Microsoft Movie Analysis

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Team



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Agenda

- Business Understanding
- Dataset Overview
 - IMDb Public Database
- Methods
- Findings
 - Drama and Action Genres have the highest average ratings
 - Top Rated Directors
- Recommendations
 - Focus on Drama and Action Genres
 - Recommend target Directors to maximize ratings and general reception
- Future Research

Business Understanding

- Hard to predict what features make a good movie
 - Public preference is always shifting
- Look into films that are successful
- Using data we can offer valuable insight into which direction to take the studio to help establish it



Main Takeaway

When considering high rated movies, **40%** more are Dramas



Overview of Data

Datasets Utilized

IMDb

- Internationally recognized database
- Data is globally pulled
- Comprehensive information: content + ratings
- Rating system used to gage public sentiment



Methods

Methods

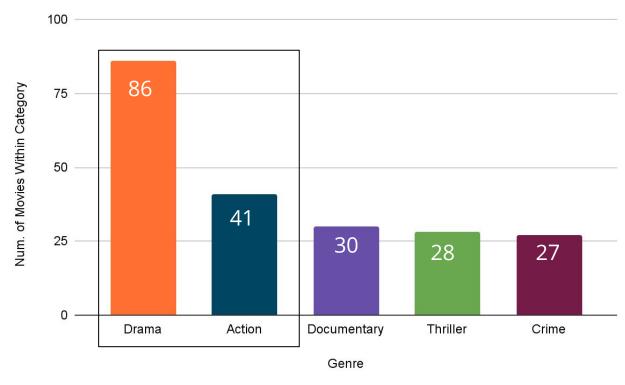
- Data were cleaned and limited to only relevant data
 - 0 2014-2018
- Determined to work only with movies that had a notable number of votes/ratings
 - Number of votes greater than dataset average
 - Ratings above 8.0



Data Analysis

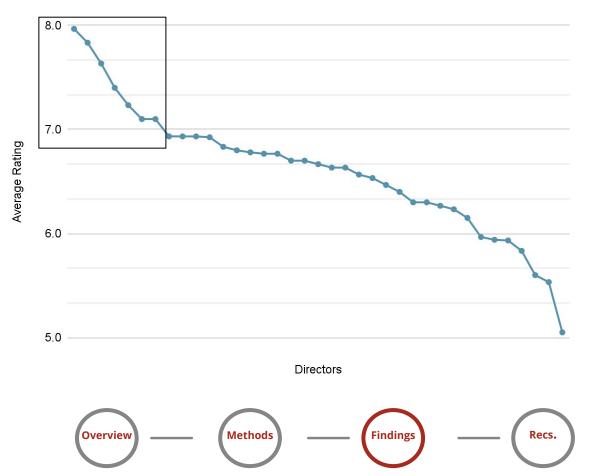
Top 5 Genres that Produced The Highest Rating

Drama and Action Genres make up the highest number of movies with high ratings.





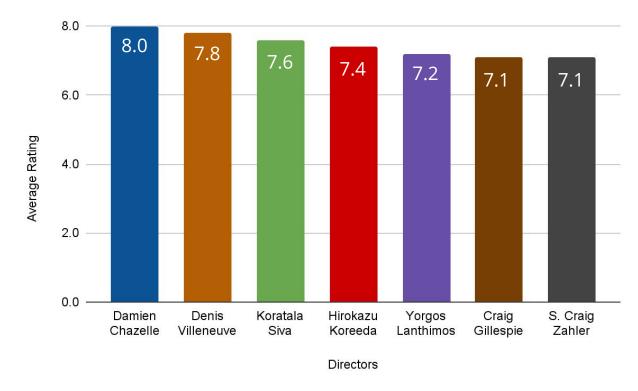
Directors of Multiple Dramas vs. Their Average Movie Rating



Drama Directors with Highest Avg. Rating: 3+ Movies

Top Two Drama directors with more than three Drama movies:

Damien Chazelle Denis Villeneuve





Top Recommended Directors

- Damien Chazelle
 - Highest average rating of 8.0
 - Known for Whiplash, La La Land
- Denis Villeneuve
 - Second highest average rating of 7.8
 - Known for Arrival, Blade Runner 2049



Drama and Action Runtimes for Highly Rated Movies

Drama Movies have an average runtime of 112 minutes while action movies tend to be 116 minutes.







Recommendations

Recommendations

- Top Priority: Focus on Drama Genre
- Medium Priority: Hire Top Rated Directors for Drama
 - Damien Chazelle
 - o Denis Villeneuve
- Low Priority: Maintain close to average runtimes
 - o Drama 112
 - Action 116



Future Research

- Incorporate Microsoft constraints into analysis (budget, production volume constraints)
- Research how COVID affected the Genre and Runtime preference of viewers
- Determine metrics and strategy recommendations for streaming outlets vs traditional theatre release
- Look into the difference between domestic and global markets



Thank you!

Questions?



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References

Drama masks:

https://www.teachwire.net/news/8-drama-games-for-primary-kids-to-ignite-imagination

IMDb: https://en.wikipedia.org/wiki/IMDb

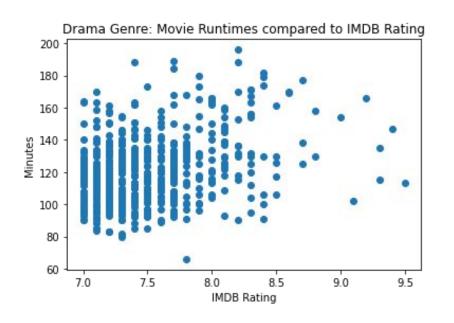
Microsoft: https://support.microsoft.com

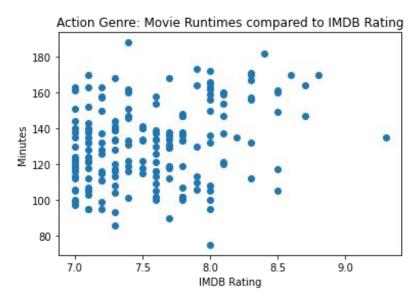
APPENDIX

Methods Explained in More Detail

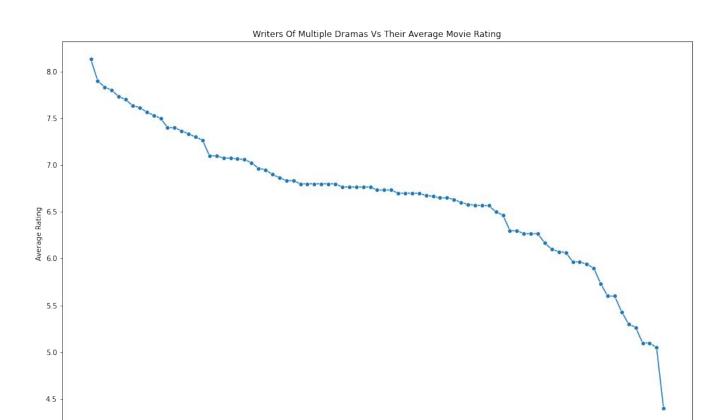
- Determination to use only greater than or equal to mean:
 - Only included movies that had a number of votes greater than or equal to the mean number of votes (3,524)
- Data was split across multiple tables, merged based on common ID columns relevant to the analysis

Runtimes for highly rated Action and Dramas

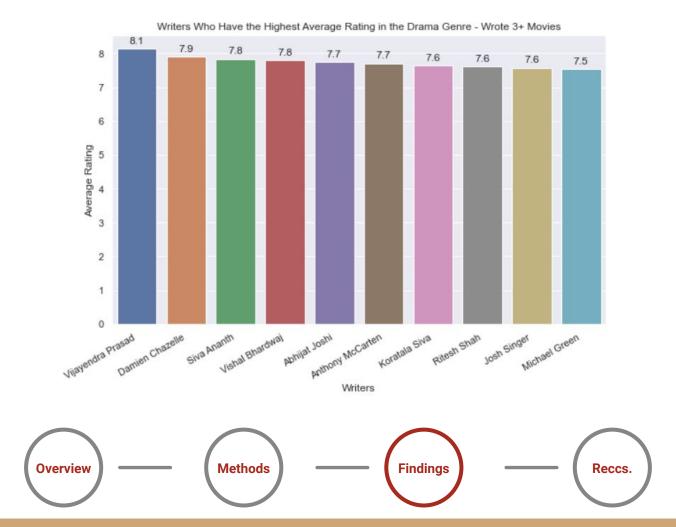




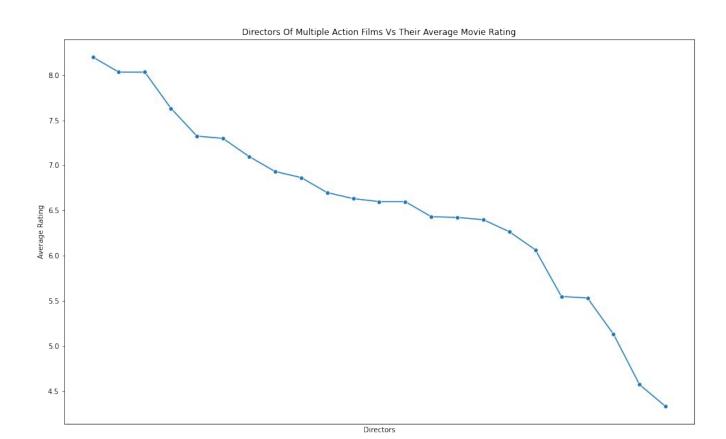
All Writers Average Rating Over Three Dramas



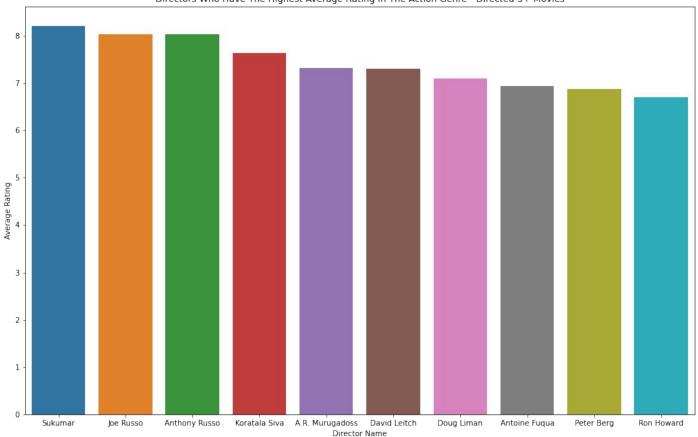
Writers



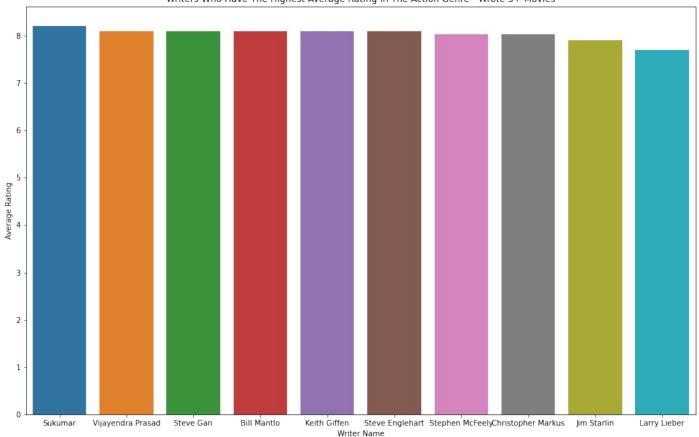
Top Writers and Directors for Action



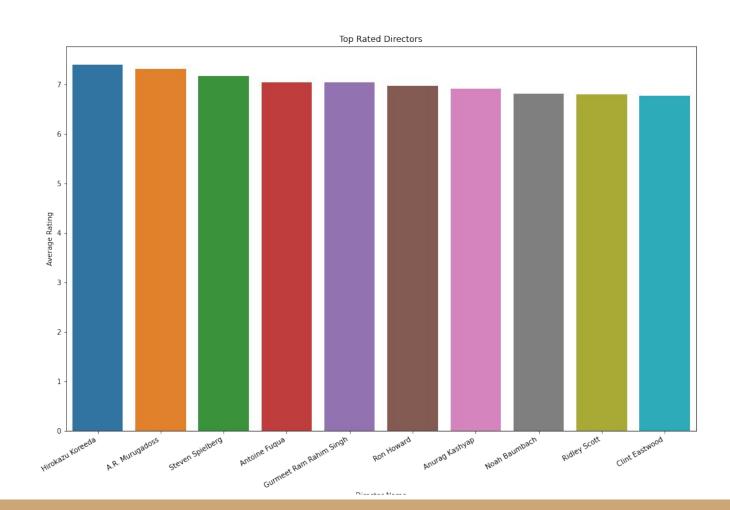
Directors Who Have The Highest Average Rating In The Action Genre - Directed 3+ Movies

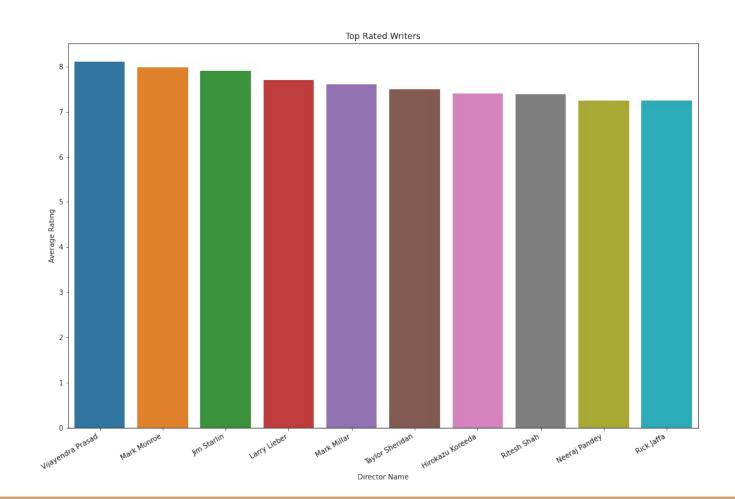


Writers Who Have The Highest Average Rating In The Action Genre - Wrote 3+ Movies



Overall Recommended Directors and Writers





Information on Gross

