Movie Analysis

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Dec 01, 2020

Outline

- Data and Methods
- Business Problem
- Results
- Conclusions

What is a successful movie?
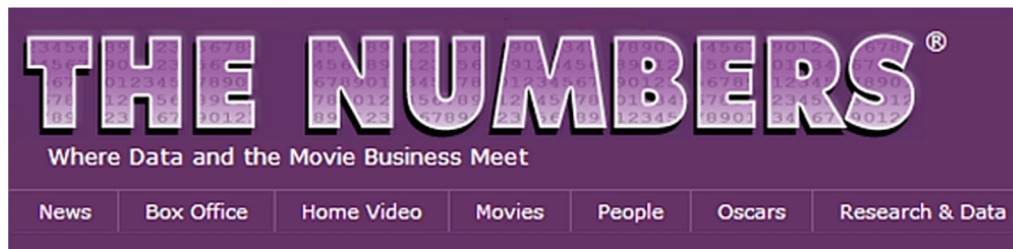
Domestic Gross ≥ 2× production budget

Or

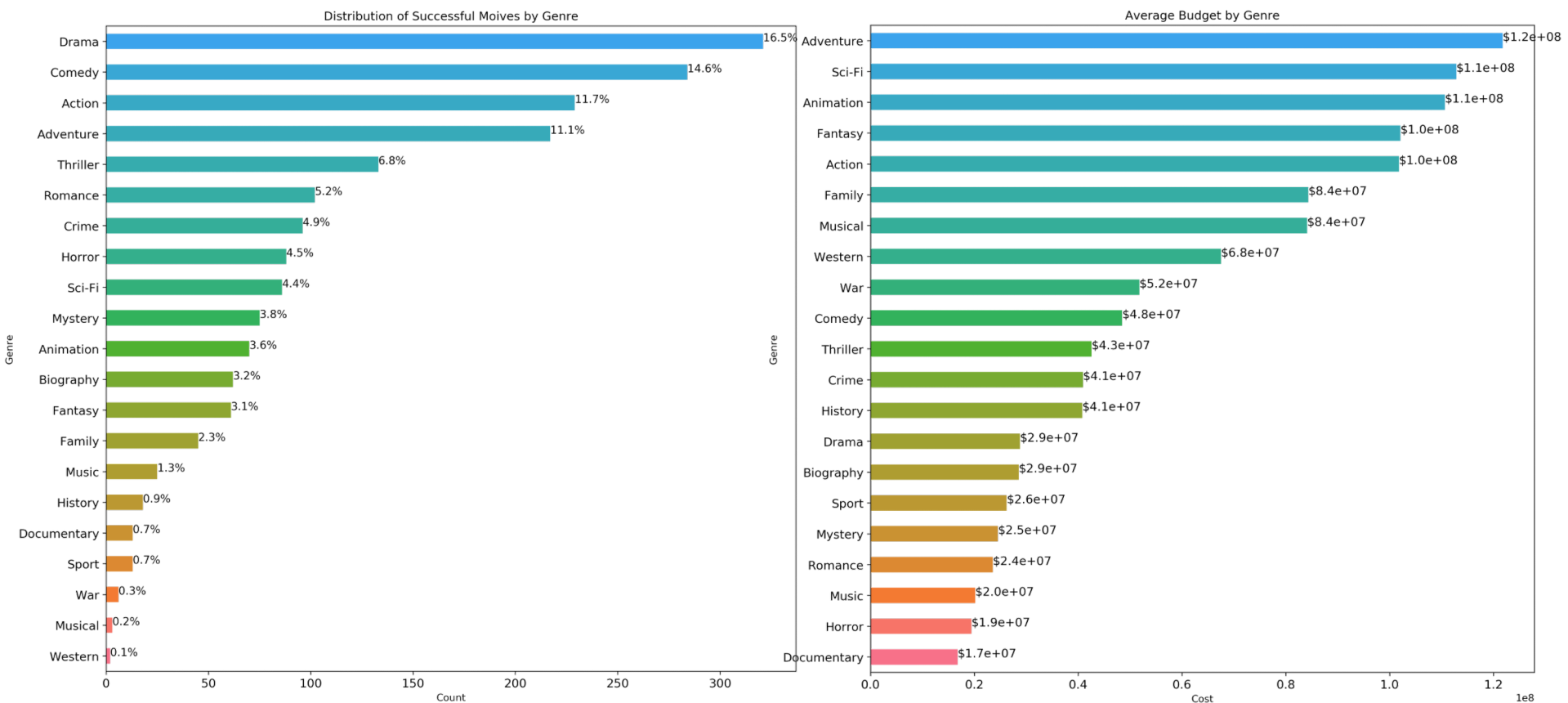Worldwide Gross ≥ 2× production budget

Data and Methods

- Descriptive analysis of multiple large data sets from IMDb and The Numbers.

- Combine IMDb and The Numbers data for over 1400 movies with unique identifiers

- Range from 2010 to 2020

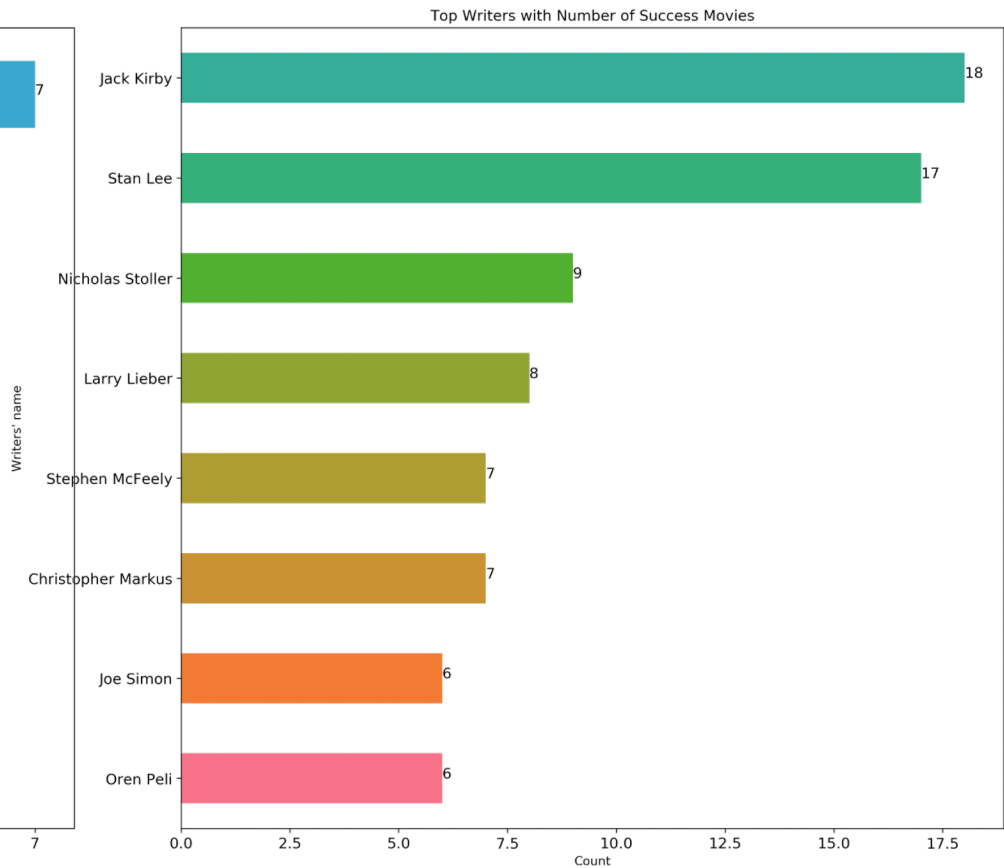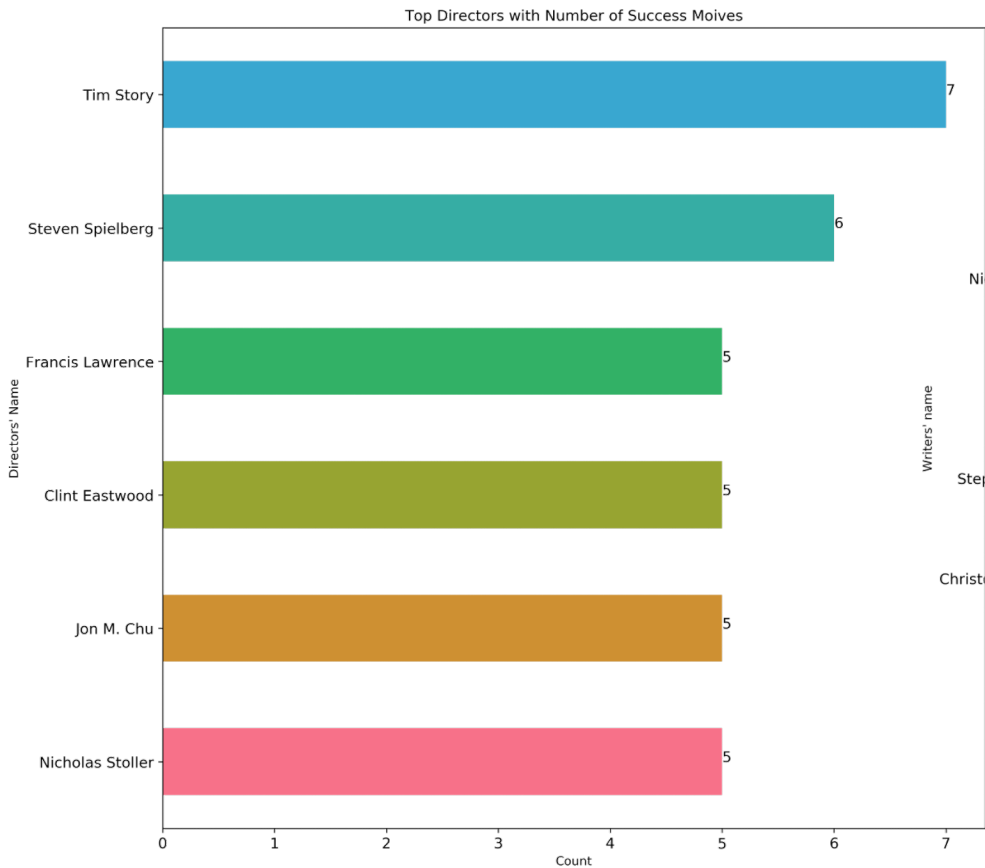- 740 movies are considered as successful movies

Business Problem

- Which genres should be selected?

- Which directors and writers should be hired?

- What is the optimal movie length?
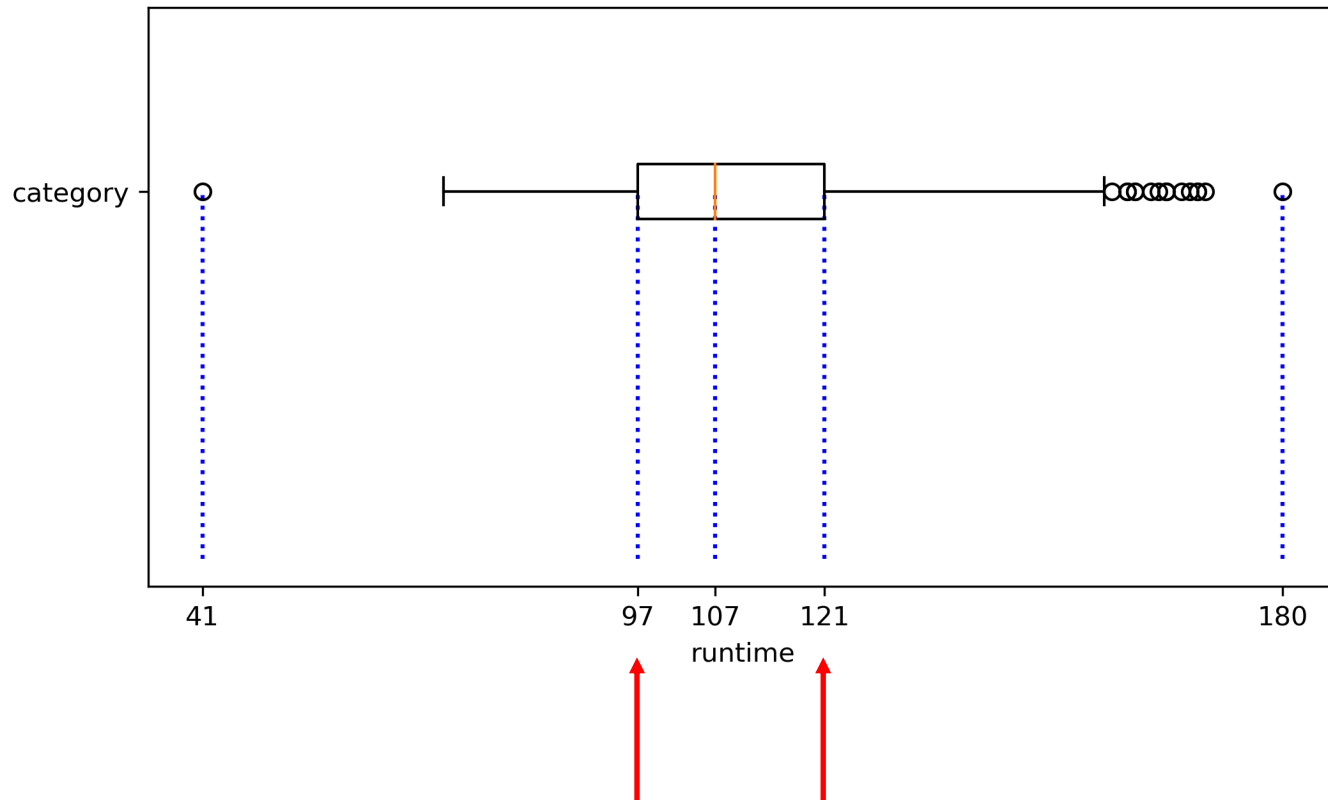
- What is the best release month?

Results: Genres

Distribution of Successful Moives by Genre

Genre	Percentage
Drama	16.5%
Comedy	14.6%
Action	11.7%
Adventure	11.1%
Thriller	6.8%
Romance	5.2%
Crime	4.9%
Horror	4.5%
Sci-Fi	4.4%
Mystery	3.8%
Animation	3.6%
Biography	3.2%
Fantasy	3.1%
Family	2.3%
Music	1.3%
History	0.9%
Documentary	0.7%
Sport	0.7%
War	0.3%
Musical	0.2%
Western	0.1%

Average Budget by Genre

Genre	Cost
Adventure	$1.2e+08
Sci-Fi	$1.1e+08
Animation	$1.1e+08
Fantasy	$1.0e+08
Action	$1.0e+08
Family	$8.4e+07
Musical	$8.4e+07
Western	$6.8e+07
War	$5.2e+07
Comedy	$4.8e+07
Thriller	$4.3e+07
Crime	$4.1e+07
History	$4.1e+07
Drama	$2.9e+07
Biography	$2.9e+07
Sport	$2.6e+07
Mystery	$2.5e+07
Romance	$2.4e+07
Music	$2.0e+07
Horror	$1.9e+07
Documentary	$1.7e+07

Results: Directors and Writers

Top Directors with Number of Success Moives

Directors' Name	Count
Tim Story	7
Steven Spielberg	6
Francis Lawrence	5
Clint Eastwood	5
Jon M. Chu	5
Nicholas Stoller	5

Top Writers with Number of Success Movies

Writers' name	Count
Jack Kirby	18
Stan Lee	17
Nicholas Stoller	9
Larry Lieber	8
Stephen McFeely	7
Christopher Markus	7
Joe Simon	6
Oren Peli	6

Results: Movie Length

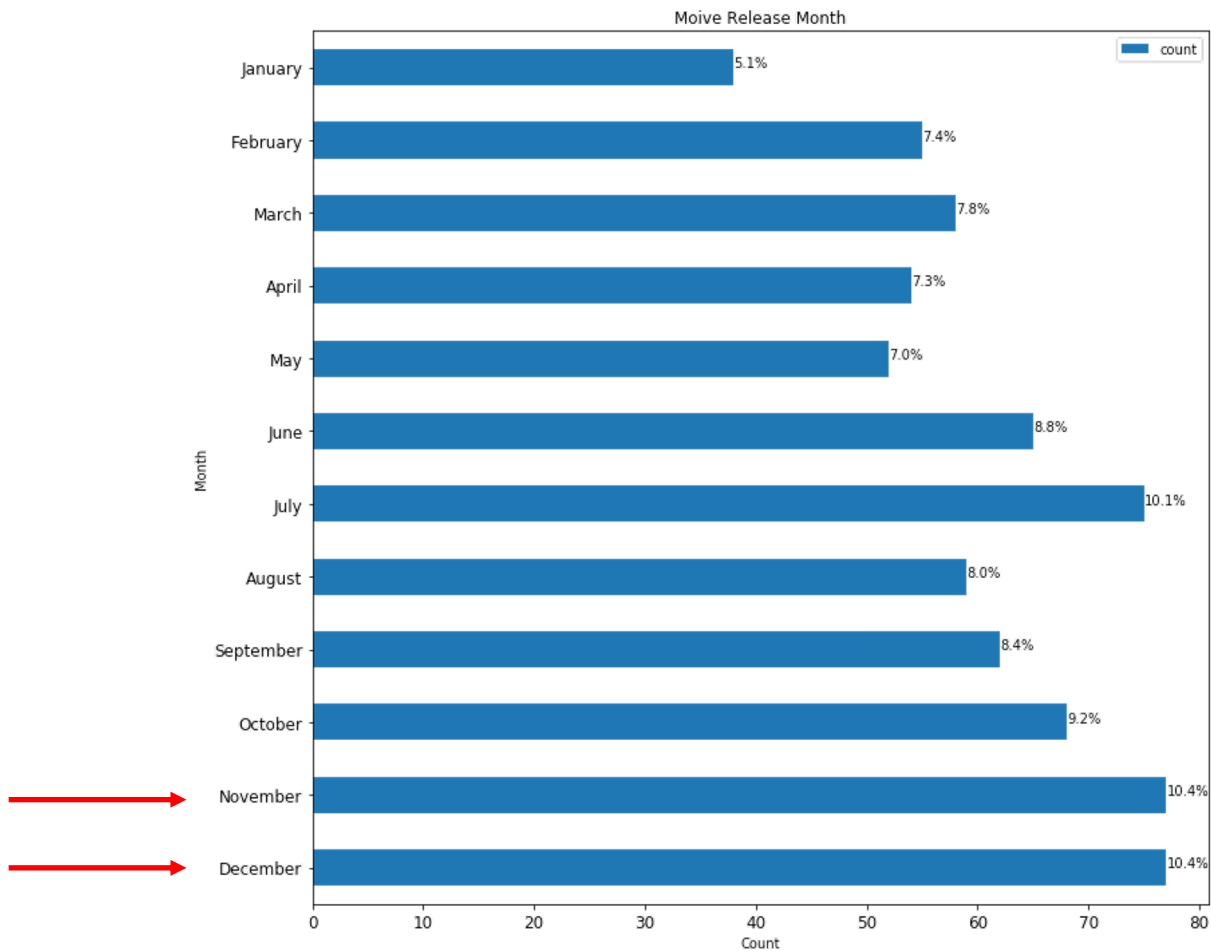# Results: Release Month

Moive Release Month

Conclusions

- ❑ Choose a combination of genres based on budget.
- ❑ Hire directors and writers who have produce more successful movies based on budget.
- ❑ The optimal movie length for successful movies is between **97 and 121** minutes.
- ❑ **November** and **December** are the best month for releasing successful movies.

Next Steps:

- ❑ Prediction on how much gross can be earned based on different budget.
- ❑ Model for age groups
- ❑ Movie Trailer

Thank You!

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