

Microsoft Goes To Hollywood



INTRODUCTION



Microsoft Goes To Hollywood

Global box office earnings was \$42.5 billion in 2019.

The creation of Microsoft Studios will create an entirely new revenue stream for the company as well as provide many opportunities to synergize with existing products.

How can we minimize risk and maximize return by using a data-driven production system?

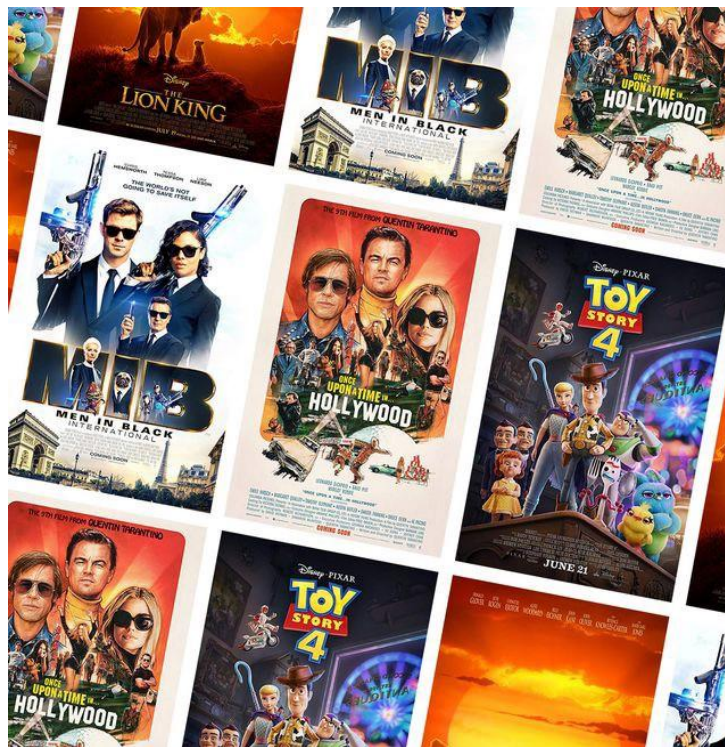


INTRODUCTION



Over the course of this presentation, we will answer the following questions:

- Is there a correlation between a film's budget and its performance at the box office?
- Do films in certain genres perform better at the box office? If so, which genres?
- Is there a relationship between a film's MPAA rating and its ROI?
- Does a film's runtime affect its worldwide gross?



THE DATA

The IMDb logo is displayed on a yellow rectangular background. The letters "IMDb" are in a bold, black, sans-serif font. The "i" is lowercase and smaller than the other letters.

A majority of the data compiled for this presentation comes from IMDB. IMDB is the “International Movie Database” and is widely considered the ultimate source of film information.

The Numbers was also used as a reference to confirm certain aspects of the data. The Numbers is the largest freely available database of movie industry information on the web.

The logo for "THE NUMBERS" features the words in a bold, purple, blocky font. The letters have a slight 3D effect with a darker purple shadow. The background is a dark purple rectangle filled with a pattern of small, light purple numbers.

A thick yellow diagonal stripe runs from the top right towards the bottom left, separating the white background on the left from the solid yellow background on the right.

1.

Budget vs. Revenue

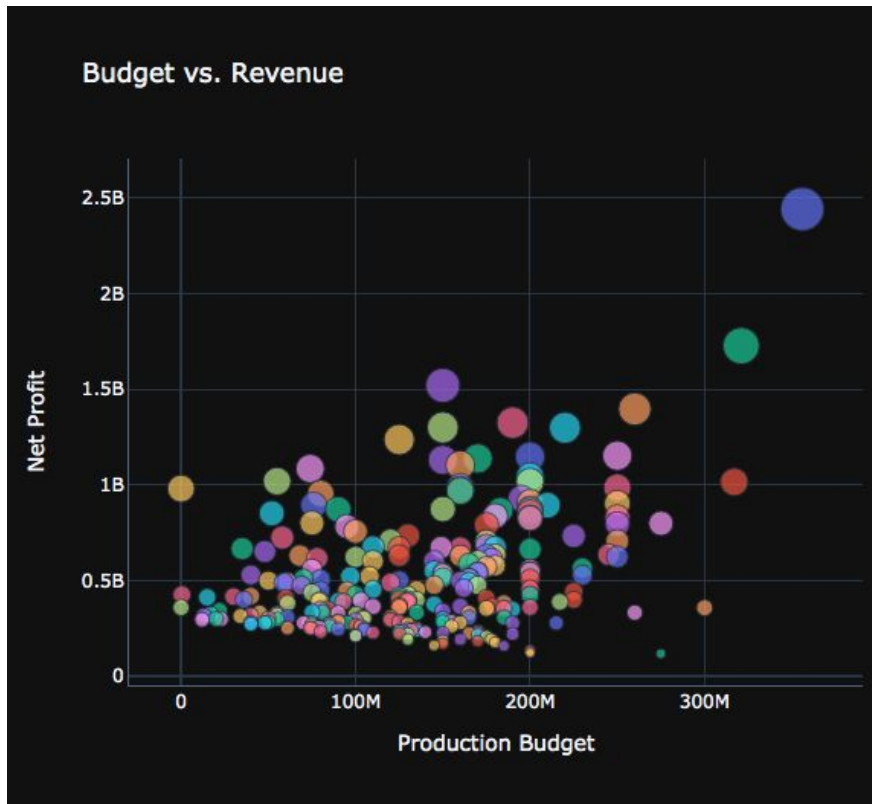
Is there a correlation
between a film's budget
and its performance at
the box office?

BUDGET VS REVENUE

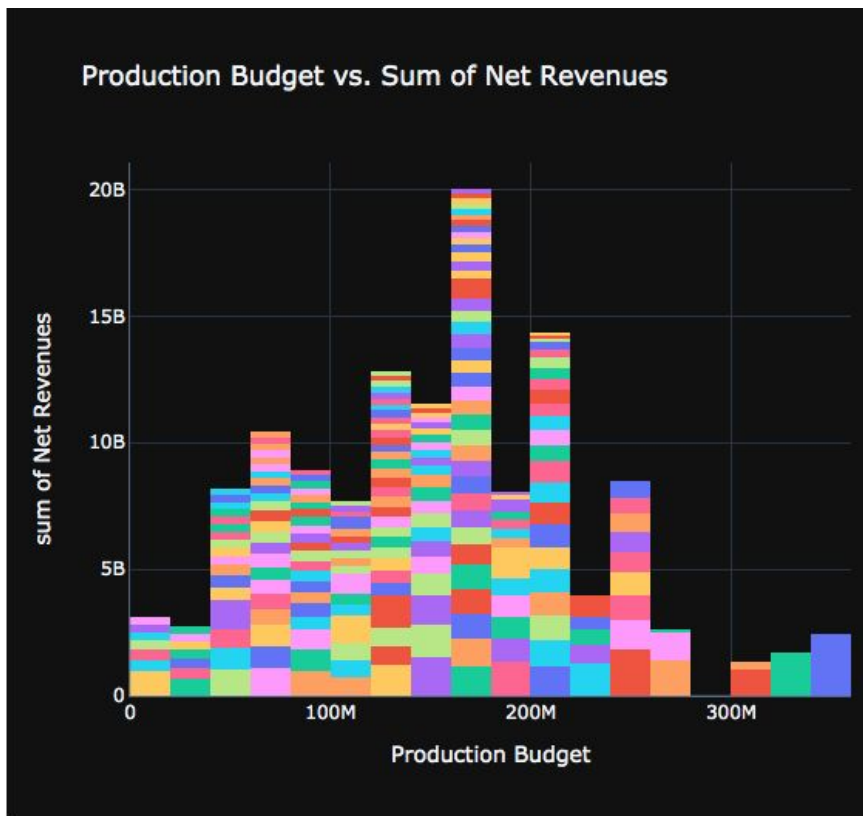


Is there a “sweet spot” between production budget and net profits?

Outside of a handful of “home runs”, the most consistent rate of return falls between 100 and 200 million dollars.



BUDGET VS REVENUE



The initial 100-200 million dollar range is a bit too vague. Let's narrow it down a little further.

As we can see in this image, the optimal budget range that has earned the most money in the last 10 years is between 160 and 170 million dollars.

This should be our goal budget.

2.

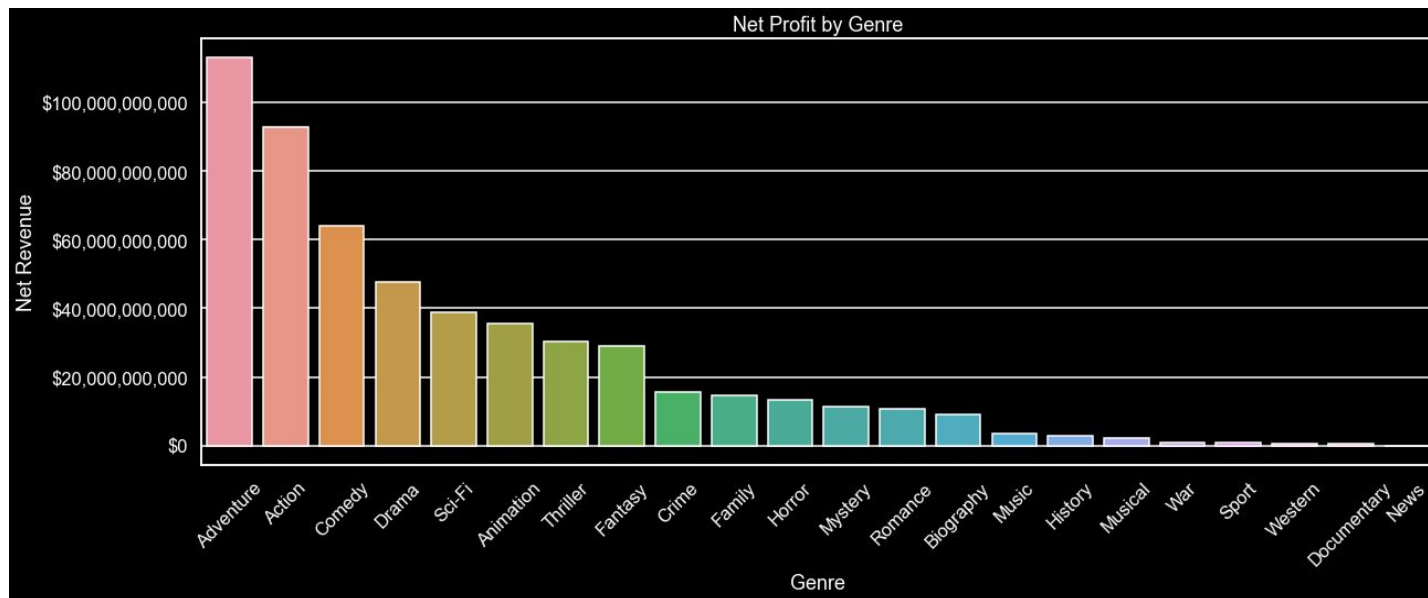
Genres

Do films in certain genres perform better at the box office?

GENRE



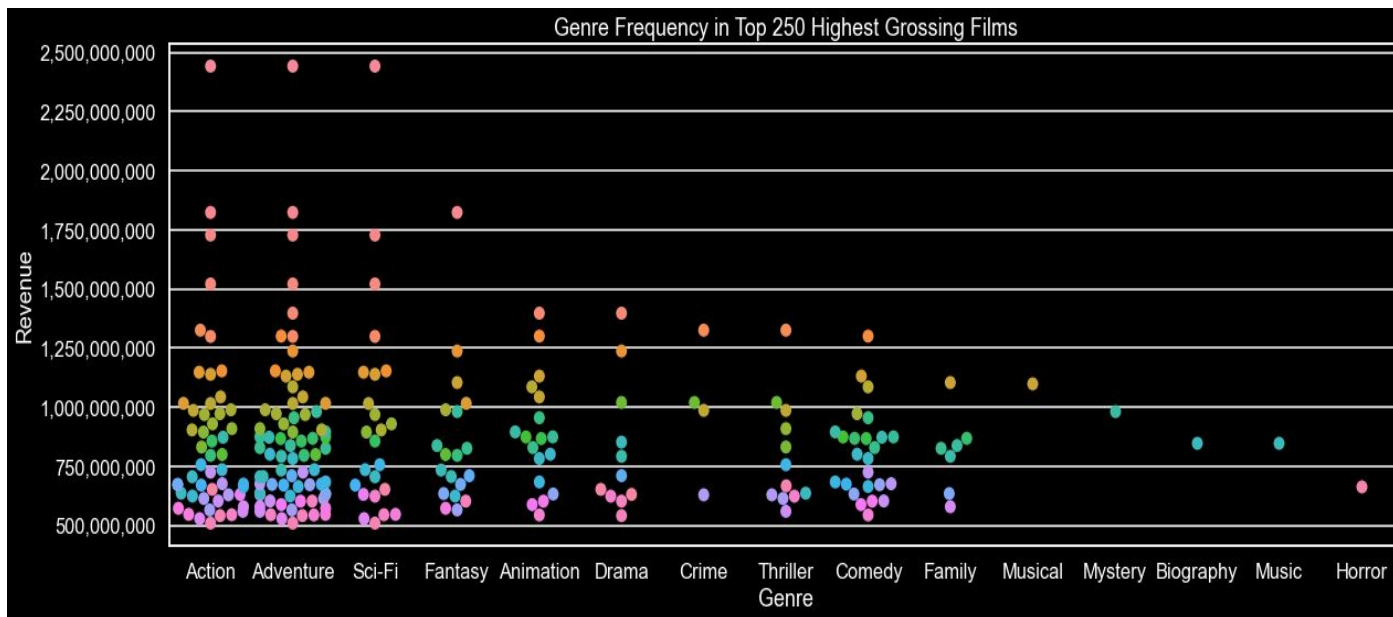
The figure below represents the total net revenue for each major genre over the last 10 years. Action and Adventure genres make up a large portion of the total profits of the film industry.



GENRE



To make sure that a small number of blockbusters aren't skewing that data, we produced a swarm plot showing the frequency of each genre in the top 250 films. Again, action and adventure make up a large majority.

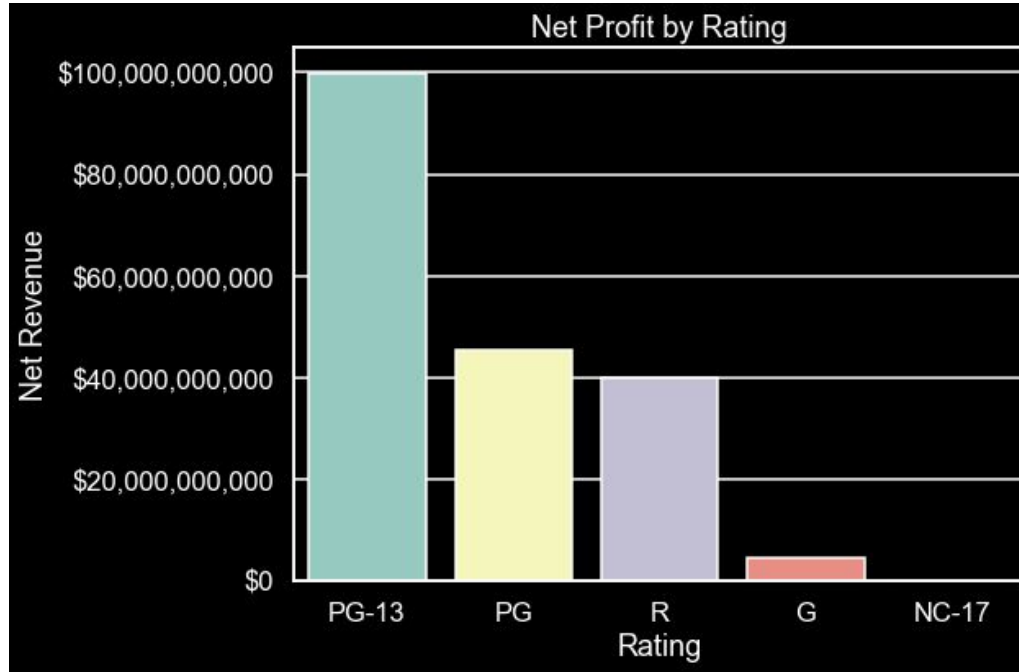


3.

The Rating

Is there a relationship
between a film's MPAA
rating and its
performance?

RATING

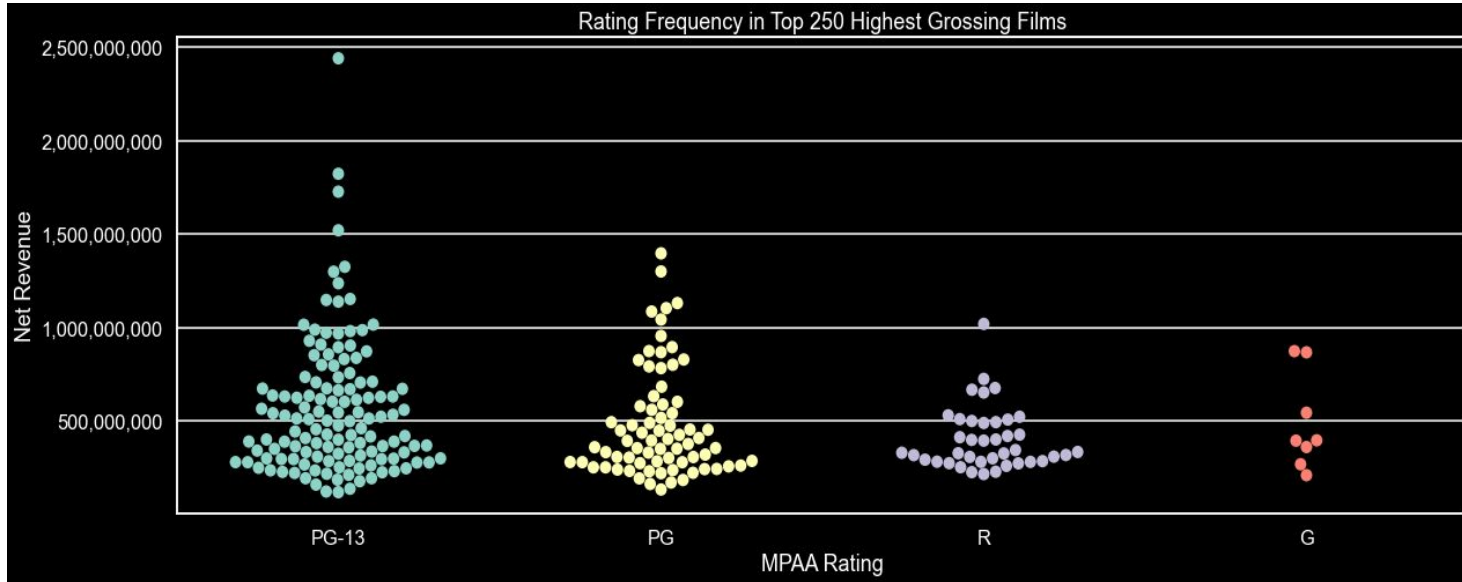


The figure above represents the total net revenue of movies with particular MPAA ratings over the last 10 years. Films that are rated PG-13 make up a large portion of the total profits of the entire film industry.

RATING



The figure below shows the frequency of each MPAA rating within the top 250 highest grossing films over the last 10 years. PG-13 rated movies, do, indeed, have the highest frequency.



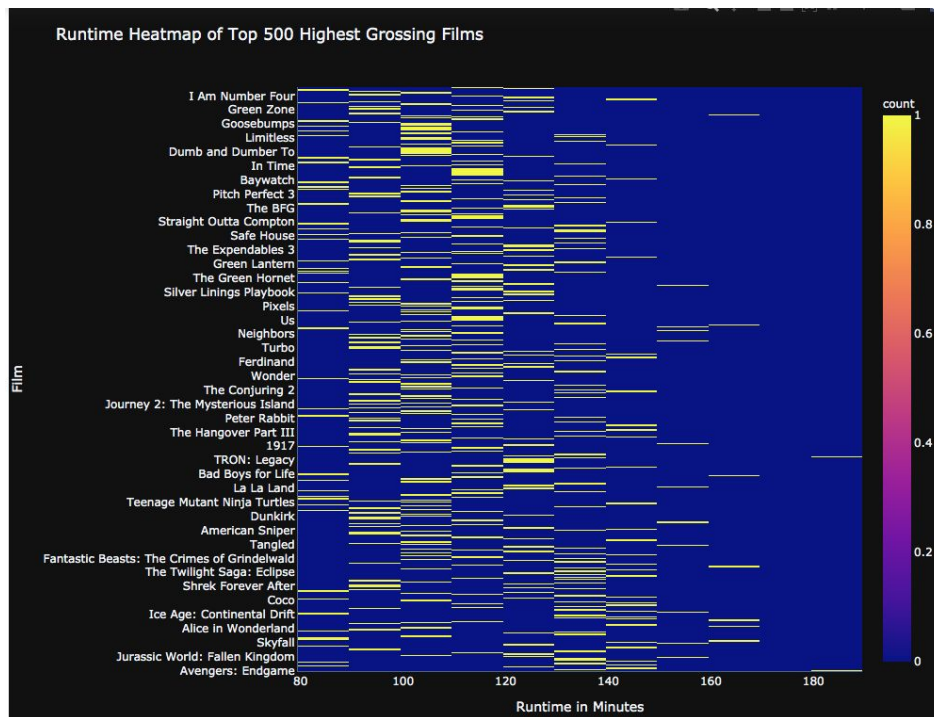
A thick yellow diagonal stripe runs from the top right corner towards the bottom left, separating the white background on the left from the solid yellow background on the right.

4.

The Length

Does the length of a
film affect its
worldwide gross?

RUNTIME

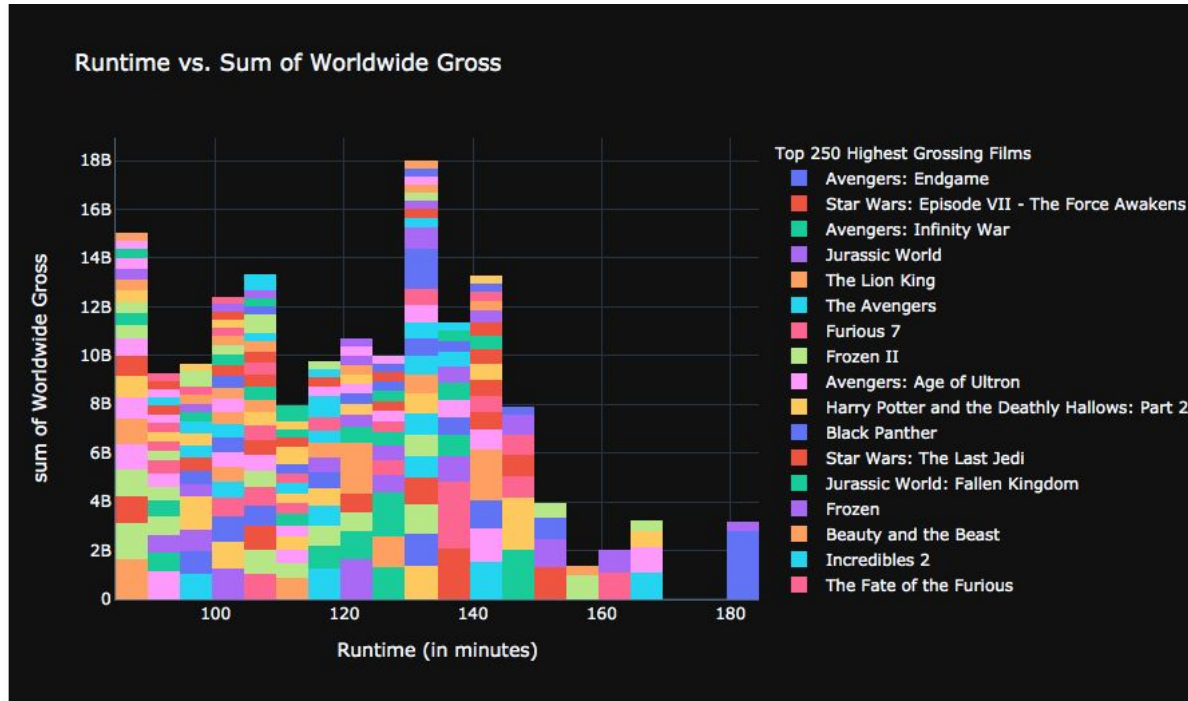


This figure represents the relationship between the length of the top 500 highest grossing movies and each respective worldwide gross. This shows that there's several ranges of runtime that are very profitable. Let's explore this further.

RUNTIME



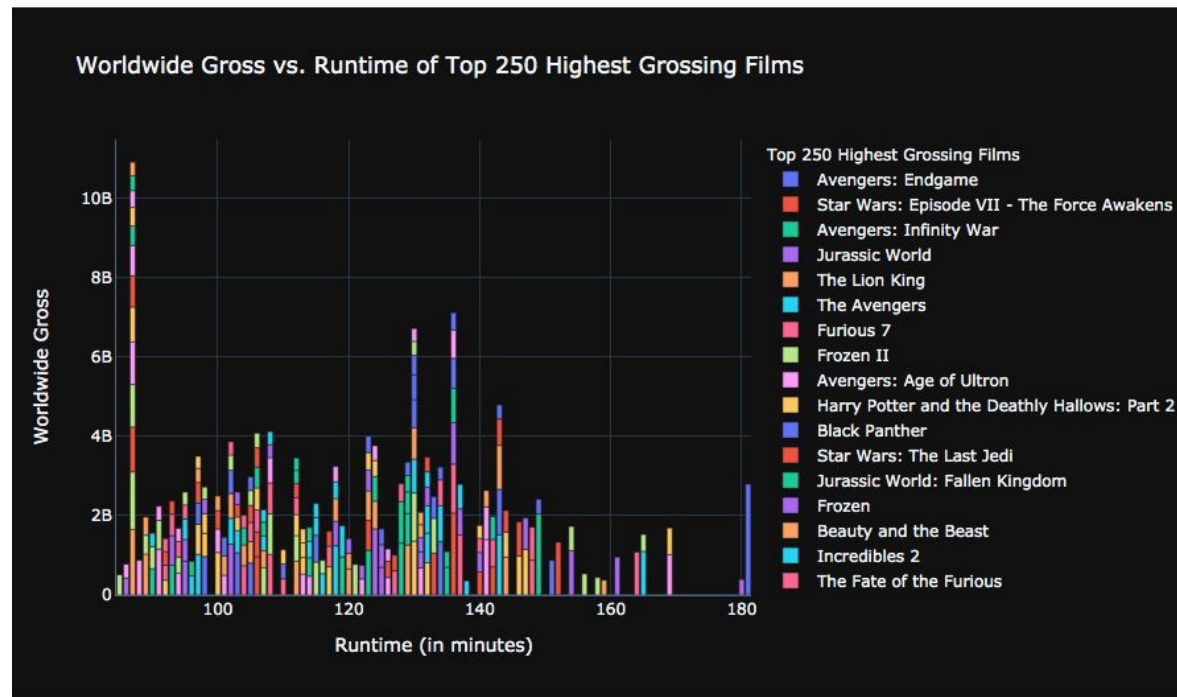
In this format, the data shows that there are two areas that seem to have the most high grossing films: roughly 90 minutes and 130-135 minutes.



RUNTIME



Breaking this down further, we now see that there's a single unique runtime that has the highest frequency within the top 250 highest grossing films: roughly 90 minutes.



CONCLUSION

What have we learned?

- The most consistent rate of return occurs when the production budget falls between 160 and 170 million dollars.
- The most profitable film genres are Action & Adventure.
- Films with the highest rate of return tend to be rated PG-13.
- Films should aim to be roughly 90 minutes in length.



We would recommend that Microsoft produce an Action/Adventure film with a budget of \$160 million. This film should be rated PG-13 and be 90 minutes in length.

FUTURE WORK

With more time, we can extract even more useful information, including:

Franchises

Are established franchises more of a “sure thing”?

Is it worth investing in an established IP?

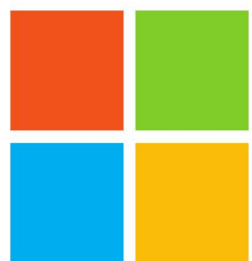
Awards

Do major award nominations affect overall earnings? Does acclaim equal dollars?

Streaming

Is it worth exploring creating and producing content for streaming platforms?

THANK YOU



Microsoft
Studios

Any questions?

You can reach me at @U0169BN6D9B
& jeff.spags@gmail.com