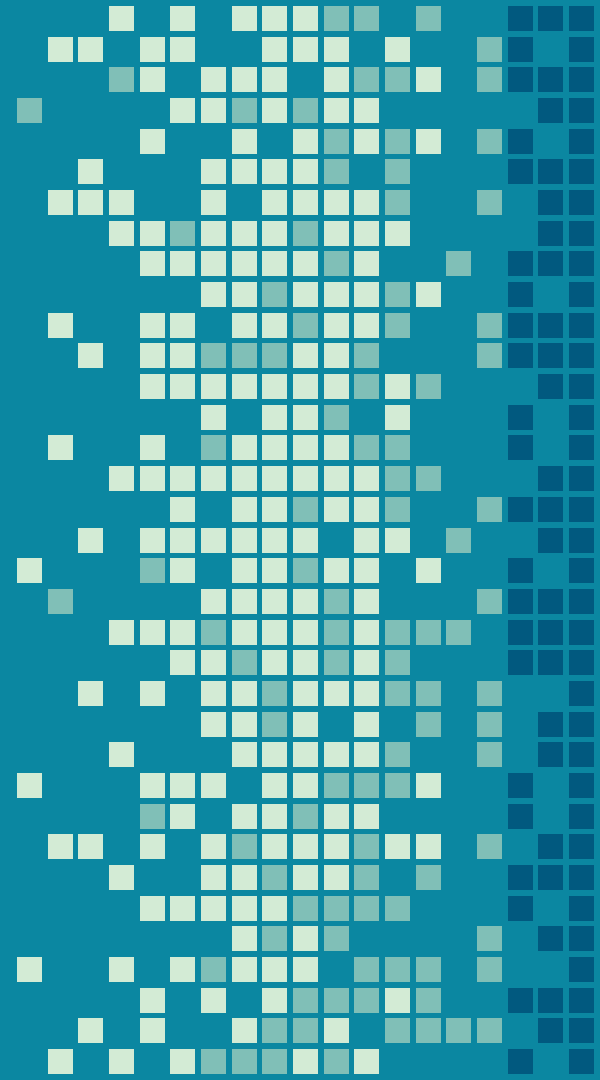# A GENRE STUDY

Tackling the Contemporary Movie Industry

Summary

- → Studying the movies by genre to see if there are specific genres that tend to be more profitable.
- → Analyzing a few parameters to see what could help maximize the gross income.

OUTLINE

Business Problem

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Business Problem

Studying the movie industry, to provide Microsoft with business recommendations based on real data.

Focusing on the movies that proved to be successful and profitable, trying to identify trends and factors that incremented the income and return on investment.

Key questions that need to be answered to have an effective business plan are:

- What movie genres have the highest income and return on investment?
- What are the parameters to be taken into consideration, to increase the chance to make a movie more profitable?
- How much can Microsoft expect to produce as an income on average, and how much would it need to invest in the production budget per movie on average?

DATA

We will be using data from the following datasets:

- IMDB – SQL database
- Rotten Tomatoes – reviews
- The Movie Database – basics and reviews
- The Numbers – budget and gross
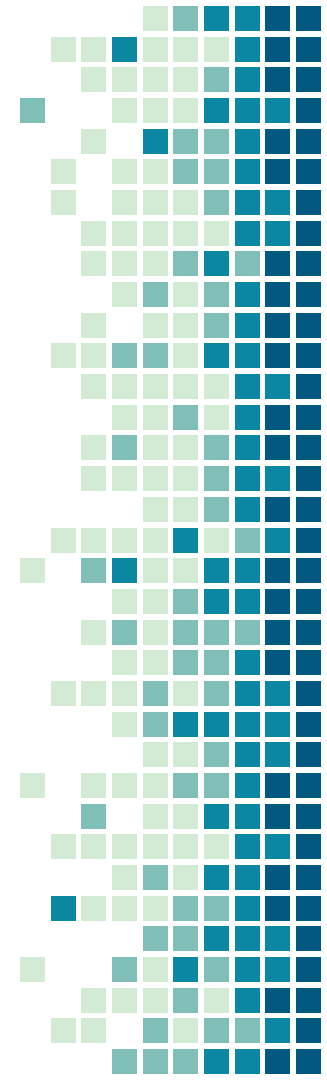
METHODS

Data preparation included:

- Changing the format of some data
- Handling null values
- Removing outliers when appropriate
- Generating new variables for the study (net income, ROI)
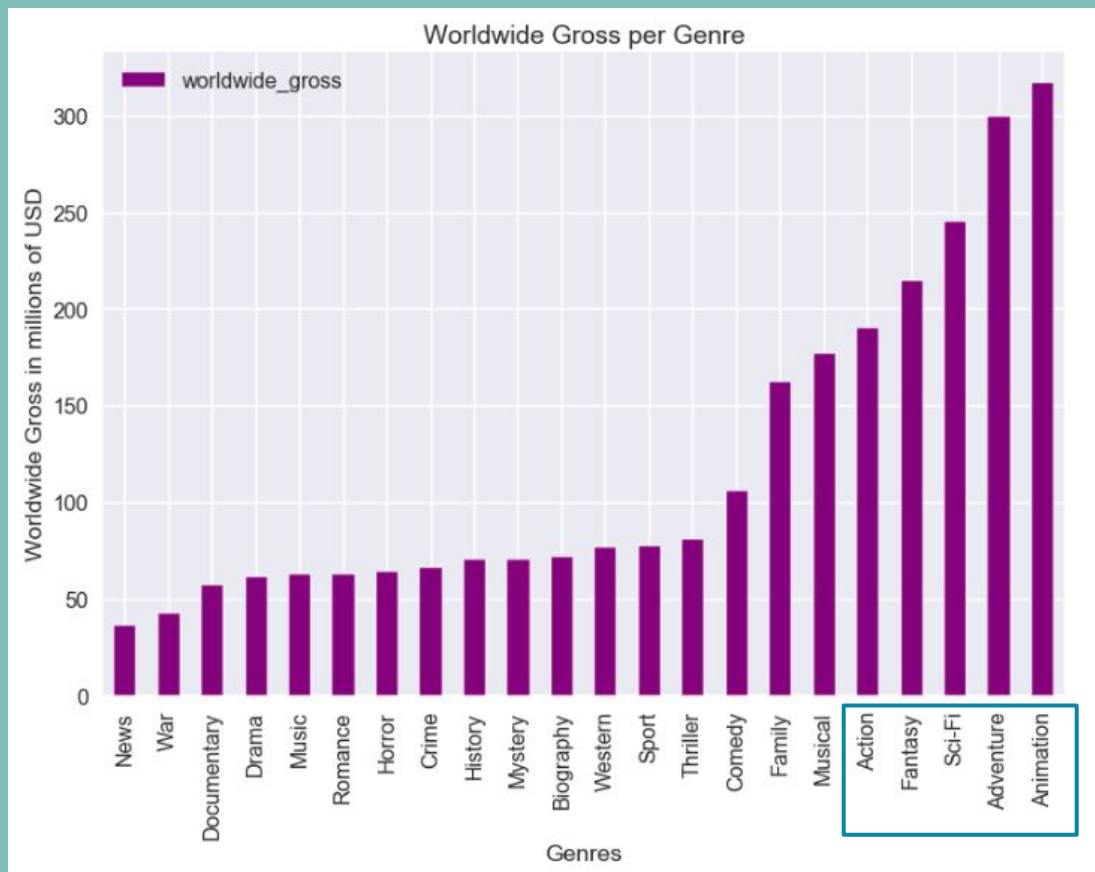
Data Modeling:

- Using methods to group and separate the data
- Studying trends in the data thus organized
- Calculating statistical values like mean, correlation and IQR
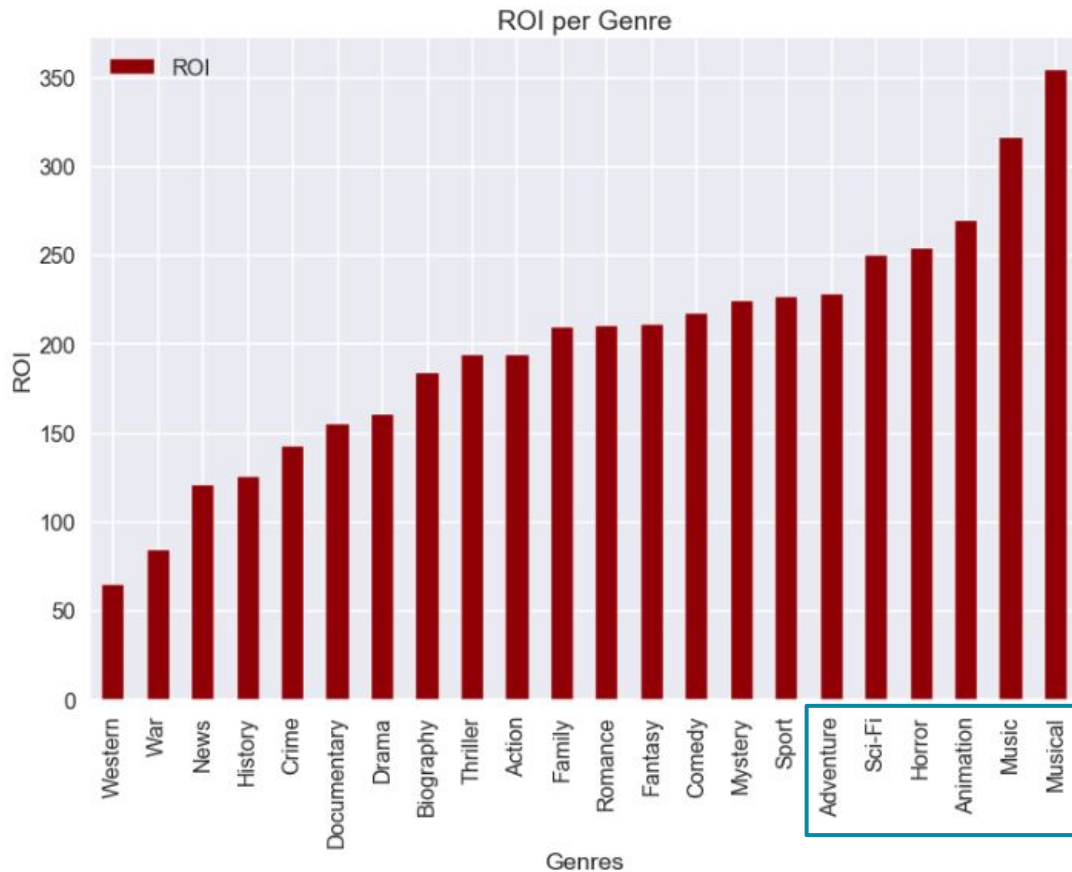
Results
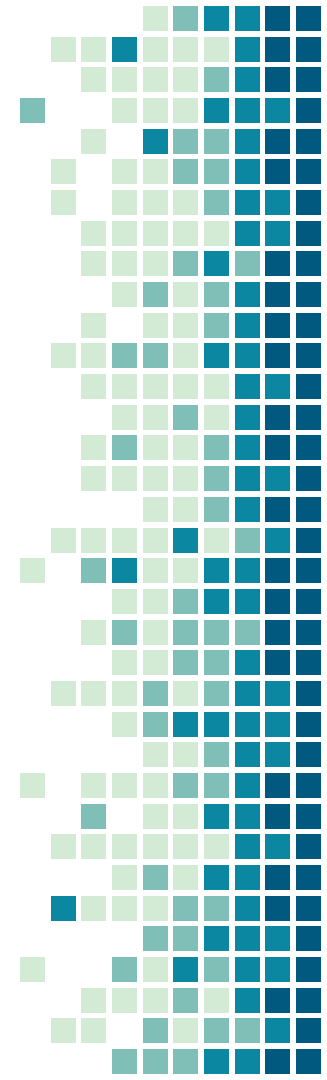
Gross per Genre

Genres with highest worldwide gross income

Worldwide Gross per Genre

ROI

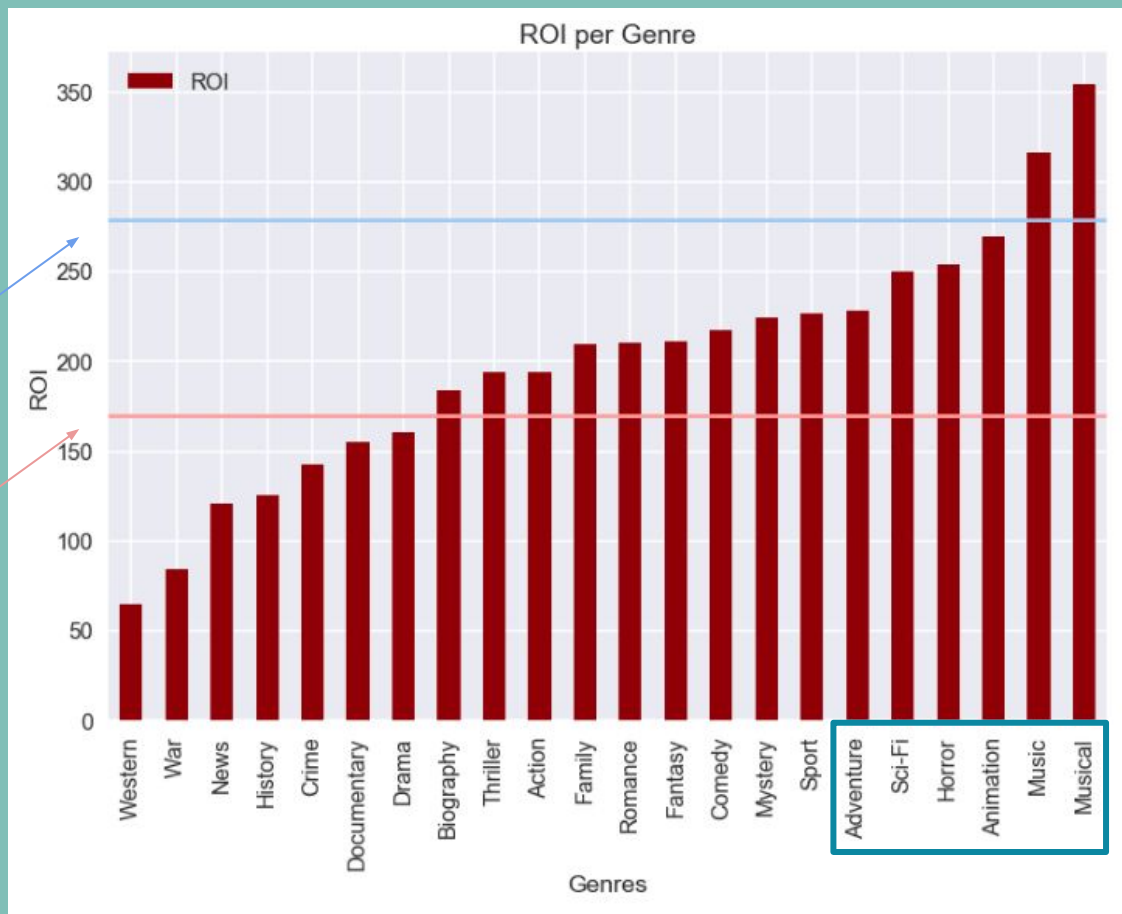Return on investment accounts for the budget

ROI per Genre

ROI

Top 5 genres 279% ROI

Other genres 170% ROI

Note: I considered "Musical" and "Music" as one genre because of their similarity

ROI per Genre

Top 5 profitable genres

Musical, Animation, Horror, Sci-Fi and Adventure

The question that we need to investigate:

What makes a movie more profitable?

Number of people known

Worldwide Gross vs Number of famous people in a movie

Correlation between number of famous people and gross income:
0.53

The other side of the coin...

Correlation between number of famous people and production budget: 0.59

Production budget vs Number of famous people in a movie

When to release

The months of June and November are related to highest gross income

Worldwide gross per month of release

The budget

Gross and Budget over months of Release
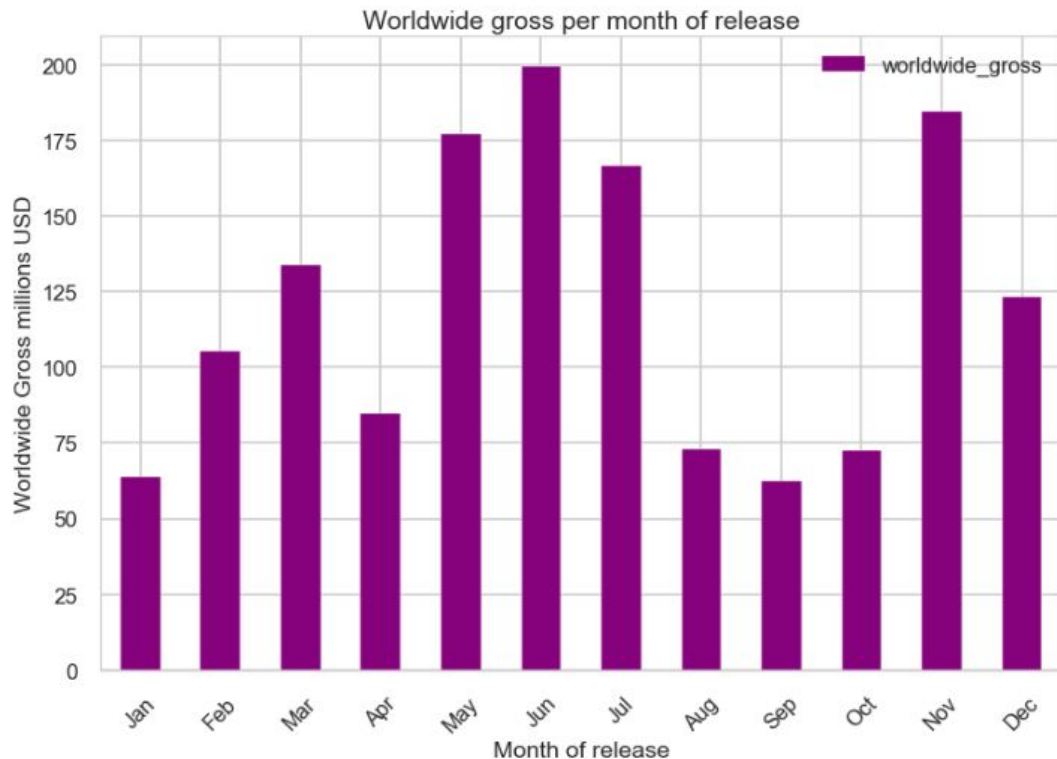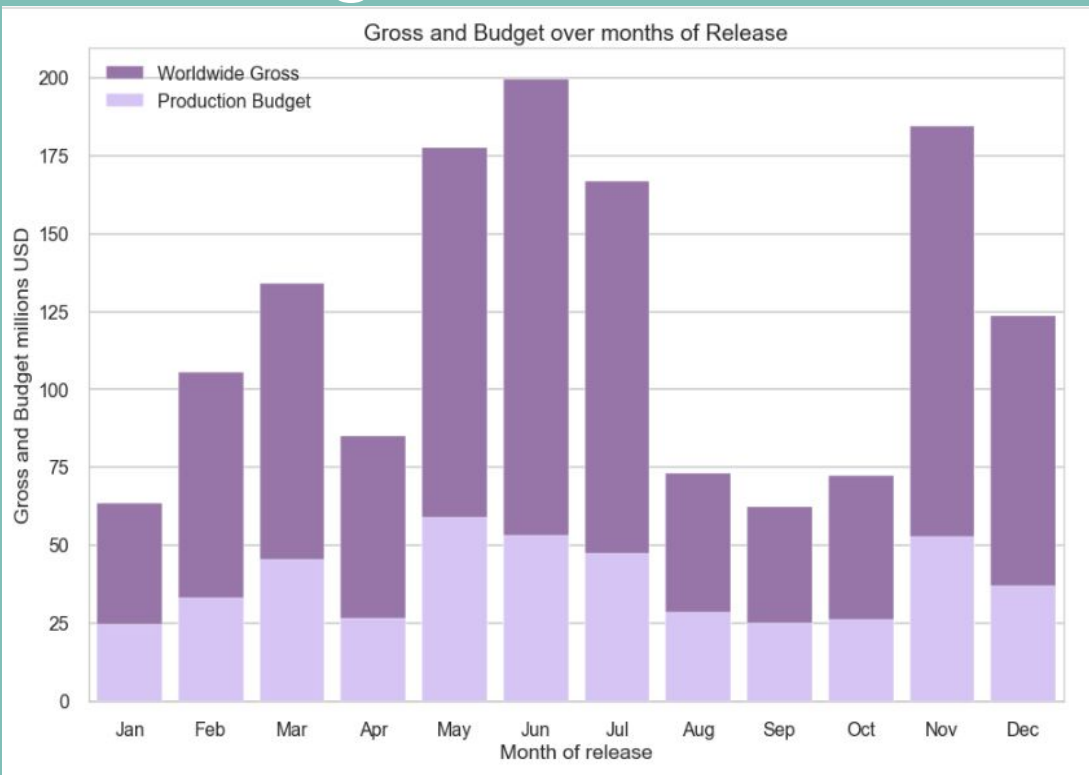
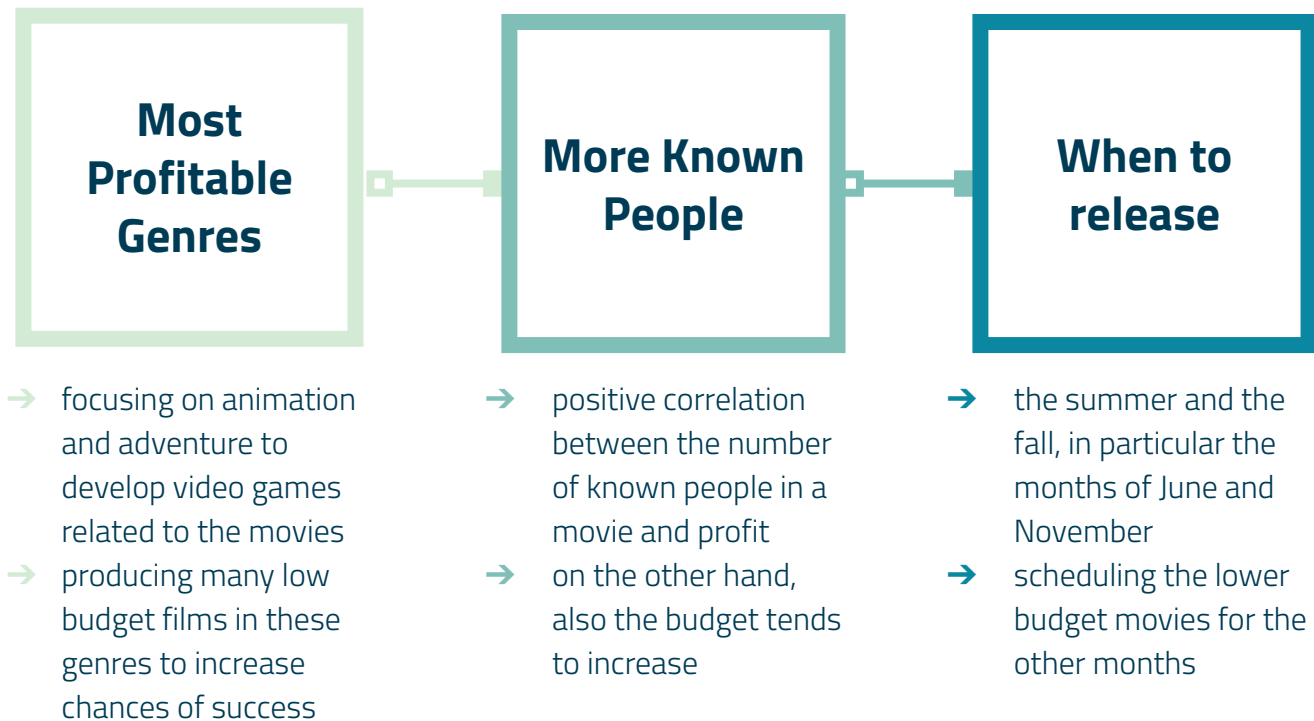The budget follows the same trend, which provides an interesting point: release lower budget movies during the lower income months

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A few numbers to keep in mind

	Worldwide Gross	Domestic Gross	Production Budget
Top five genres	**63.06 mils USD**	**31.73 mils USD**	**20.43 mils USD**
Rest of the genres	**55.56 mils USD**	**29.33 mils USD**	**20.17 mils USD**

Conclusions and proposals

Most Profitable Genres

More Known People

When to release

→ focusing on animation and adventure to develop video games related to the movies

→ producing many low budget films in these genres to increase chances of success

→ positive correlation between the number of known people in a movie and profit

→ on the other hand, also the budget tends to increase

→ the summer and the fall, in particular the months of June and November

→ scheduling the lower budget movies for the other months

Other considerations

Where do we go from here?

- Include also marketing as part of budget
- Consider inflation and movies with multiple releases
- Study the release month based on genre
- Research which genres <u>more recently</u> have been rising in popularity and profitability

THANKS!

Any questions?

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