

Initial Genre Recommendations for Microsoft

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Background

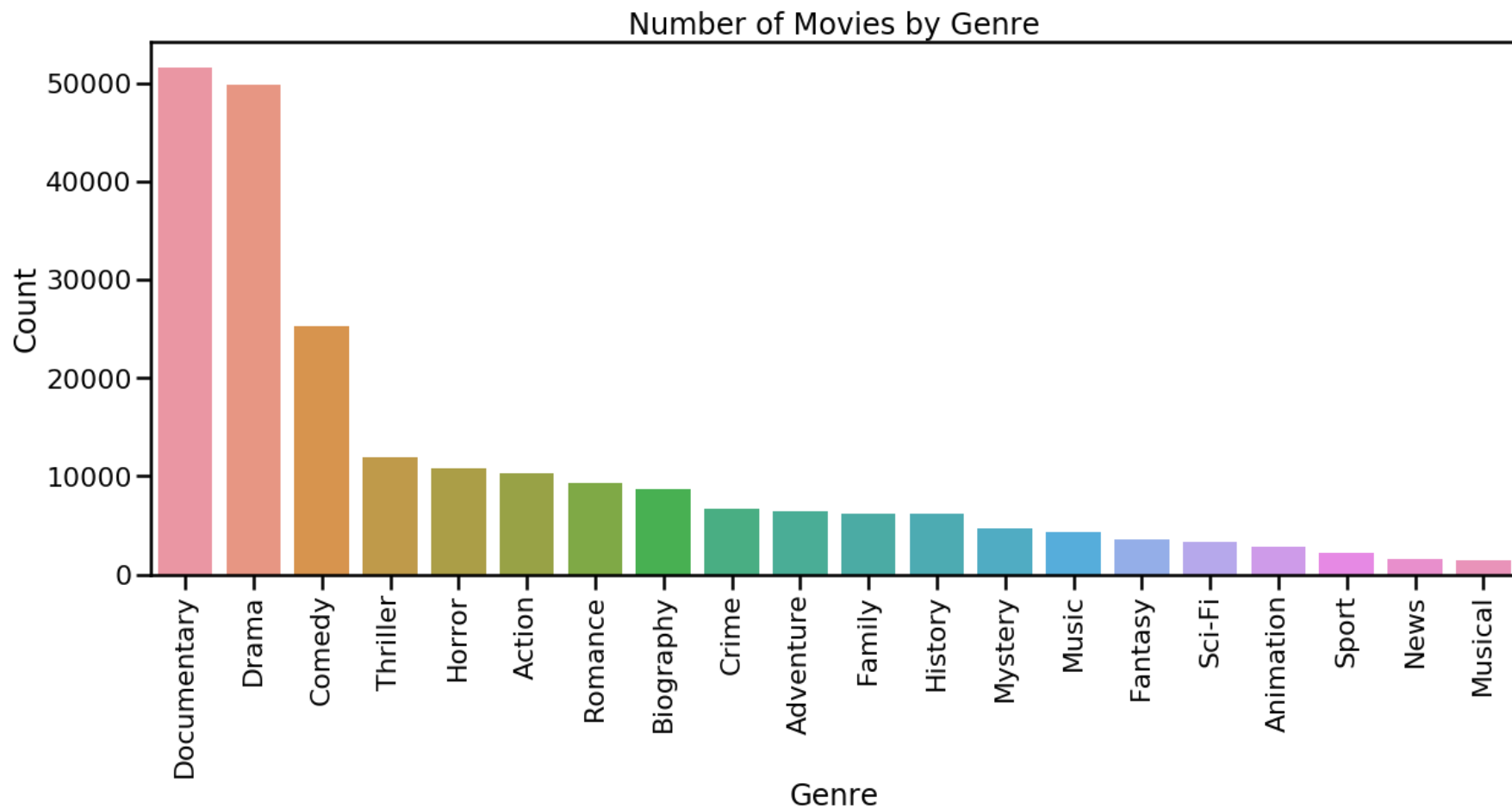
- Microsoft has decided to create a new movie studio
- They don't know anything about creating movies
- They have hired you to help them better understand the movie industry and explore what type of films are currently doing the best at the box office

Considerations & Questions

- When considering what genre to produce, it's important to ask:
 - What genre has the highest ROI?
 - What genre has a reasonable production cost?
 - What genre has the highest ratings?
- Starting out, it's important to produce a movie as inexpensively as possible in a genre with a solid ROI that's popular

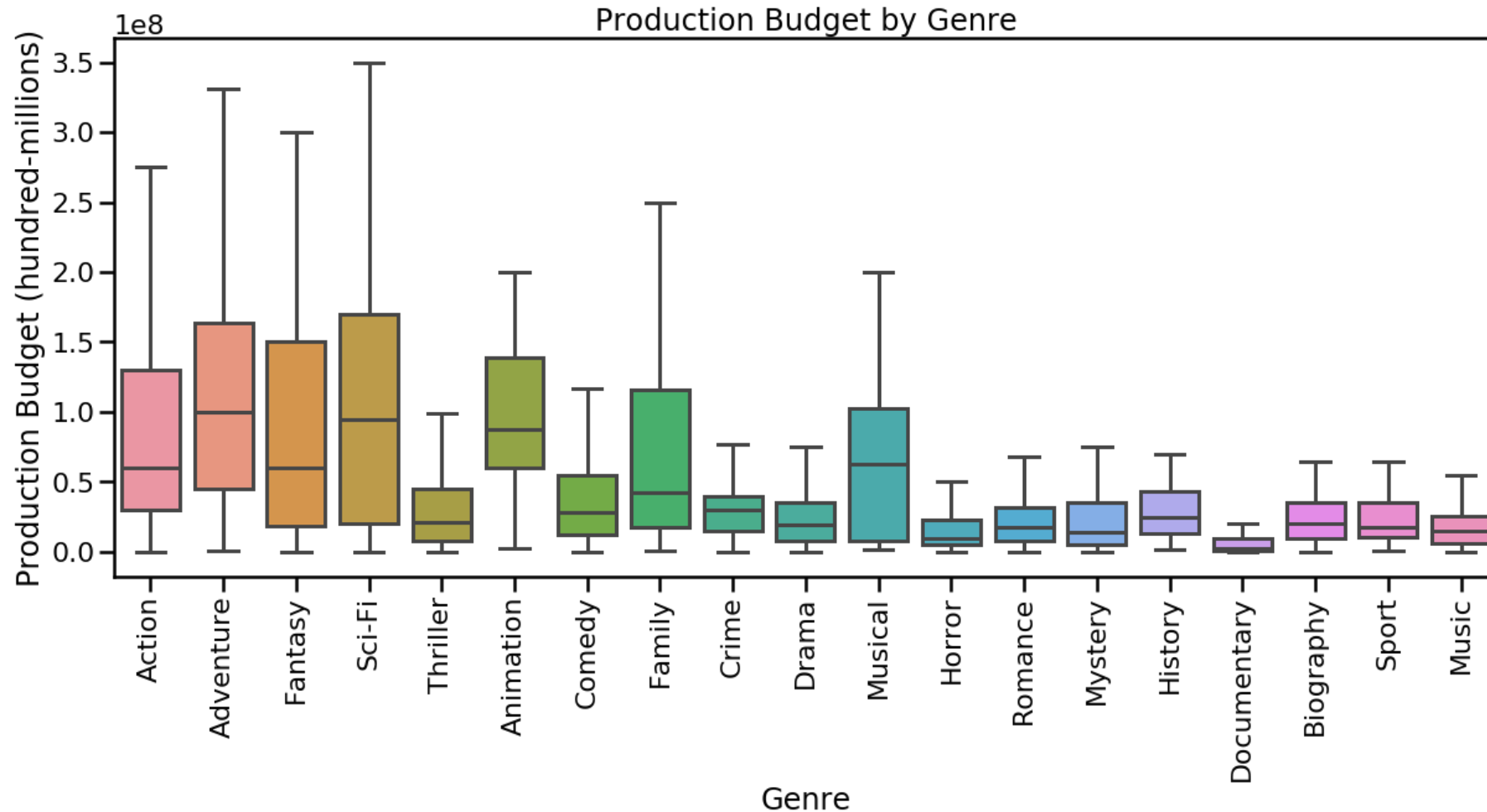
Initial Exploration

- Universe of movies: 146,144 worldwide, according to IMDB
- Vast majority are either a documentary or drama, with a steep drop-off after that



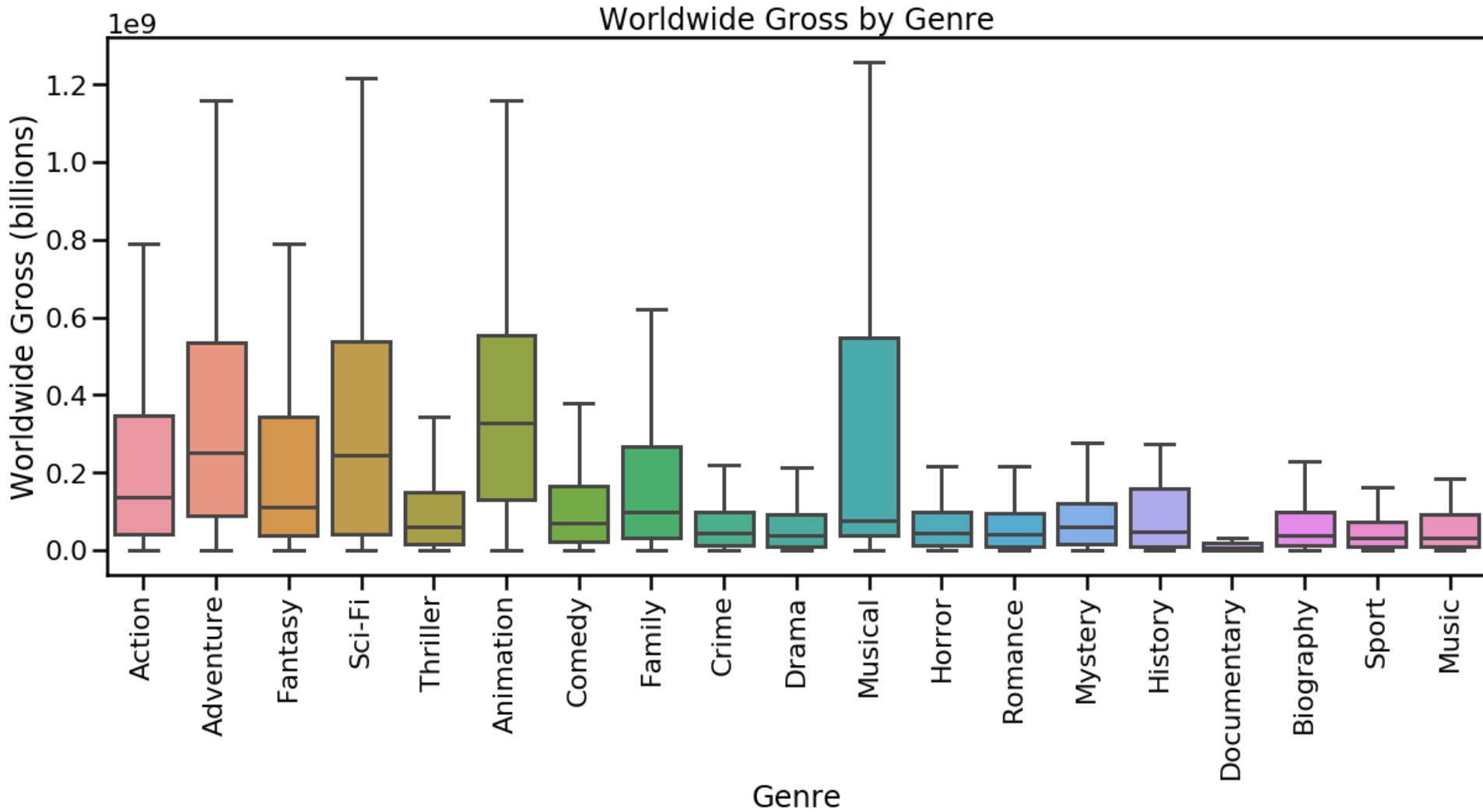
Production Costs

- The top 3 median production budgets are Adventure, Sci-Fi, and Animation, respectively
- The median production cost for Adventure films, for example, is \$100 million



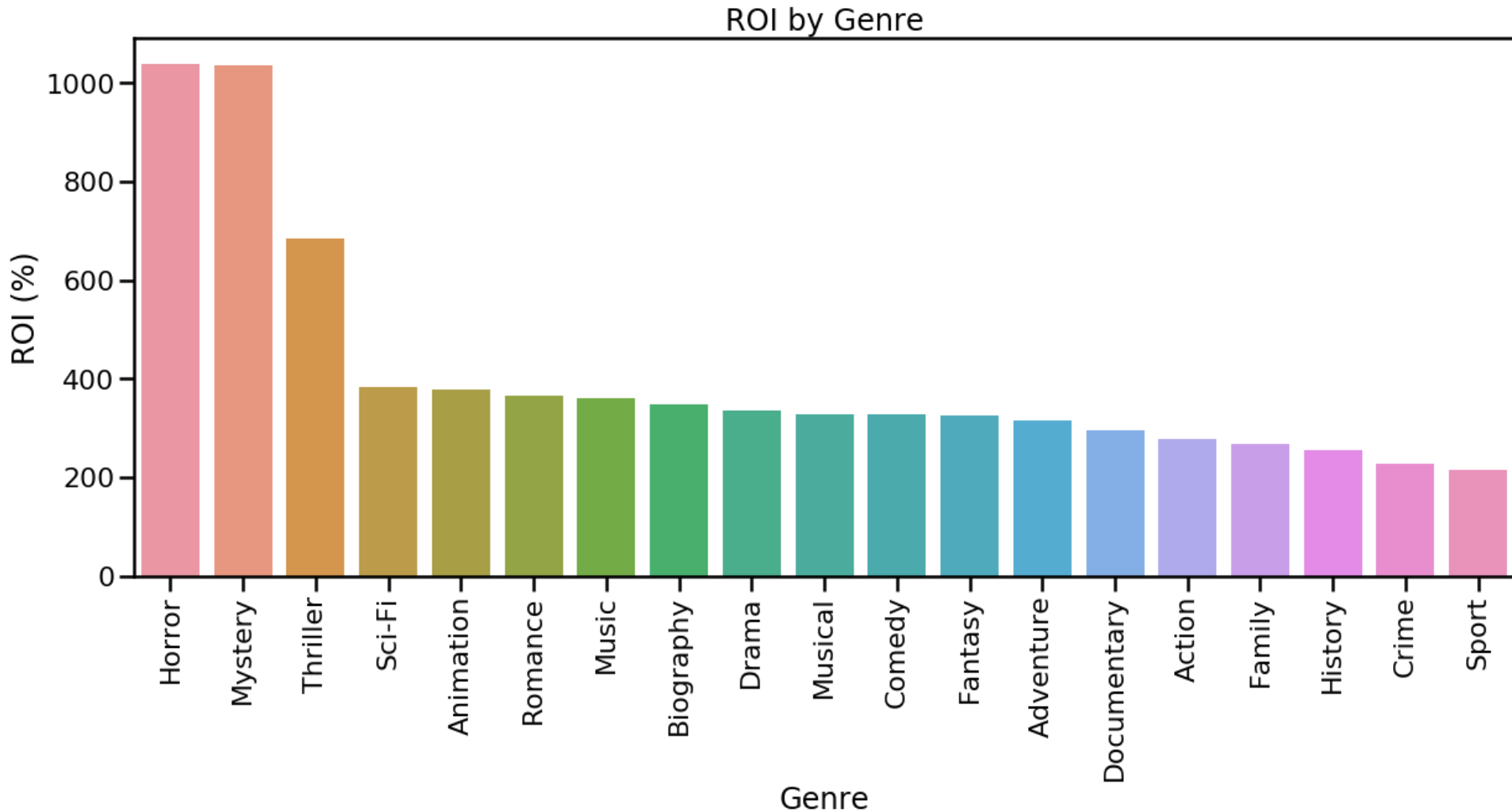
Worldwide Gross

- Similarly, the top 3 highest grossing genres are Animation, Adventure, and Sci-Fi, respectively
- Animation has the highest median worldwide gross of ~\$327 million



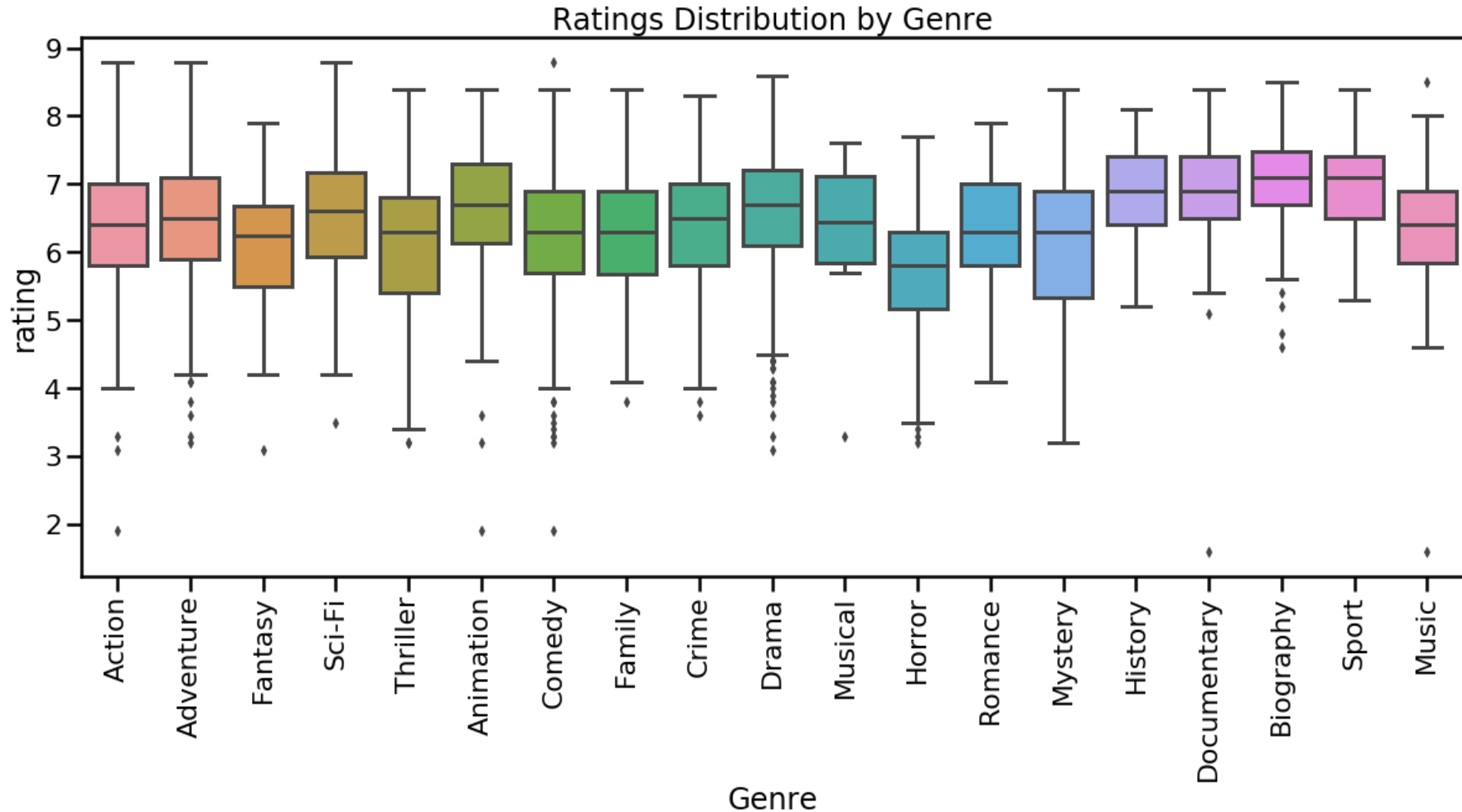
Return on Investment

- Looking at the return on investment, the top 3 genres are Horror, Mystery, and Thriller respectively



Ratings Distribution

- Ratings are consistent across the board, with most of the abnormal ratings on the low side versus abnormally high ratings



Recommendations

- I would recommend starting with either Mystery or Thriller films
- Mystery has the second highest ROI of over 1000% and a relatively modest median production cost of \$14 million
- Thriller has the third highest ROI of 685%, and a slightly higher median production budget of \$21 million
- Their average ratings are virtually identical, as 6.2 and 6.1, respectively
- However, Thriller is a much more crowded market with over 11 thousand movies, compared to 4.6 thousand Mystery films
- Horror may have the highest ROI, but compared to Mystery, has a broader appeal and higher ratings

Next Steps

- Determine if Microsoft wants to focus on domestic or international films
- Conduct further analyses to determine the relationship between ROI and run time/production budget
- Create a list of producers with the highest grossing and rated movies in our selected genre (potential collaborators or producers)

Thank you for you time!

Appendix

Fig. 1: Genre Financials

	worldwide_gross	production_budget
Genre		
Sci-Fi	243,511,801.5	95,000,000
Animation	327,829,122.5	87,500,000
Musical	75,792,303.5	62,500,000
Action	135,965,960.0	60,000,000
Fantasy	110,635,328.0	60,000,000
Family	97,846,798.5	42,500,000
Crime	45,671,512.0	30,000,000
Comedy	68,848,446.0	28,000,000
History	46,734,733.0	25,000,000
Thriller	58,978,477.0	21,000,000
Biography	37,596,367.5	20,000,000
Documentary	7,241,309.0	2,500,000
Drama	36,964,656.0	19,000,000
Romance	41,334,735.0	18,000,000
Sport	30,138,912.0	18,000,000
Music	32,700,439.0	15,000,000
Mystery	61,166,295.5	14,000,000
Adventure	250,795,637.5	100,000,000
Horror	43,587,448.5	10,000,000

Appendix

Fig. 2: Genre ROI

ROI	
Genre	
Documentary	173.121062
Action	111.171112
Musical	104.250647
Comedy	91.995824
Drama	72.827988
Music	41.551239
Crime	24.598919
Family	20.451557
Sci-Fi	17.372825
Romance	15.120420
Thriller	14.337796
Horror	12.517040
Fantasy	11.780952
Adventure	7.401090
Animation	6.721386
Biography	4.735828
Mystery	3.859088
Sport	3.749092
History	3.595131

Appendix

Fig. 3: Movie Count by Genre

	Genre	Count
0	Documentary	51,639
1	Drama	49,882
2	Comedy	25,311
3	Thriller	11,882
4	Horror	10,804
5	Action	10,334
6	Romance	9,371
7	Biography	8,721
8	Crime	6,752
9	Adventure	6,464
10	Family	6,226
11	History	6,224
12	Mystery	4,658
13	Music	4,313
14	Fantasy	3,515
15	Sci-Fi	3,364
16	Animation	2,798
17	Sport	2,233
18	News	1,550
19	Musical	1,429

Appendix

Fig. 4: Average Rating by Genre

rating	
Genre	
Biography	7.051538
History	6.946154
Sport	6.896970
Documentary	6.790909
Drama	6.603829
Animation	6.574490
Sci-Fi	6.565873
Adventure	6.489181
Crime	6.405882
Music	6.389362
Action	6.358810
Romance	6.326519
Comedy	6.248247
Musical	6.212500
Family	6.189773
Mystery	6.179661
Fantasy	6.134746
Thriller	6.122594
Horror	5.693590