

# Film production recommendations

Microsoft Studios - August 2020

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# Problem statement

- To help guide the launch of Microsoft's new content production business, Microsoft Studios, the in-house analytics team was tasked with using historic film financials and associated metadata to develop strategic recommendations
- The following presentation will detail our analytical process and describe our findings

# Methodology

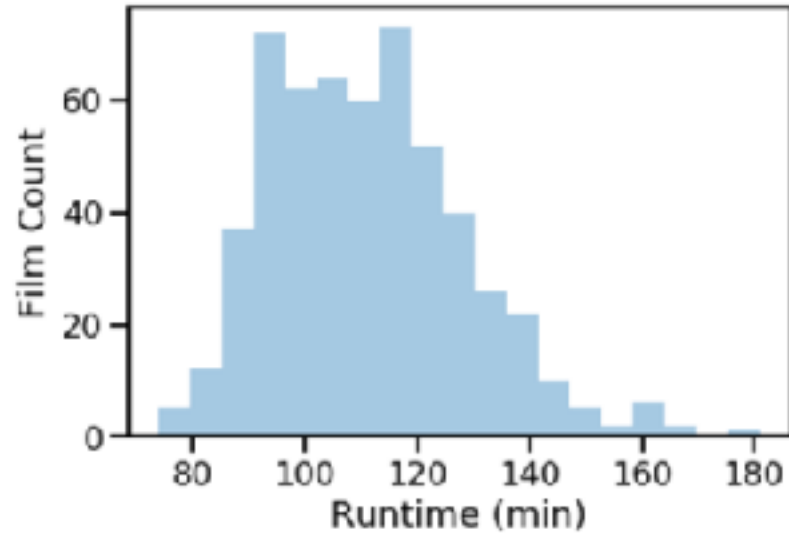
- Initial datasets were provided from IMDB, Rotten Tomatoes, Box Office Mojo, and TheMovieDB.org
- Additional data was scraped from IMDB during the analysis process
- Data was cleaned and sorted into one of four following categories for analysis:
  - Movie metadata
  - Ratings and reviews
  - Cast and crew
  - Financials

# Questions for analysis:

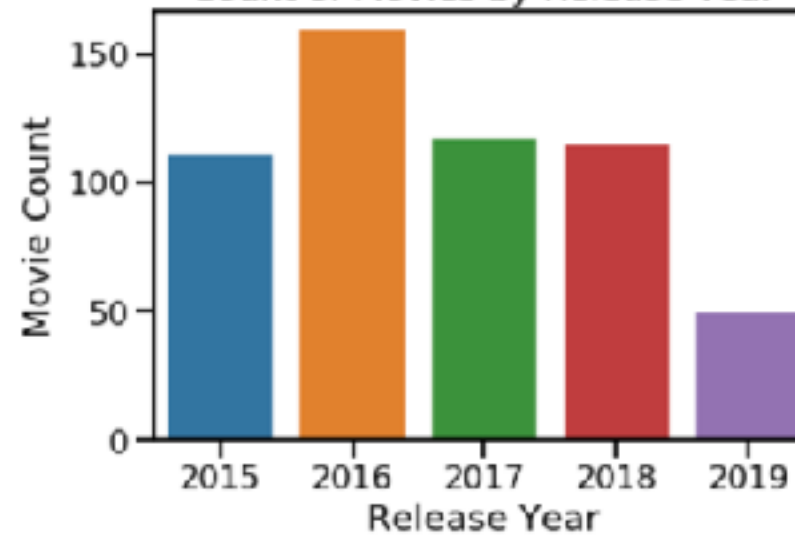
- What should the film's rating be?
- What should the film's genre be?
- Who should Microsoft hire to compose the soundtrack?

# Dataset overview

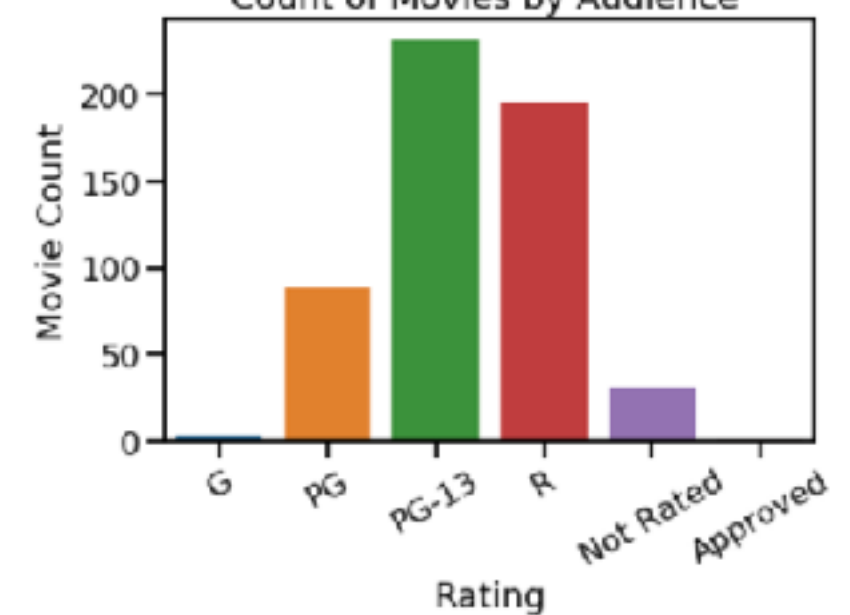
Distribution of Movie Runtimes



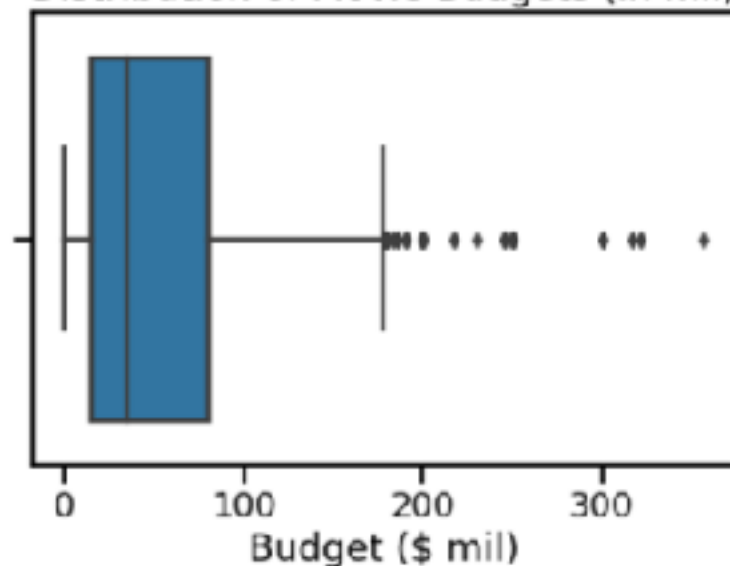
Count of Movies by Release Year



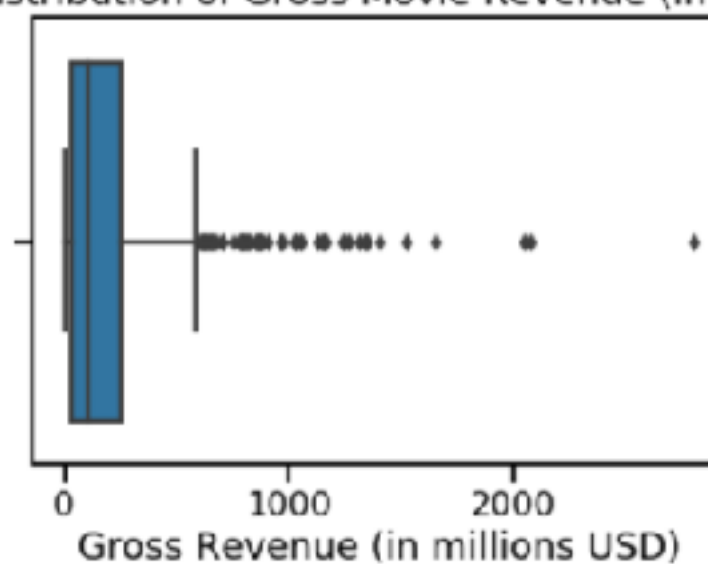
Count of Movies by Audience



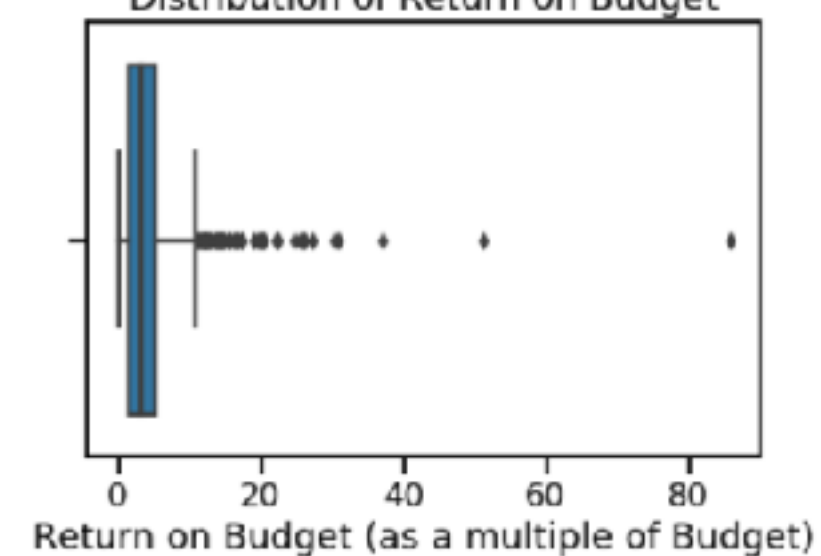
Distribution of Movie Budgets (in mil)



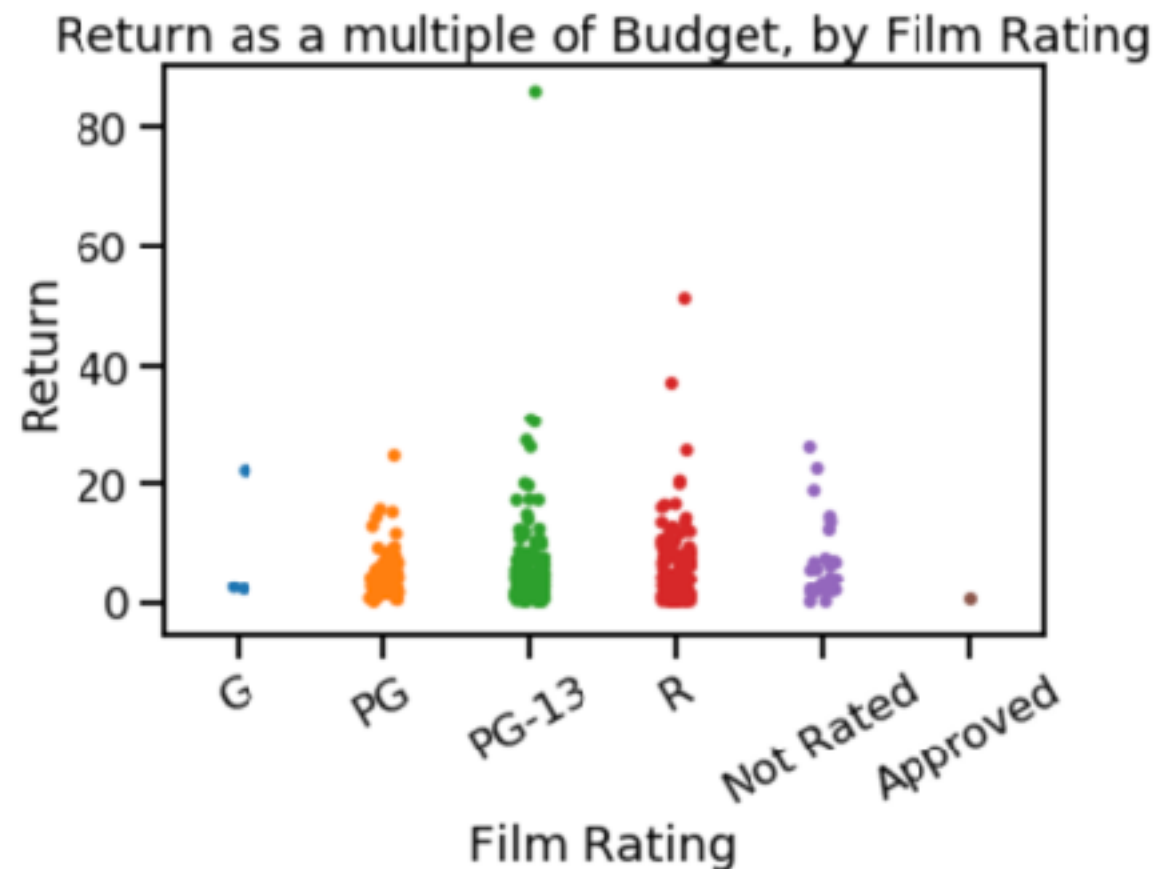
Distribution of Gross Movie Revenue (in mil)



Distribution of Return on Budget

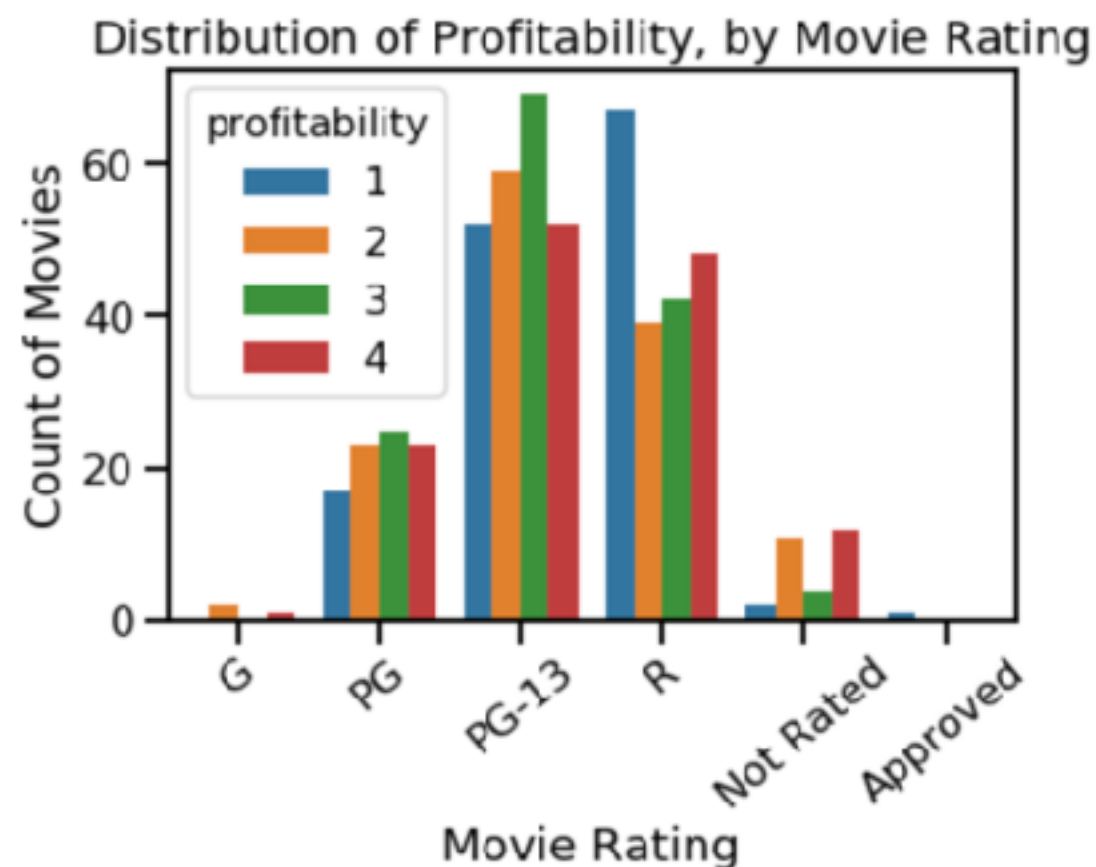


# 1. Target film rating: PG-13



- PG-13 and R-rated movies earned the highest returns at the box office

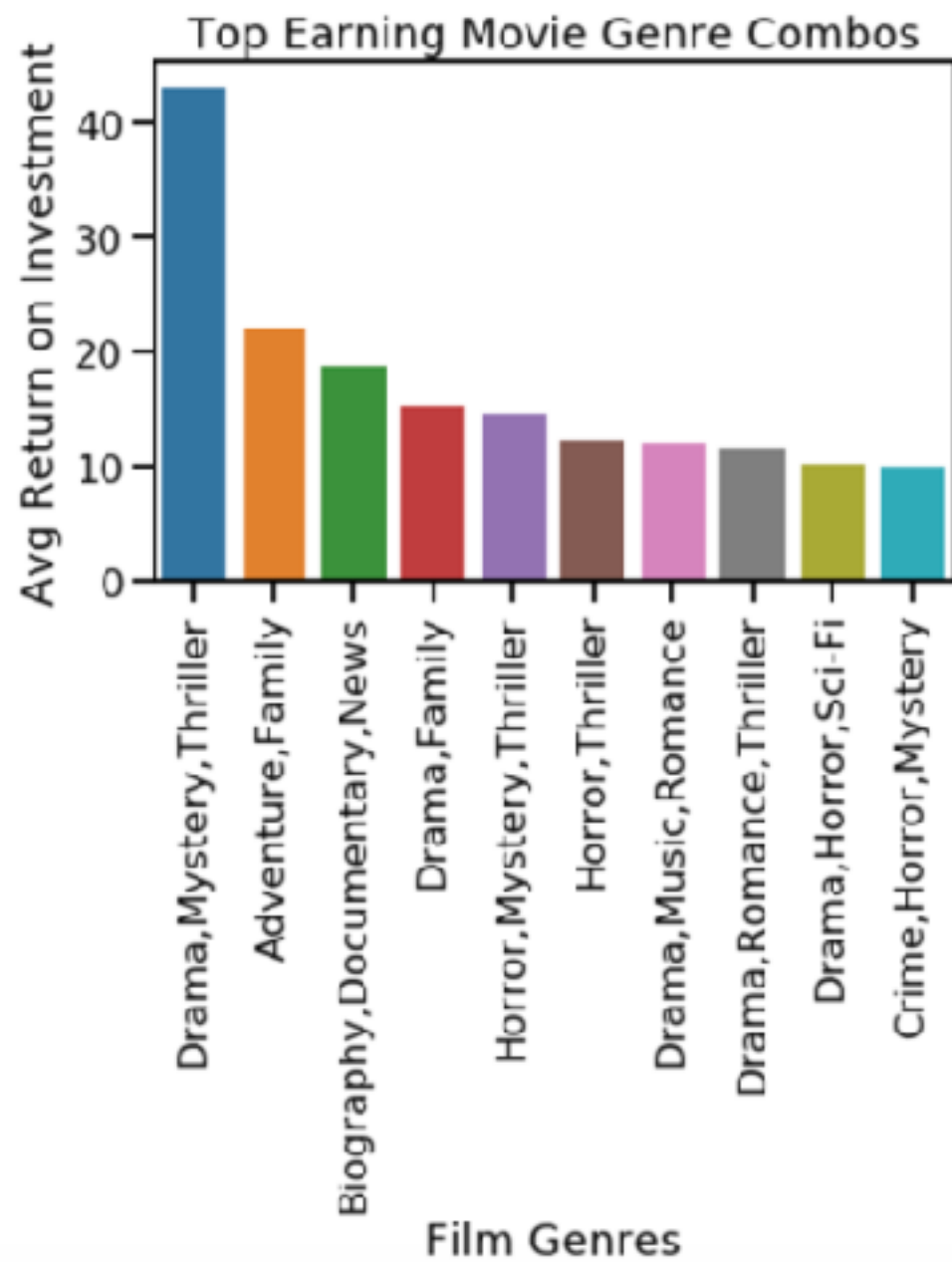
# 1. Target film rating: PG-13



- A closer look shows that, in our dataset, R-Rated films are more likely to land in the least profitable quartile of films than any other profitability quartile, making PG-13 films potentially less risky to produce

NOTE: **Profitability Group #1** represents the overall LEAST profitable quartile of films in our dataset; **Profitability Group #4** represents the MOST profitable quartile of films

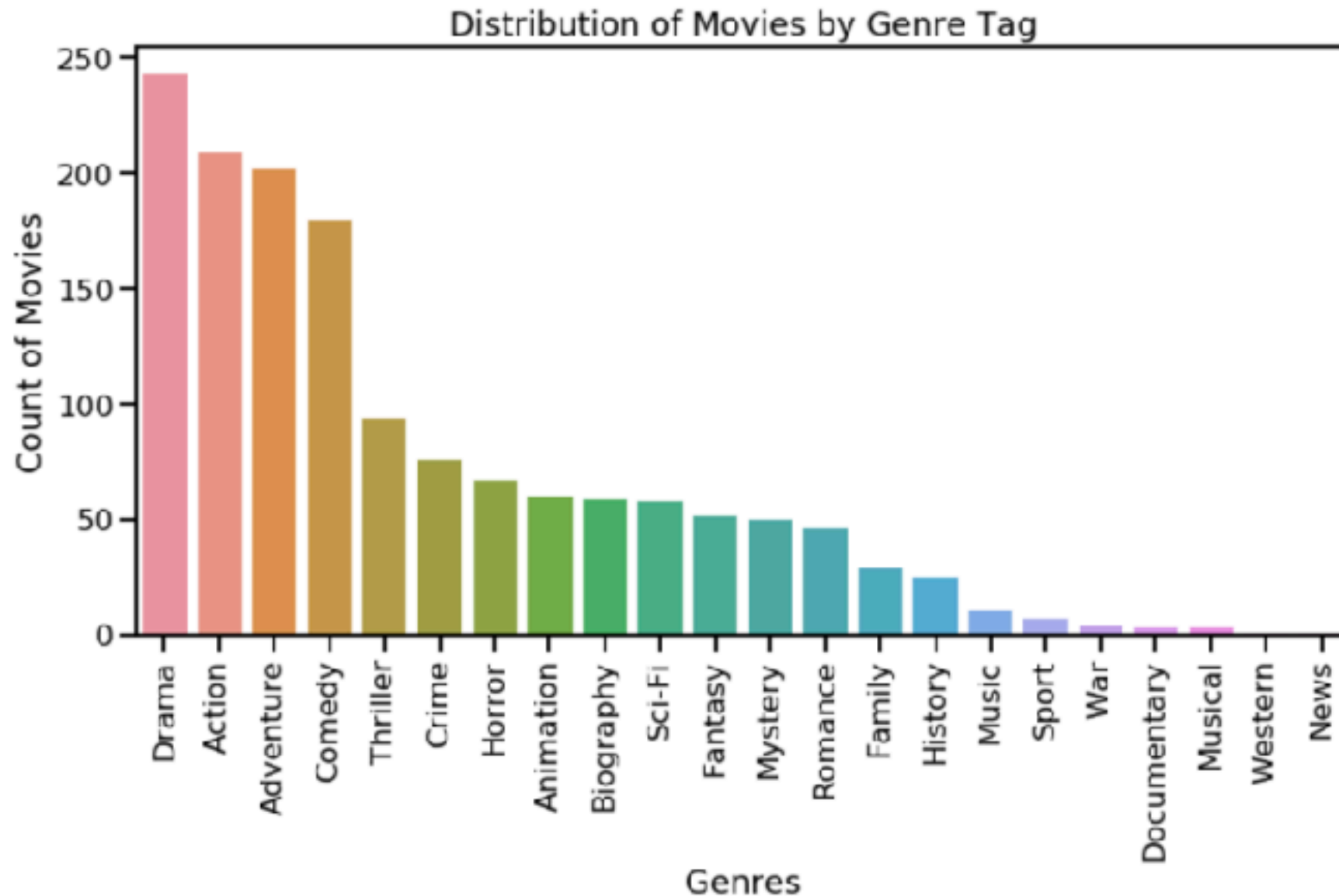
## 2. Target genre: Thriller



- Films tagged with the genres Drama, Mystery, and Thriller averaged a 40x return on budget at the box office
- Drama and Thriller are the two most common genres included within the top ten

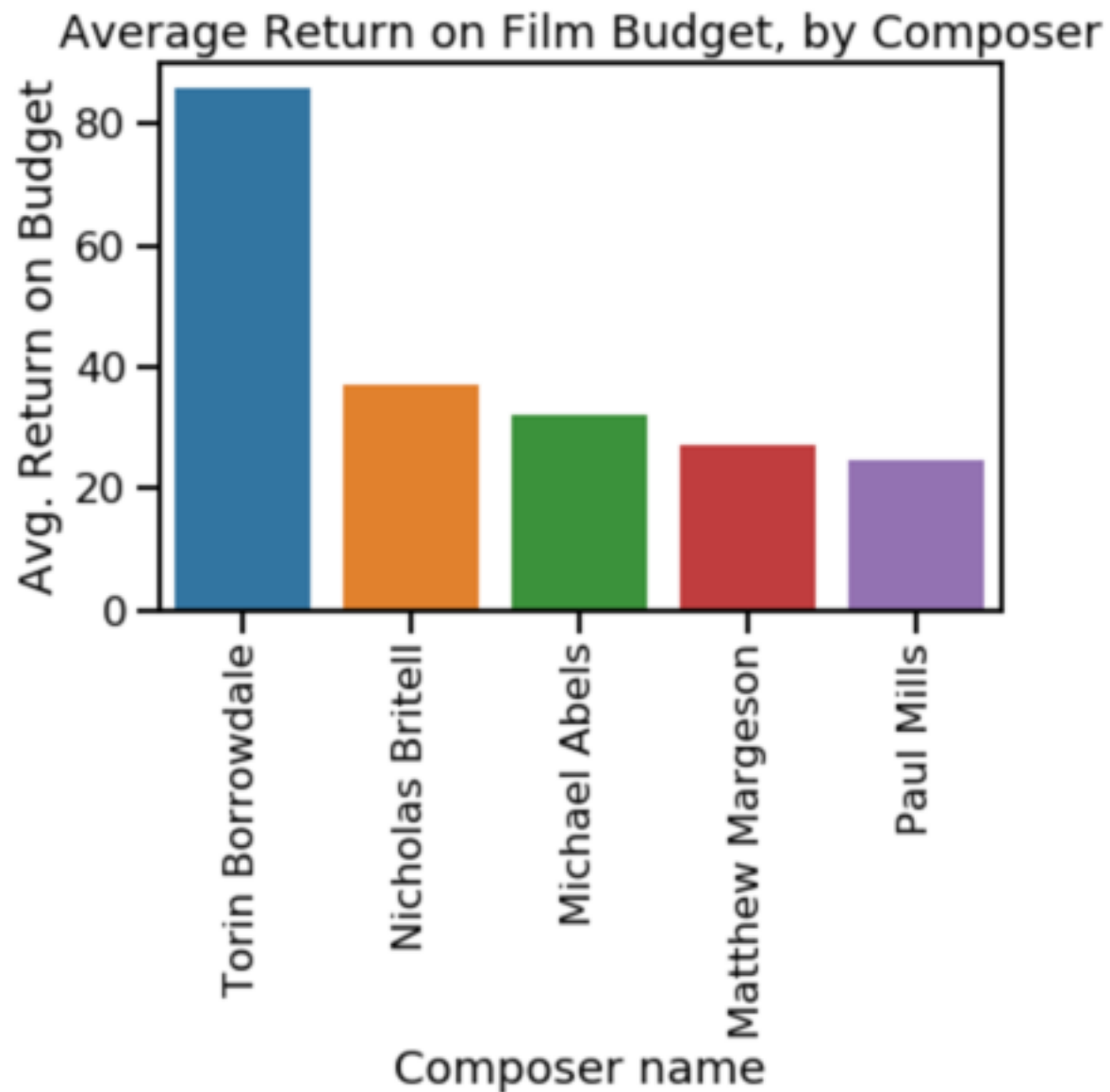


## 2. Target genre: Thriller



- Looking at the distribution of genres within our sample dataset, Drama appears to be the most saturated category for new films, making Thriller a more ideal choice for Microsoft

# 3. Target composer: Torin Borrowdale



- Films with scores composed by Torin Borrowdale had the highest returns on average (as a multiple of budget)
- Torin only scored one film in our dataset, which happened to be a thriller, making him a great up-and-coming candidate to score Microsoft's release

# Future work

- Demographics:
  - Should Microsoft make a Thriller that is broadly appealing or should they target a specific demographic? If so, which demographic?
- Actors, Actresses, Directors, and Writers:
  - Given a set of target demographics, which actors, actresses, directors, and writers should Microsoft approach to collaborate with?

# Thank you!

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