Mars Movie Recommendations

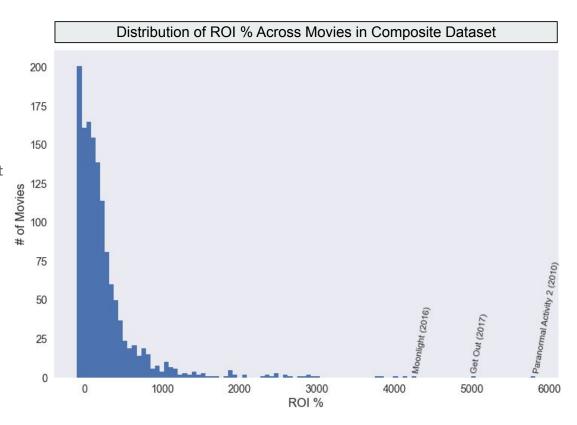
Nick Indorf, Danielle Rossman, Jeff Marvel

Executive Summary

- **Project Goal**: maximize **return on investment** in percent (ROI%) of Microsoft Studios
- Business recommendations:
 - Horrors, Mystery & Thrillers pay: ROI is ~100% higher than average
 - **Hire top talent**: six recommended hires
 - o Invest in Quality and Social Media: high engagement drives profitability

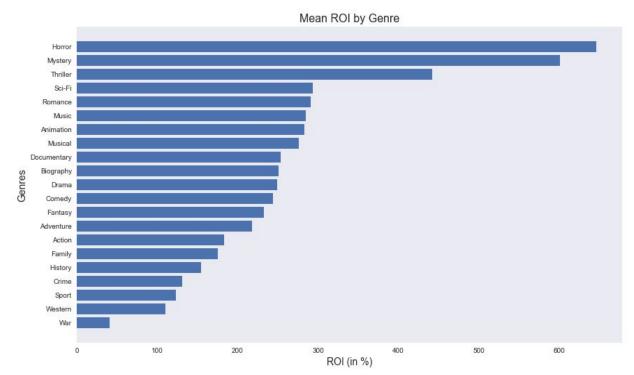
Data & Methodology

- Sources:
 - o IMDB: Movie info
 - The Numbers: Movie profit and cost
 - o Data.world: Tweet info
- Metric of Success: ROI% = Profit / Cost in percent
- Composite Dataset:
 - ~1,400 movies with ROI%
 - o Years: 2010-2019
 - Average ROI: 272%



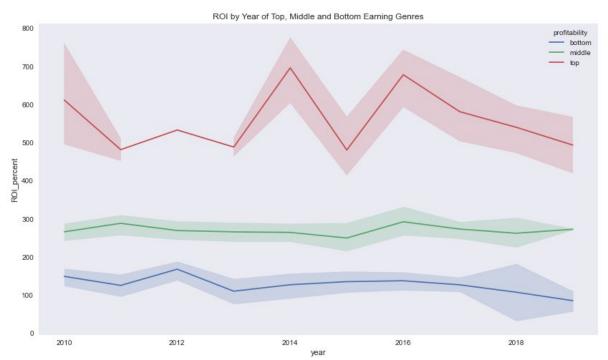
Genre Analysis (1 of 2)

- Horror, Mystery, and Thriller movies:
 108% higher ROI than average
- Science Fiction, Dramas, Comedies,
 Adventures, and Documentaries
 generate respectable ROIs as well



Genre Analysis (2 of 2)

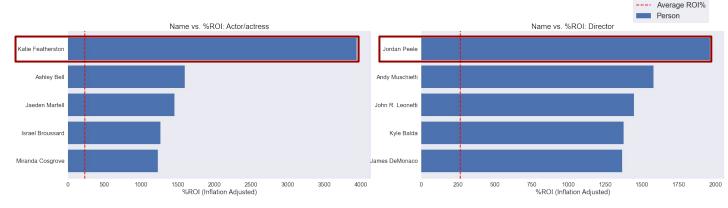
- Top performers: more variability
- Middle performers: more stability
- Bottom performers: decline in ROI in recent years

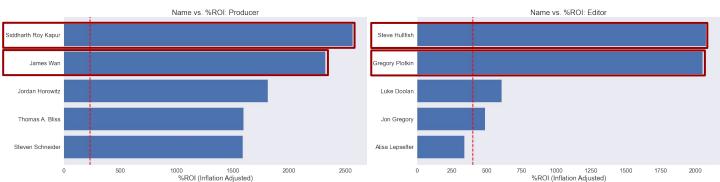


Cast & Crew analysis

6 breakout
 people with
 much greater
 %ROI than
 their peers

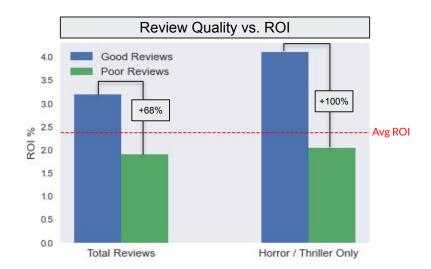
Additional detail in appendix

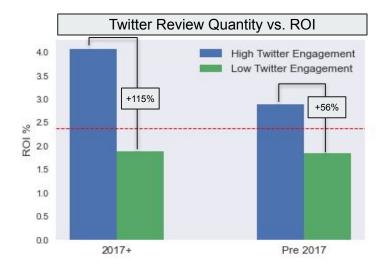




Reviews and social media presence

- Movies with high reviews (8+ on IMDB) had a 68% higher ROI than average
 - This is particularly true for horror / thriller movies (+100% ROI)
- Generating more social media engagement (minimum 500 reviews) is correlated with higher ROI
 - The relationship is even stronger post 2017 (+115% ROI for high engagement movie)





Conclusion / next steps

- Keys to success:
 - Produce Horror, Mystery and Thriller movies
 - Hire top talent
 - Invest in social media
- Further analysis:
 - Interaction of Genre and Cast/Crew
 - All twitter mentions



Contact info:

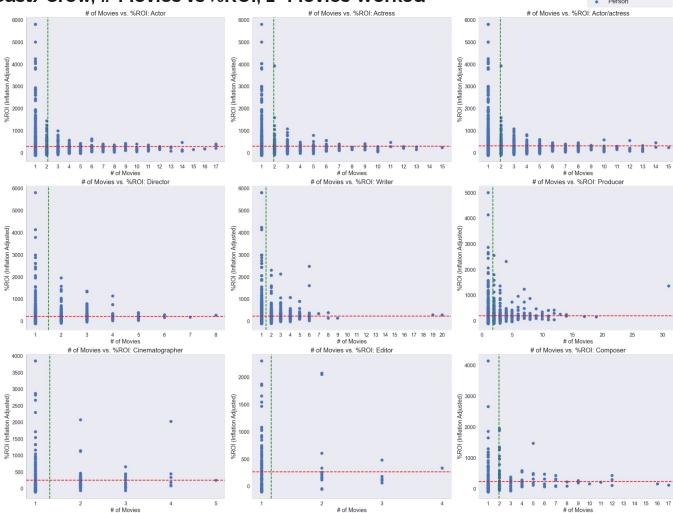
Nick: github.com/Nindorph | linkedin.com/nicholas-indorf-data-scientist

Jeff: https://github.com/marvelje

Danielle: <u>Danielle.m.rossman@gmail.com</u>

Appendix

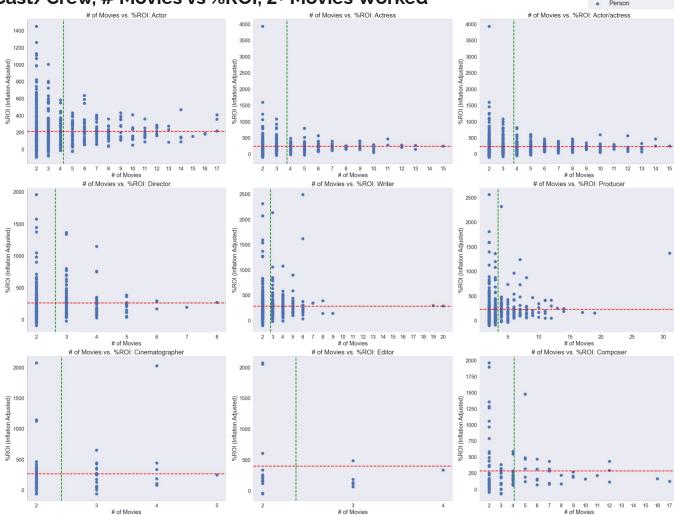
Appendix 2a: Cast/Crew, # Movies vs %ROI, 1+ Movies Worked



---- Average Movie Count

--- Average ROI%

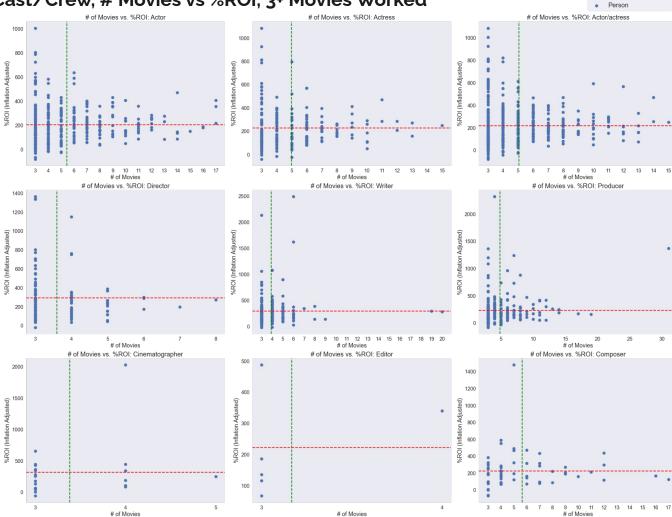
Appendix 2a: Cast/Crew, # Movies vs %ROI, 2+ Movies Worked



---- Average Movie Count

---- Average ROI%

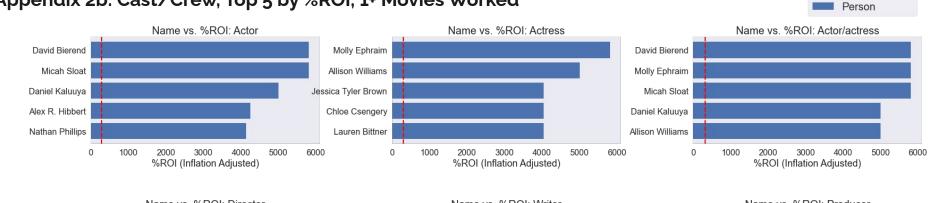
Appendix 2a: Cast/Crew, # Movies vs %ROI, 3+ Movies Worked



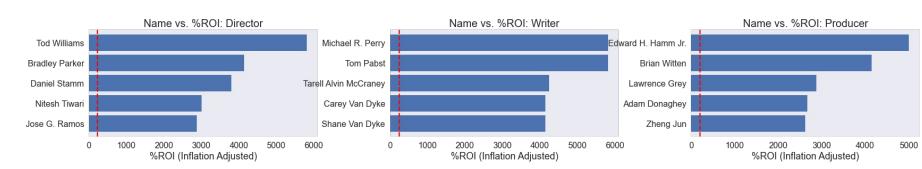
---- Average Movie Count

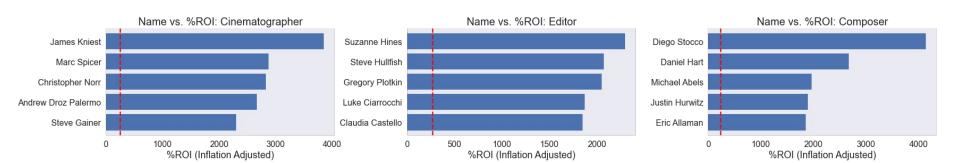
---- Average ROI%

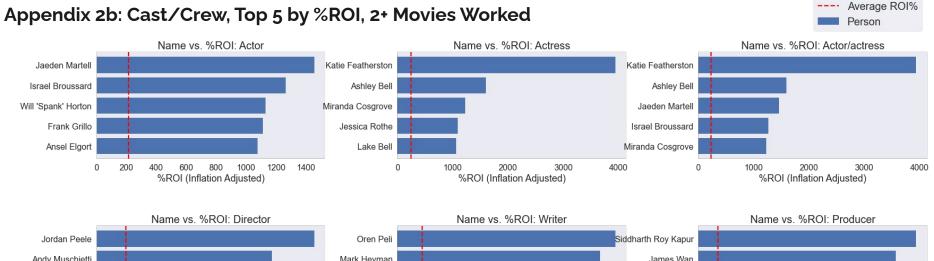
Appendix 2b: Cast/Crew, Top 5 by %ROI, 1+ Movies Worked

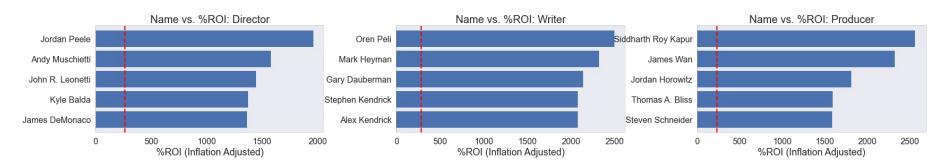


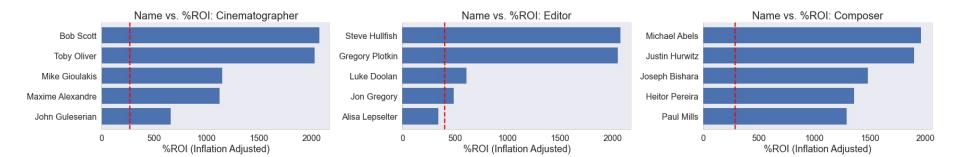
Average ROI%





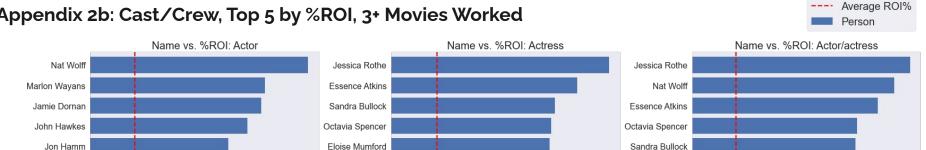






Appendix 2b: Cast/Crew, Top 5 by %ROI, 3+ Movies Worked

%ROI (Inflation Adjusted)



%ROI (Inflation Adjusted)

%ROI (Inflation Adjusted)

