

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. They are positioned diagonally, with the blue one in front of the green one.


# Success in the Movie Industry

Thomas Tam, Edward Chang, Ari Iwunze



## Project Goals

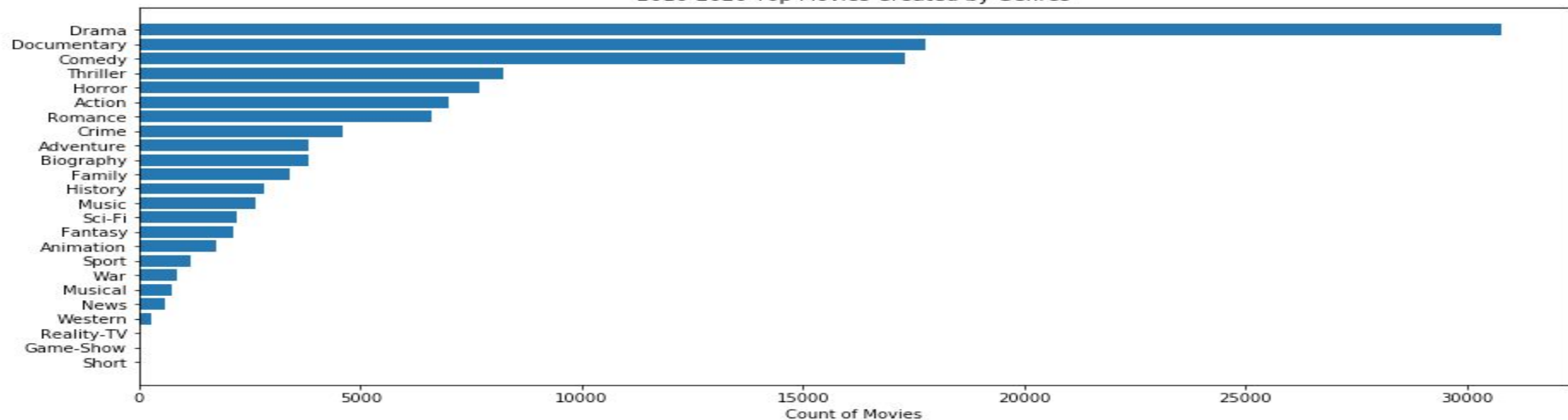
Have a better understanding of the movie industry and what type of films our company should create



What is the distribution for movies in each genre? What are the top 3 genres that film studios create the most?

- Action?
- Thriller?
- Drama?
- Comedy?
- Romance?
- Animation?

2010-2020 Top Movies Created by Genres



Genre	Count	Percentage (%)
Drama	30788	24.41
Documentary	17753	14.08
Comedy	17290	13.71
Thriller	8217	6.52
Horror	7674	6.08
Action	6988	5.54
Romance	6589	5.22
Crime	4611	3.66
Adventure	3817	3.03
Biography	3809	3.02
Family	3412	2.71
History	2825	2.24

Genre	Count	Percentage (%)
Music	2644	2.10
Sci-Fi	2206	1.75
Fantasy	2126	1.69
Animation	1743	1.38
Sport	1179	0.93
War	853	0.68
Musical	721	0.57
News	579	0.46
Western	280	0.22
Reality-TV	17	0.01
Game-Show	2	0.00
Short	1	0.00

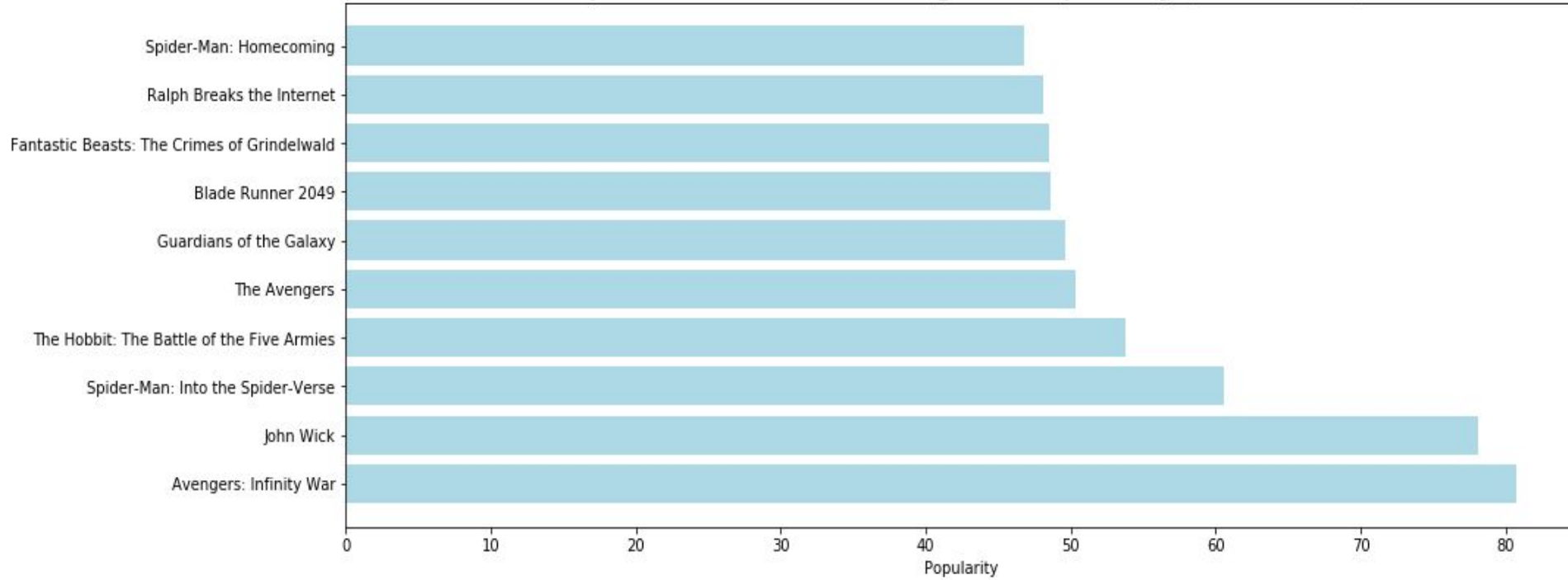
What films have been most popular and highest rated between 2010 - 2020?



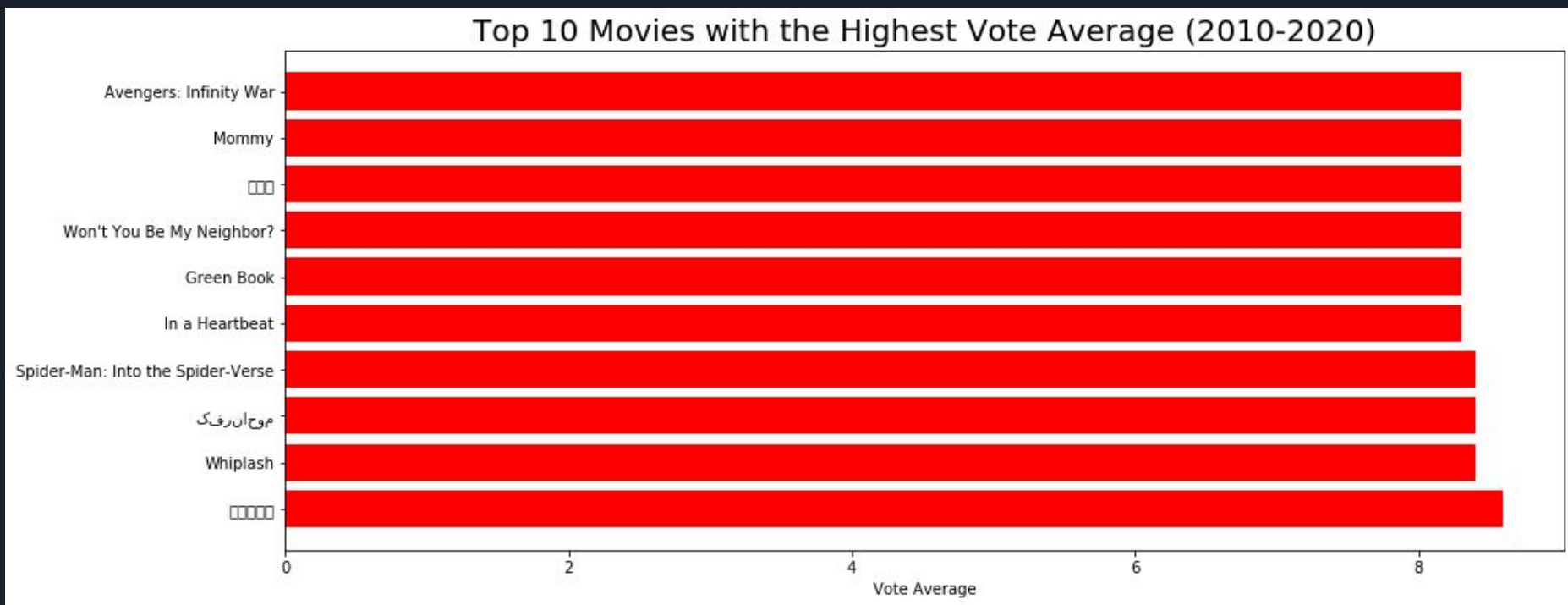
Definitely not this (Rotten Tomatoes - 7%)

# Top 10 Most Popular Movies (2010-2020)

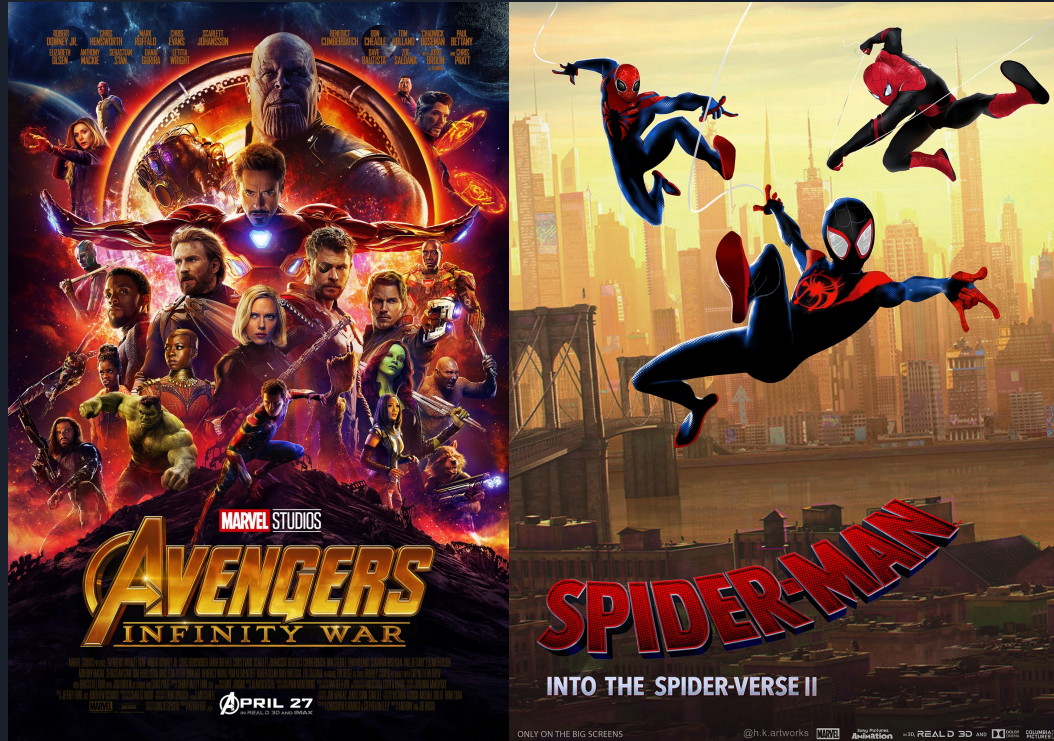
Top 10 Movies with the Highest Popularity (2010-2020)



# Top 10 Most Highest Rated Movies (2010-2020)



Both these are in the top 10 Most Popular and Highly Rated. What do they have in common?

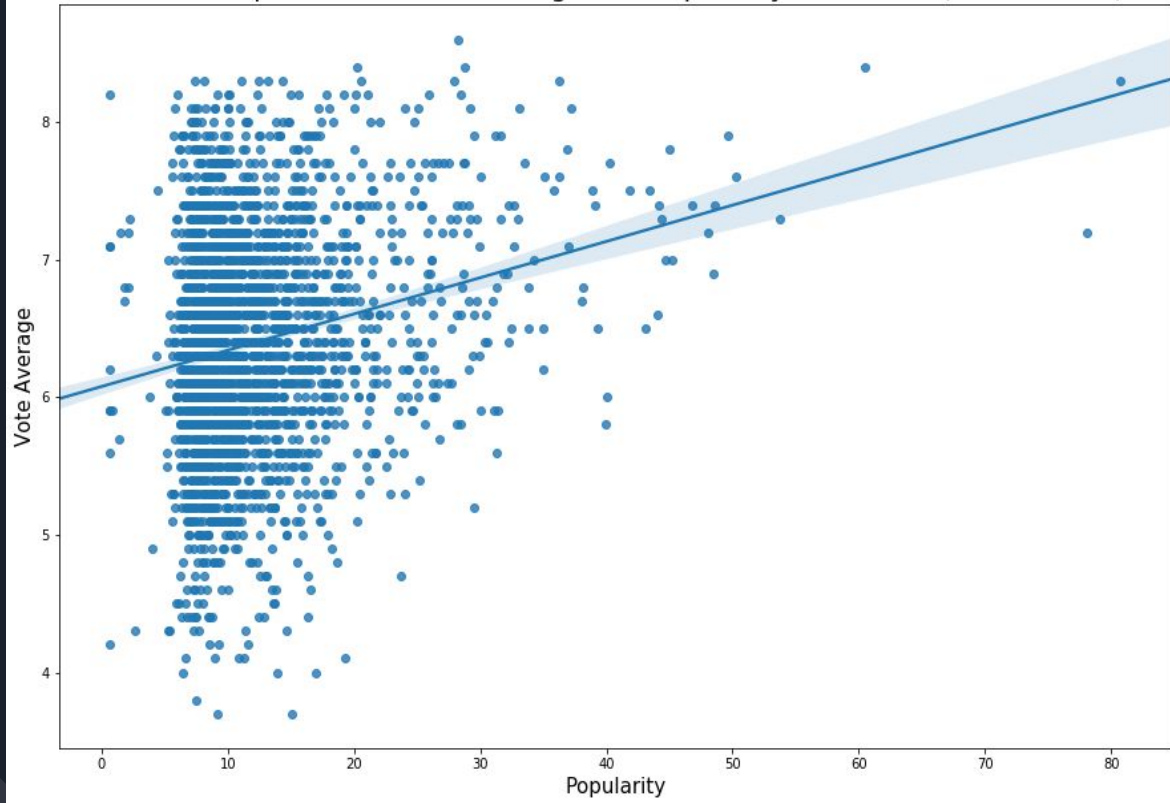






Is there a relationship between Popularity  
and Highest Rated Movies?

Relationship between Vote Average and Popularity for Movies (2010 - 2020)



Correlation Coefficient: 0.21

Total Records: 2412

### Popularity

Min: 8.23

Max: 80.77

Median: 10.32

Mean: 12.38

### Vote Average

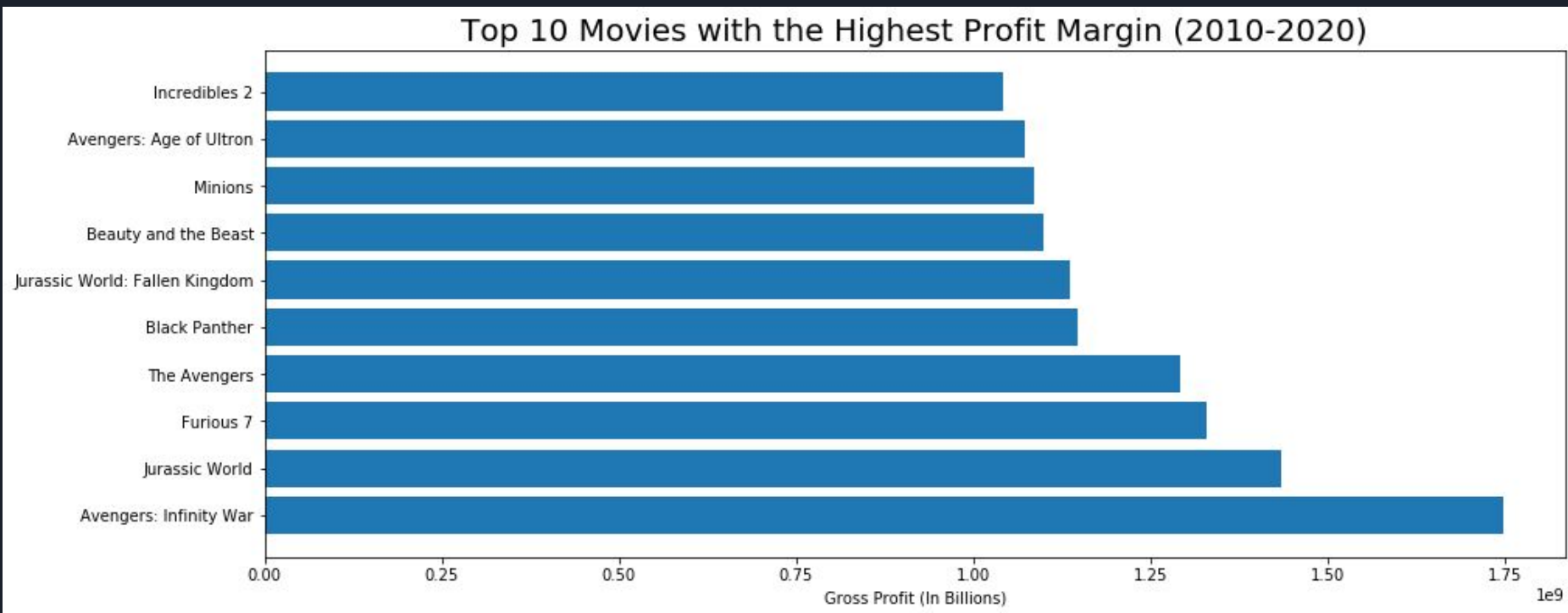
Min: 3.70

Max: 8.60

Median: 6.40

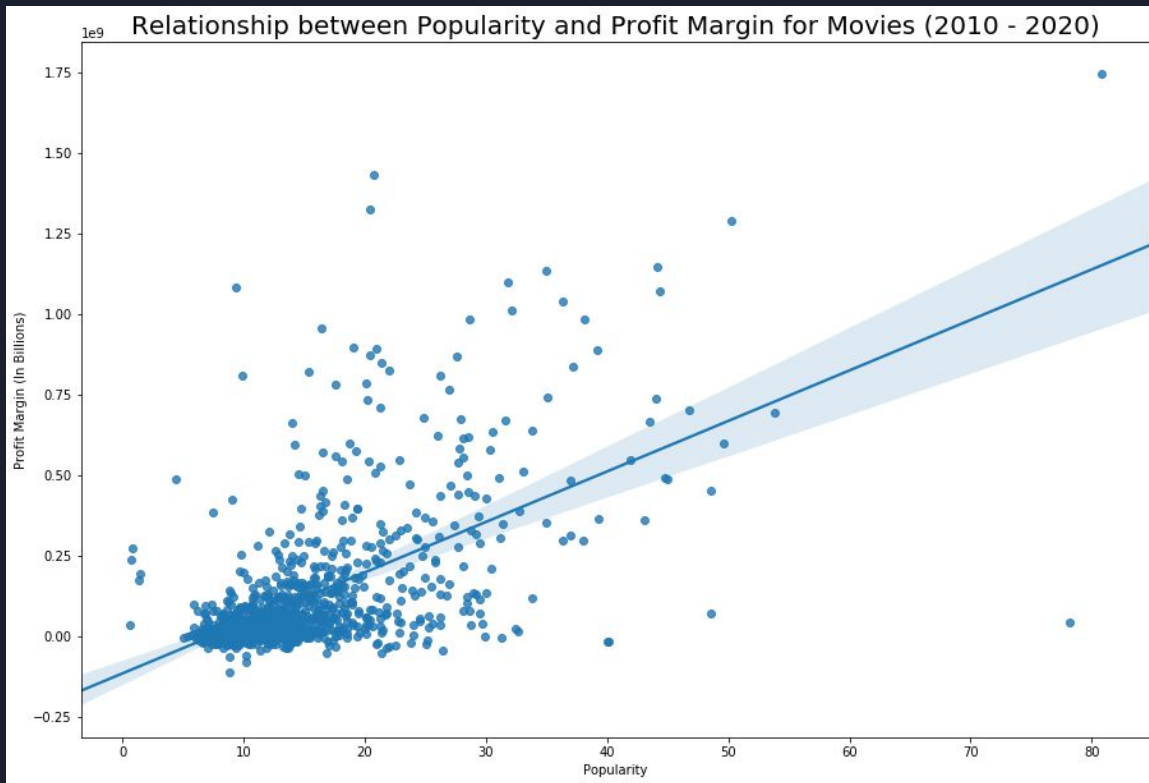
Mean: 6.40

# Top 10 Movies with the Highest Profit Margin (2010-2020)





Is there a relationship between Popularity  
and Profit Margin?



Total Records: 1028

## Popularity

Min: 0.60

Max: 80.77

Median: 12.77

Mean: 14.77

## Profit Margin

Min: -110M

Max: 1748M

Median: 42M

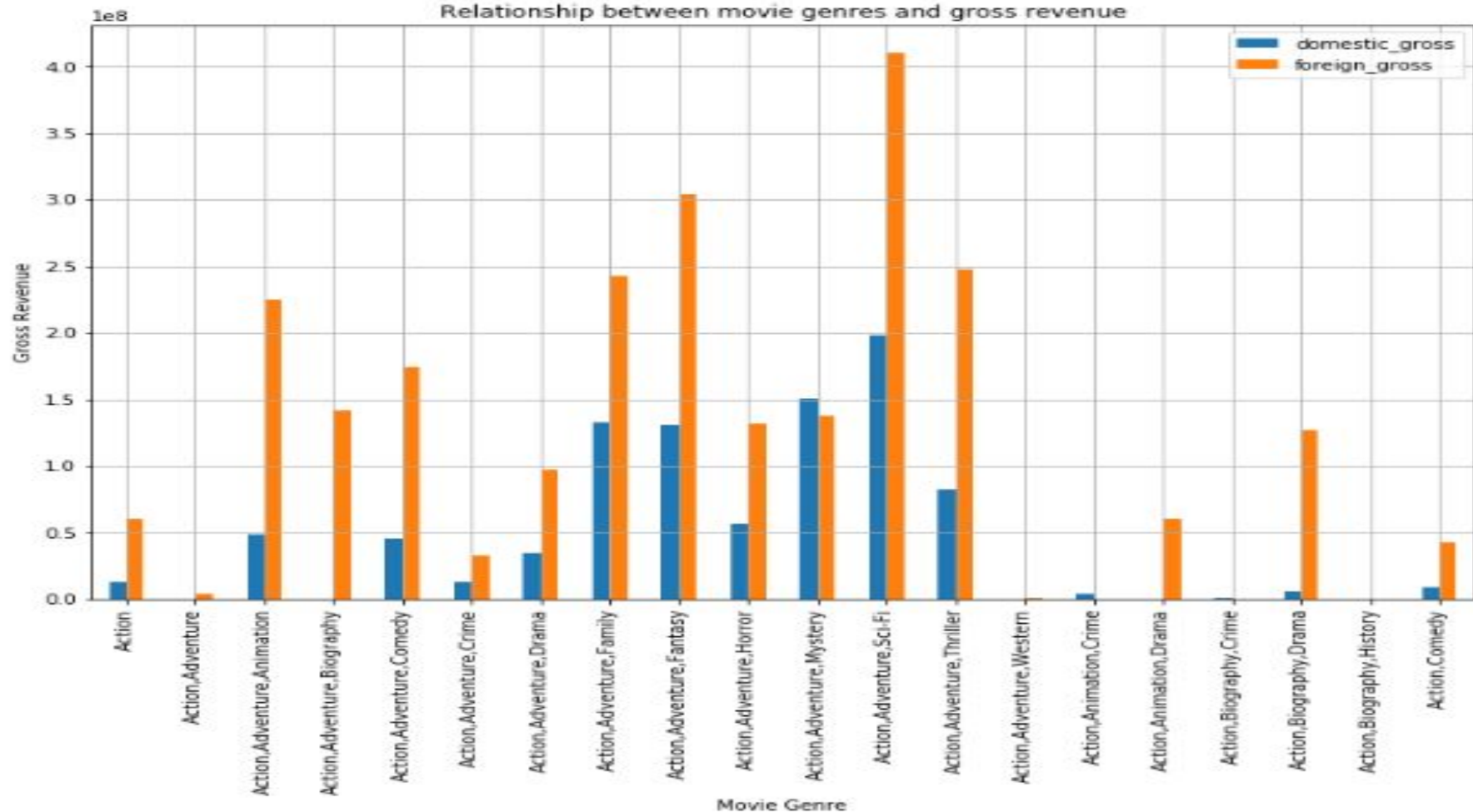
Mean: 118M

Correlation Coefficient: 0.60



What are the most lucrative genre combinations?

Relationship between movie genres and gross revenue



# Top Movie Genre Combinations

\* Movies may

genres	domestic_gross	foreign_gross
Action,Adventure,Sci-Fi	1.979944e+08	4.105883e+08
Action,Adventure,Fantasy	1.304897e+08	3.047091e+08
Action,Adventure,Thriller	8.247758e+07	2.482125e+08
Action,Adventure,Family	1.324500e+08	2.432000e+08
Action,Adventure,Animation	4.871540e+07	2.252333e+08





Who are the top 5 writers, producers, and directors for the top 3 genres?

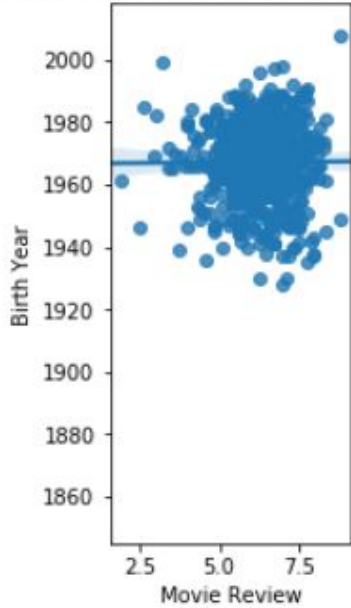
Based on our analysis the ideal 5 casts for the best genre combination are:

Genre	Producers	Directors	Writers
Action	Chris Hemsworth	Stanley Tucci	John Logan
Action	Frank Grillo	Ian McShane	Jeff Pinkner
Action	Stanley Tucci	Don Murphy	Akiva Goldsman
Action	Amber Heard	Irrfan Khan	Steven Spielberg
Action	Ian McShane	Akiva Goldsman	T.J. Miller
Adventure	Chris Hemsworth	Stanley Tucci	Jennifer Lee
Adventure	Jennifer Lee	Ian McShane	John Logan
Adventure	Stanley Tucci	Don Murphy	Denis Leary
Adventure	Christopher Meledandri	Cate Blanchett	Mike Mitchell
Adventure	Amber Heard	Carolynne Cunningham	Cinco Paul
Sci-Fi	Chris Hemsworth	Stanley Tucci	Jeff Pinkner
Sci-Fi	Stanley Tucci	Don Murphy	Akiva Goldsman
Sci-Fi	Don Murphy	Irrfan Khan	Steven Spielberg
Sci-Fi	Jeff Pinkner	Akiva Goldsman	Jon Hoeber
Sci-Fi		Steven Spielberg	Wai Lun Ng

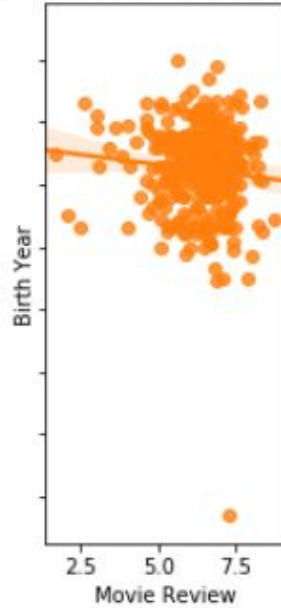


What's the relationship between the age of a crew member and the rating of a movie?

Producers Birth Year vs Movie Rating



Directors Birth Year vs Movie Rating



## Slope:

Producers: 0.000527 (Positive)

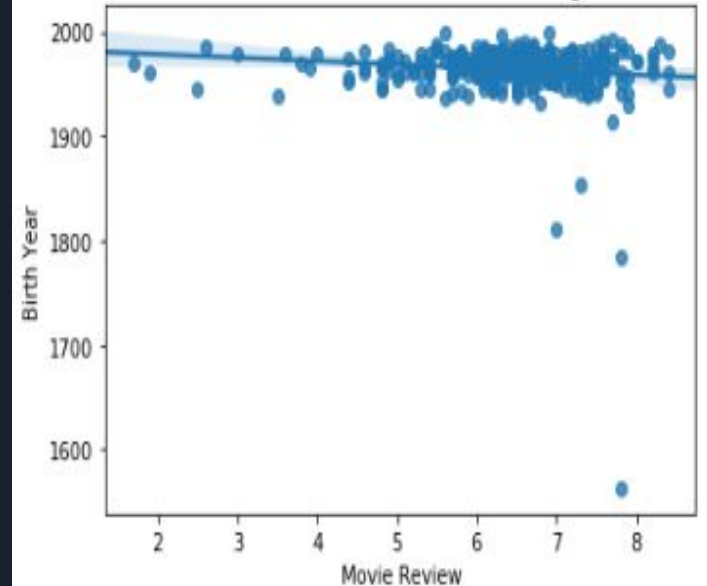
Directors: 0.006959 (Positive)

Writers: -0.003943 (Negative)

## Analysis:

Based on this I'll strongly recommend hiring a combination of a younger producer with an older more experienced writer and director.

Writers Birth Year vs Movie Rating

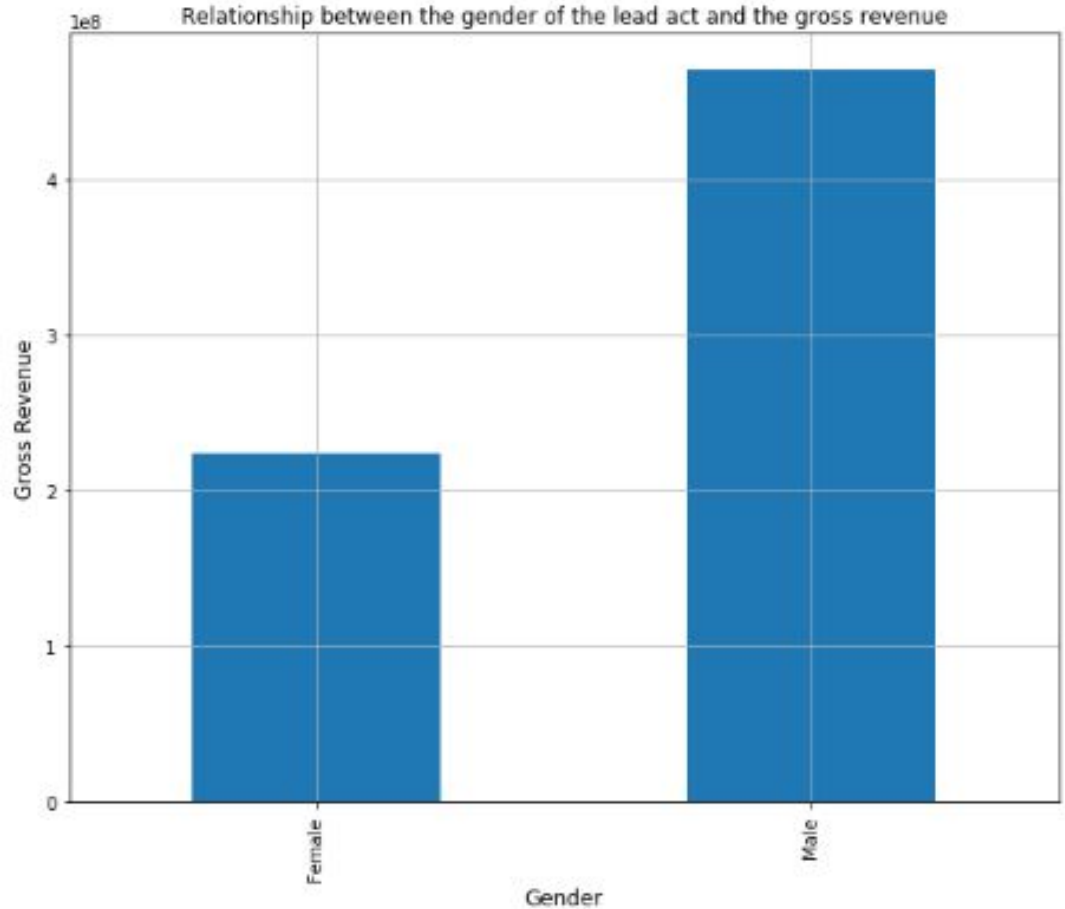




What's the relationship between the gender of the protagonist in an action movie and the gross revenue of that movie?

## Analysis

Based on this I'll recommend focusing on casting males as the protagonist of action movies. But if casting a female instead, a really solid strategy must be set in place .

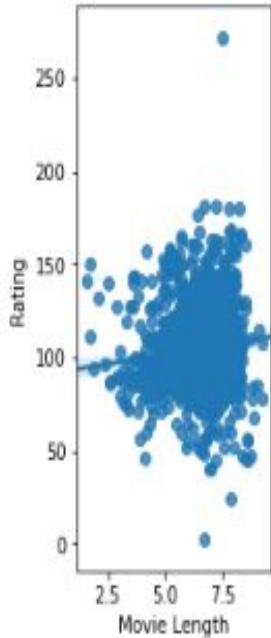




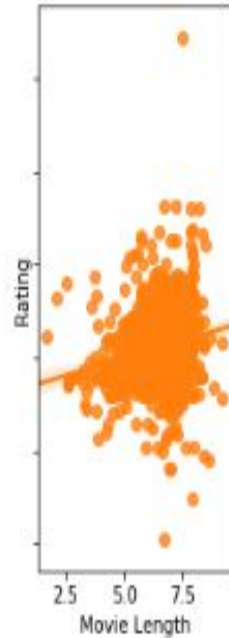
What's the relationship between the length of a movie and the gross revenue/rating of that movie?

# Relationship between Movie Length and the Movie Ratings/Revenue

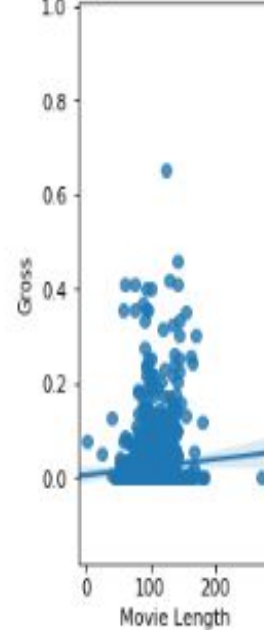
Movie length vs Movie Ratings Locally



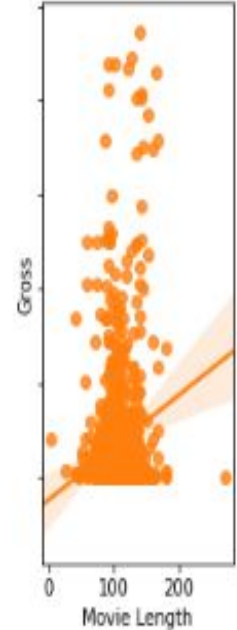
Movie length vs Movie Ratings Globally



Movie length vs Movie Revenue Locally



Movie length vs Movie Revenue Globally



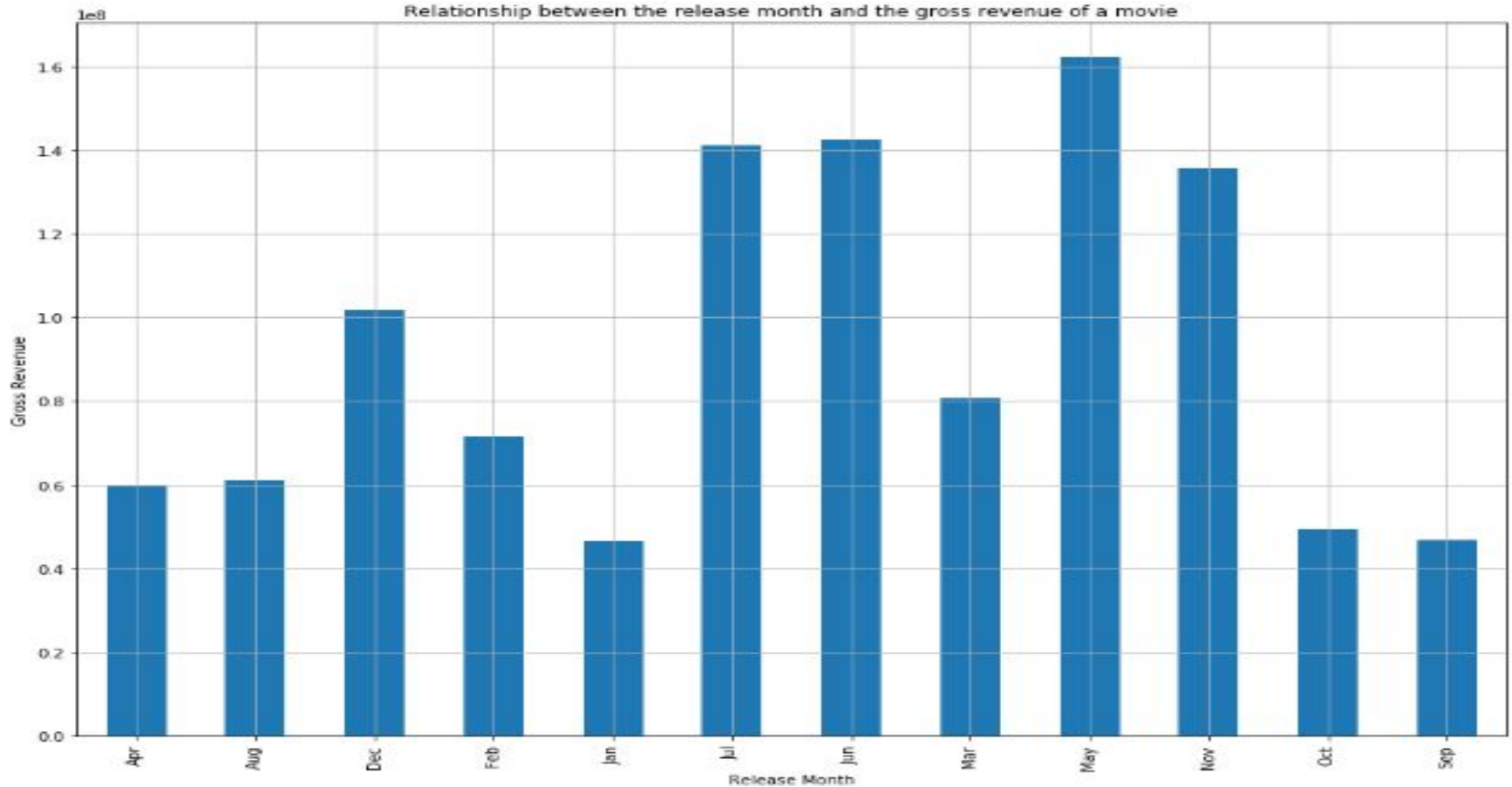
All four scatter plots have positive slopes which indicates longer movies do better





What's the relationship between the movie release month and the gross revenue/rating of a movie?

# Highest Grossing Movie Release Months



When your first movie breaks the box office

