



# Microsoft Movie Analysis

Aiding Microsoft's new studio into the movie  
world

By Jonah Devoy

The background of the slide is a dark blue stage. On the left, a red curtain is partially open, revealing a black spotlight fixture that casts a bright beam of light onto the center of the stage. The beam illuminates the word 'Summary' and the text below it. On the right, another red curtain is partially open. At the bottom of the slide, there are several rows of red theater seats, suggesting an audience's perspective.

# Summary

For my analysis, I reviewed high-profiting movie data elements to see what makes them successful. This analysis will help you determine what movies to produce considering movie genre, market saturation, and directors to hire.

# Table of contents



**Business  
Problem**



**Data  
Understanding**



**Data  
Preparation**



**Results**



**Conclusion**



# Business Problem

Here are three factors you should look at before greenlighting your production:

- Genre Profitability
- Market Saturation
- Movie Directors

# Data Understanding



**tn.movie\_budgets.csv**

- Movie Title
- Production Budget
- Domestic and Worldwide Gross



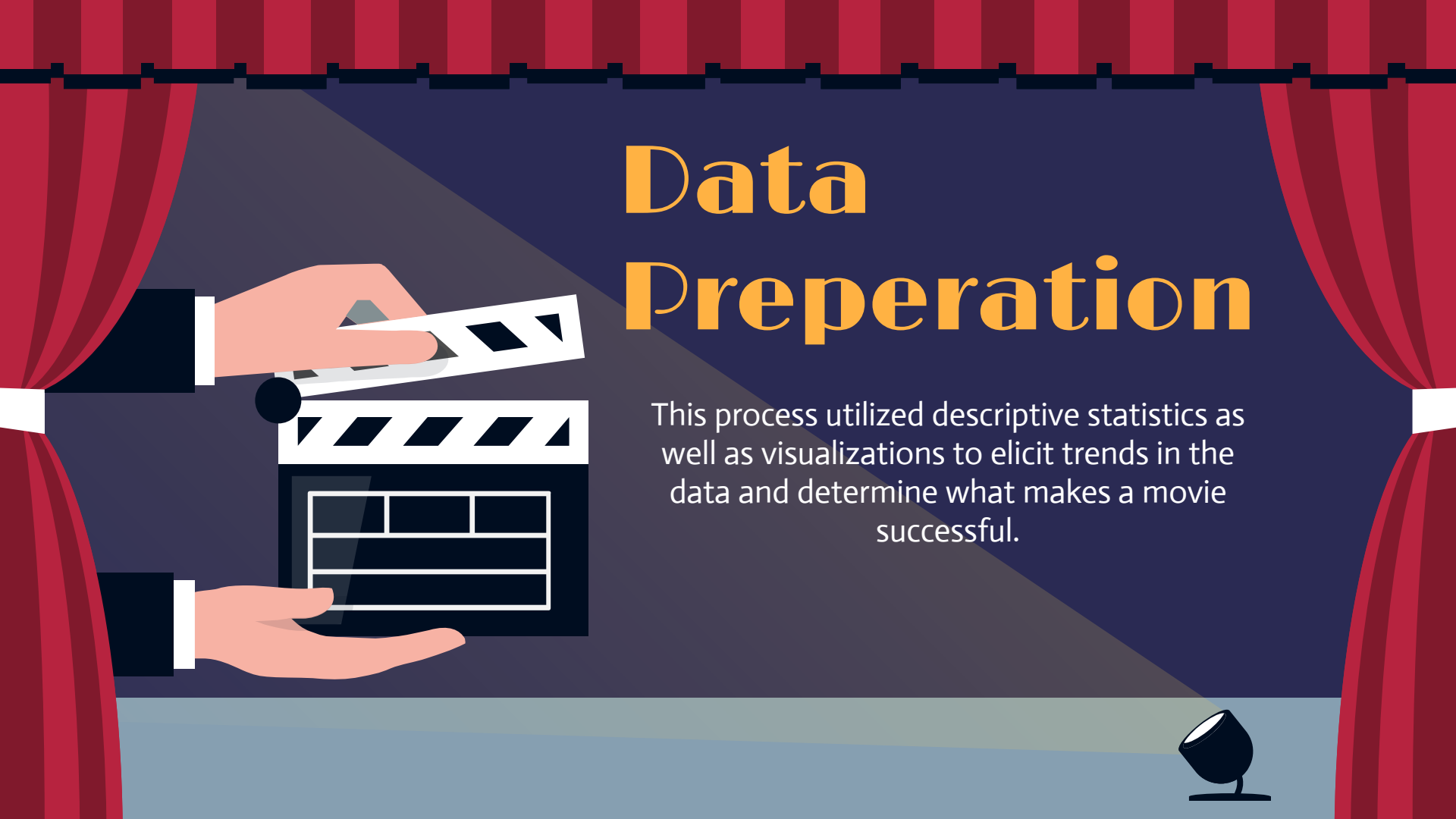
**imdb\_top\_1000.cs**



- Movie Title
- Budgets and Gross
- Directors and Actors
- Year Released
- IMDB Ratings

# Data Preperation

This process utilized descriptive statistics as well as visualizations to elicit trends in the data and determine what makes a movie successful.

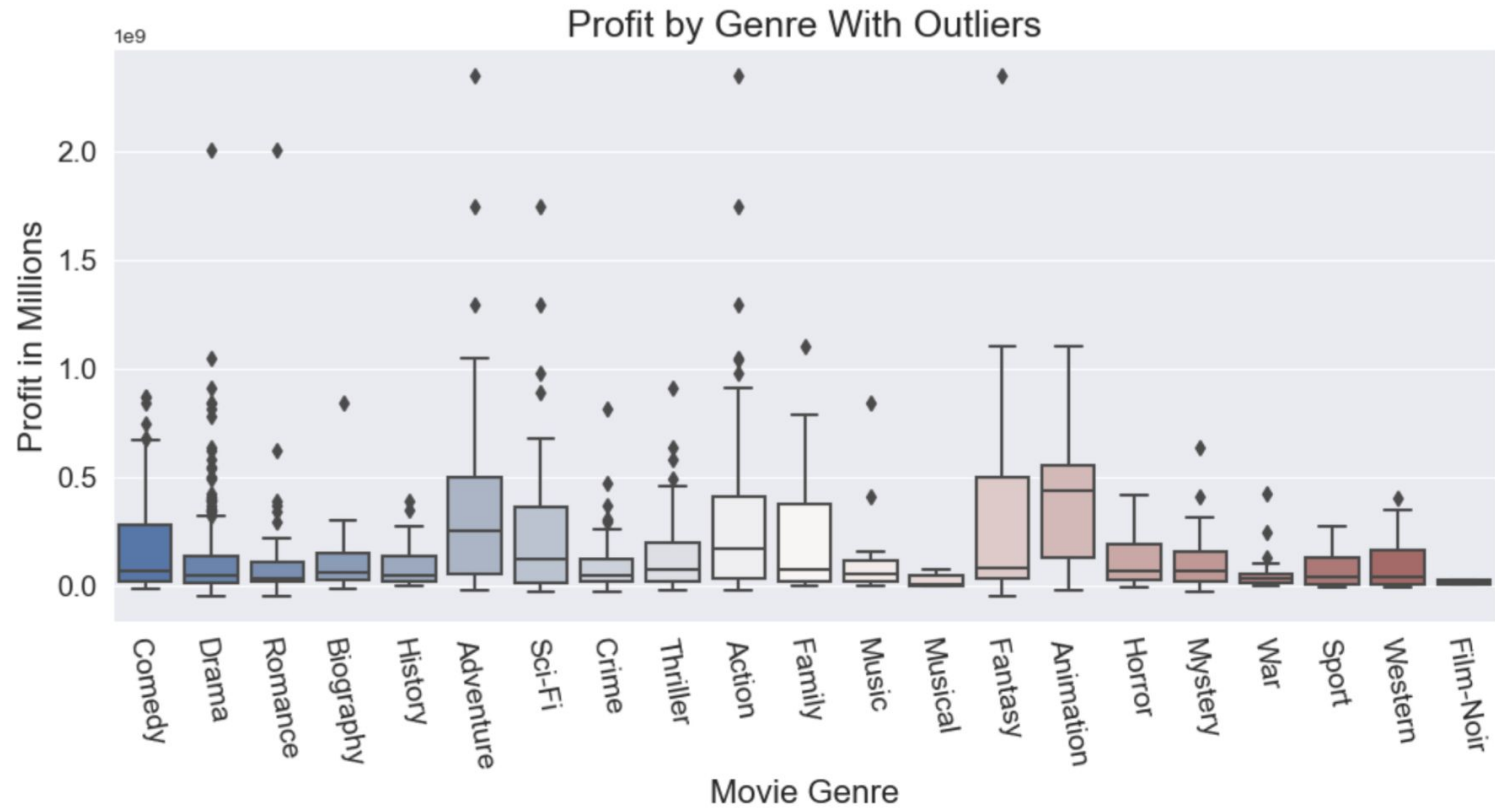




## Question : 1

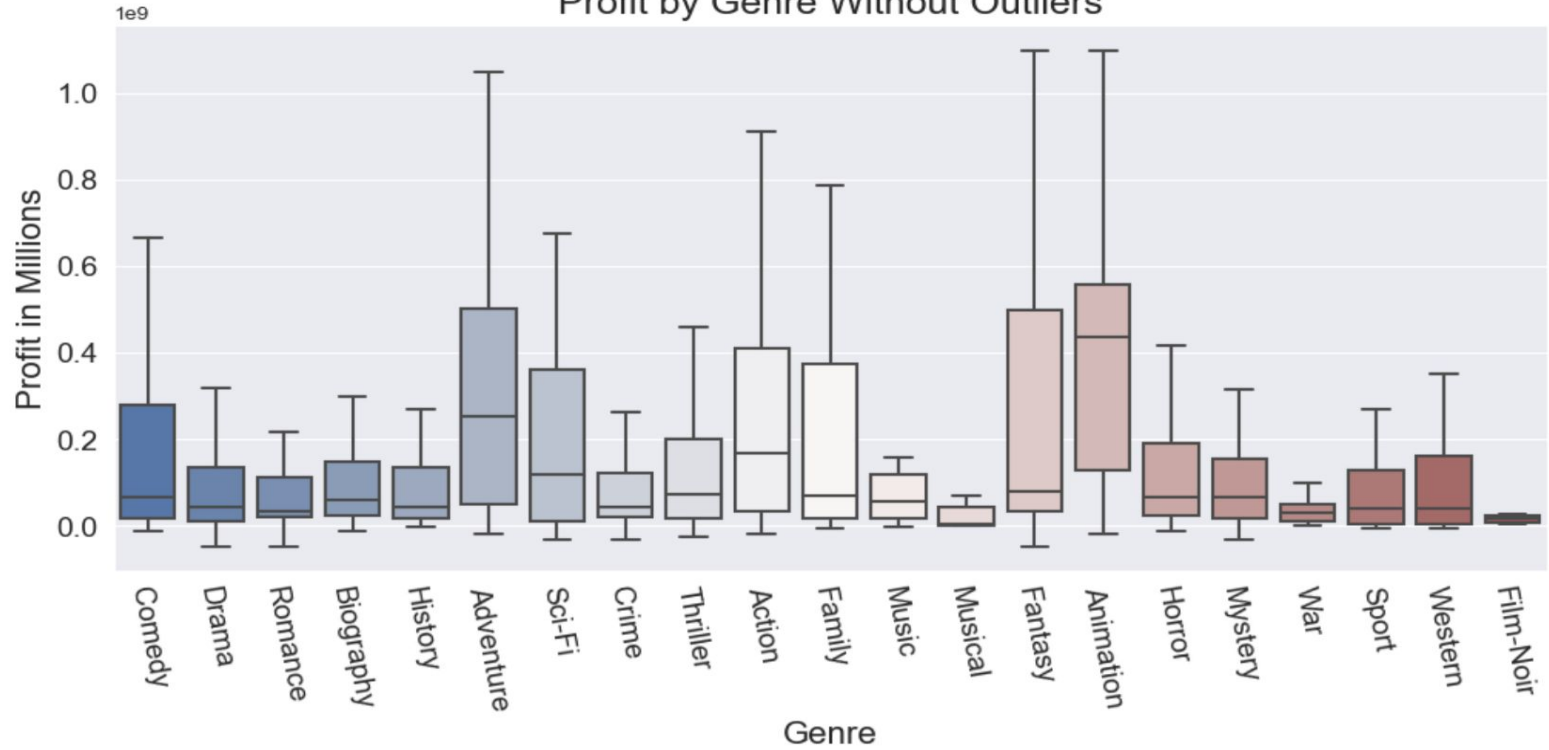
# Genre Profitability

Which genres generate the highest profits?

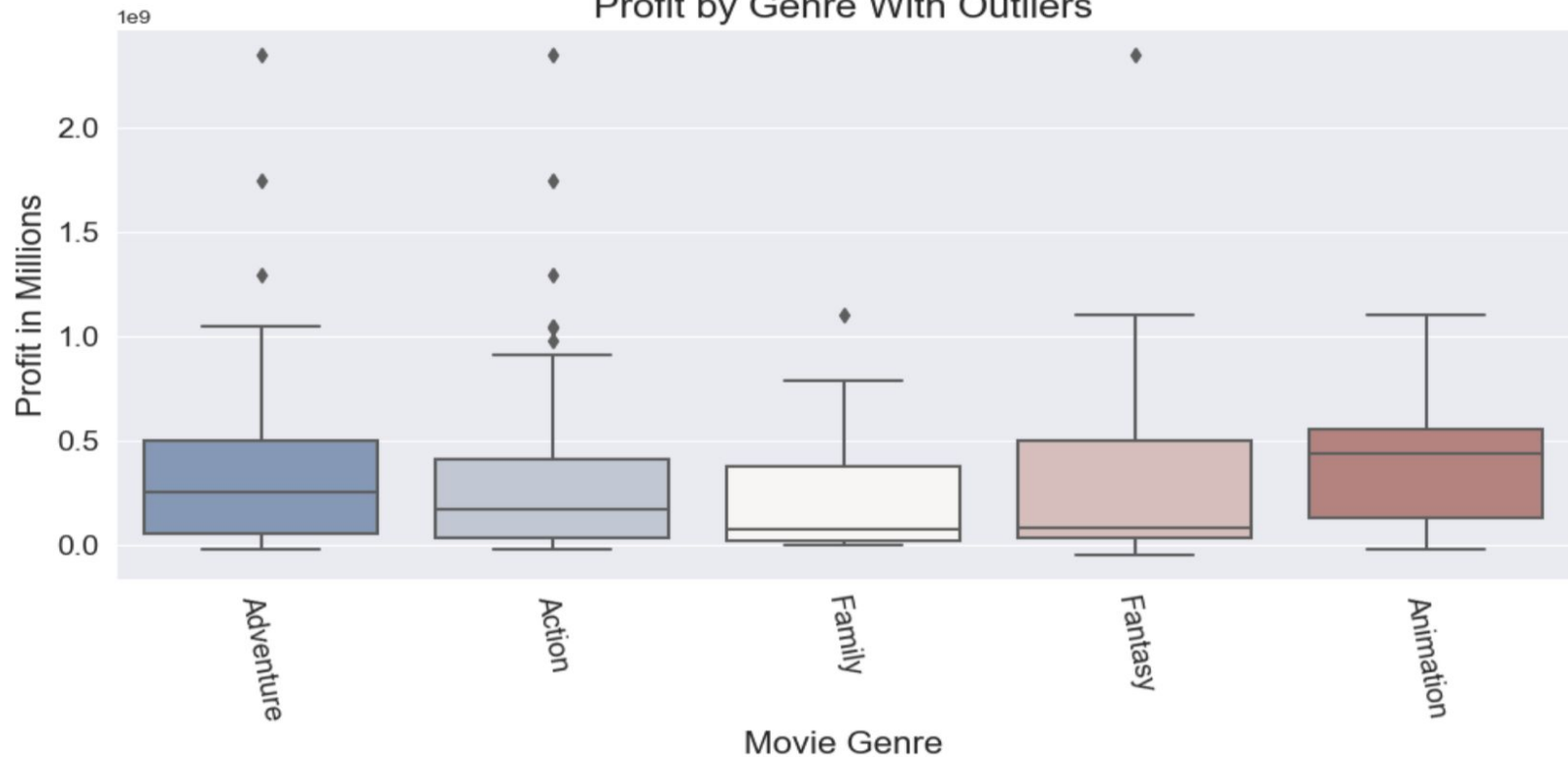


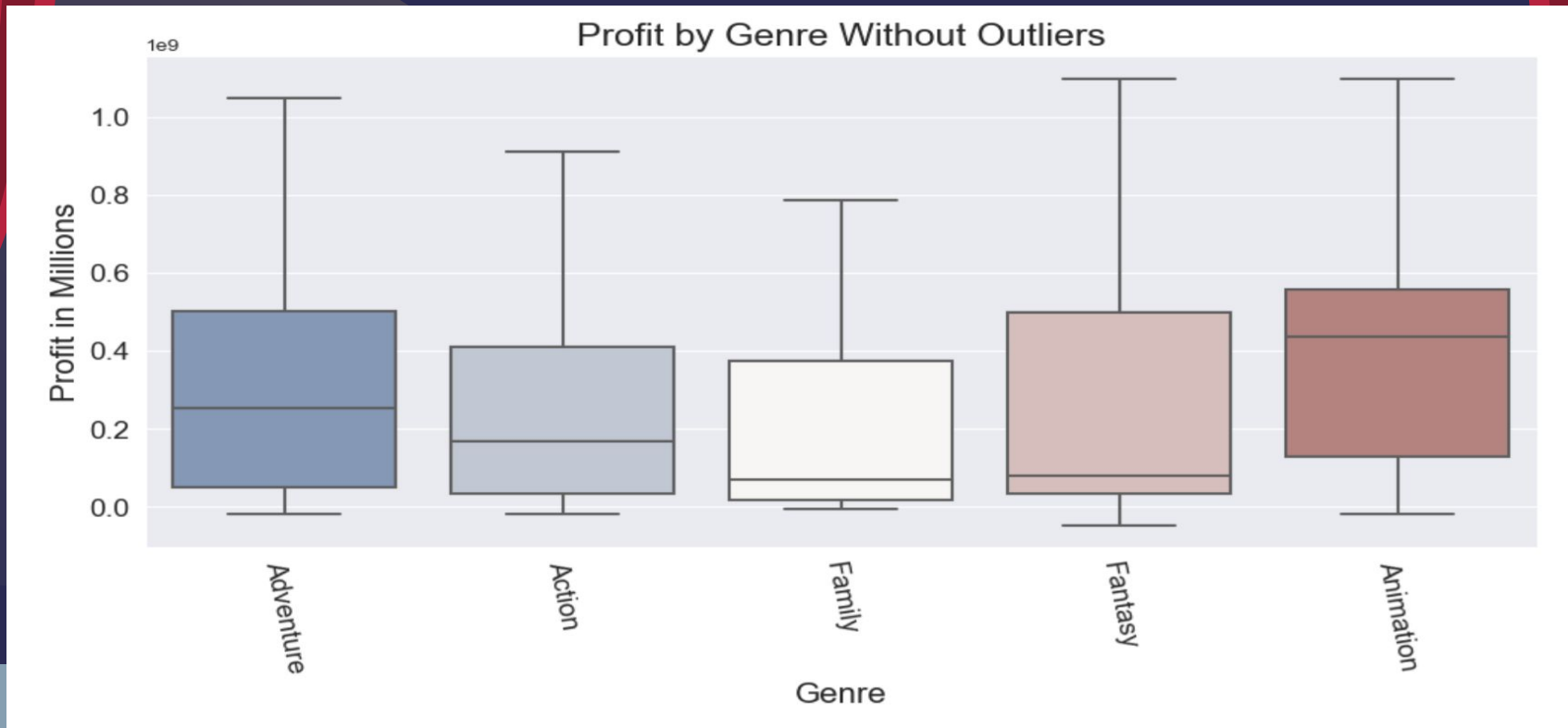


Profit by Genre Without Outliers



Profit by Genre With Outliers





“Based on the data visualizations provided its safe to say action, adventure, fantasy, family and animation profit the most.”

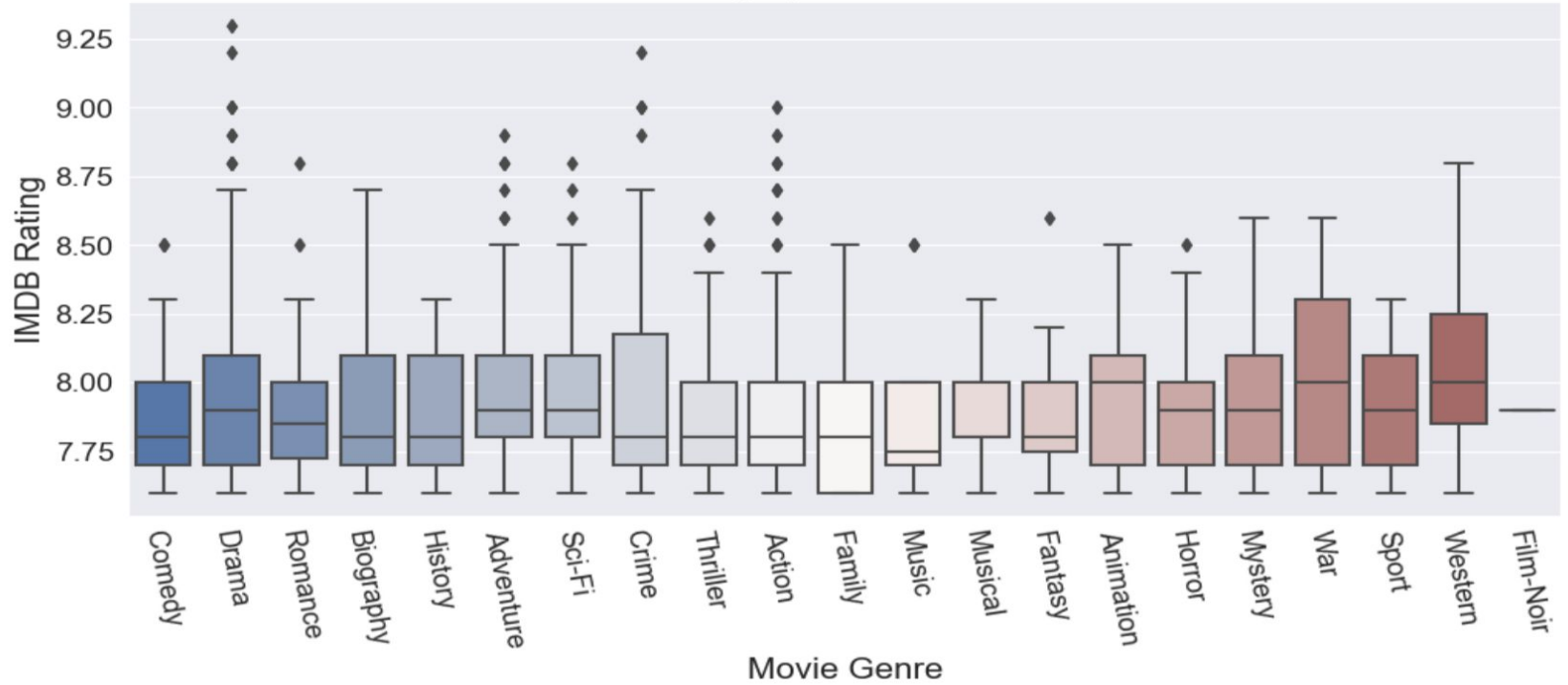
—**Jonah Devoy**



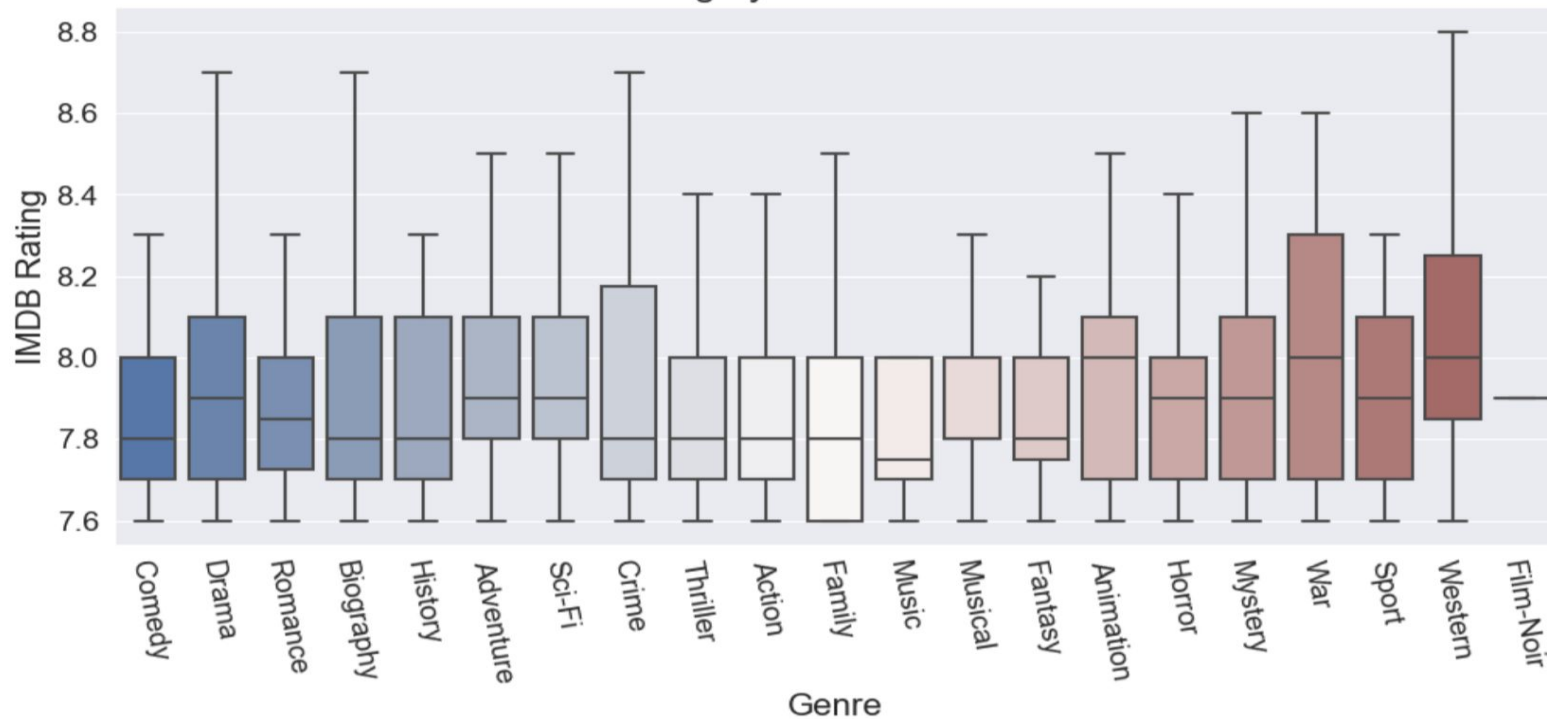
**What about IMDB  
Ratings? Is this  
useful data?**

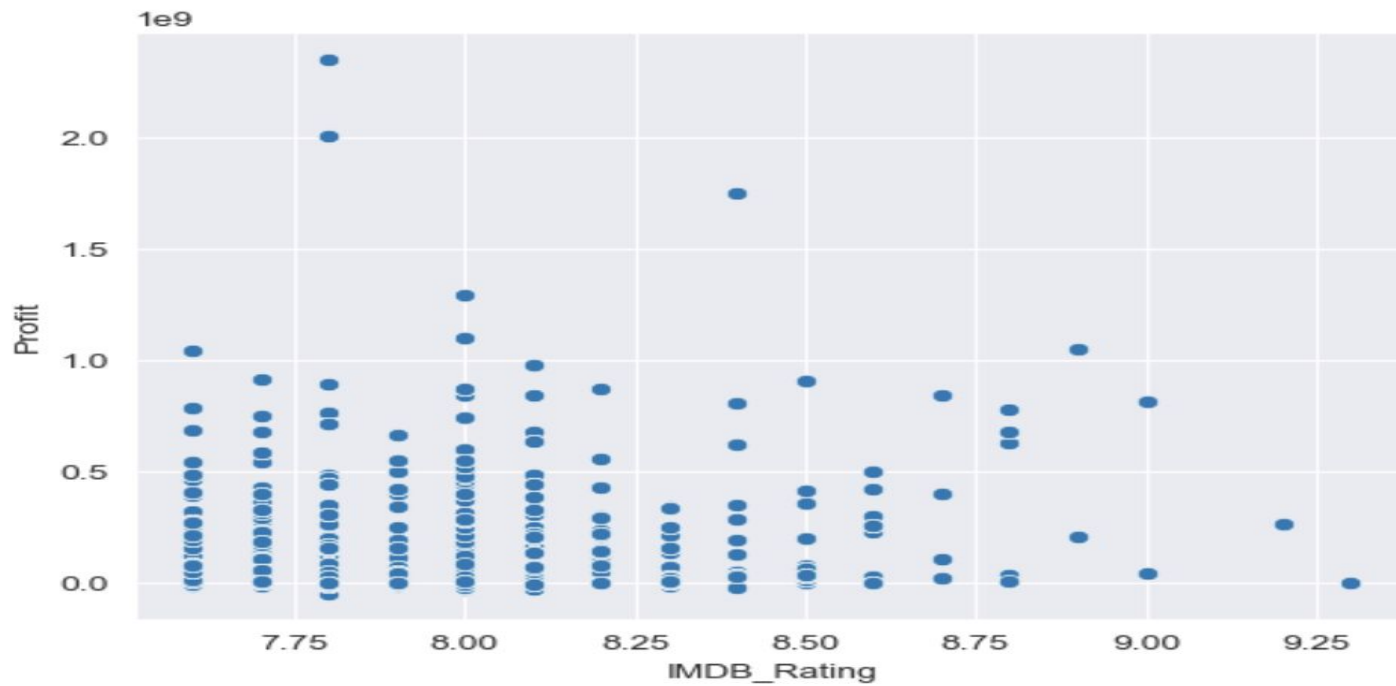


IMDB Rating by Genre With Outliers



IMDB Rating by Genre Without Outliers





	Profit	IMDB_Rating
Profit	1.000000	0.163062
IMDB_Rating	0.163062	1.000000



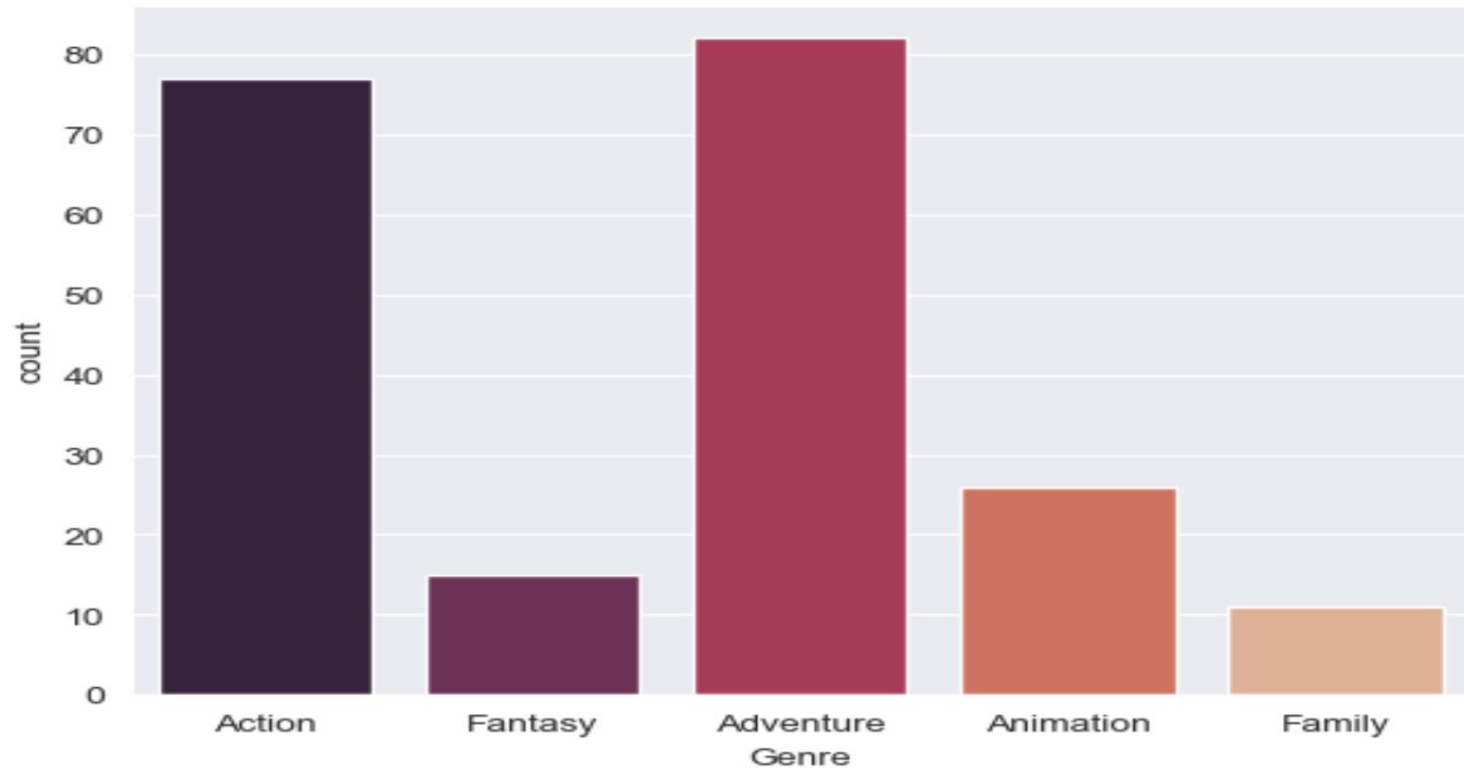


Question : 2

# Market Saturation

Which of the 5 most popular genre of movies would stand out against competing movie types?

Genre Count



# Animation Fantasy Family



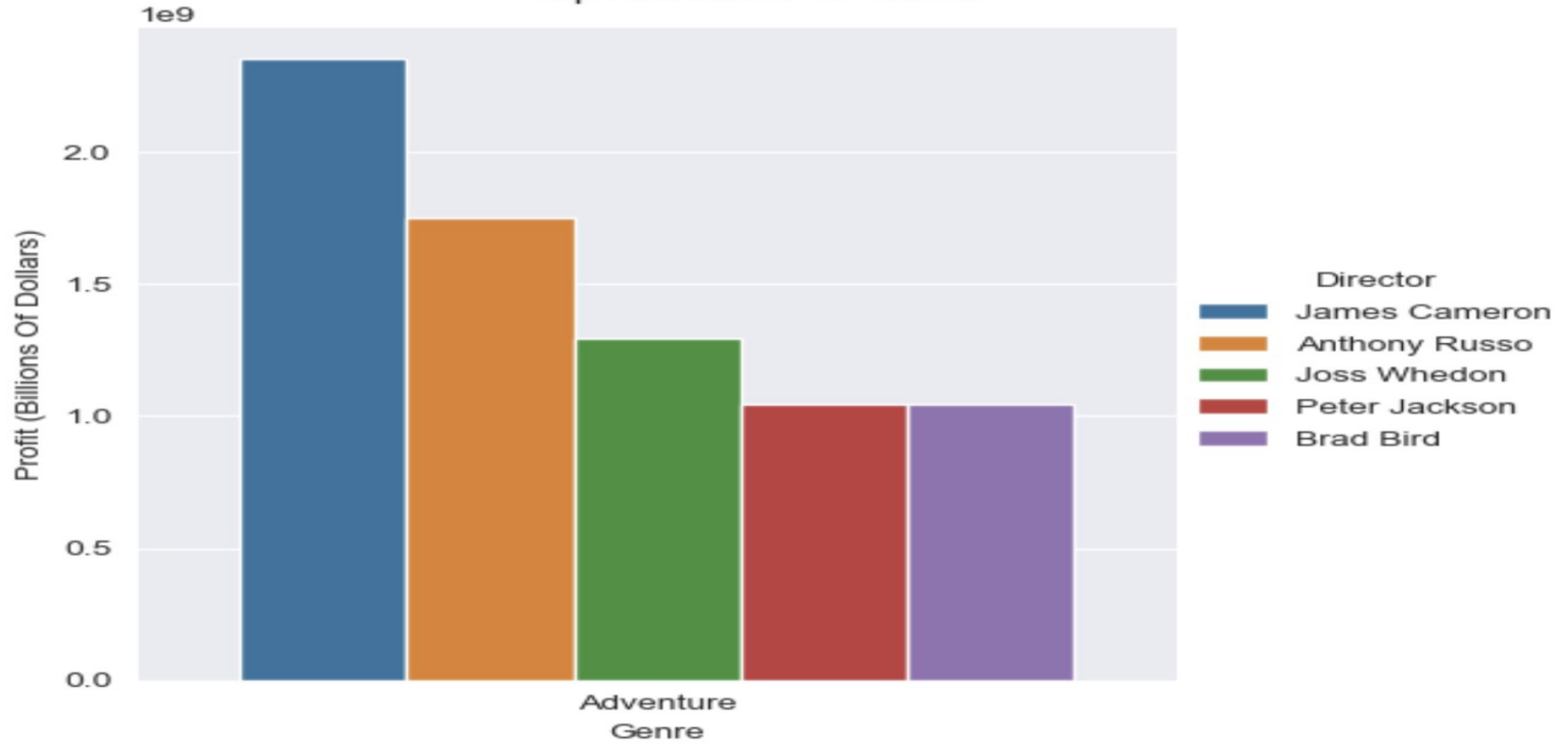
An illustration of a movie theater stage. A woman with blonde hair, wearing a black blazer over a white shirt and black pants, stands with her arms crossed on a yellow star on the floor. To her left is a red director's chair with a yellow star on the back. A spotlight from the top left illuminates the woman and the chair. The background is a dark blue screen flanked by red curtains. In the foreground, the tops of several red theater seats are visible.

## Question : 3

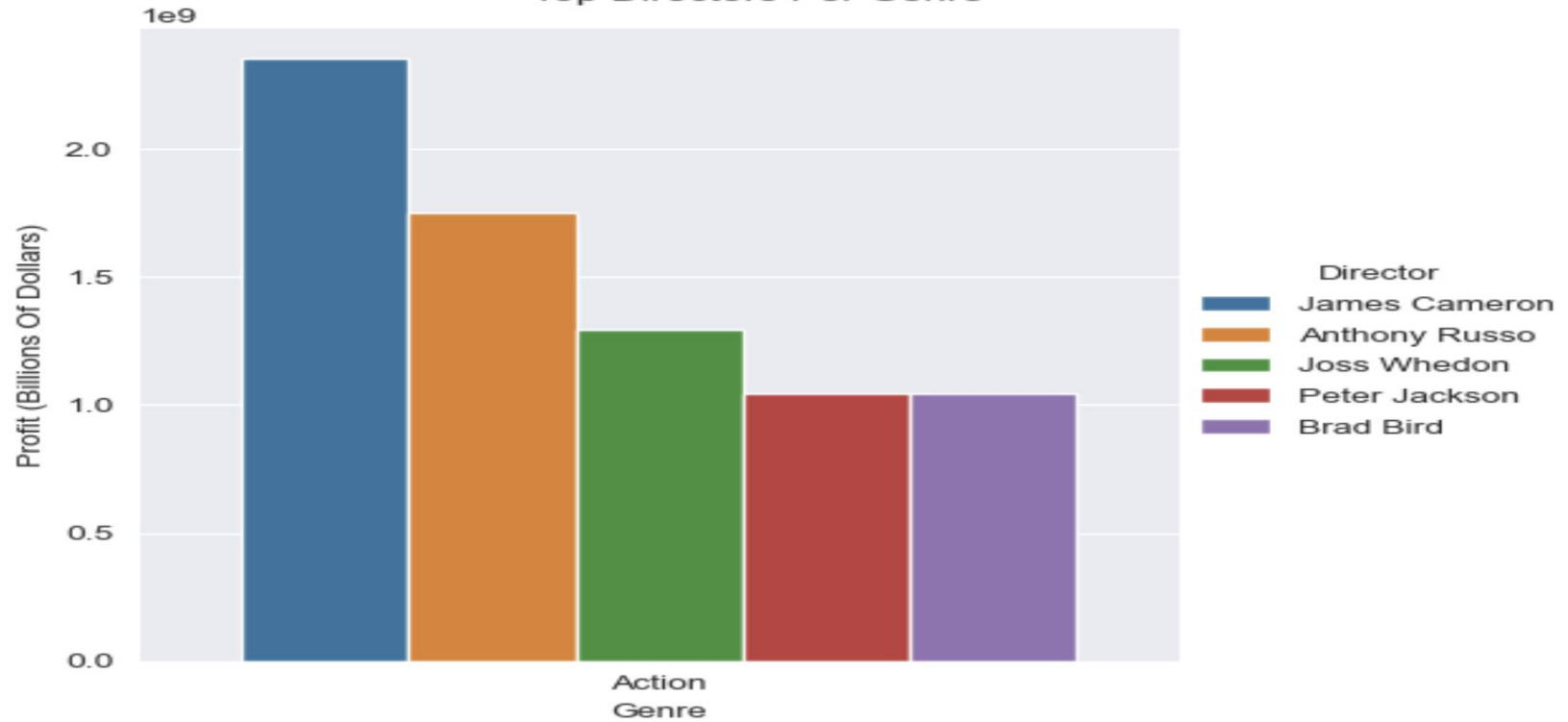
# Movie Directors

Who are the top five  
directors to hire for  
action, fantasy,  
adventure, animation,  
and family movies?

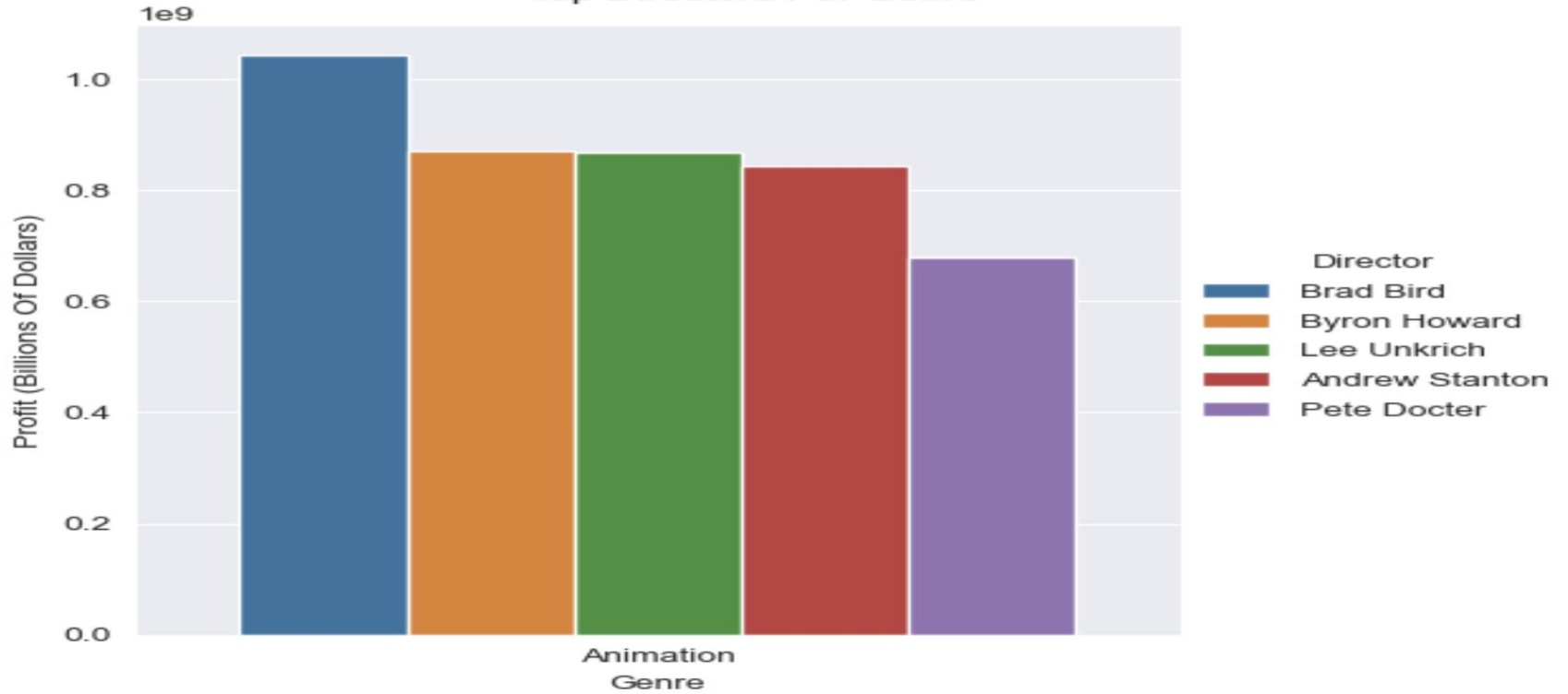
Top Directors Per Genre



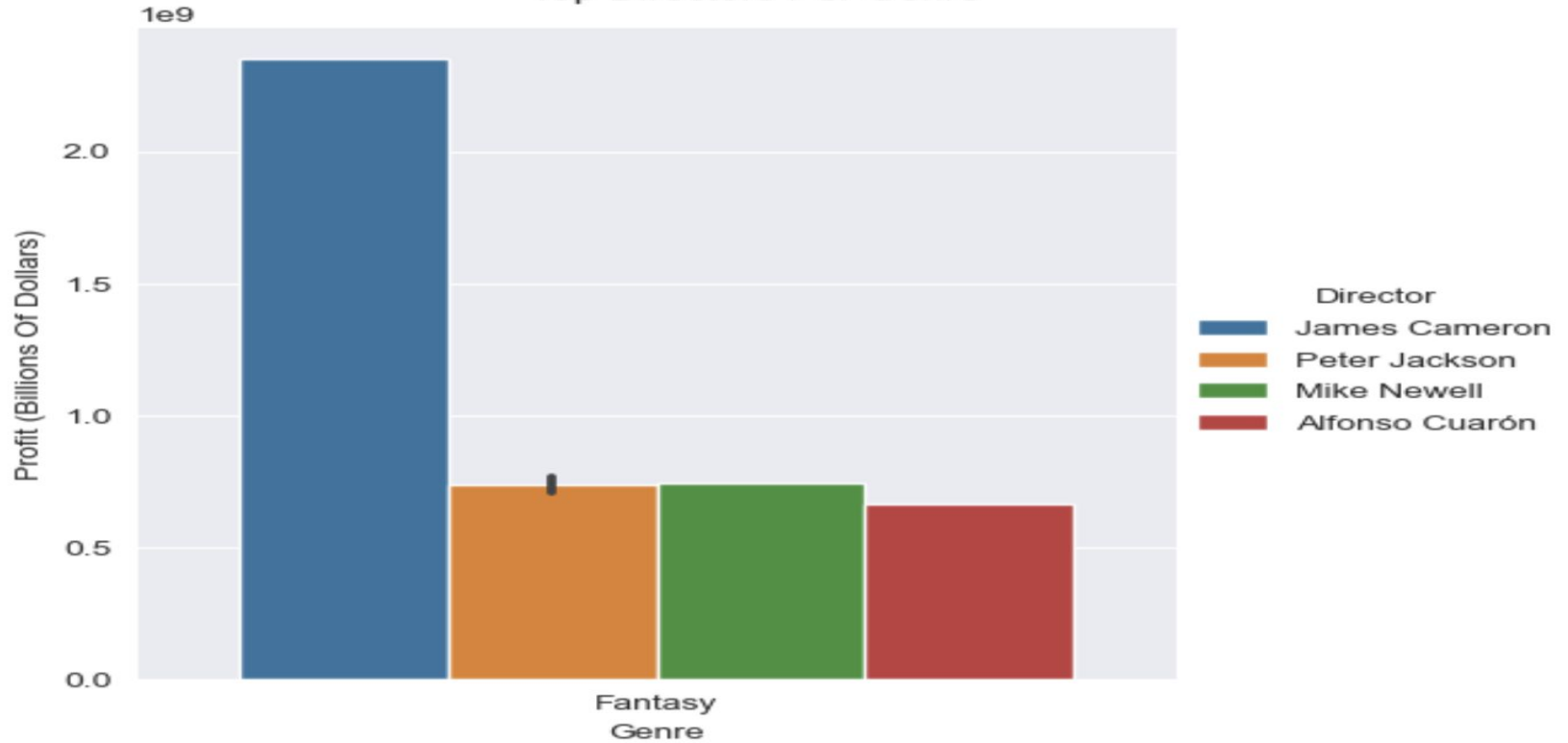
Top Directors Per Genre



Top Directors Per Genre

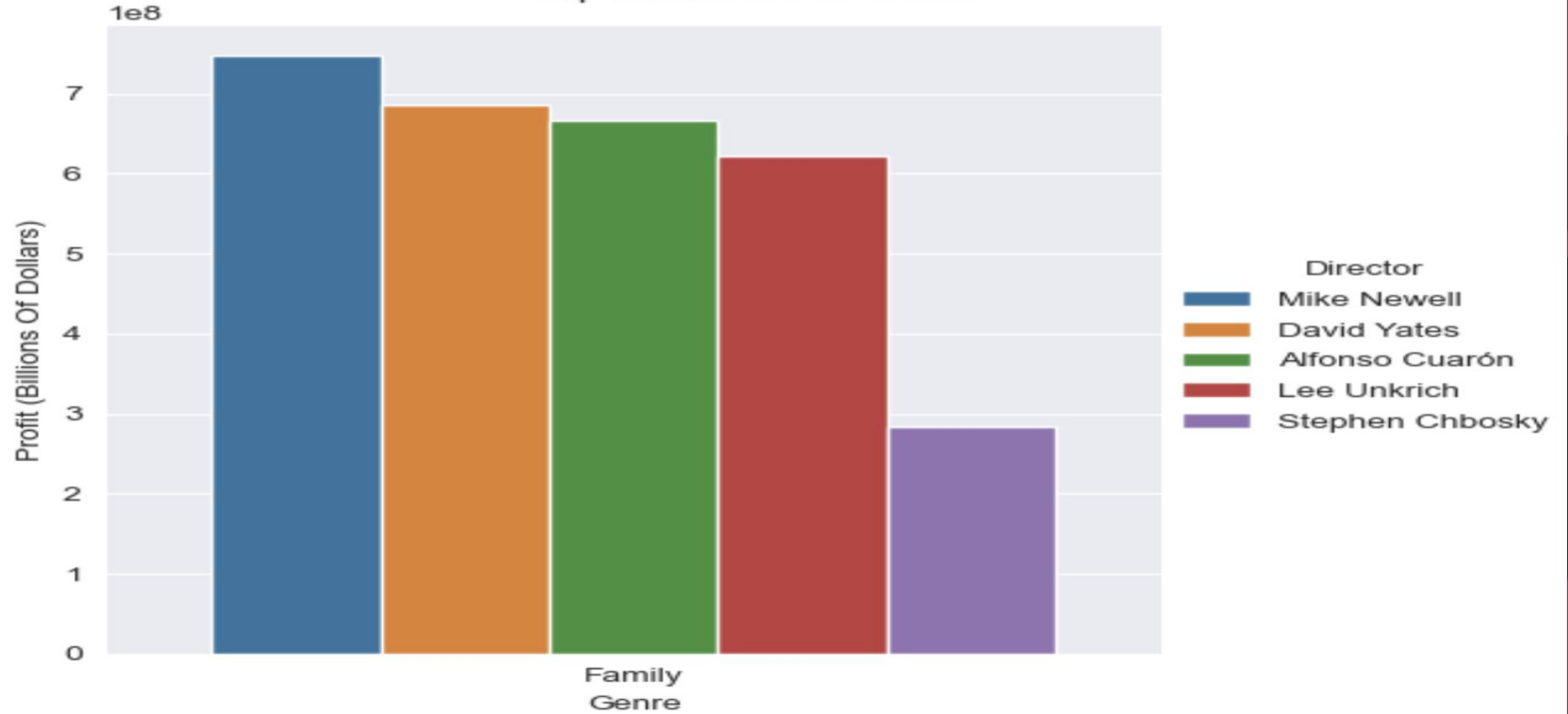


Top Directors Per Genre





Top Directors Per Genre



# Results

1. The highest profiting movie genres are Adventure, Action, Animation, Fantasy and Family
- 2.) Genres that will stand out include Animation, Family and Fantasy
- 3.) The best directors to hire are **James Cameron**, **Brad Bird**, and **Mike Newell**



# Conclusion



## Movie Option #1

- \* A fantasy movie directed by James Cameron.
- \* Potential profit of \$2,351,345,279



## Movie Option #2

- \* A animation movie directed by Brad Bird.
- \* Potential profit of \$1,042,520,711



## Movie Option #3

- \* A family movie directed by Mike Newell.
- \* Potential profit of \$747,099,794

# Thank you!

Do you have any questions?

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<https://github.com/jj862>

