Microsoft Media

An analysis project by Austin Murray and Mel Friedman

Business Problem and how we plan to solve it

Microsoft is starting their own movie studio and needs recommendations on what is currently doing well in the movie market.

We are going to look at datasets and API's from the biggest movie websites to gather current data, details and technical specs.

Where did we get our data?

Data sets from:

- IMDB
- TMDB

API's:

- IMDb API by apidojo found on Rapid API
- GeoCoding API by Google Cloud API

The data we used was filtered by movies that only had a USA release. Foreign movies were included as long as they were still released in America.
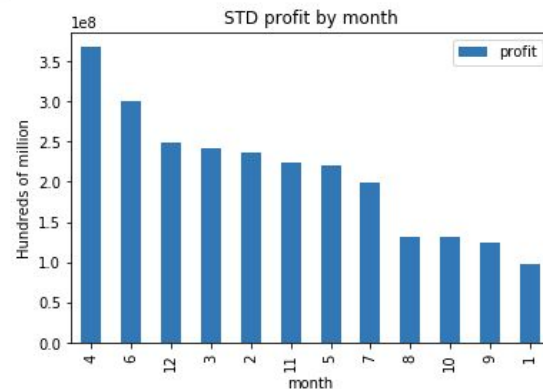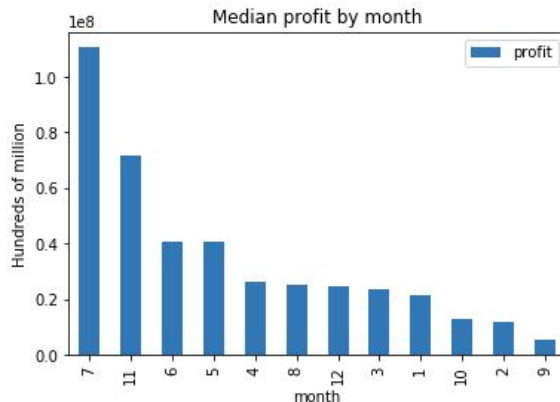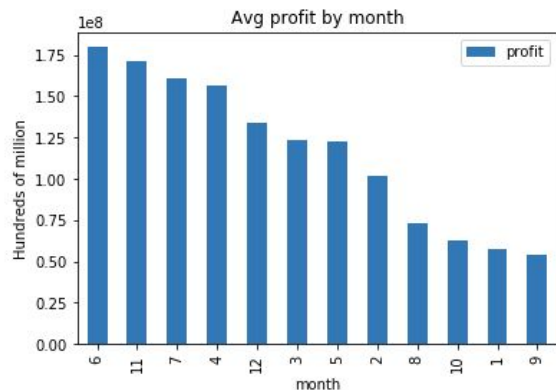
Data sets were filtered to only the last 5 years to get a current representation of what customers want.

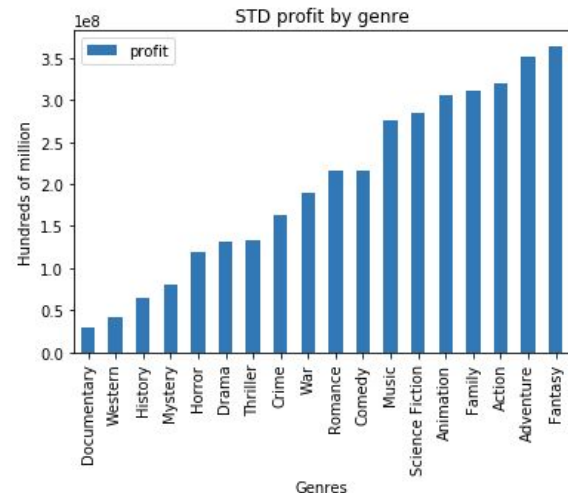# Best runtime for ratings
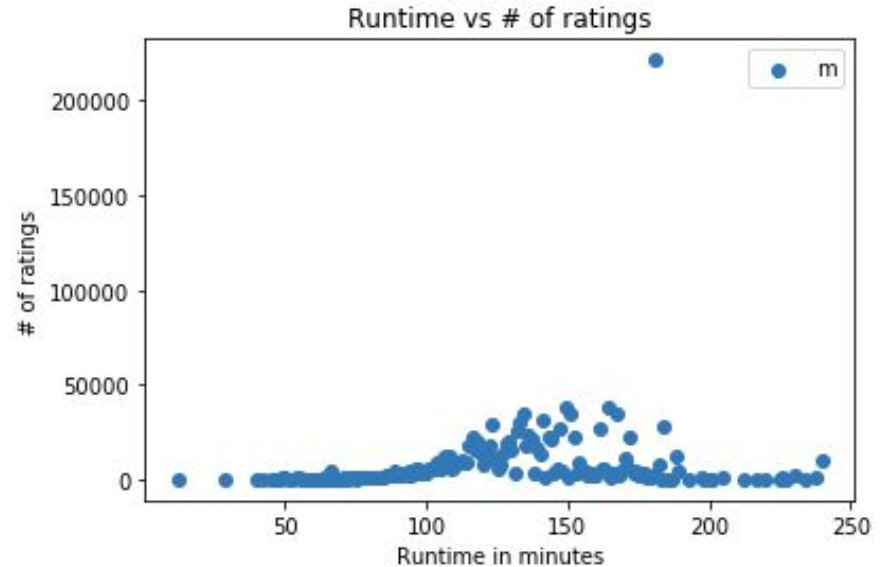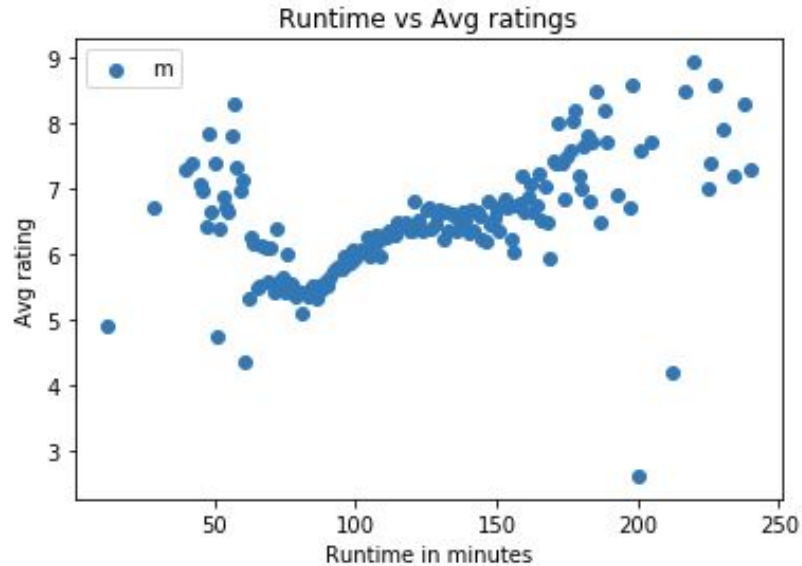
150 to 175 minutes gives you the best ratings with also the most votes.

Best month to release a movie

July is in the top for AVG and median while in the bottom half for STD meaning this is the most reliable high profit month to release a movie

Best profit generating genres
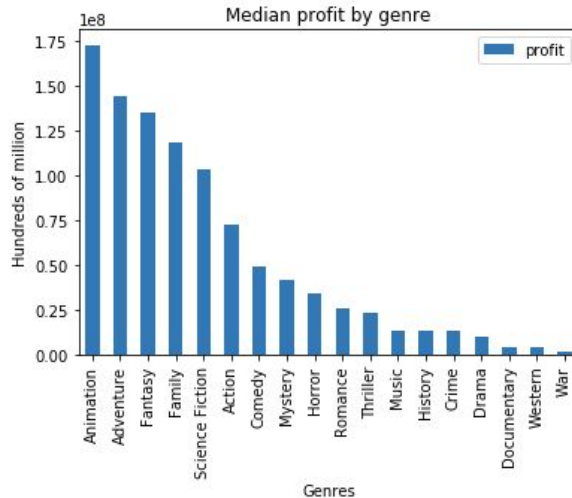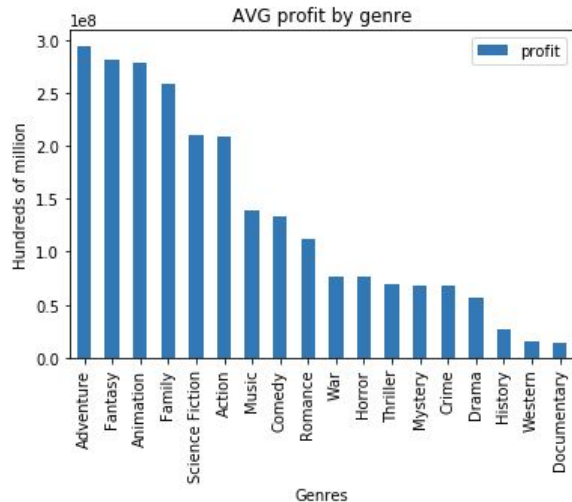
The most profitable genres also have the highest STD.

This means that there is giant variety in the profit value for the top earners and doesn't say there is a for sure one to go with.

Comparing highest worldwide gross vs best profit returns:

Top 10 Grossing Movies vs Their Return Ratio

Legend:
- Gross Amounts
- Return Ratio

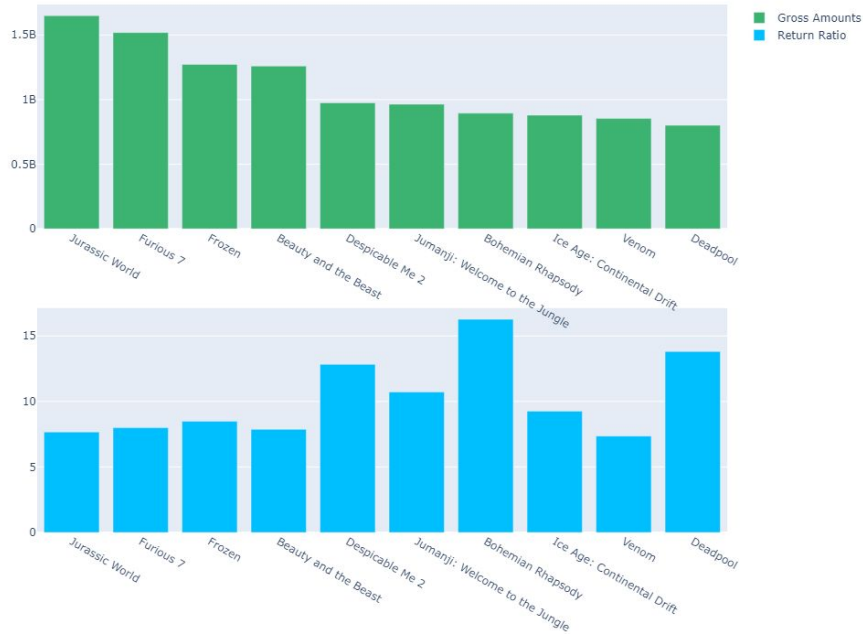Chart categories: Jurassic World, Furious 7, Frozen, Beauty and the Beast, Despicable Me 2, Jumanji: Welcome to the Jungle, Bohemian Rhapsody, Ice Age: Continental Drift, Venom, Deadpool

Top 10 Movies with Highest Profit Return Value and Their corresponding Gross

Legend:
- Return Ratio
- Gross Amounts

Chart categories: Insidious, Benji, Split, Get Out, Moonlight, Dangal, Lights Out, Sinister, A Ghost Story, You're Next
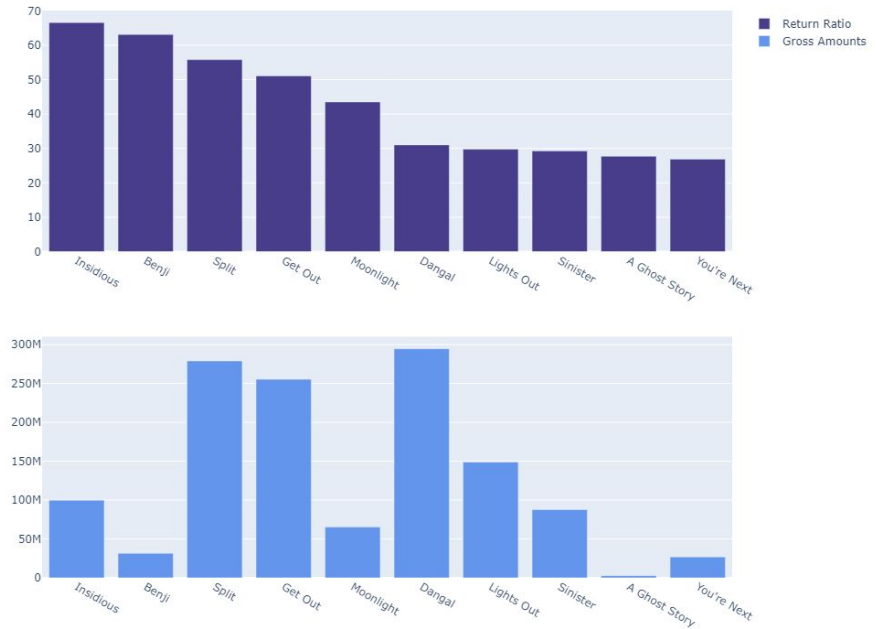
Where were the most profitable movies filmed?

Los Angeles, California

New York City, New York

Philadelphia, Pennsylvania

Miami, Florida

Amsterdam, Netherlands

Summary of our findings

Best month for releasing a movie: July

Best location to film: United States, mostly in Southern California or the large cities in New England

Genre: Adventure/animation are top producers for profit but not a guarantee

Runtime: 150 to 175 minutes

A question for Microsoft....

Would you rather have movies that return a high gross, but cost more to make? Or would you rather make a minimal investment to have a high return ratio, but a lower total worldwide gross?

What's next?

We plan to do further analysis on:
- Location data
  - Was a certain genre more commonly filmed in a certain area?
  - What are the changes in production budget for each location?

New analysis we'd like to look into:
- Categorizing movies based on where they were released; theatre, Amazon, or Netflix?
- Whether certain directors, writers or actors correlate to higher profit
- Percentage of budget spent on cast, production, location compared to profit.

Thank you!

Interested in following our work? You can find us here:

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