

# Microsoft & Movies:

## Data Analysis and Business Recommendations



# Overview

- Business Problem
- Data
- Methods
- Conclusions

# Business Problem

Starting a movie studio takes time, money, and risk.

- Understanding what qualities make a film successful
  - Choosing what type of films to create
  - Determining budget size
  - Deciding when to release films
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# Data and Methods

- Utilized two online movie databases for data: **IMDd** and **The-Numbers.com**
- Final dataset contains **2092** movies ranging from **1940** to **2019**
- Data includes:
  - Movie title
  - Genre
  - Total gross (domestic and worldwide)
  - Budget
  - Release-date
  - Average Rating

# Results

- Genre
- Release Date
- Budget
- Rating

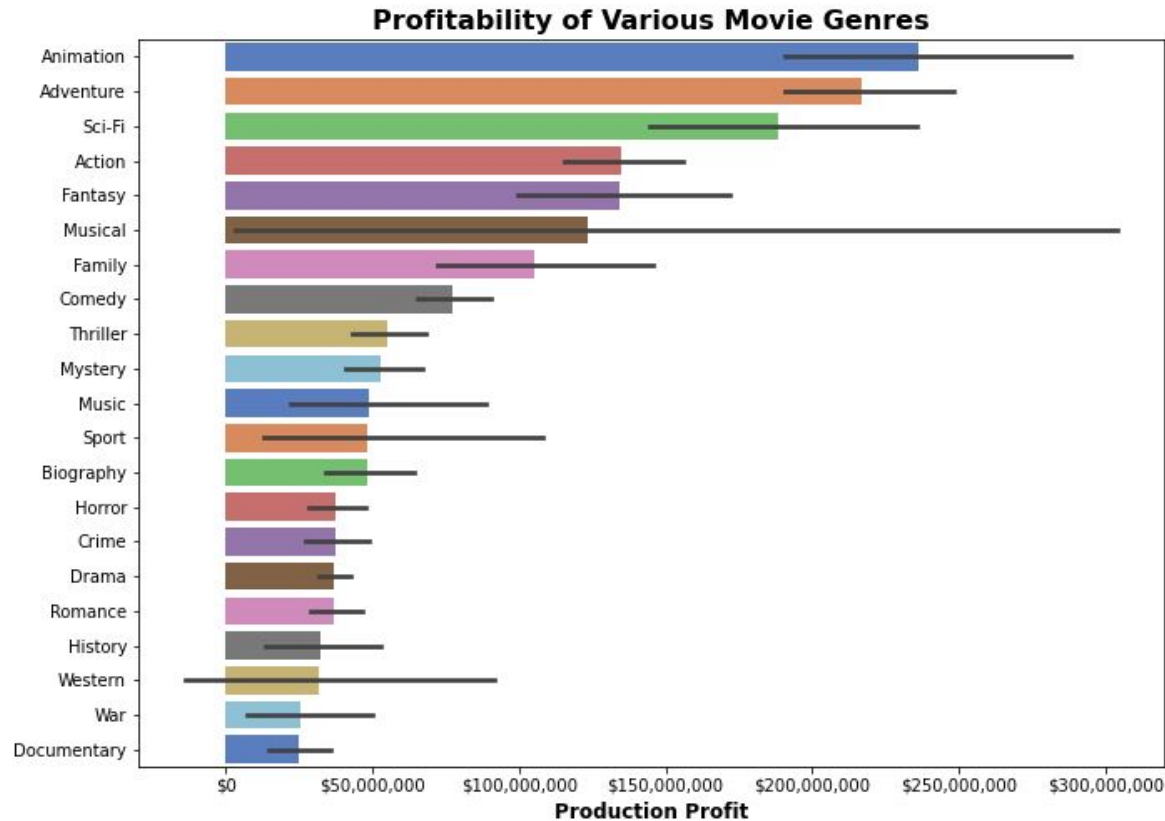
# Genre

The *most profitable* movie genres are:

1. Animation (\$236 million)
2. Adventure (\$217 million)
3. Sci-fi (\$189 million)

The *least profitable* genres are:

1. Documentary (\$24.6 million)
2. War (\$25.6 million)
3. Western (\$31.5 million)



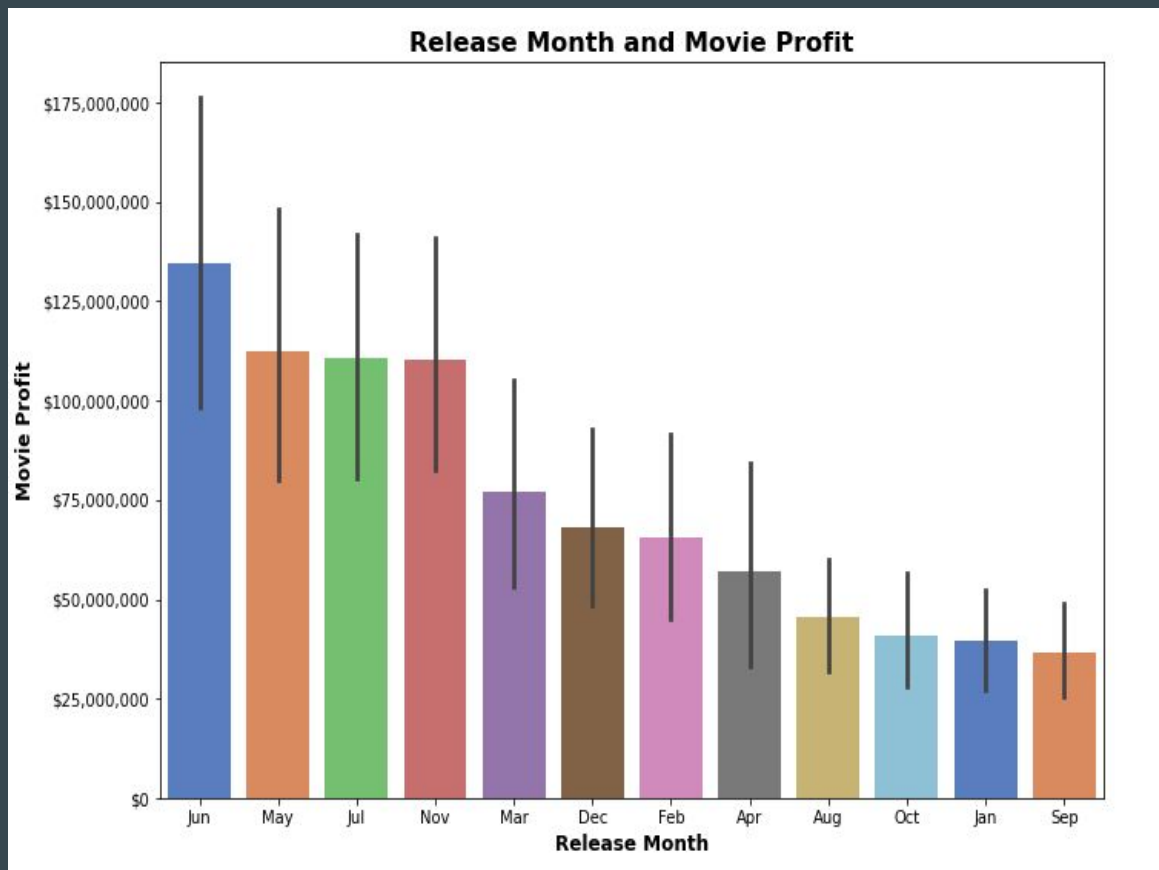
# Release Month

The best time to release a film is during the *summer* :

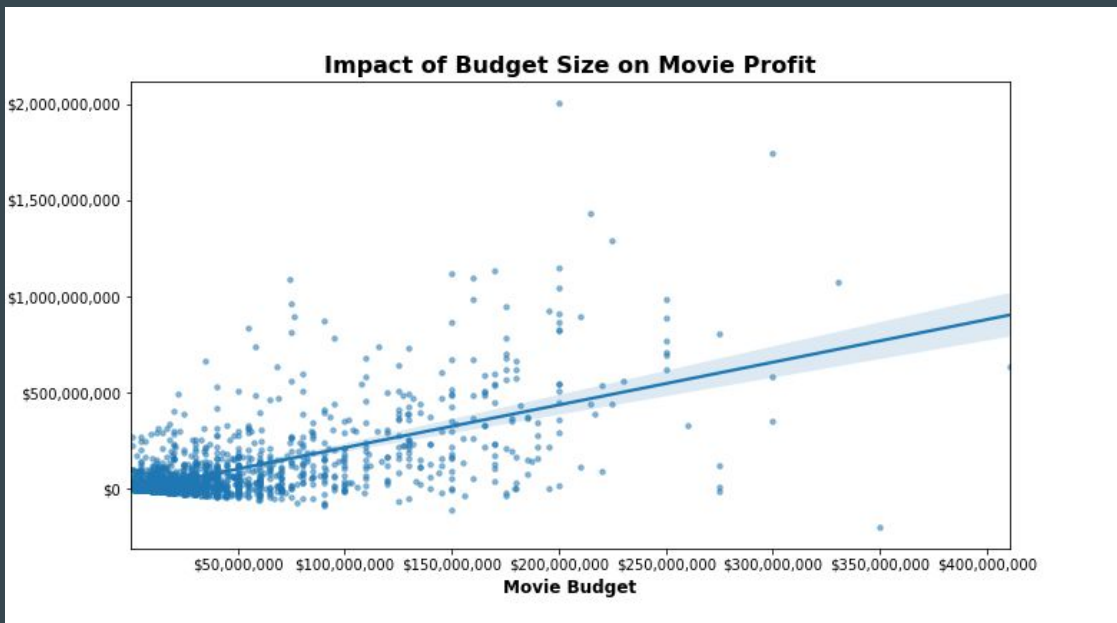
1. June (\$134 million)
2. May (\$112 milion)
3. July (\$111 million)

One of the worst times to release a film is in the *fall* :

1. September (\$37 million)
2. January (\$40 million)
3. October (\$41 million)
4. August (\$45 million)



# Budget Size



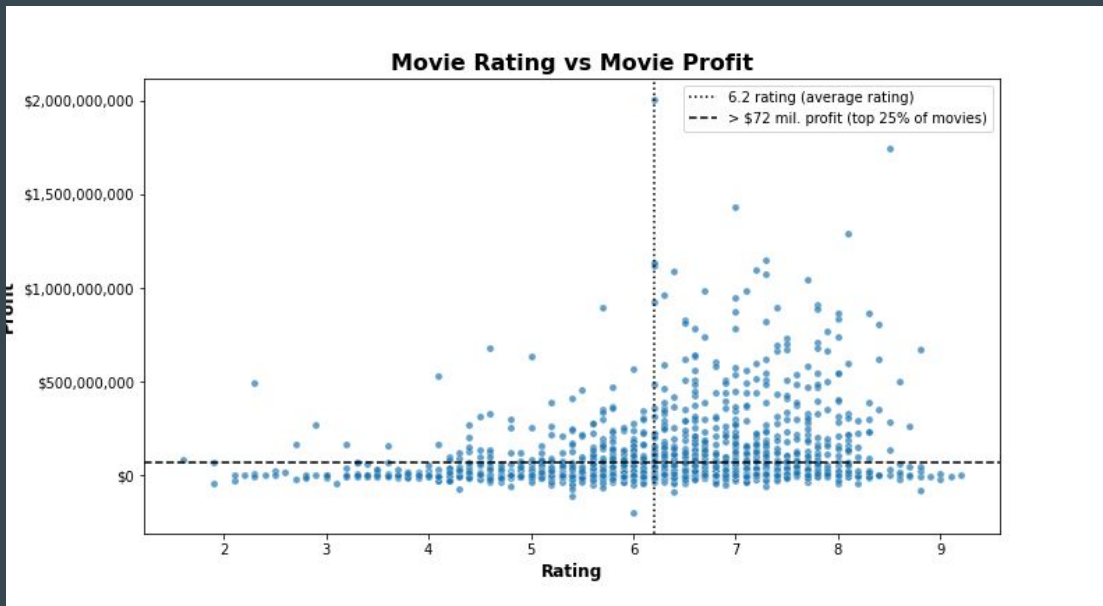
There is a **relatively strong correlation** between budget size and movie profit

Movies with larger budgets are **more likely to do better** at the box office.

- The median median budget for a film is **\$18 million**
- 25% of films budget more than **\$45 million** and these films are more likely to have higher profit



# Average Rating



On average, films earn a **6.2** rating, and earn **\$72 million**

Films that earn higher than a 6.2 rating are more likely to make more than \$72 million.

# Conclusions

1. Limit creation of movies **to top-performing genres** (e.g., action, animation, sci-fi)
2. Release movies during **the summer** (May-July) and avoid releasing movies during **the fall** (Aug-Oct).
3. Plan to budget at least **\$18 million** for a low-production movie and at least **\$45 million** for a high-end, high-production film.
4. Strive to release films that earn **high ratings** with **6.2** being the minimum threshold.

# Next Steps

1. Analyze the budgets of high-grossing, high budget films.
2. Determine common characteristic of highly rated films.
3. Perform analysis with more recent data.

# Thank you!

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