



Microsoft

Microsoft Movie Studio Analysis

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Summary

Provide insight for [Microsoft](#) regarding the latest popular and most successful box office films so they can leverage this information to provide quality content in their new movie studio.

Using [IMDB](#) and [Box Office Mojo](#) datasets to provide insight to Microsoft:

- Top 10 movies with the highest gross at the box office
- Top 10 movies with highest review ratings from fans and critics
- Most popular and profitable genres

Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions

Business Problem

Provide direction for movie creation

Return on investment

Ensure movies will be widely accepted

Data

Box Office Mojo providing a single dataset:

- Domestic and foreign gross values
- Production studio

Box Office Mojo

Two datasets provided from IMDB covering:

- Title
- Year
- Length of movie (mins)
- Genre
- Average IMDB rating
- Number of votes



Methods

Data cleaning involved:

- Removing symbols out of titles
- Dropping of columns
- Conversion of data types
- Separation of Genres

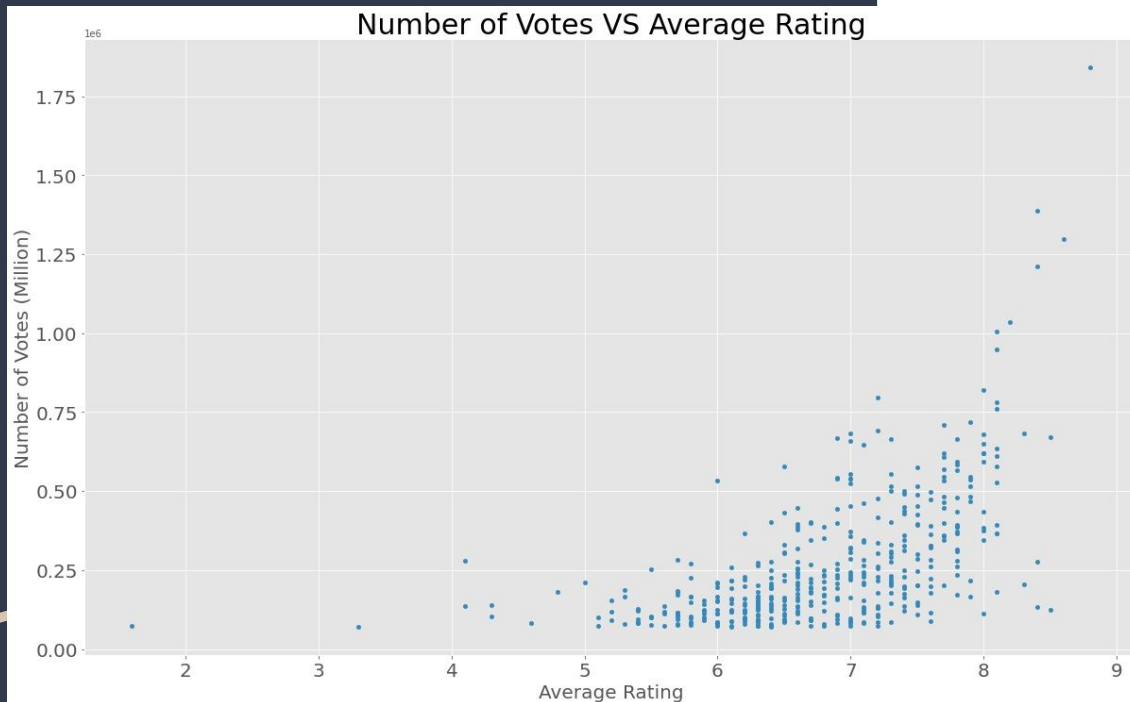
Merged all datasets together to provide best use of information

Further data cleaning:

- Removal of NaN values
- Creation and deletion of columns
- Restriction of data based on gross and ratings

Modelling of data to suit business problem

Results



Scatter plot comparing number of votes with average rating given.

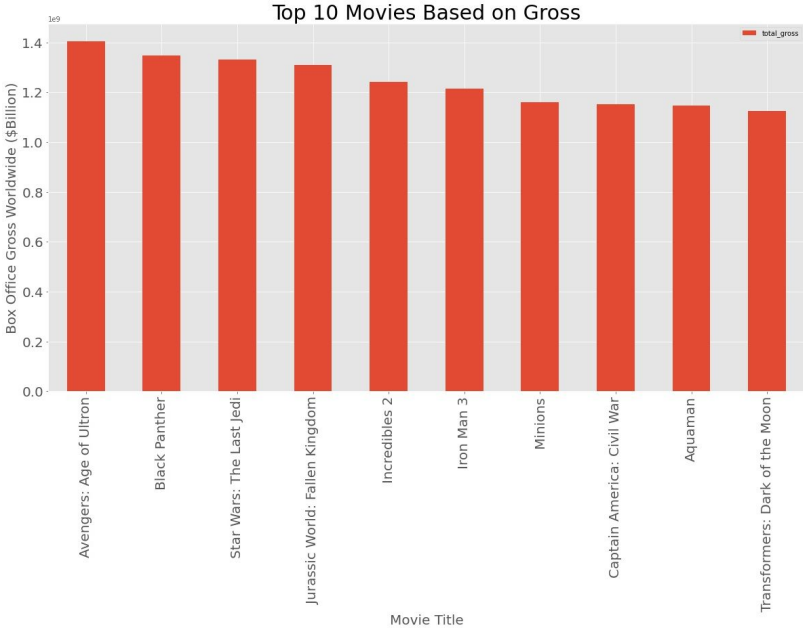
This provided a trend that the more votes a movie obtained the higher the rating typically was.

Results

An output to show the total gross of the top 10 movies.

90% of the top 10 grossing movies were Action and Adventure.

60% were from BV (Marvel) studio.



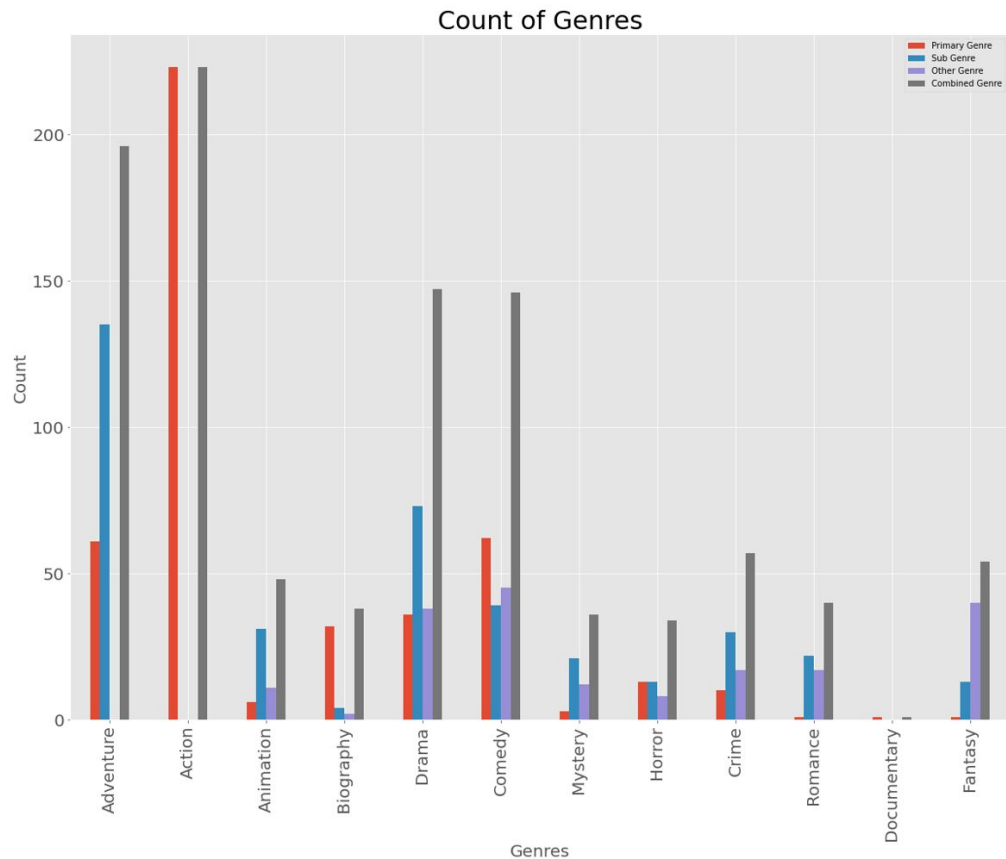
title	studio	year	total_gross	runtime_minutes	averagerating	numvotes	primary_genre	sub_genre	other_genre
Avengers: Age of Ultron	BV	2015	1405400000	141.0	7.3	665594	Action	Adventure	Sci-Fi
Black Panther	BV	2018	1347000000	134.0	7.3	516148	Action	Adventure	Sci-Fi
Star Wars: The Last Jedi	BV	2017	1332600000	152.0	7.1	462903	Action	Adventure	Fantasy
Jurassic World: Fallen Kingdom	Uni.	2018	1309500000	128.0	6.2	219125	Action	Adventure	Sci-Fi
Incredibles 2	BV	2018	1242800000	118.0	7.7	203510	Action	Adventure	Animation
Iron Man 3	BV	2013	1214800000	130.0	7.2	692794	Action	Adventure	Sci-Fi
Minions	Uni.	2015	1159400000	91.0	6.4	193917	Adventure	Animation	Comedy
Captain America: Civil War	BV	2016	1153300000	147.0	7.8	583507	Action	Adventure	Sci-Fi
Aquaman	WB	2018	1147800000	143.0	7.1	263328	Action	Adventure	Fantasy
Transformers: Dark of the Moon	P/DW	2011	1123800000	154.0	6.2	366409	Action	Adventure	Sci-Fi

Results

Action and Adventure had the highest count of movies.

This was after movies below the mean gross and ratings were removed, to negate any irrelevant data.

Microsoft should point their attention towards these genres for movie content.



Conclusions

- Prioritise the creation of Action and Adventure movies for the highest gross.
- Movies last greater than 100 minutes were seen in the top 10 gross and top 10 from ratings.

What's Next

- Data related to cost of creating movies would directly influence the current suggestions.
- Analysis didn't provide any clear cut definitive to provide certainty in success of movies.
- Additional data would be required.

Thank You!

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