

Initial Genre Recommendations for Microsoft

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Background

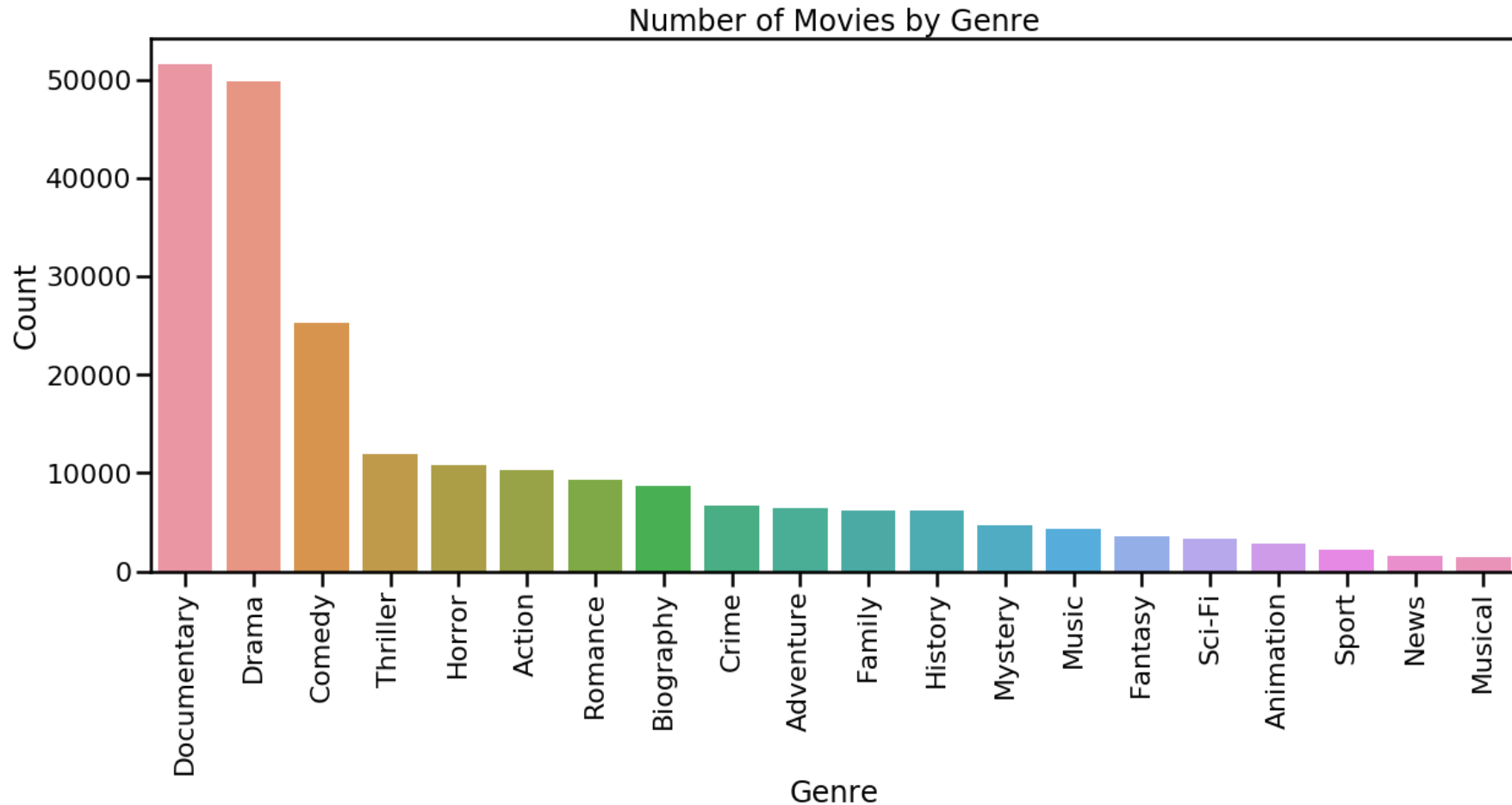
- Microsoft has decided to create a new movie studio
- They don't know anything about creating movies
- They have hired you to help them better understand the movie industry and explore what type of films are currently doing the best at the box office

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

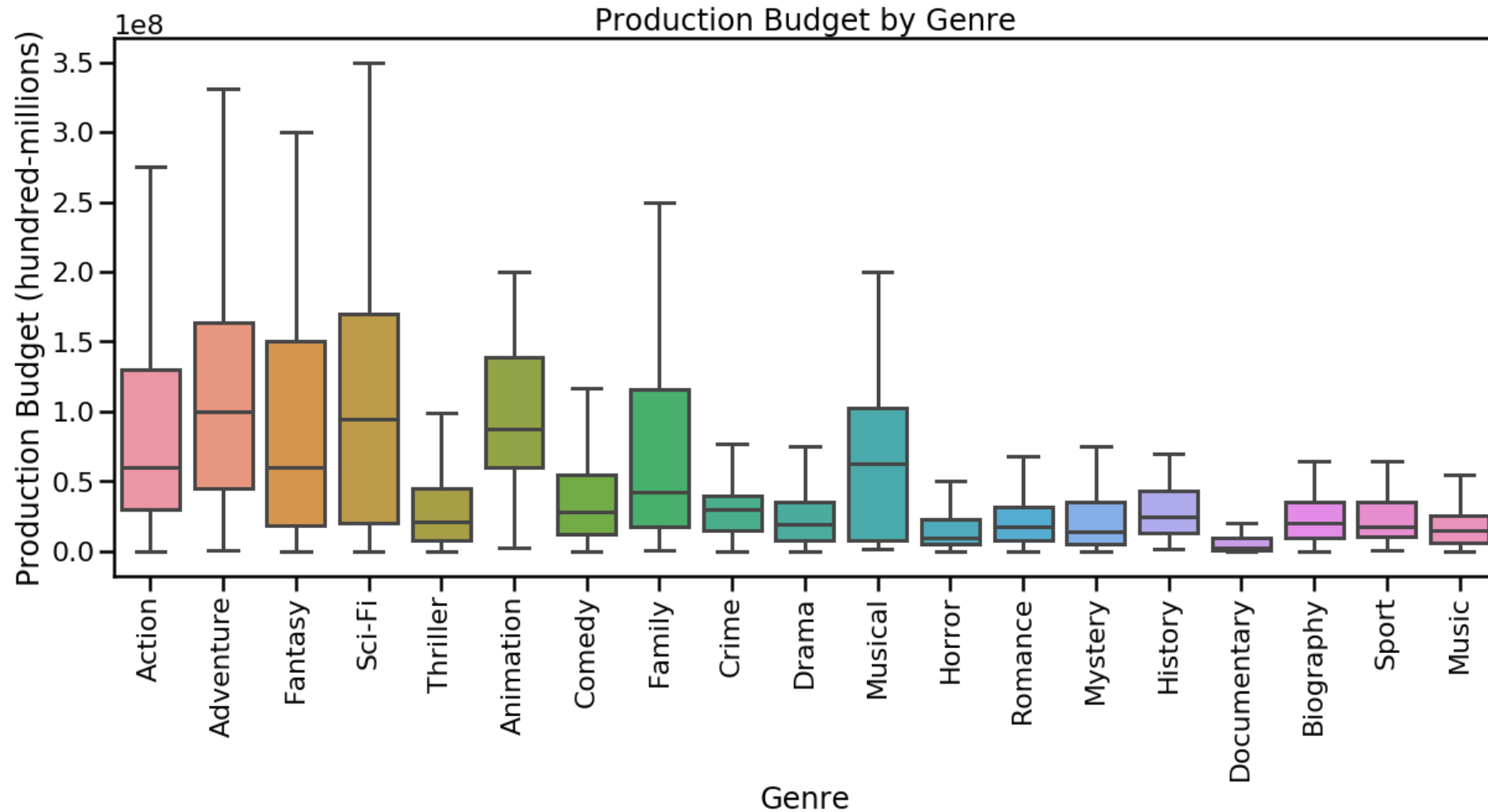
Initial Exploration

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



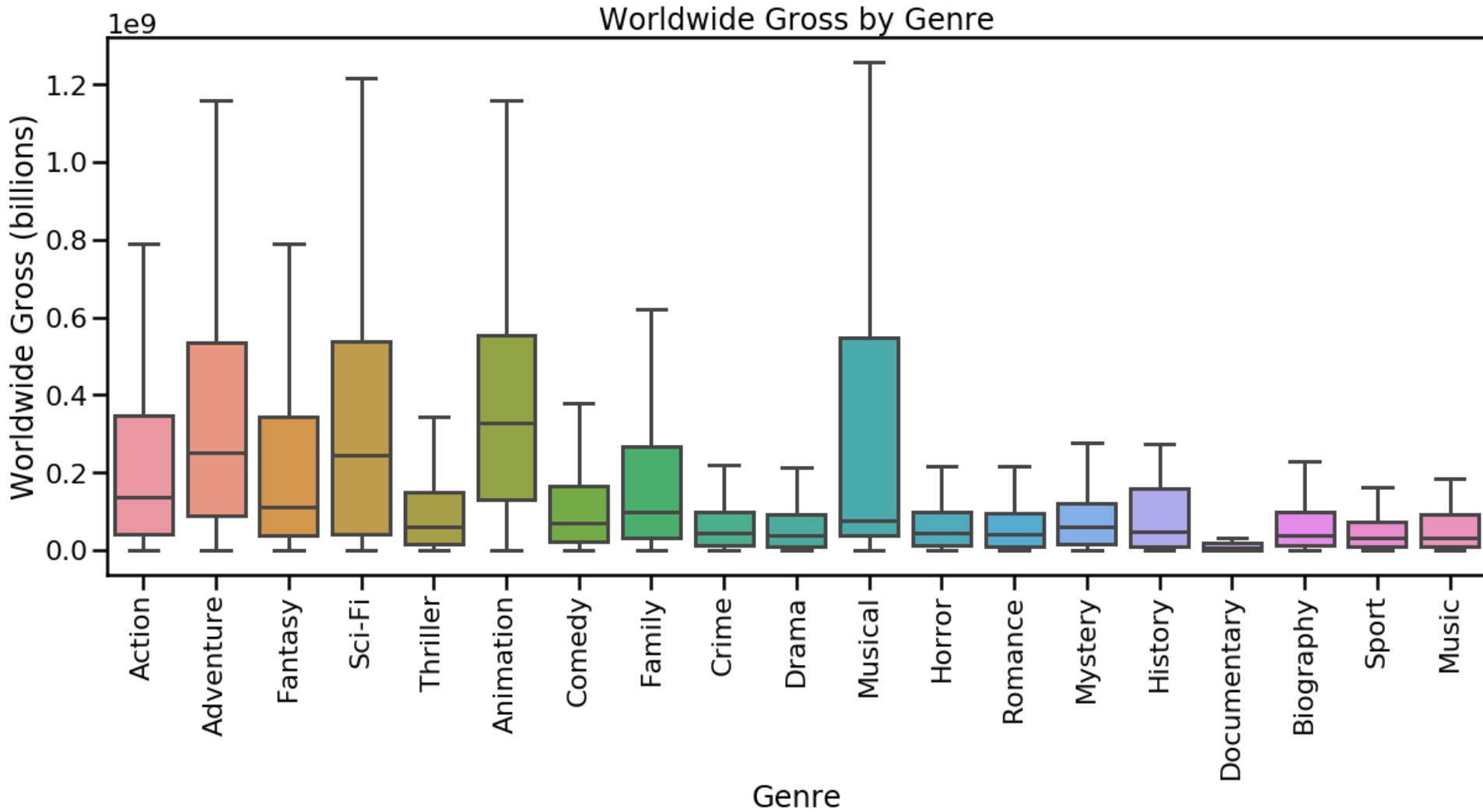
Production Costs

- 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



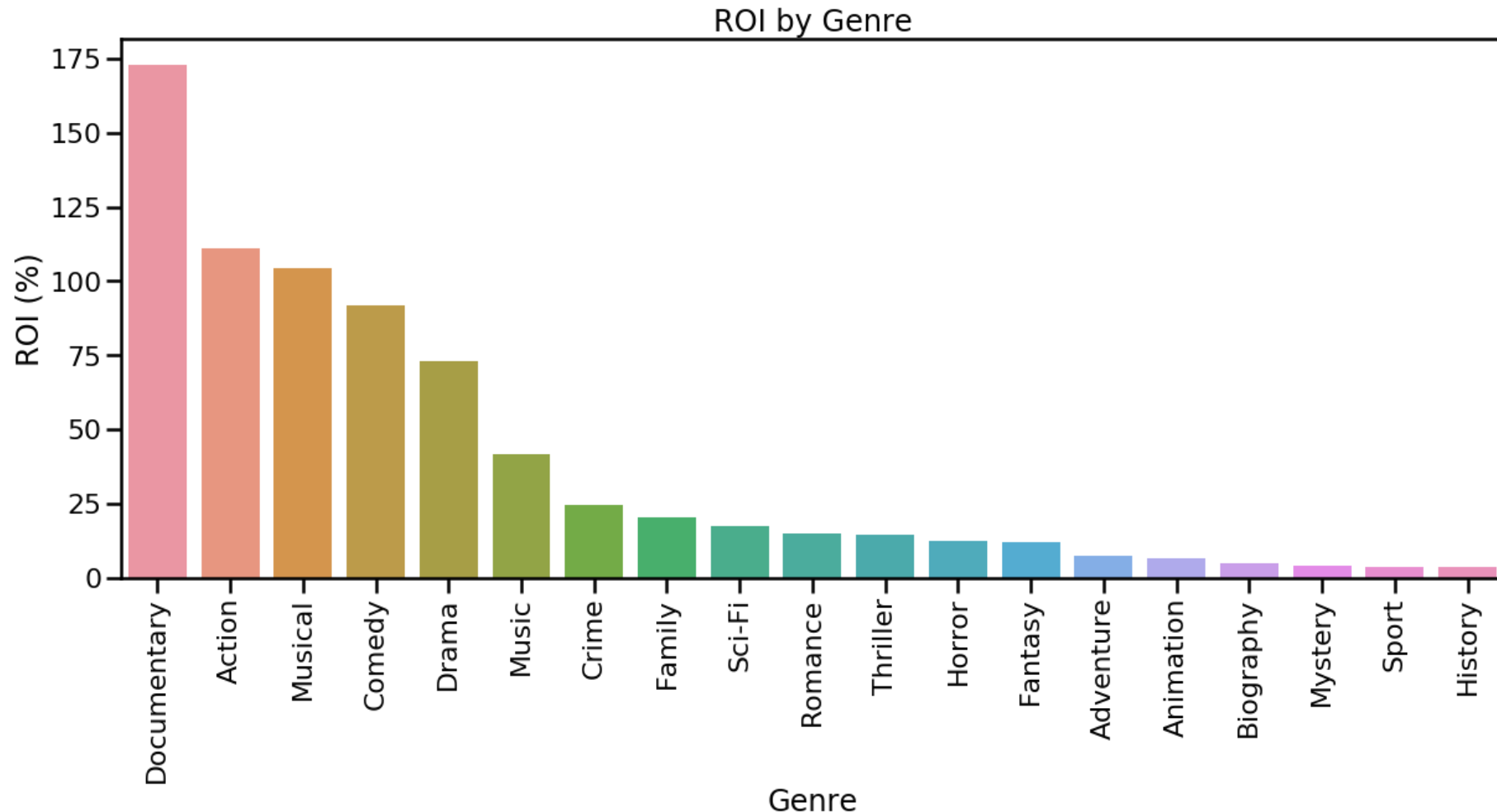
Worldwide Gross

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



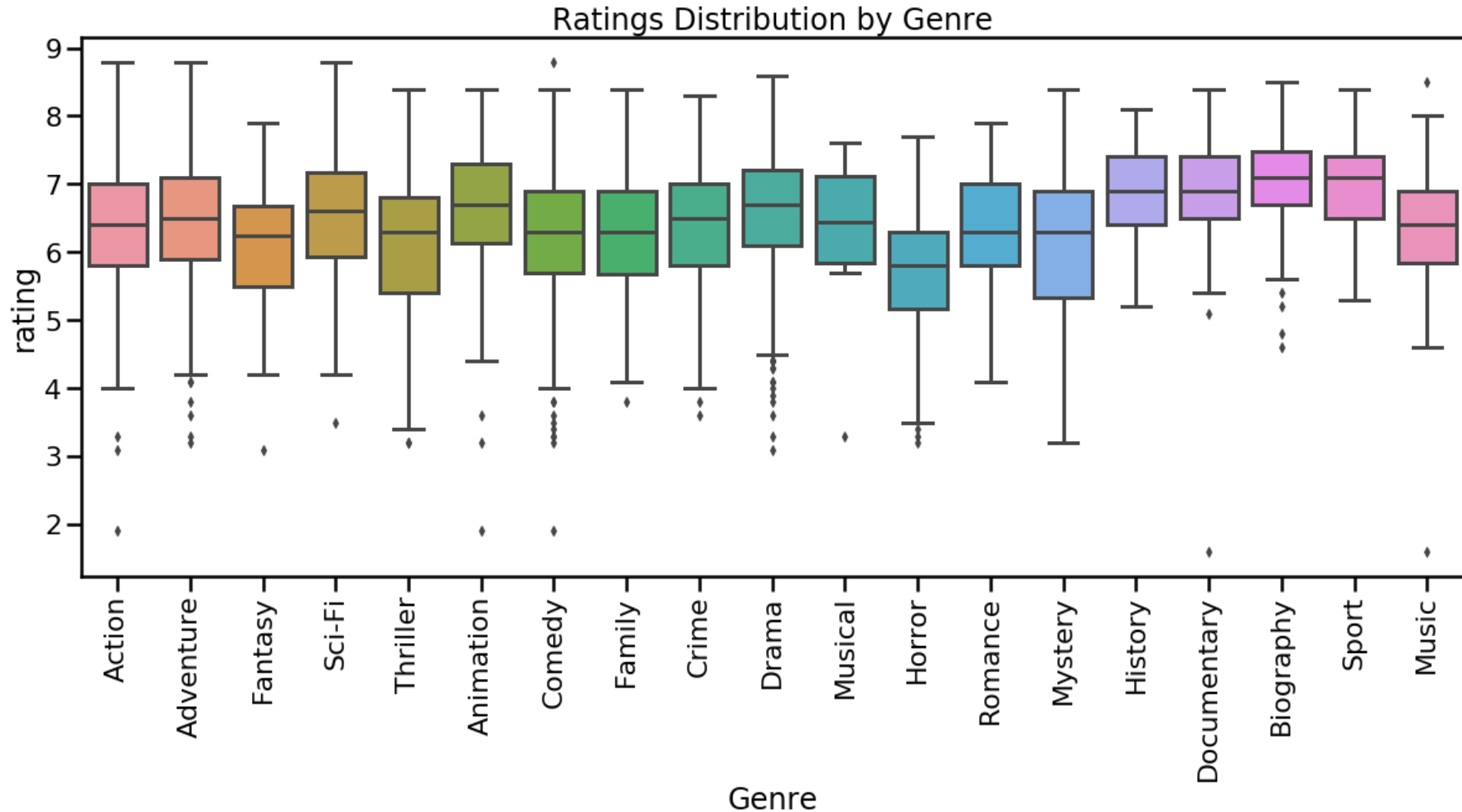
Return on Investment

- Looking at the return on investment, the top 3 genres are Documentary, Action, and Musical, respectively
- Interpret these results carefully; documentaries, for example, is the lowest grossing genre of all



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 Action or Comedy films
- Action has the second highest ROI of 111% and a relatively modest median production cost of \$60 million
- Comedy has the fourth highest ROI of ~92%, and an even lower median production budget of \$28 million
- Their average ratings are virtually identical, as 6.4 and 6.2, respectively
- However, Comedy is a much more crowded market with over 25 thousand movies, compared to 10 thousand Action films

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		
Adventure	250795637.5	100000000
Sci-Fi	243511801.5	95000000
Animation	327829122.5	87500000
Musical	75792303.5	62500000
Action	135965960.0	60000000
Fantasy	110635328.0	60000000
Family	97846798.5	42500000
Crime	45671512.0	30000000
Comedy	68848446.0	28000000
History	46734733.0	25000000
Thriller	58978477.0	21000000
Biography	37596367.5	20000000
Drama	36964656.0	19000000
Romance	41334735.0	18000000
Sport	30138912.0	18000000
Music	32700439.0	15000000
Mystery	61166295.5	14000000
Horror	43587448.5	10000000
Documentary	7241309.0	2500000

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	51639
1	Drama	49882
2	Comedy	25311
3	Thriller	11882
4	Horror	10804
5	Action	10334
6	Romance	9371
7	Biography	8721
8	Crime	6752
9	Adventure	6464
10	Family	6226
11	History	6224
12	Mystery	4658
13	Music	4313
14	Fantasy	3515
15	Sci-Fi	3364
16	Animation	2798
17	Sport	2233
18	News	1550
19	Musical	1429

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