The Mystery of Microsoft Film Division

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Summary

Using data from past movies to make a plan for the start the new movie and streaming division of Microsoft. We found that the best genres for starting movies would be Mystery/Horror due to a high Return on Investment, the best release month is May because of lower number of releases and higher returns and several suggestions for the best Directors to recruit.

Why Start a Film Division?

Benefits:

- $100 billion industry in 2021 (Variety, 2022)
- Product placement (free advertising)
- Support and work with video game division

Business Problem

Goal: Start a new film and streaming division for Microsoft.

- What would be a good film genre to start with?
- When would be the optimal release date?
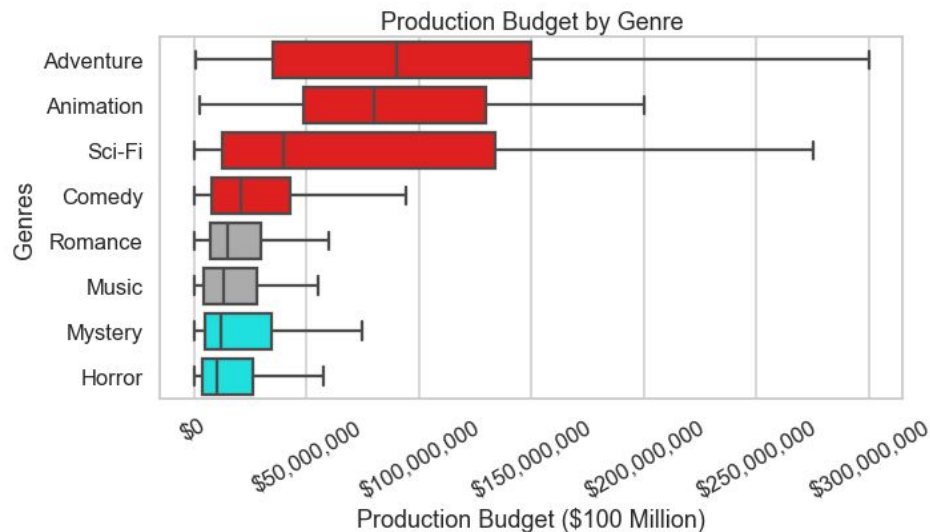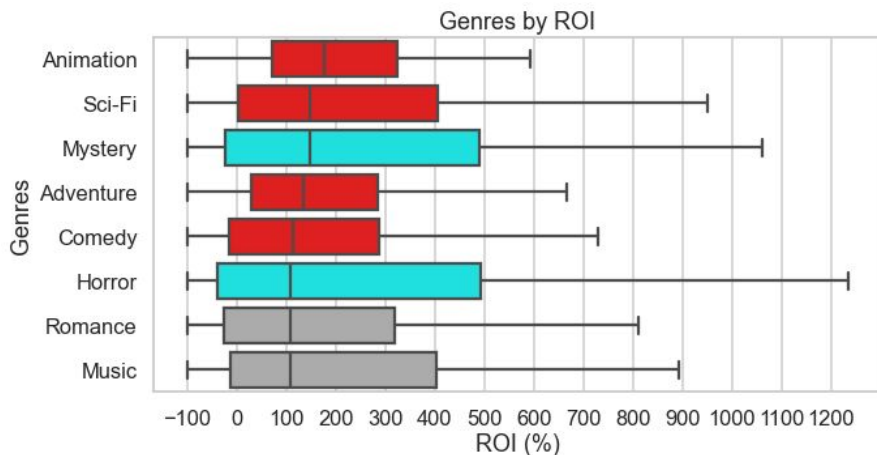- Who should direct the movie?

Data

- IMDB - https://www.imdb.com/
- Rotten Tomatoes - https://www.rottentomatoes.com/
- The Movie DB - https://www.themoviedb.org/
- The Numbers - https://www.the-numbers.com/

Methods

- Used Python and Pandas in a Jupyter Notebook.
- Combine DataFrames using SQL.
- Clean Data.
- Calculate Profit and ROI.
- Graph data using matplotlib and Seaborn
- Analysed the data to find what would be the best course of action.

Best Genres to Start

Genres by ROI

Genres: Animation, Sci-Fi, Mystery, Adventure, Comedy, Horror, Romance, Music

ROI (%): −100 0 100 200 300 400 500 600 700 800 900 1000 1100 1200

Production Budget by Genre

Genres: Adventure, Animation, Sci-Fi, Comedy, Romance, Music, Mystery, Horror

Production Budget ($100 Million): $0, $50,000,000, $100,000,000, $150,000,000, $200,000,000, $250,000,000, $300,000,000
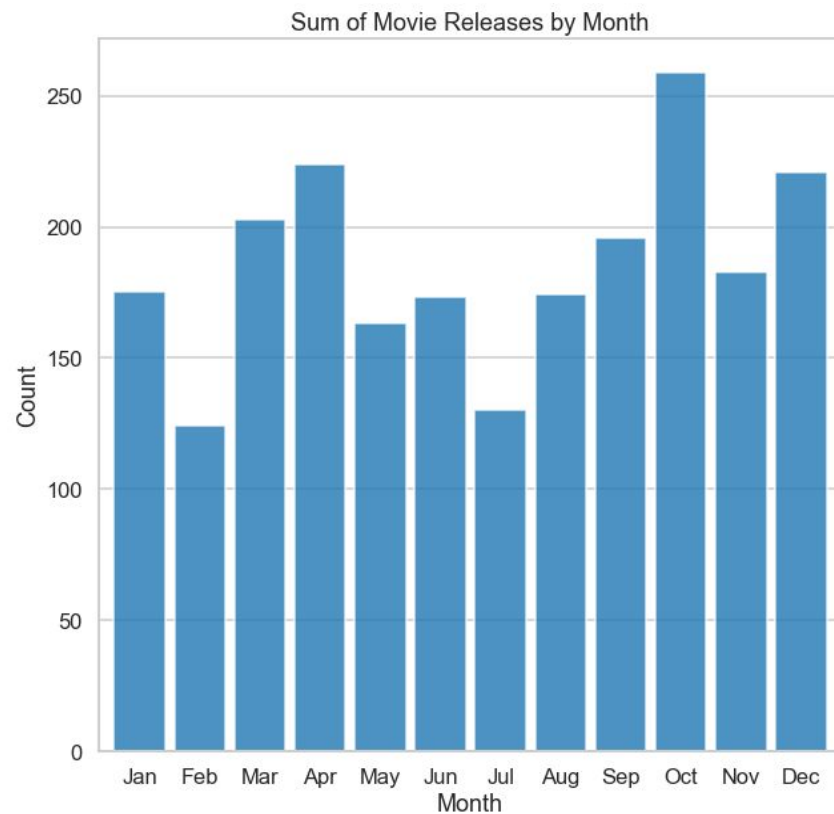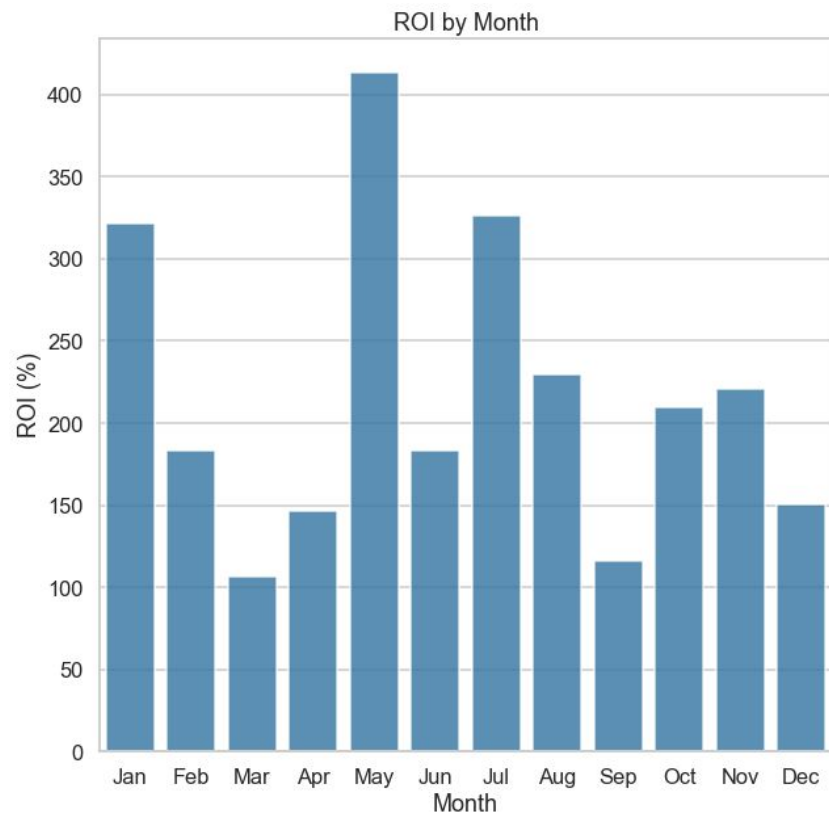
- Mystery and Horror both have high ROI and lower costs.
- Lower cost productions allows lower initial risk and a great way to get started in the industry.

The box plots are sorted by their median values in descending order. The box represents the middle 50% (25-75%). The whiskers represent the bottom and top 25% of values.
Genres were reduced to the top eight by ROI to simplify graphs.

Ideal Launch Month
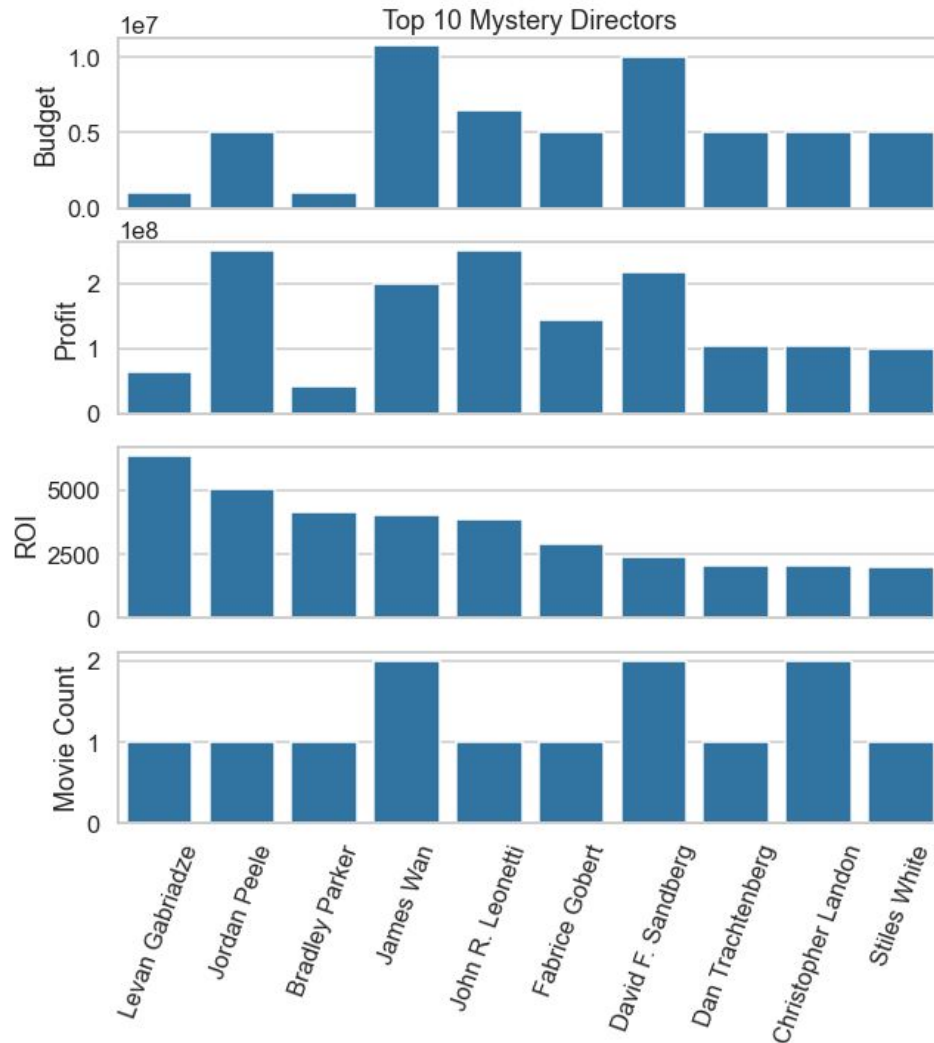

ROI by Month

Sum of Movie Releases by Month

Ideal Launch Month

- May has the highest ROI and a low number of releases.
- The lower competition makes May an ideal launch date.
- Just in time for summer!

Mystery Director

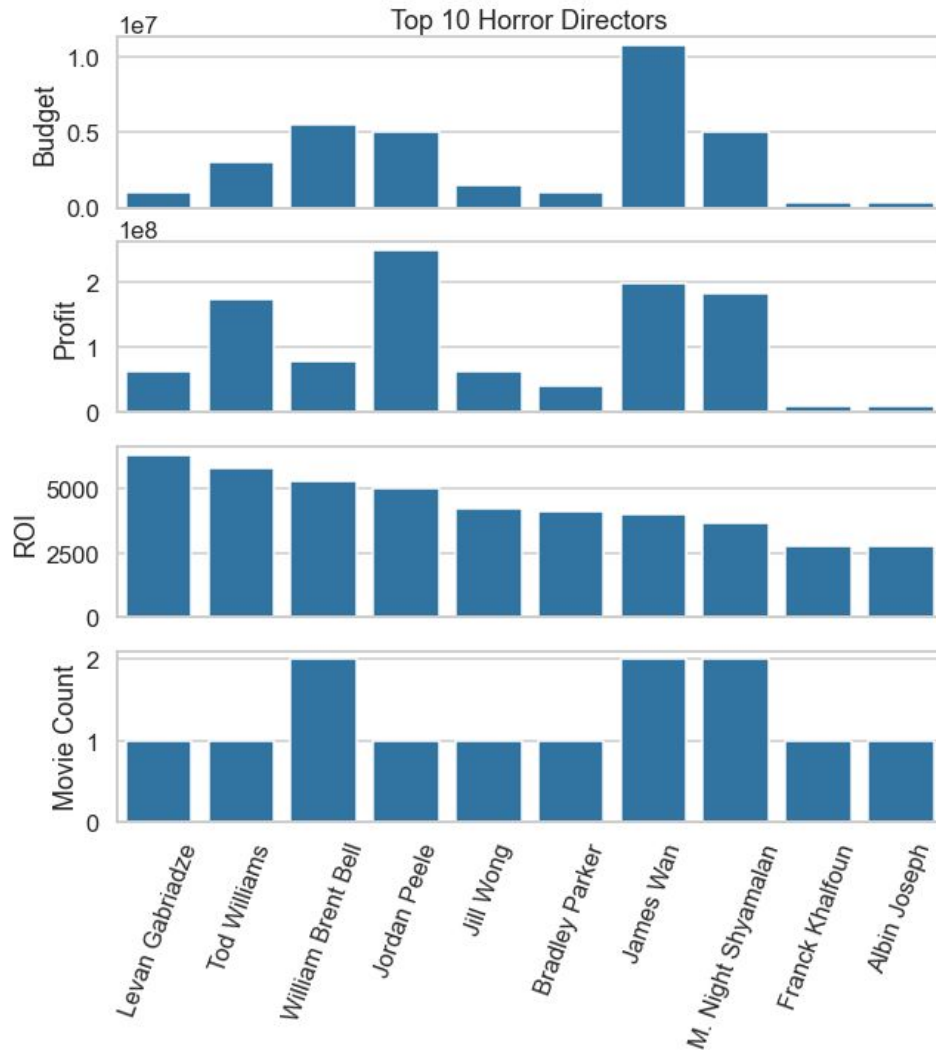James Wan & David F. Sandberg both have multiple films in the mystery genre.

- Strong ROI
- High profit
- Low budgets

Horror Director

M. Night Shyamalan has multiple films in Horror

- Strong ROI
- High profit
- Low budgets

Top 10 Horror Directors

Conclusions

Mystery and Horror are both great genres to start a new movie division.

- High ROI and low cost of production.
- Genres have a large amount of overlap.

Month of May is a great month for release.

- High ROI and month with lower number of releases.

James Wan, David F. Sandberg and M. Night Shyamalan are great options for directors for the first films.

Citations

Vanity 2022 - Rebecca Rubin

https://variety.com/2022/film/news/entertainment-industry-revenues-streaming-box-office-recovery-1235203582/

Thank You!

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