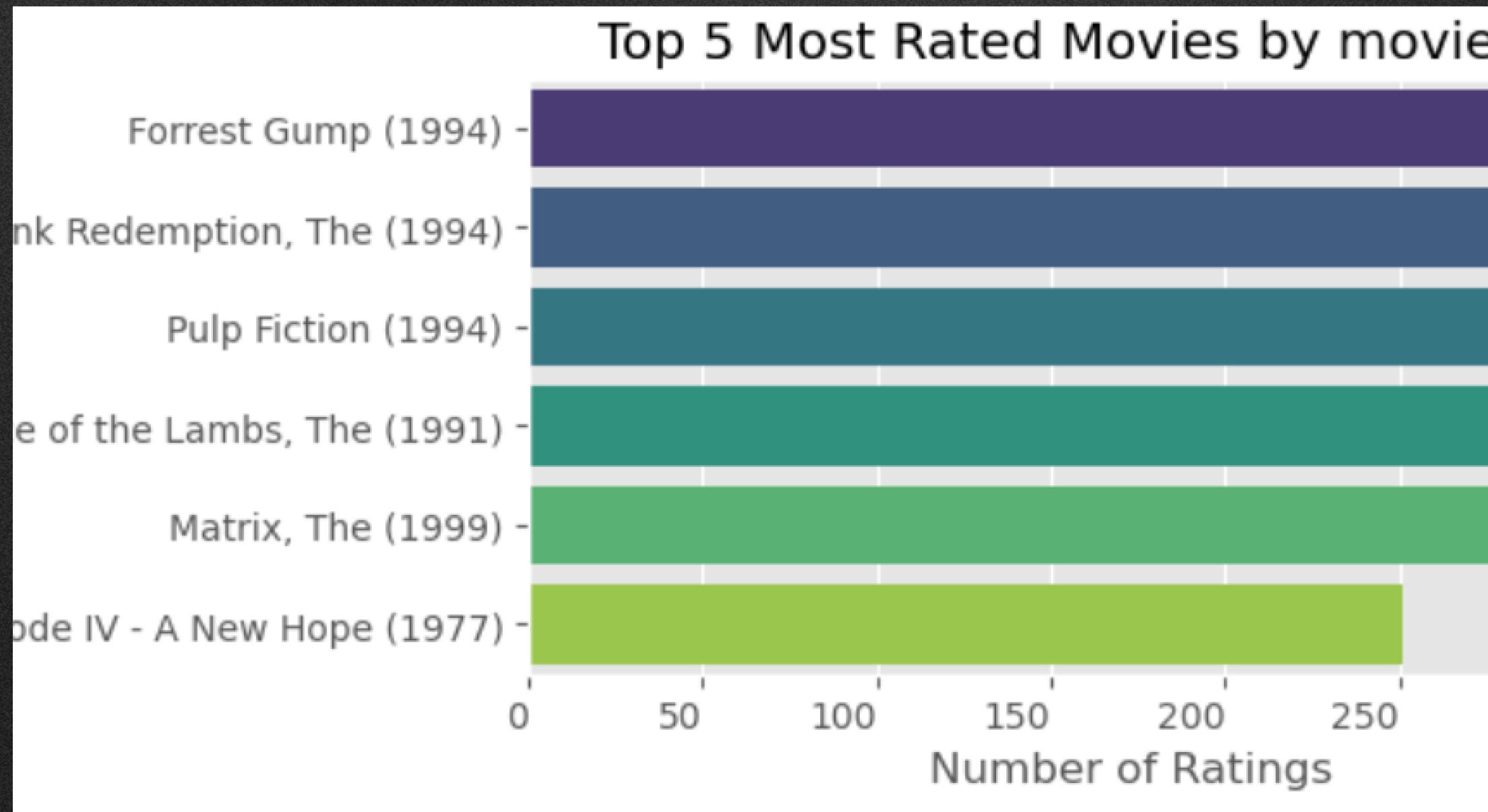
In the year 1995 had the highest production of movies and the release has been on a downward trend ever since .

DISTRIBUTION OF MOVIE RATINGS BY COUNT



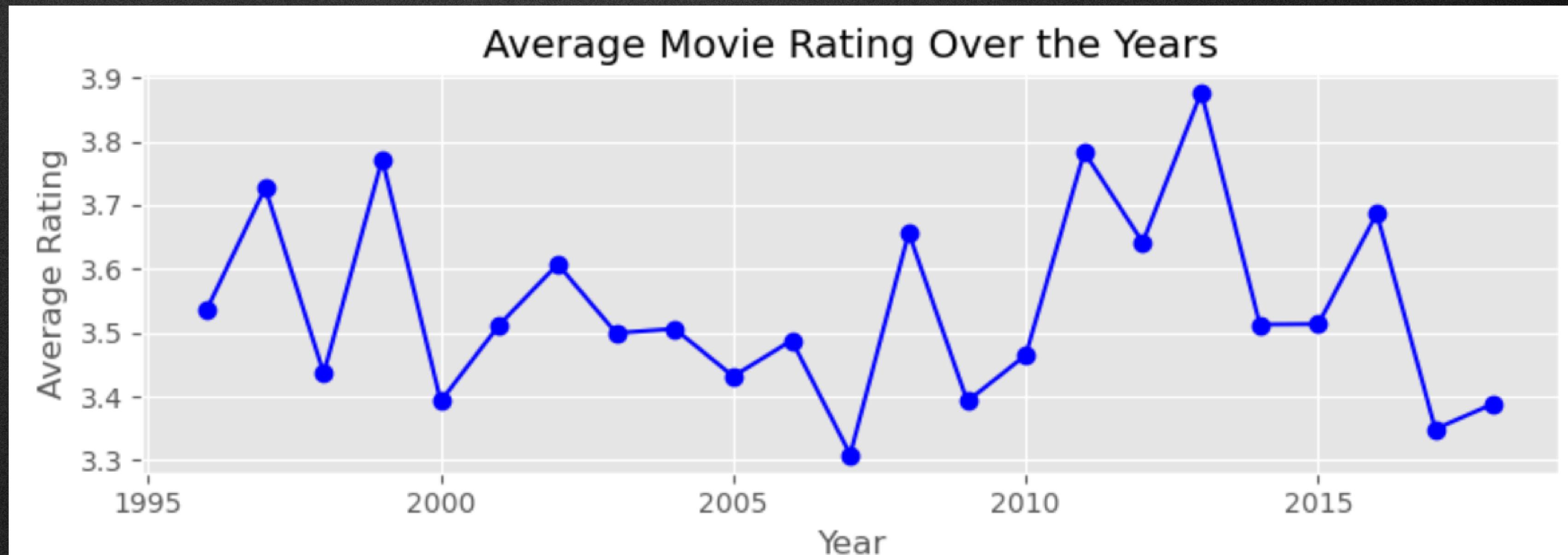
The majorityy of the movies in our dataset have a rating of 4.0. Followed by 3.0 and (5.0 and 3.5 with a tie).

TOP 5 MOVIES BY RATINGS



The most popular movies are
Forest Grump, Shawshank
Redemption and Pulp Fiction
both released in the year
1994.

AVERAGE MOVIE RATING OVER THE YEARS



Between the year 1995 and 2000 movies had a higher rating followed by a dip then the movie ratings improved between the year 2007 and 2013.



Modelling



USER-USER COLLABORATIVE FILTERING:

This approach recommends items to a target user based on the preferences of similar users. It computes similarities between users based on their past interactions with items and recommends items that similar users have liked or interacted with.

ITEM-ITEM COLLABORATIVE FILTERING:

In this approach, recommendations are made based on the similarity between items. It identifies items that are similar to the ones the user has interacted with in the past and recommends those similar items.

HYBRID COLLABORATIVE FILTERING:

Combines user-based and item-based approaches to generate accurate and diverse movie recommendations, leveraging both user-item interactions and item-item similarities to enhance the overall user experience.

CONCLUSION



In conclusion, our recommendation system, empowered by tuned parameters and rigorous evaluation, represents a significant advancement in the field of personalized recommendation systems. With its superior accuracy, scalability, and potential for further optimization, the system holds great promise for delivering unparalleled user experiences and driving business success in the ever-evolving landscape of recommendation technology.

**THANK
YOU**



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