Movies Recommendation Engine

Business case

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BACKGROUND INFORMATION

The provided dataset is called MovieLens. It has data about 1682 movies, which have been rated a total of 100000 times by 943 users. It is clear that the data has the potential to be utilized in a beneficial way by building a movie recommendation engine.

There are 2 main types of recommendation engines – content-based filtering and collaborative filtering. Content-based finds the similarity of the movies based on their attributes. Collaborative filtering operates on the user data, finding similarities between them based on common interests.

BUSINESS BENEFITS

Recommendation engines are at the forefront of e-commerce services, social media platforms, and movie streaming services such as Netflix. In fact, more than 80% of the TV shows people watch on Netflix are discovered through the platform's recommendation system, which is worth $1 billion per year (Chhabra, 2017), (McAlone, 2016).

BUSINESS GOAL

With the models' predictions, movies will be recommended to active users based on their tastes and past behavior. For new users, the model will recommend the most popular and highest rated movies. In terms of business value, that results in an enhanced user experience, which leads to users spending more time on the platform, watching more movies, getting more services. The platform will also adapt to the data-driven approach of movie recommendations that successful similar businesses employ, thus remaining relevant on the marketplace.
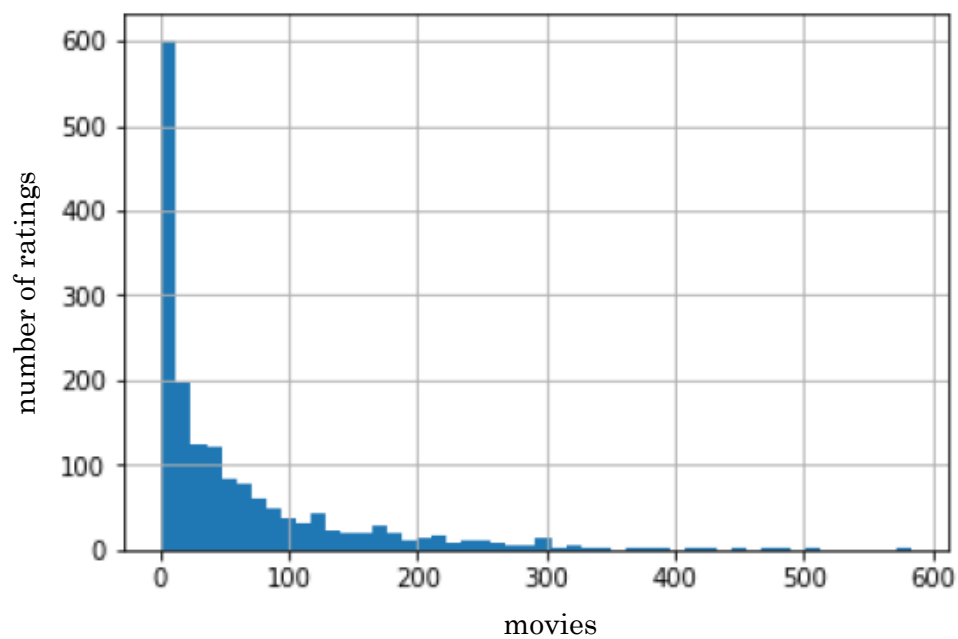
BUSINESS QUESTIONS

1. Do the movies with more ratings have higher ratings on average?

rating

pearsonr = 0.43; p = 3.1e-76
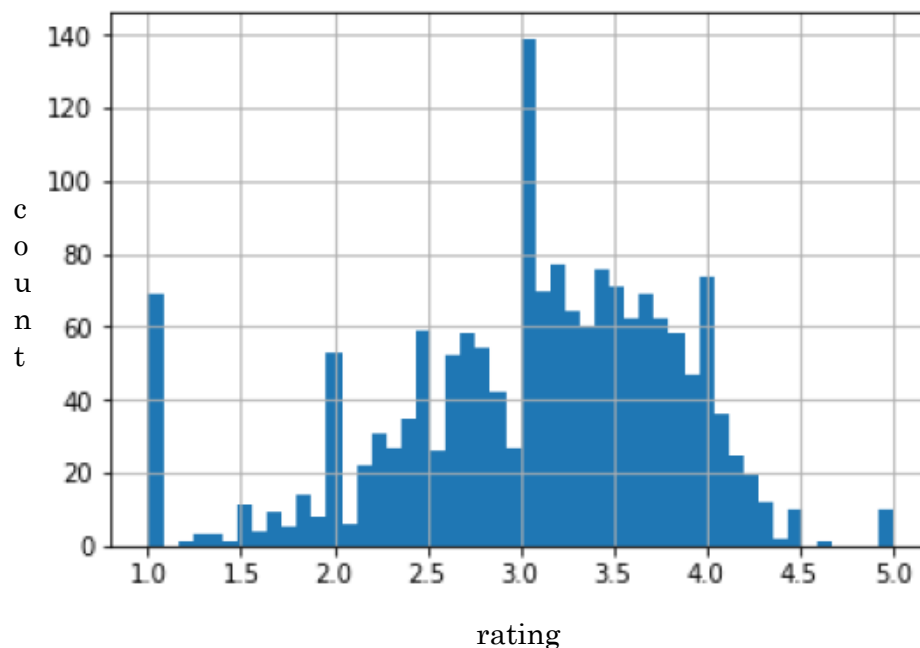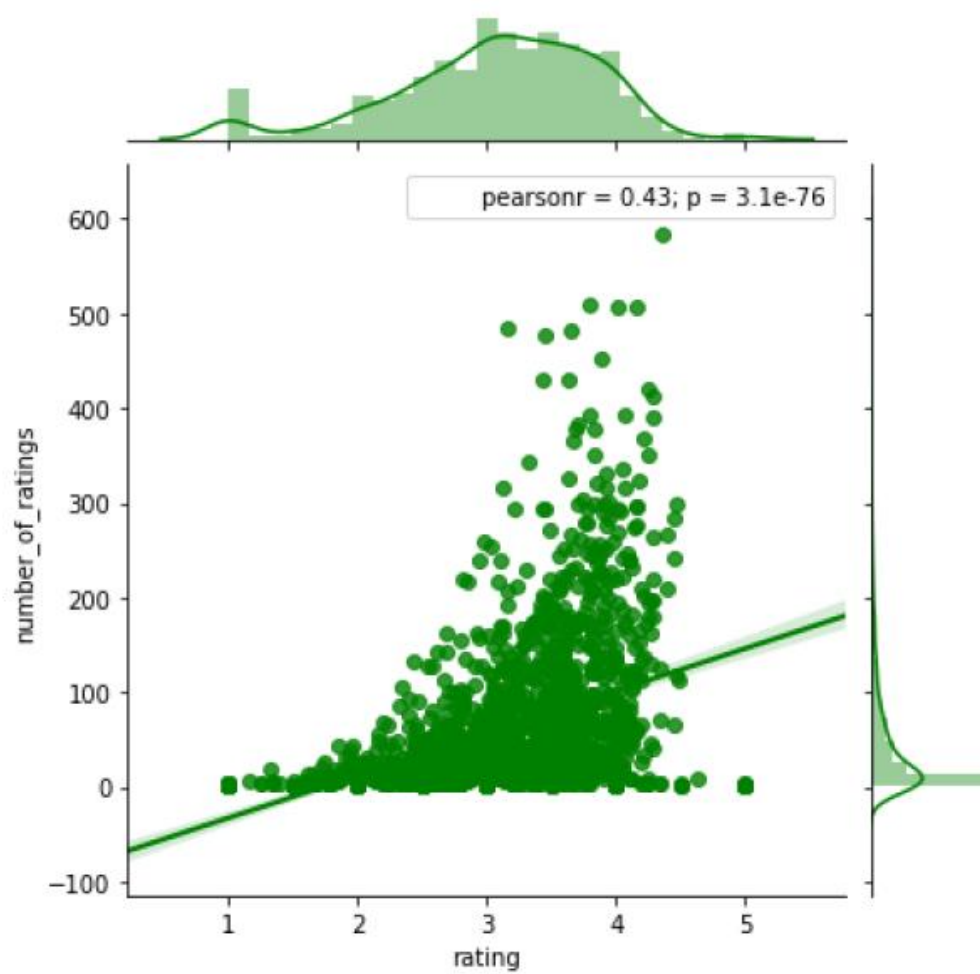
2. What is the distribution of the number of ratings per movie?

There is a correlation between number of ratings and the rating of a movie itself.

BIBLIOGRAPHY

Chhabra, S. (2017, August 21). *Netflix says 80 percent of watched content is based on algorithmic recommendations*. Retrieved from Mobile Syrup: https://mobilesyrup.com/2017/08/22/80-percent-netflix-shows-discovered-recommendation/

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