

Movie Data Analysis for Microsoft

By Janet Khainza



Microsoft is planning to establish a new movie studio, and it is crucial to consider essential factors that can enhance profitability. Through an analysis of historical data, we have discovered valuable insights that can aid in ensuring that a film production delivers a strong performance while also providing an efficient return on investment.

To provide information to Microsoft so they can assess the criteria for a successful entry into the movie production business.



Business Problem

- ✓ Microsoft wants a piece of the multi-billion dollar movie-making industry, but that they are unsure of where to begin. The challenge for their new movie studio is that they are ready to jump into the industry but do not have the necessary knowledge to move forward.
- ✓ Microsoft also wants to make sure that their own movie studio will have a greater chance of success within the digital content market.

Data Sources

My analysis comprised of data

acquired from the following sources:

✓The Movie Database

✓The Numbers Movie Budgets

✓Box Office Mojo.





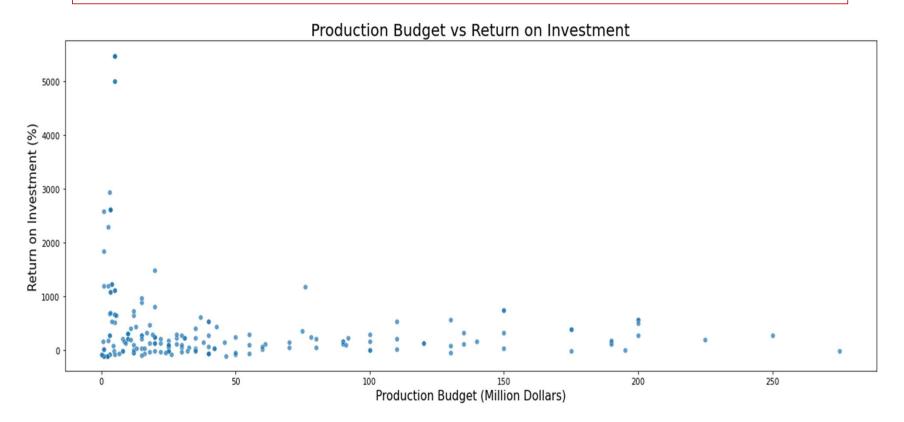
Data Methods

- ✓ Data cleaning Dealing with missing data
- ✓ Converting column types Ensuring that data in the columns are in the correct type to allow for data manipulation
- ✓ Feature engineering Creating new columns in the data to create more insights
- ✓ Data analysis Exploration of data to establish meaningful insights
- ✓ Data visualization visual representations using charts, graphs, etc to communicate complex data in a clear and understandable manner



- ✓ Higher production budgets does not necessarily mean higher returns.
- ✓ Microsoft may face challenges entering the film industry despite potentially acquiring IP rights from top studios due to lack of experience in film production.
- ✓ Consider popular genres for movie creation.

1. Production Budget Vs Return on Investment Graph

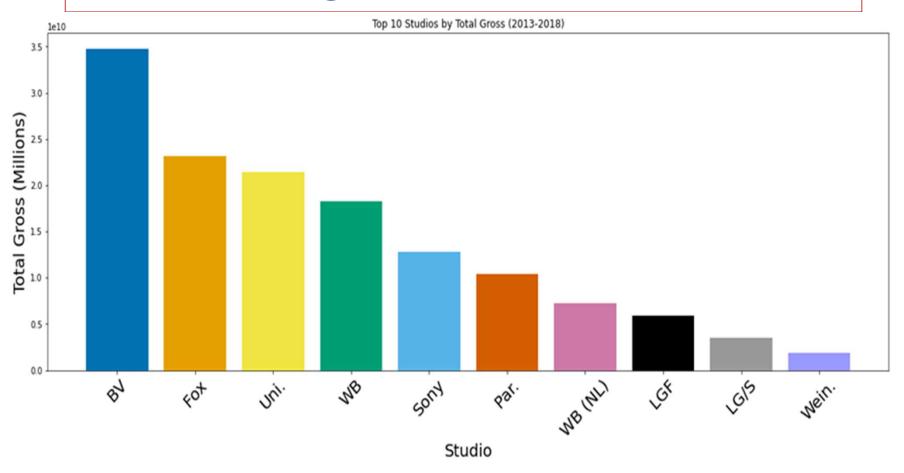




Correlation: ROI vs Production Budget

- ✓ The weak positive correlation between production
 budget and return on investment suggests that higher
 production budgets do not necessarily guarantee higher
 returns.
- ✓ This means that Microsoft may need to carefully
 manage its production costs and investments to ensure
 a profitable return on investment

2. Best Performing Studios in terms of Gross Income



The top 5 performing studios in terms of gross

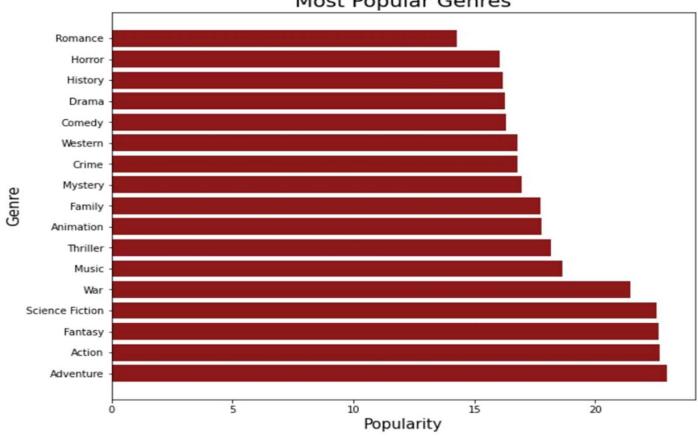
income are:

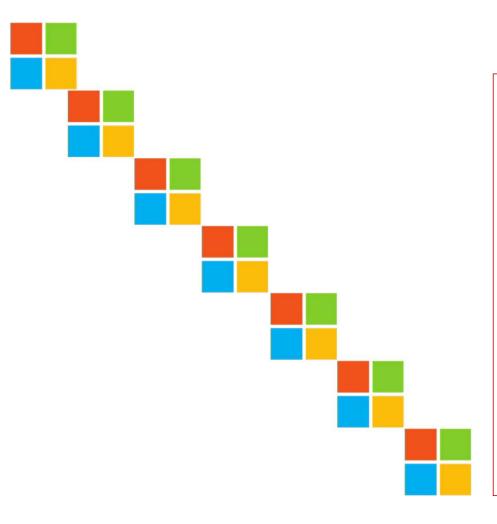
- 1.Walt Disney Studios BV
- 2. Warner Bros. Pictures
- 3. 20th Century Fox
- 4. Universal Pictures
- 5. Warner Bros. Pictures



3. Popular genres







Genre Popularity

My analysis shows that the following genres are quite popular with movie lovers:

- 1. Adventure
- 2. Action
- 3. Fantasy
- 4. Science Fiction
- 5. War

Conclusion and Recommendations

For Microsoft to get it right in the Movie Industry:

- 1. Enter the film industry by obtaining intellectual property rights from top movie studios
- 2. Microsoft will need to carefully manage its production costs and investments
- 3. Focus on high-budget productions
- 4. Consider producing films in popular and profitable genres such as Horror, Music, Action, and Adventure.

