


# Movie Success Analysis

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# Agenda

- Overview of Study
  - The Data
- Visuals observing:
  - Genre
  - Time of year
  - Movie Rating
  - Production Budget
- Recommendations
  - Conclusion
  - Future Work





Business Problem :  
Presenting  
recommendations to  
Microsoft on successful  
movies.

## Overview of Study

### Exploratory Data Analysis

- Data Prepped and Cleaned
- Statistical visuals Generated and Observed

**Key measurements of success used for recommendations:**

**Revenue**

**Profit**

**Return on Investment**





Source	Length	Movies dating from _____ to _____
Rotten Tomatoes: Reviews and Movie Info	Merged – 54,672 Data Points	1958 to present
The Numbers : Movie Budgets	5782 Data Points	1915 to present
IMDB and The Numbers: Movie Budgets	Merged – 43,969 Data Points	1915 to present

## The Data

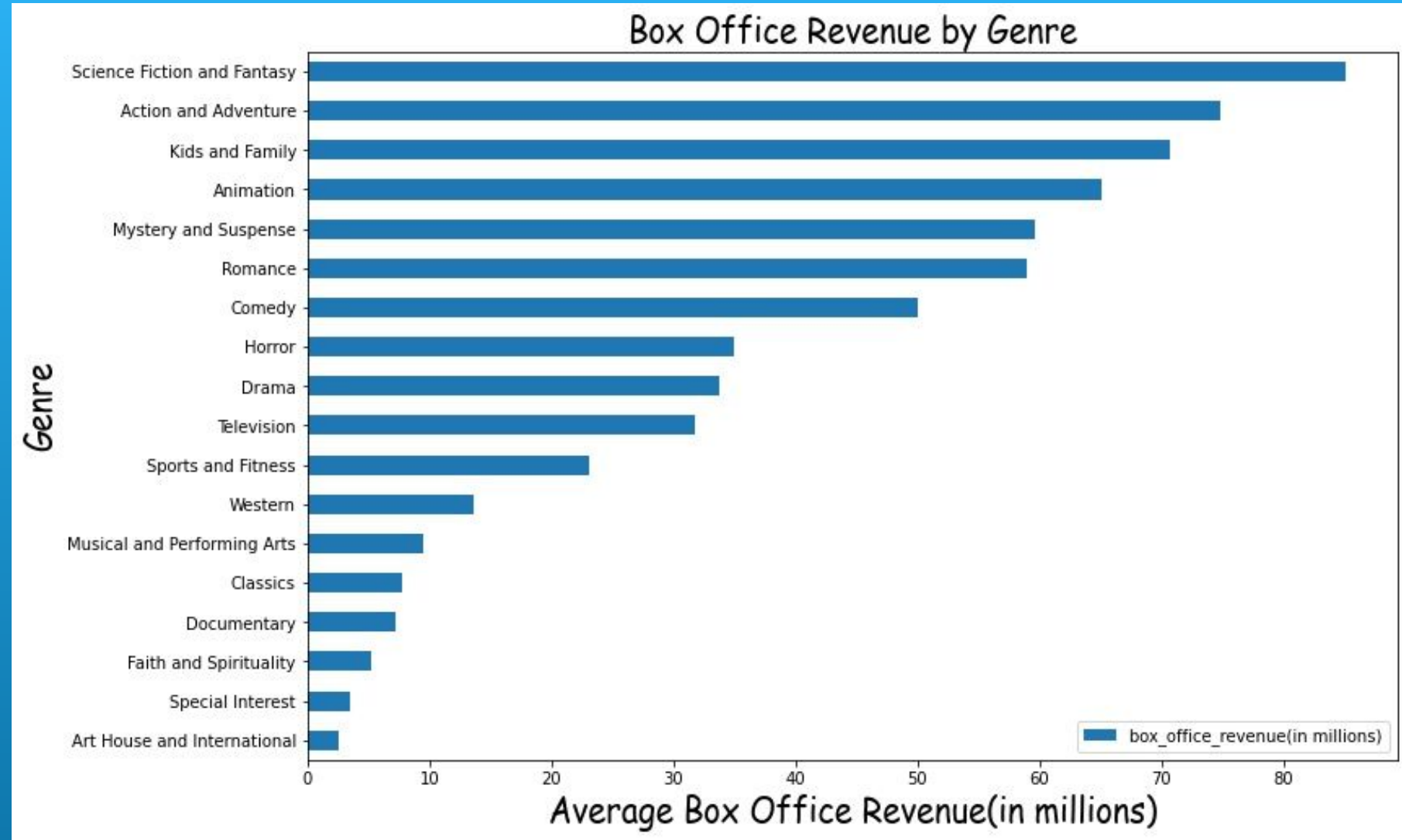
The IMDb logo, consisting of the letters "IMDb" in a bold, black, sans-serif font on a yellow background.

### Highest Grossing Genres:

- Science Fiction and Fantasy
- Action and Adventure
- Kids and Family

### Medium-High Performing:

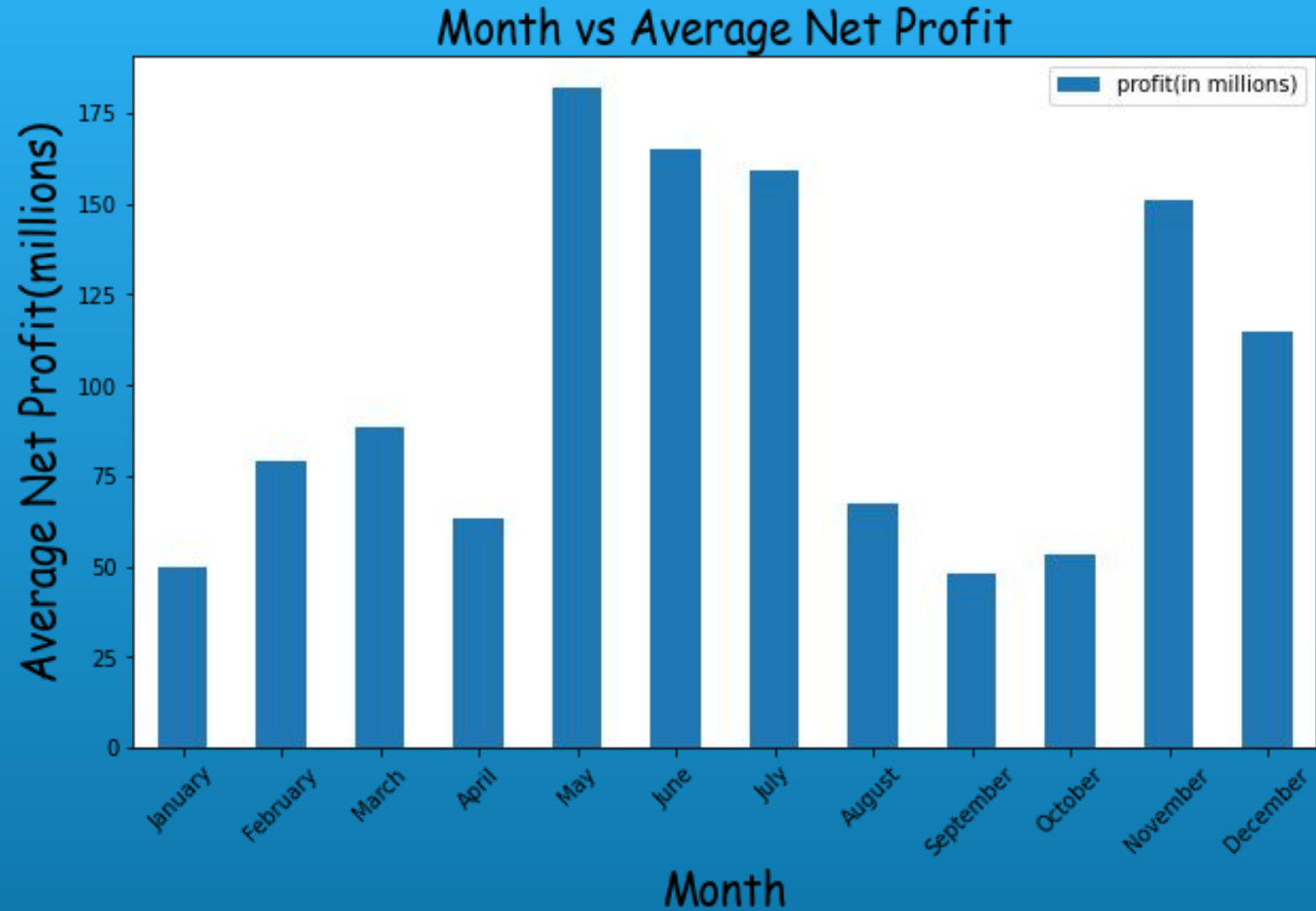
- Romance
- Mystery and Suspense
- Animation
- Comedy



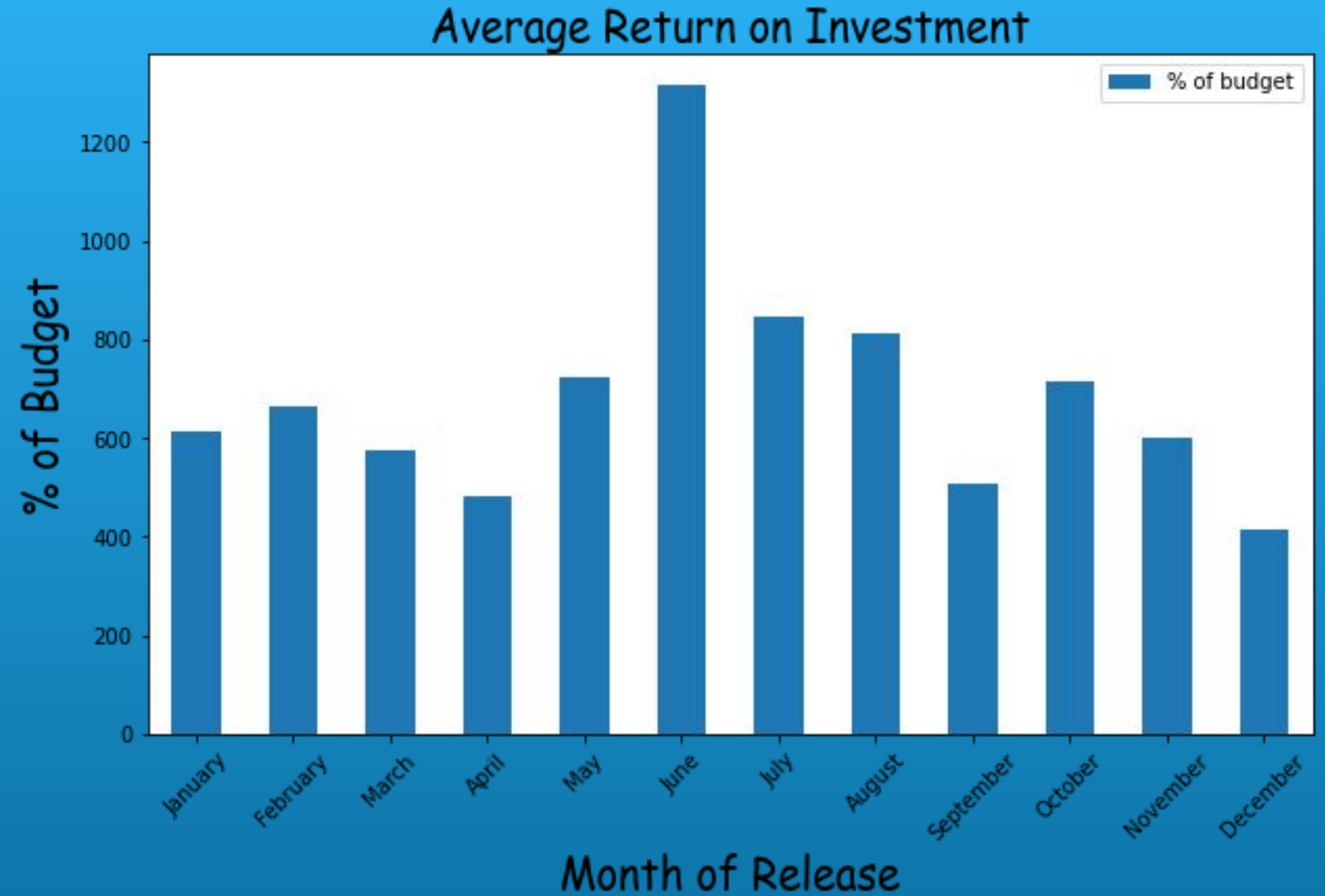
### Highest Months for Profit:

- May
- June
- July
- November
- December

This is likely due to the Summer and holidays months being so popular for movies.



June - highest potential for return on investment.

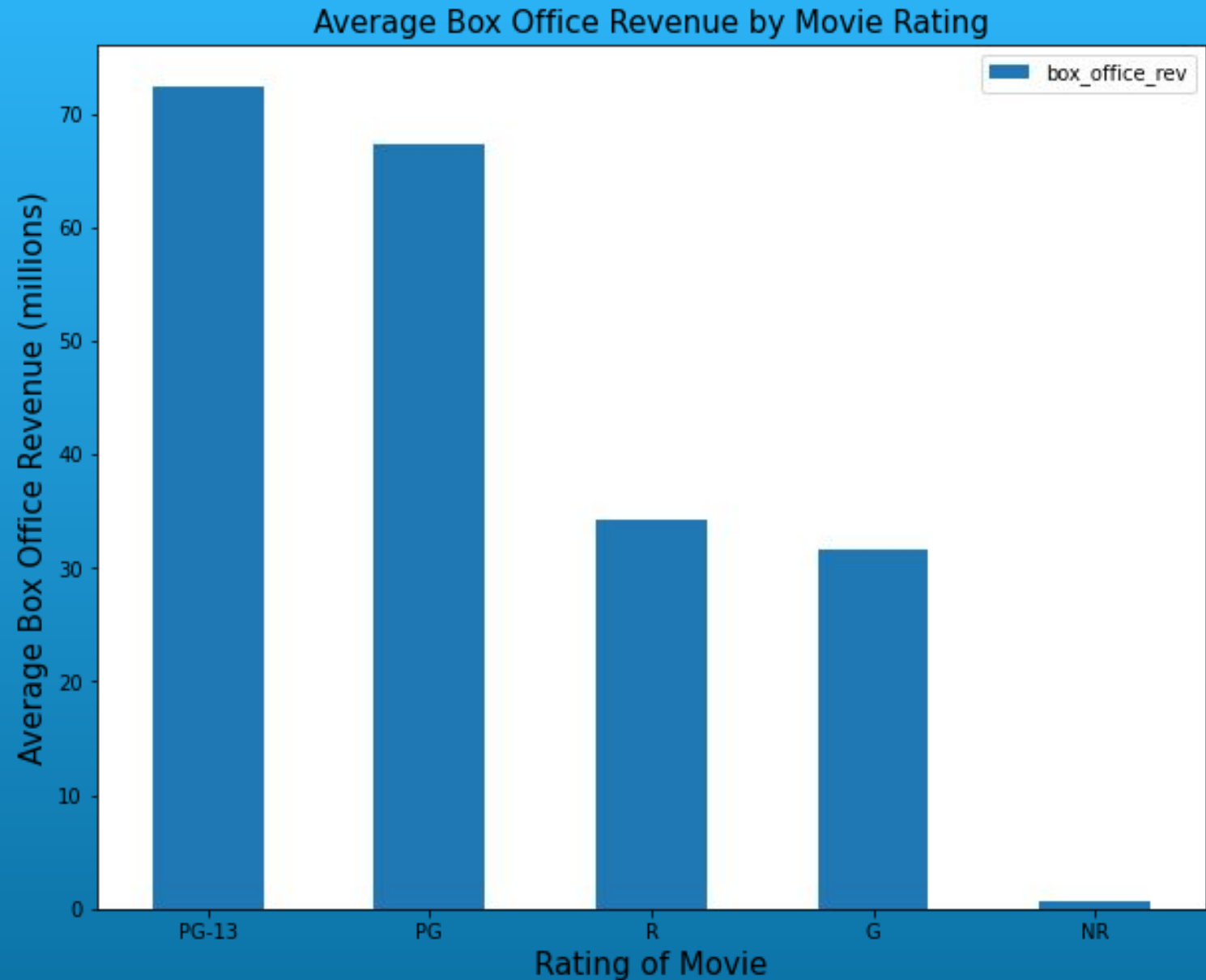




- The **average revenue** for ratings appears to favor **PG and PG-13** films

Possible reason:

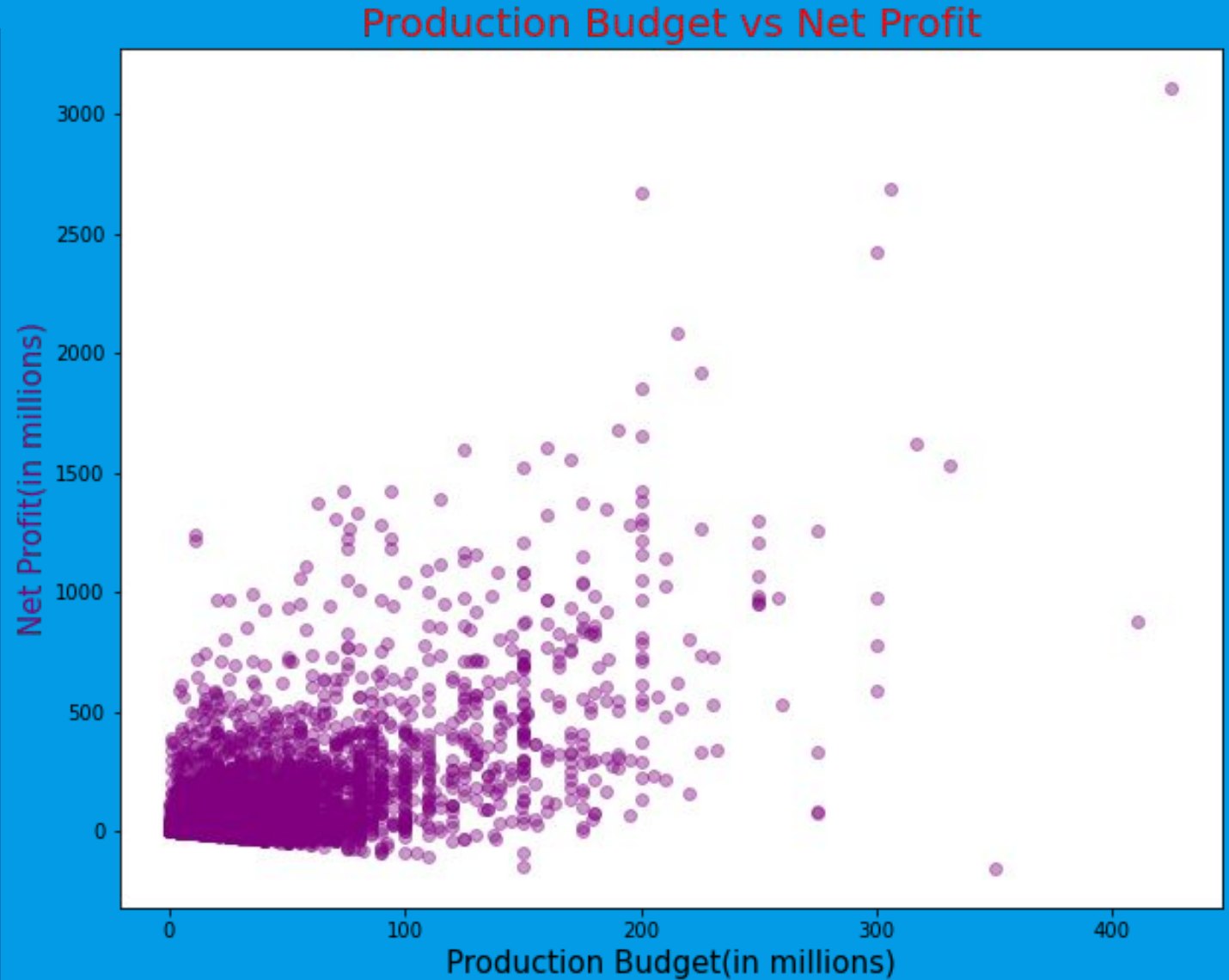
- Rated **R and G** movies will by design exclude a subset of viewers for a population due to **age**.



Correlation Coefficient of  
**Production Budget** to  
**Net Profit: .64**



Medium Positive  
Correlation – as the  
budget increases, the net  
profit increases.



# Moving forward

- **Recommendations**

#1: Keep the Budget low to manage risk.

#2: Release Movies during the Summer  
and the Holiday Season.

#3: Maximize these Genres:

- Action, Adventure
- Science-Fiction, Fantasy, Animation
- Preferably in the PG, PG-13 rating.



# Conclusion

## Big Takeaways

- Time of year is clear on the best times for movies
- Applying to the masses matters according to movie rating.
- Sci-Fi, Animated and Kids movies: Genres are generally in these rating brackets, meaning they apply to the masses, which leads higher revenue.

## Limitations

- Movie Rating and popularity: No clear outcome from study.
- Only three sources were used for study: More resources used could lead to more reliable recommendations.

# Future Work

## Next Steps

Observe more parameters to look deeper into features that make for successful movie production.

### Possible Parameters:

- Demographic of viewer
- Region or Country
- Runtime
- Directors
- Actors
- Holidays outside of the Summer, Winter: Halloween, Veterans day, Labor Day