

The background image shows the interior of a movie theater. Rows of orange upholstered seats are arranged in a tiered fashion, facing towards the back of the frame. The floor is covered with a dark carpet featuring a complex, light-colored geometric pattern. The walls are dark and appear to be made of wood or a similar material. Several bright spotlights are visible on the ceiling, creating a hazy, atmospheric effect. The overall lighting is dim, typical of a theater setting.

Box Office Revenue Prediction Model

Content

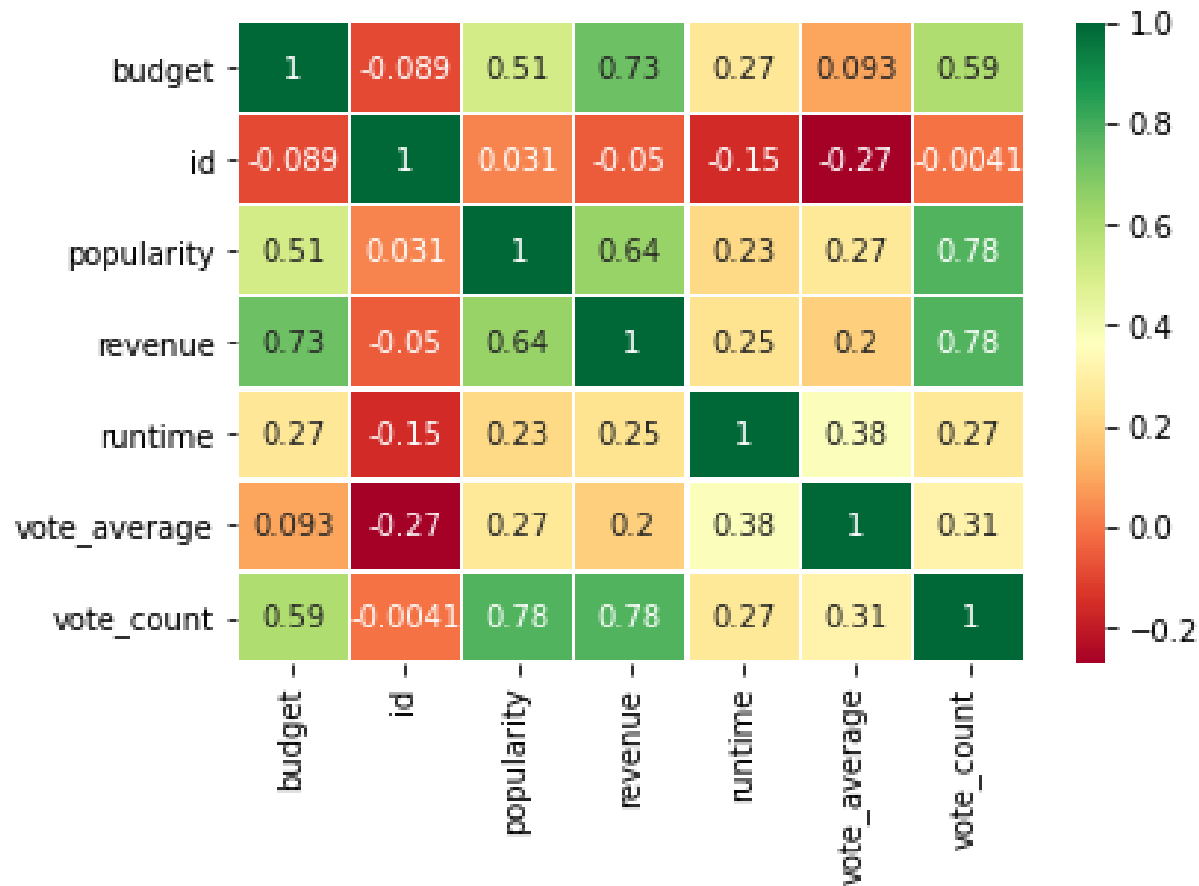
- Business Problem
- Analysis
 - Correlations
 - Genre
 - Release Day
 - Webpage
- Proposed plan
- Reference

Business Problem

Studio wants to relook her strategies to improve revenue and production.

We will look into 5000 movies dataset and check out trends, as well as design a prediction model for future planning.

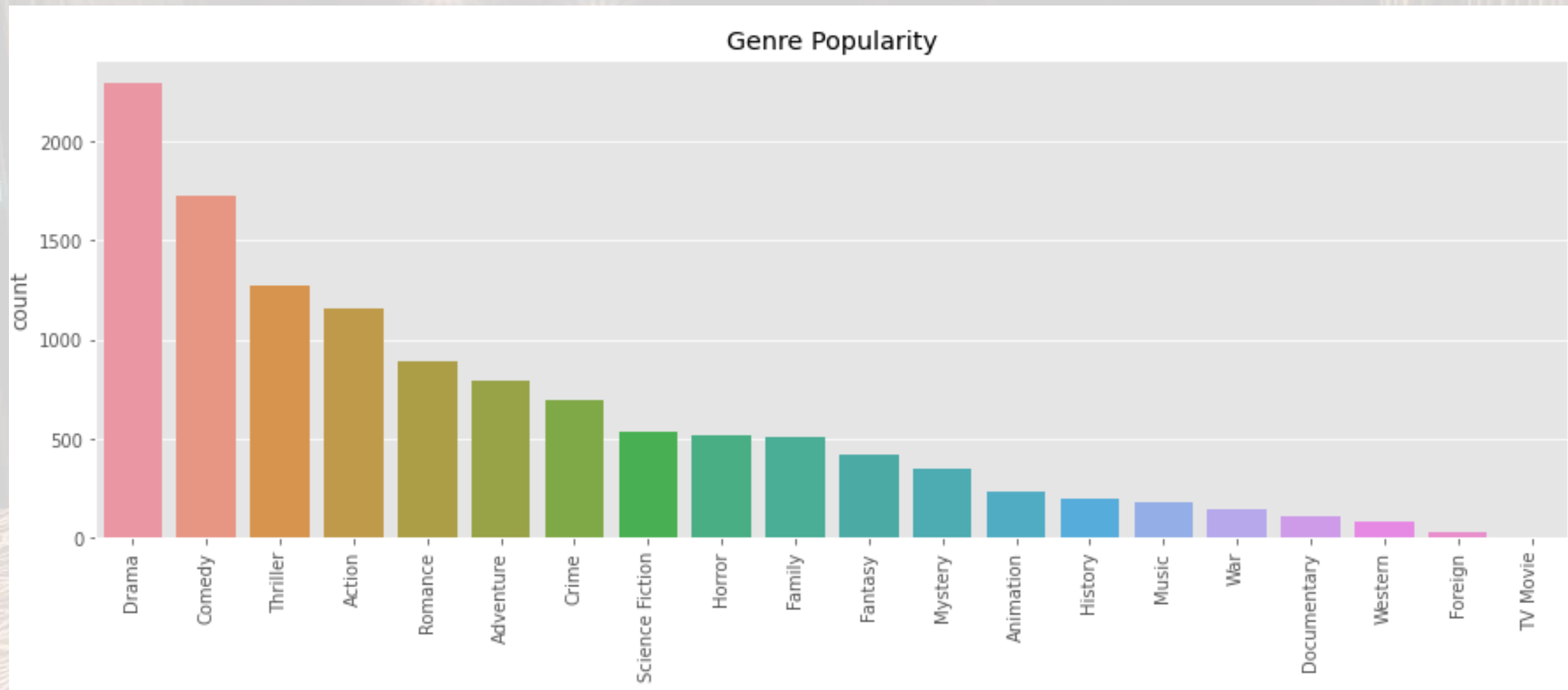
Analysis: Correlation



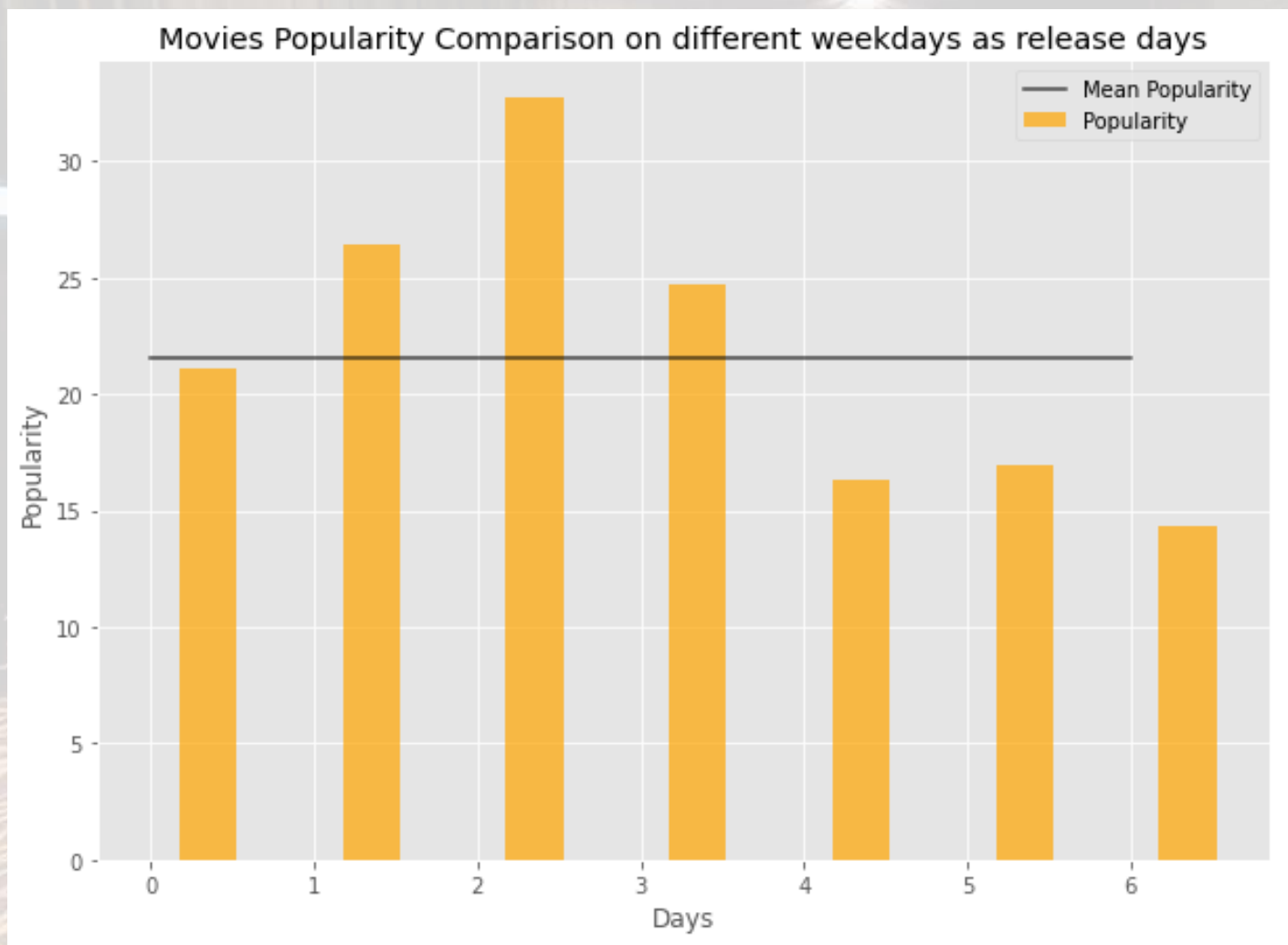
- **Two factors which matters:**

1. Revenue & Vote Count
2. Popularity & Vote Count
3. Revenue & Budget
4. Popularity & Revenue
5. Budget & Vote Count

Analysis: Genre



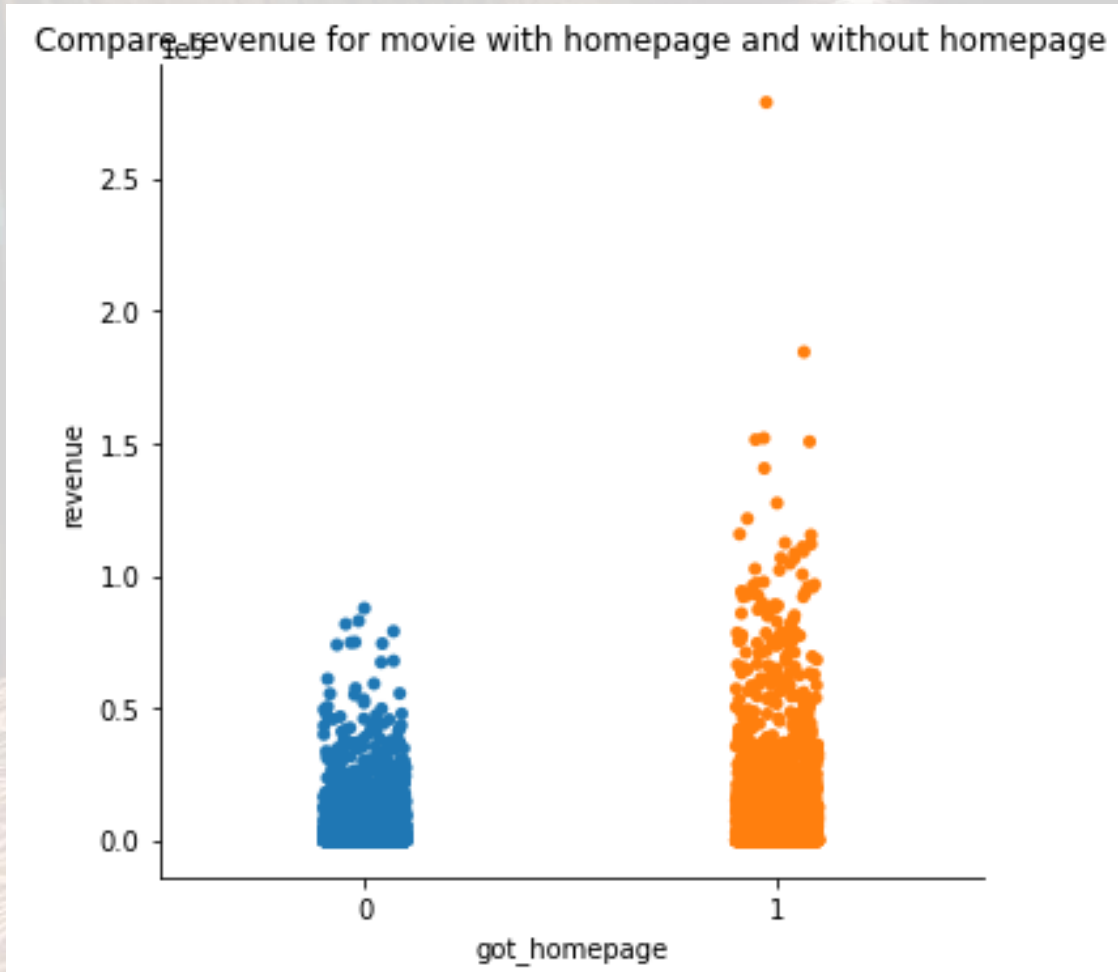
Analysis: Release Day



- Ideal Release Date

1. Wednesday
2. Tuesday
3. Thursday

Analysis: Webpage



- Movies with homepage generates higher revenue
- Relate to Correlation.
 1. Revenue & Vote Count
 2. Popularity & Vote Count

Prediction Model

	budget	genres	popularity	revenue	predicted_revenue
0	237000000	[Action, Adventure, Fantasy, Science Fiction]	150.437577	2787965087	6.433161e+07
1	300000000	[Adventure, Fantasy, Action]	139.082615	961000000	1.617601e+07
2	245000000	[Action, Adventure, Crime]	107.376788	880674609	6.254707e+06
3	250000000	[Action, Crime, Drama, Thriller]	112.312950	1084939099	4.421009e+07
4	260000000	[Action, Adventure, Science Fiction]	43.926995	284139100	1.852488e+07

Proposed plan

- Focused genre: Comedy, Thriller & Action
- Create website for every films
- Participate in Social Media Platforms & Review Communities

Reference

- https://www.kaggle.com/tmdb/tmdb-movie-metadata?select=tmdb_5000_movies.csv
- <https://realpython.com/pandas-python-explore-dataset/>
- <https://medium.com/analytics-vidhya/how-to-use-machine-learning-approach-to-predict-movie-box-office-revenue-success-e2e688669972>
- <https://towardsdatascience.com/what-makes-a-successful-film-predicting-a-films-revenue-and-user-rating-with-machine-learning-e2d1b42365e7>