




Microsoft Movie Analysis



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Summary

Descriptive analyses of movie datasets from various movie websites can help Microsoft in building a new movie studio.

The analyses generate the insights of:

- the top movie genres with the highest average worldwide gross
- the top movie directors with the highest average worldwide gross
- the relation between the movie ratings and production budget



Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions

Business Problem

Microsoft have decided to create a new movie studio, but they do not know anything about creating movies.

Task:

- Analyze movie datasets collected from various locations
- Give three business recommendations for the company in terms of what movies are doing the best at the box offices

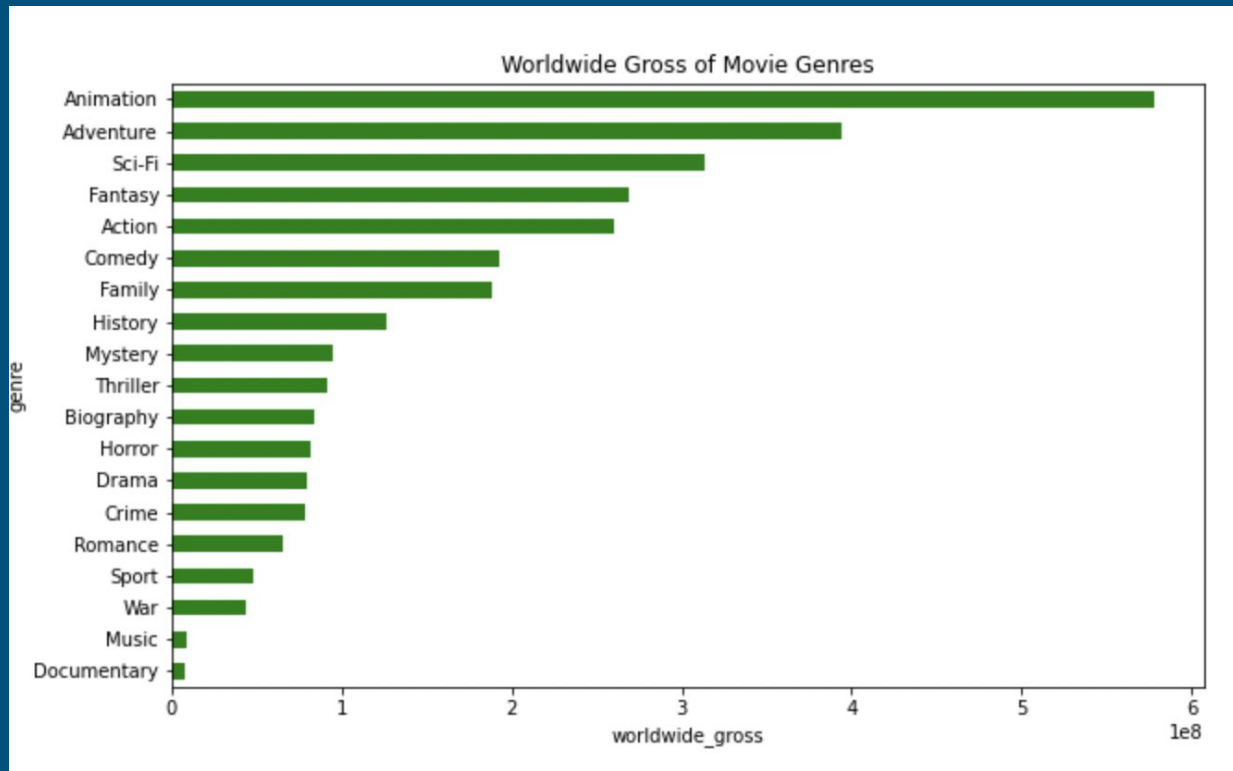
Data

- Three movie websites (IMDB, TheMovieDB, and The Numbers) were analyzed
- Three movie aspects (genres, directors, and production budget) were analyzed in terms of worldwide gross and ratings
- All information was taken from the merged data that consisted of 414 movies
- The analyses were performed on eight-year period from 2010 to 2018

Methods

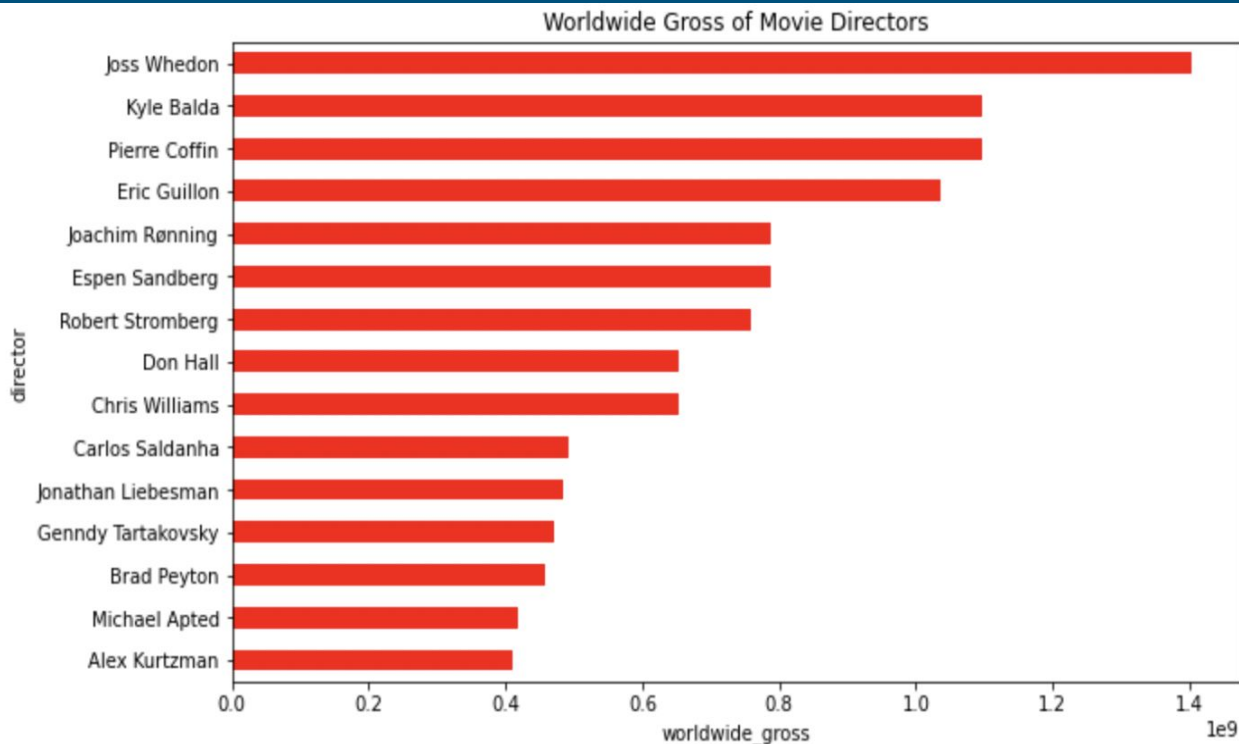
- The date format was transformed to show only the years of release
- Duplicate values were dropped
- Missing values were changed to 'Unknown'
- Data was transformed, so each genre element became a separate row
- Three sets of data were joined to become one dataframe
- Production budget was binned
- Extreme data value was not included in bins
- Graphs were plotted

Top Movie Genres with Highest Worldwide Gross:



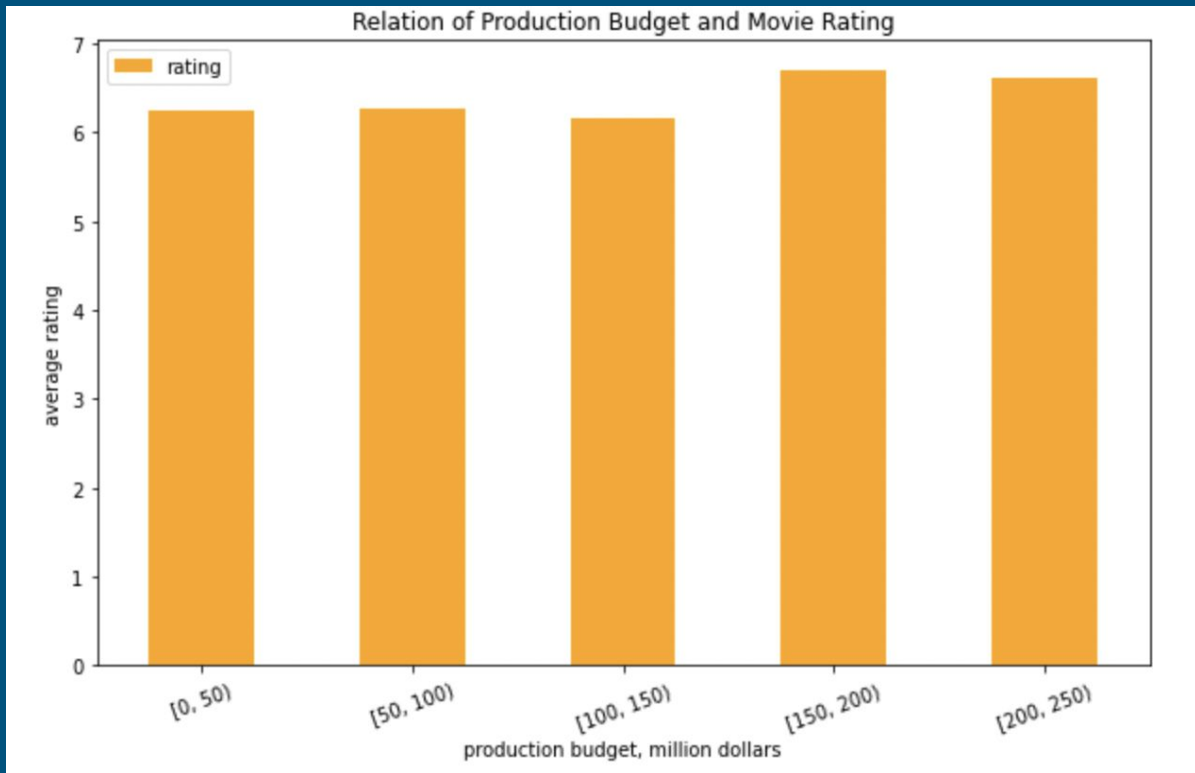
- Animation
- Adventure
- Science fiction.

Top Movies Directors with Highest Worldwide Gross:



- Joss Whedon
- Kyle Balda
- Pierre Coffin

Production Budget with Highest Rating:



- Production budget does not influence much on the movie rating
- The best ratings belong to movies with the budget from 150 million dollars to 200 million dollars

Conclusions

Recommendations:

- Film animation, adventure or science fiction.
- Hire Joss Whedon, Kyle Balda, or Pierre Coffin as directors.
- Production budget doesn't determine the rating.

Next steps:

- Deeper research of the data: ratings and the release months, worldwide gross and writers, etc.
- Analysis of the movies with budget below 50 million dollars.

Thank You!

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