

# Microsoft Movie Studio Production Recommendations

## Overview

In 2021, digital, theatrical, and physical sales of movies were \$136.5 billion globally and \$36.8 billion in the United States. Digital sales account for 80% of revenue, theatrical sales are 12%, and physical media is the remaining 8%.

Microsoft is creating a new movie studio and wants to know what types of movies they should create to tap into this industry. This project will explore what types of movies are currently doing the best at the box office and recommend what types of movies Microsoft should create.

# **Objective - Business Questions**

- What movie genres should Microsoft Movie Studios focus on?
- When should these movies be released?
- How much should be budgeted for the production of each movie?

## **Deliverables**

- Presentation: Genre, Release Time, and Budget for Microsoft Movie Studio
- Jupyter Notebook
- GitHub Repository

# **Repository Navigation**

- /img contains image files
- /img/fig stores plots and figures created with the analysis
- /zippedData stores data used for this analysis
- /license contains the license information
- project\_notebook.ipynb Jupyter Notebook



- Python
- pandas library
- matplotlib library
- sqlite3 library

## **Methods**

- 1. Clone this repo (for help see this tutorial).
- 2. Gather and import raw data
- 3. Combine, join, and clean data
- 4. Exploratory Data Analysis to form recommendations
- 5. Plot visualizations

#### The Data

#### **Data Description**

In the folder zippedData are movie datasets from:

- bom.movie\_gross.csv.gz: Box Office Mojo
  - stored in compressed CSV
  - o contains domestic and foreign gross revenue
- tn.movie\_budget.csv.gz: The Numbers
  - stored in compressed cSV
  - contains production budget

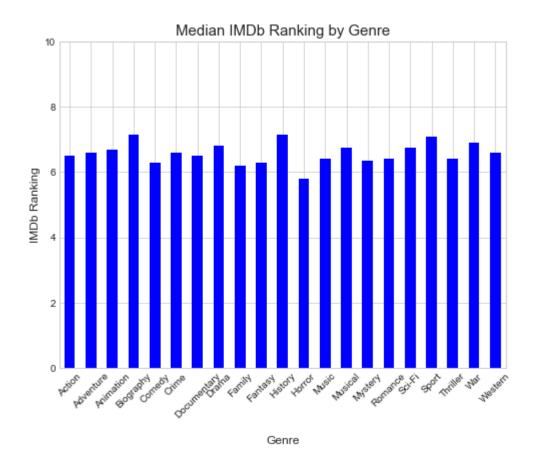
Box Office Mojo and The Numbers data are stored in compressed CSV (comma-separated values).

- im.db.zip: IMDB
  - stored in a SQLite database
  - contains user-generated rankings on a scale of 0 10 with 0 being the worse and
    10 the best

# **Data Analysis and Recommendations**

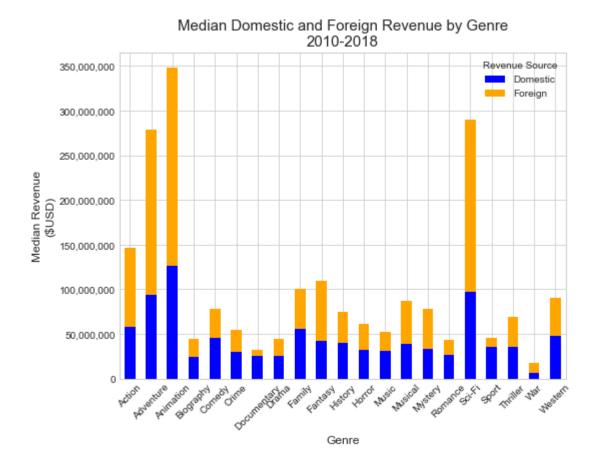
## Movie genre does not have an effect on IMDb

• More profitable movies do not on average have much difference in user ranking



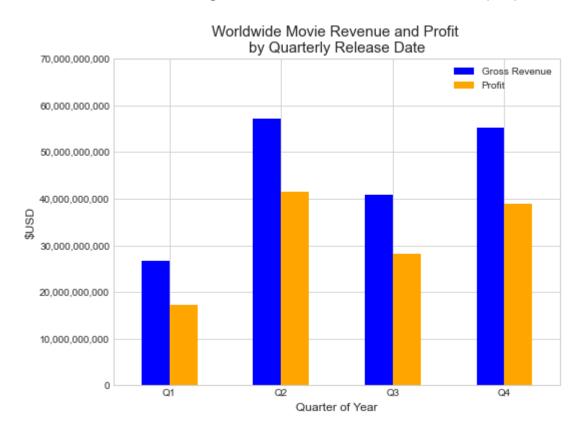
Movie genre should be a combination of Action, Adventure, Animation, or Sci-Fi

• Generate the most worldwide gross revenue



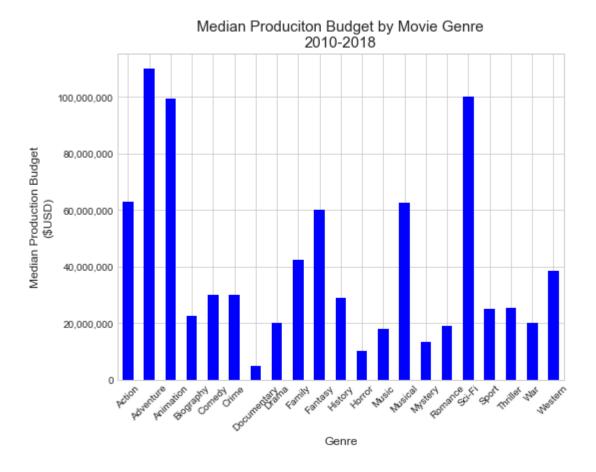
#### The movie should be released in Q2 or Q4

• Q2 and Q4 have the highest revenue because these are when people are working less



## Expect to budget \$60 million to \$100 million per movie

• The highest revenue generators also have the highest production budgets



## **Conclusions**

Microsoft wants a part of the \$136 billion global movie industry by creating highly ranked and profitable movies. Microsoft is positioned well with its brand recognition and streaming services to capture most of the revenue generated after a movie's theatrical release.

- Microsoft should focus on action, adventure, animation, or science fiction genres
- The movies should be released in the summer during Q2 or during the fall or winter holidays in Q4
- The budget needed for these genres is between \$60 million to \$100 million.

#### Releases

## **Packages**

No packages published Publish your first package

## Languages

• Jupyter Notebook 100.0%