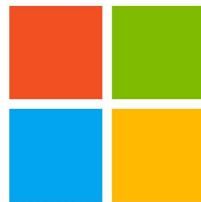# Movie Recommendations for

Microsoft

Brooke Smyth | Garrett Williams | Scott Schumann

Business Problem

❖ Microsoft wants to create a new movie studio

❖ Our job was to analyze data about current films to determine what factors are correlated with box office success.

❖ After our analysis was complete, we came up with three actionable insights for the head of the new Microsoft movie studio.
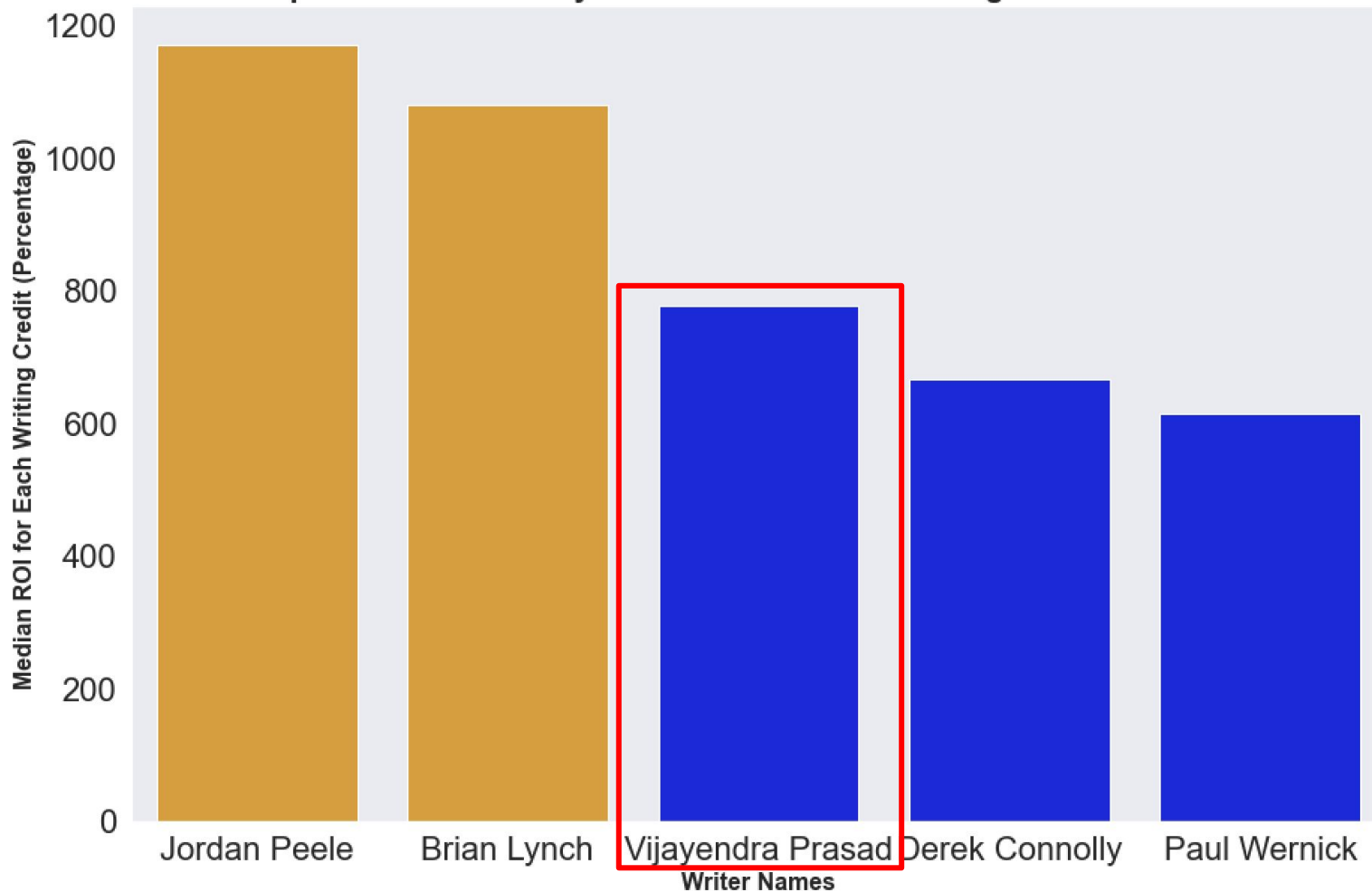
Business Understanding

- ❖ Focus on current films from 2015 to 2020

- ❖ The primary measurement is Median ROI (Return on Investment).

  - ➢ (worldwide gross - production cost) / (production cost)

  - ➢ Removes outliers skewing data

- ❖ Focus on the people with expertise in the industry
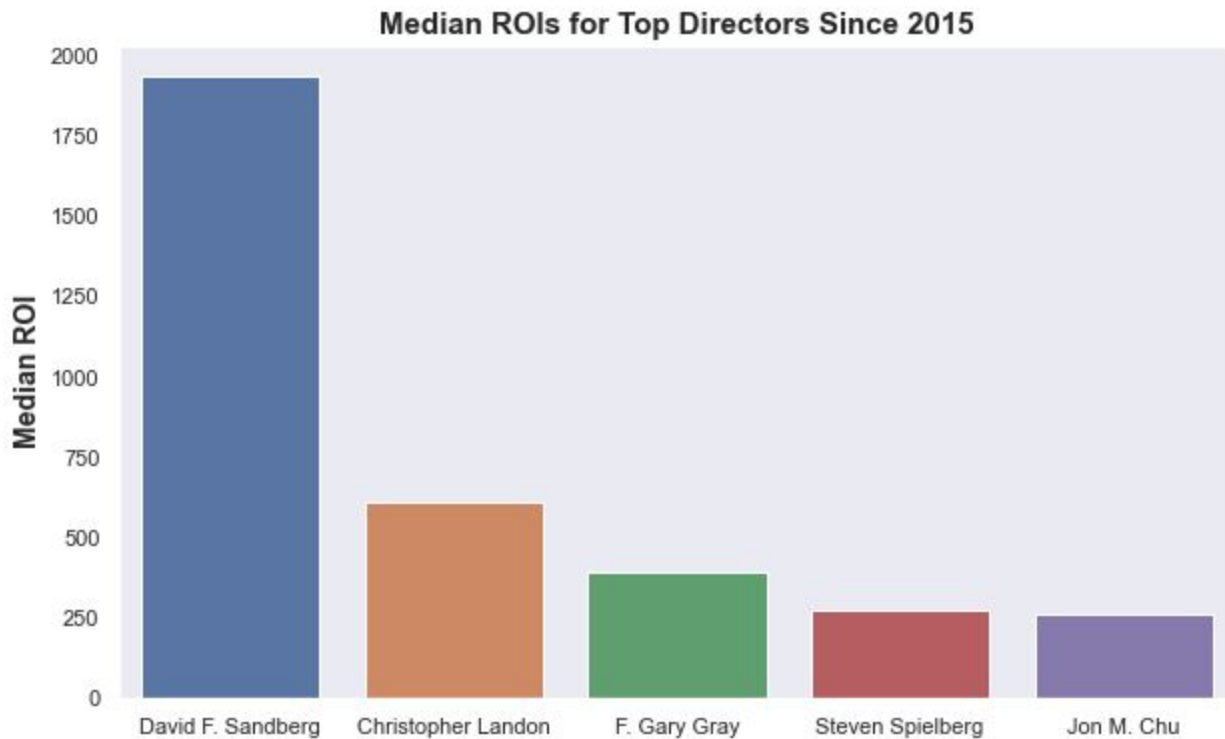
  - ➢ Writers

  - ➢ Directors

  - ➢ Actors/Actresses

Data Understanding

1) Calculated Film's ROI
   a) The Numbers (TN)
   b) www.the-number.com

2) Get Writer, Directors, and Actors for those movies
   a) IMDb
   b) www.imdb.com

Top 5 Writers Sorted by Median ROI for Each Writing Credit Since 2015
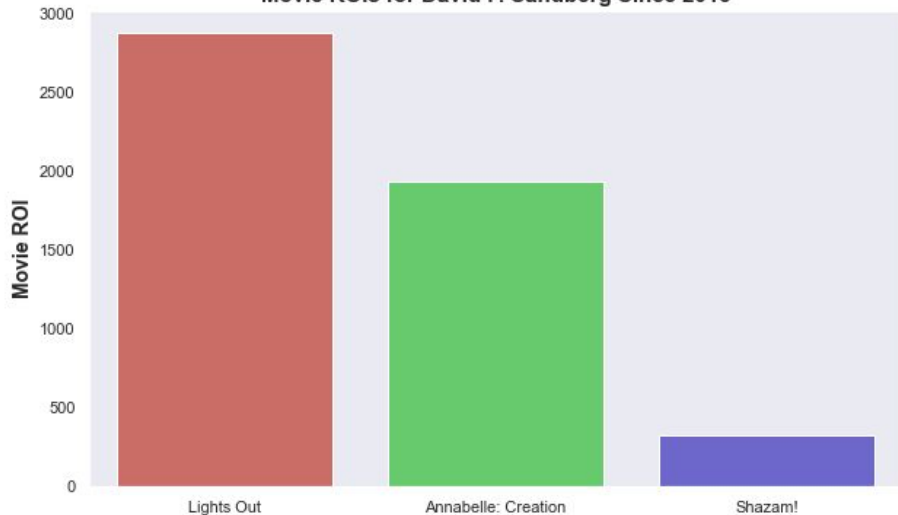
Directors

Median ROIs for Top Directors Since 2015

Directors: David Sandberg and Christopher Landon Movies
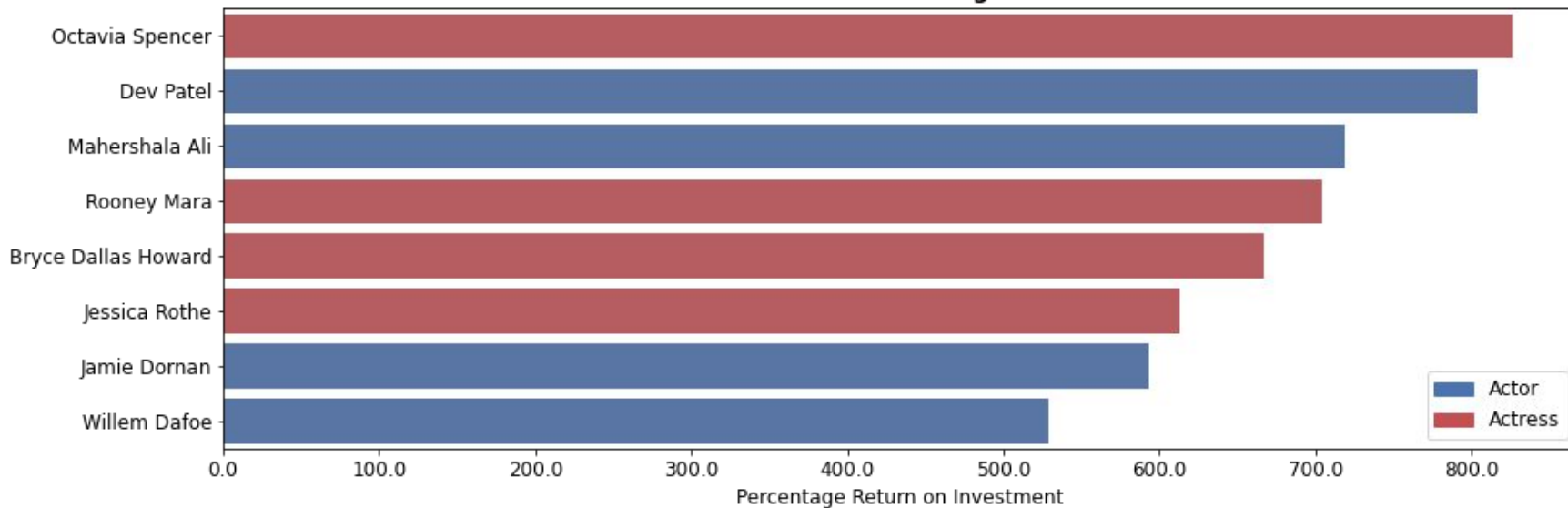

Movie ROIs for David F. Sandberg Since 2015

Movie ROIs for Christopher Landon Since 2015

Actors and Actresses

Actors and Actresses with Highest Median ROI

Recommendations to Microsoft Movie Studios:

- ❖ Writers
  - ➢ Jordan Peele (*Get Out, Us*)
  - ➢ Bryan Lynch (*Minions, The Secret Life of Pets*)
- ❖ Directors
  - ➢ David F. Sandberg (*Lights Out, Annabelle*)
  - ➢ Christopher Landon (*Happy Death Day*)
- ❖ Actors/Actresses
  - ➢ Octavia Spencer
  - ➢ Dev Patel
  - ➢ Mahershala Ali
  - ➢ Rooney Mara

Next Steps

❖ Analyze the correlations between each recommended person

❖ Look at the relationship between genres and movies with multiple genres

Thank You!

Any Questions?

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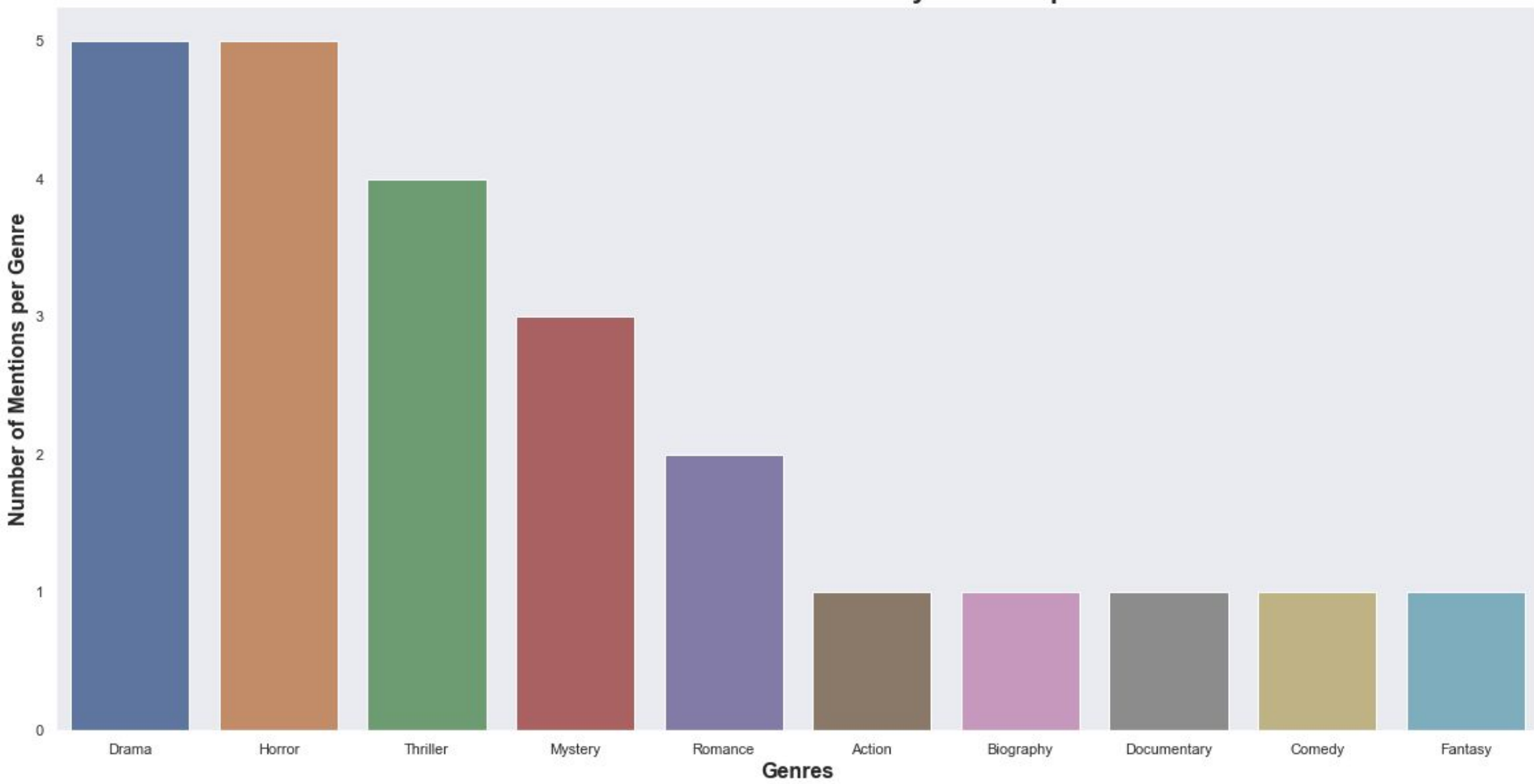
Appendix

- Further Analysis on Genres with high Median ROI

Genre—Top 10 Films Since 2015

Number of Mentions of Each Movie Genre Sorted by ROI in Top 10 Films Since 2015

Genre—Full data set

Number of Mentions of Each Movie Genre Sorted by ROI in Films Since 2015