

AN EXPLORATORY ANALYSIS OF MOVIES RELEASED FROM 1915 TO 2018

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SUMMARY

Applying **exploratory analysis** and **visualization** of movie data from **Rotten Tomatoes** and **the-numbers.com** between 1915 and 2018 to detect market trends and determine how to construct and optimize content for a movie to reach its maximum potential

OUTLINE

- Objective
- Data
- Methods
- Results
- Conclusions
- Next Steps



OBJECTIVE

Predict customer preference and plan for a debut into the highly competitive filmmaking industry for a new production company

- Investigate the relations between certain attributes including **genres**, **directors**, **production company**, **month of release** on a movie's **commercial success**

DATA

- A merge between **Rotten Tomatoes** and **the-numbers.com** containing 4,304 entries for movies released from 1915 to 2018
- Key features to be analyzed:
 - Release Date
 - Genres
 - Production Company
 - Production Budget
 - Domestic/Worldwide Gross

METHODS

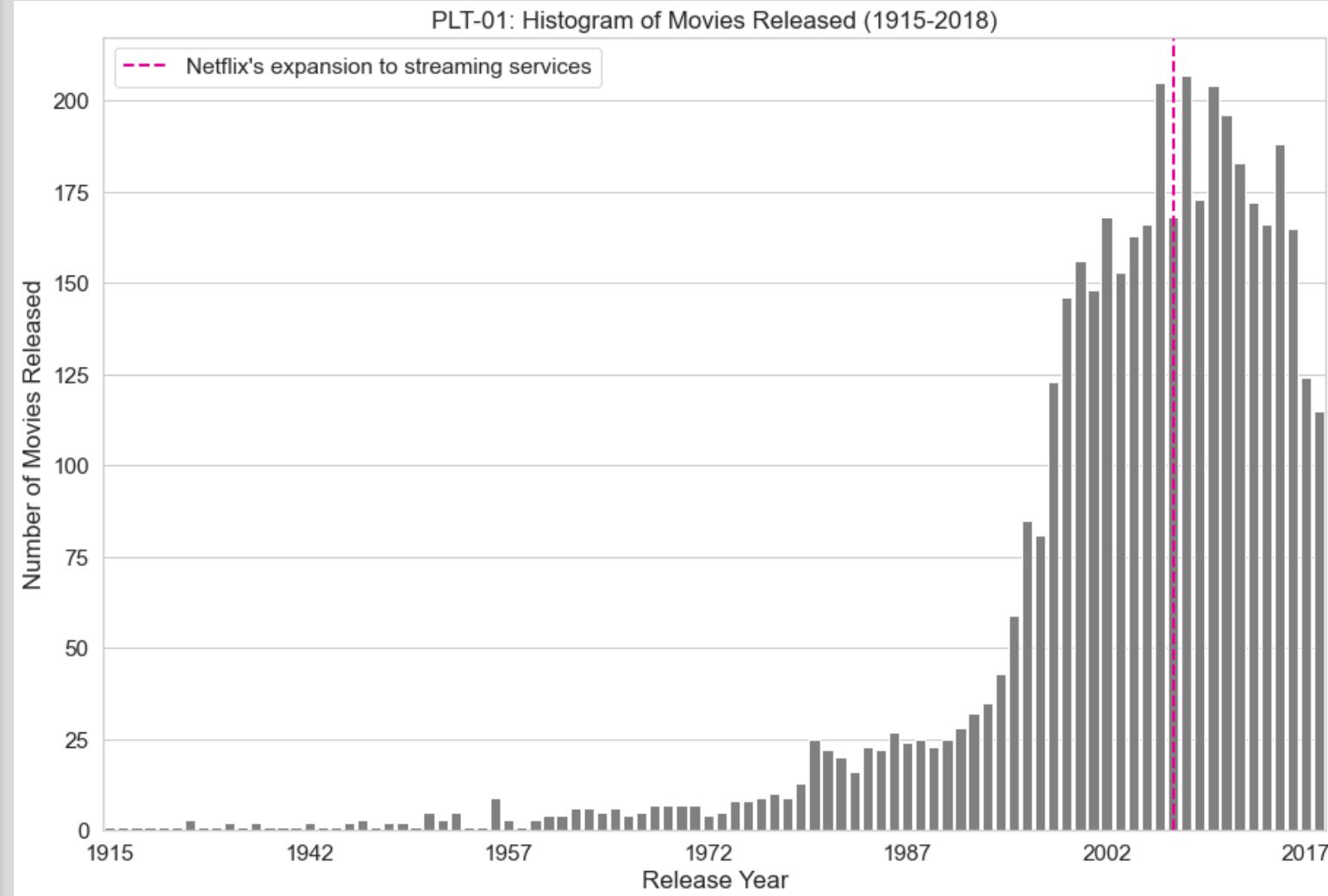
Using **descriptive analysis** including the examination of trends and market distribution over time to gain useful insights on the landscape of the filmmaking industry

- **Commercial success** of movies are evaluated on:
 - **Box Office Gross**
 - **Profit** (= worldwide gross - production budget)
 - **Rate of Return** (= profit / production budget)

RESULTS OVERVIEW

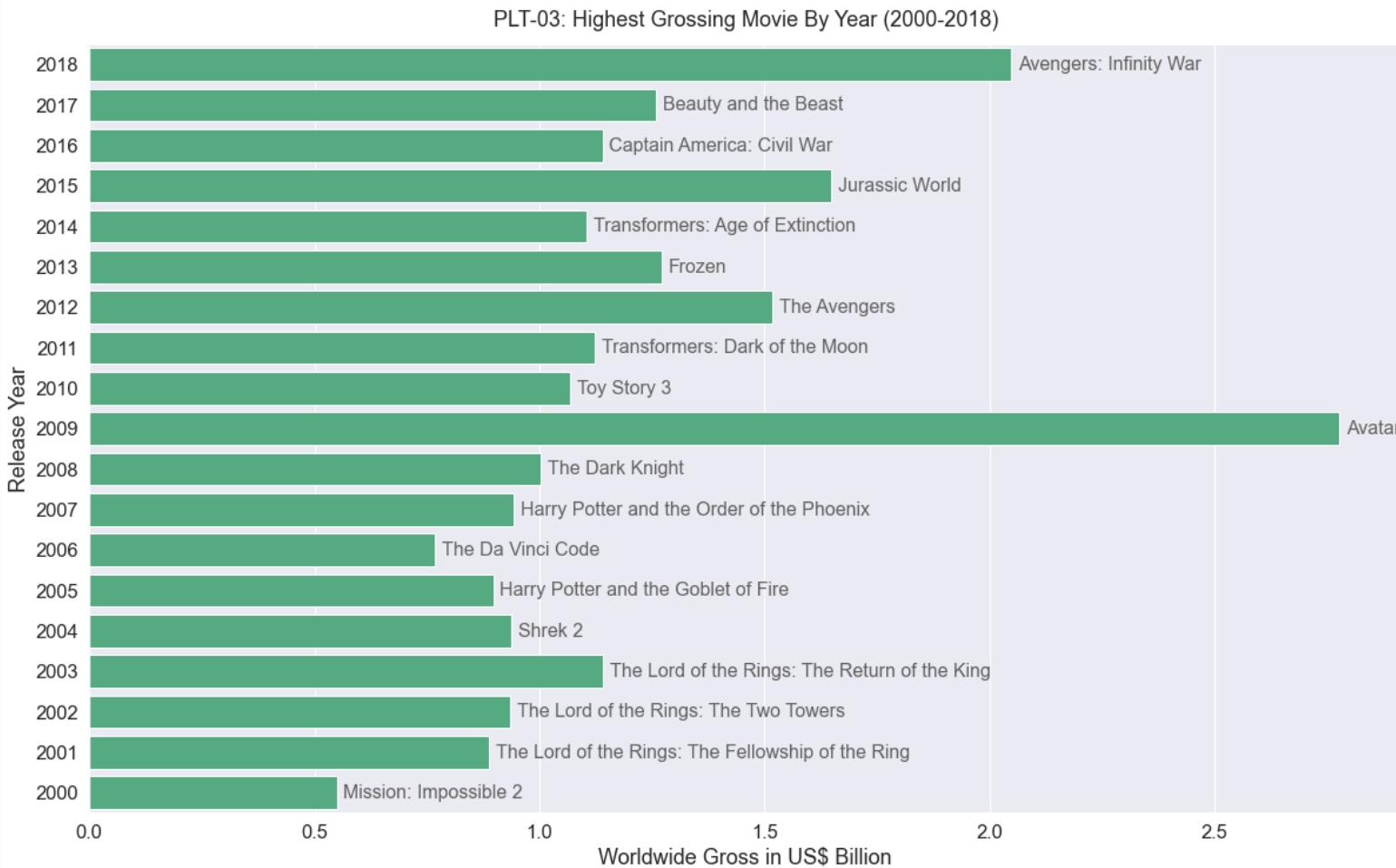
Number of movies released seems to decrease since 2008

- Netflix started offering streaming services in 2007



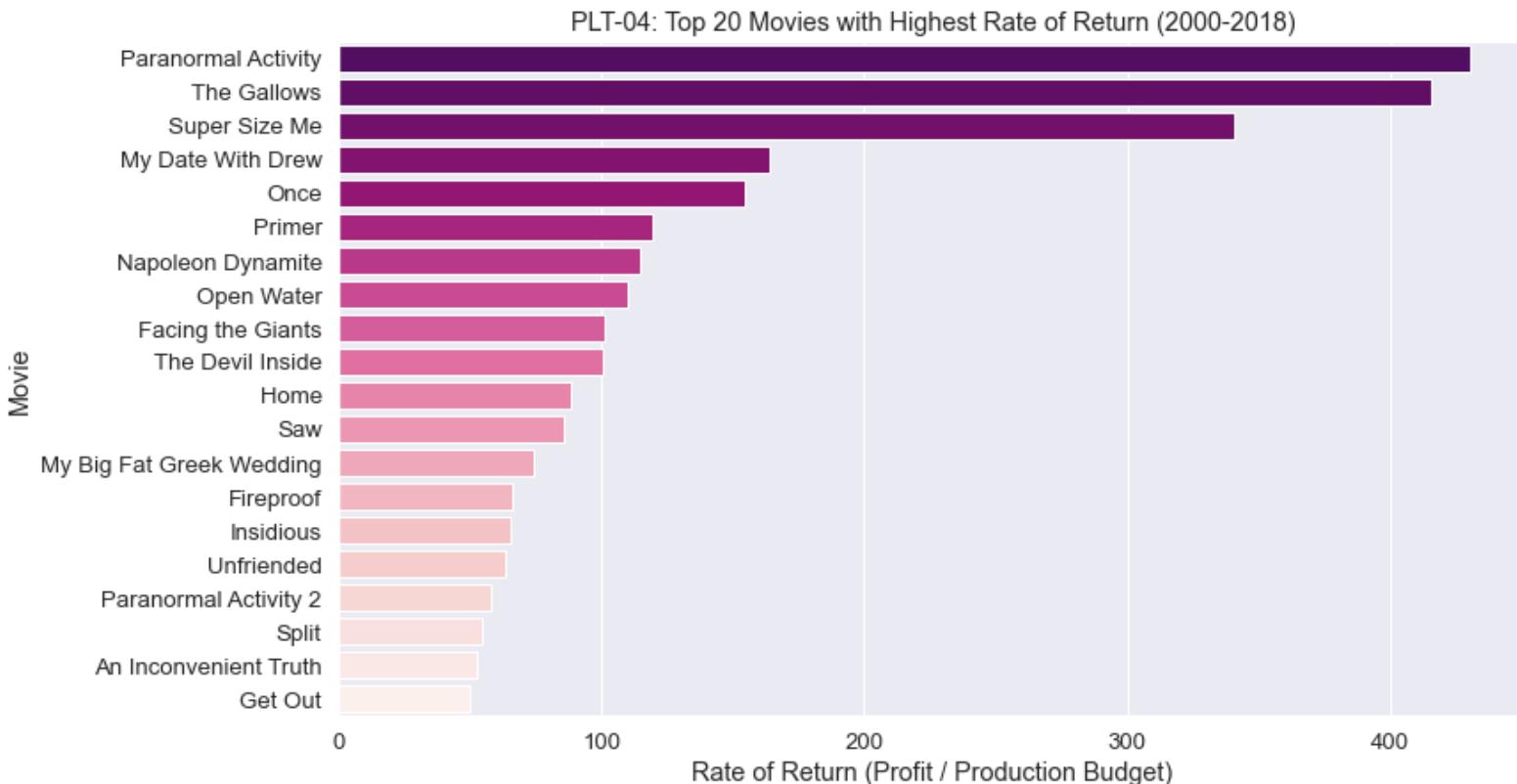
RESULTS OVERVIEW

Up to 2018, **Avatar** (2009) is the **HIGHEST GROSSING** movie with a worldwide box office revenue of more than US\$ 2.77B



RESULTS OVERVIEW

Some of the movies with
HIGHEST RATES OF
RETURN (2000-2018) are
Horror and Mystery &
Suspense

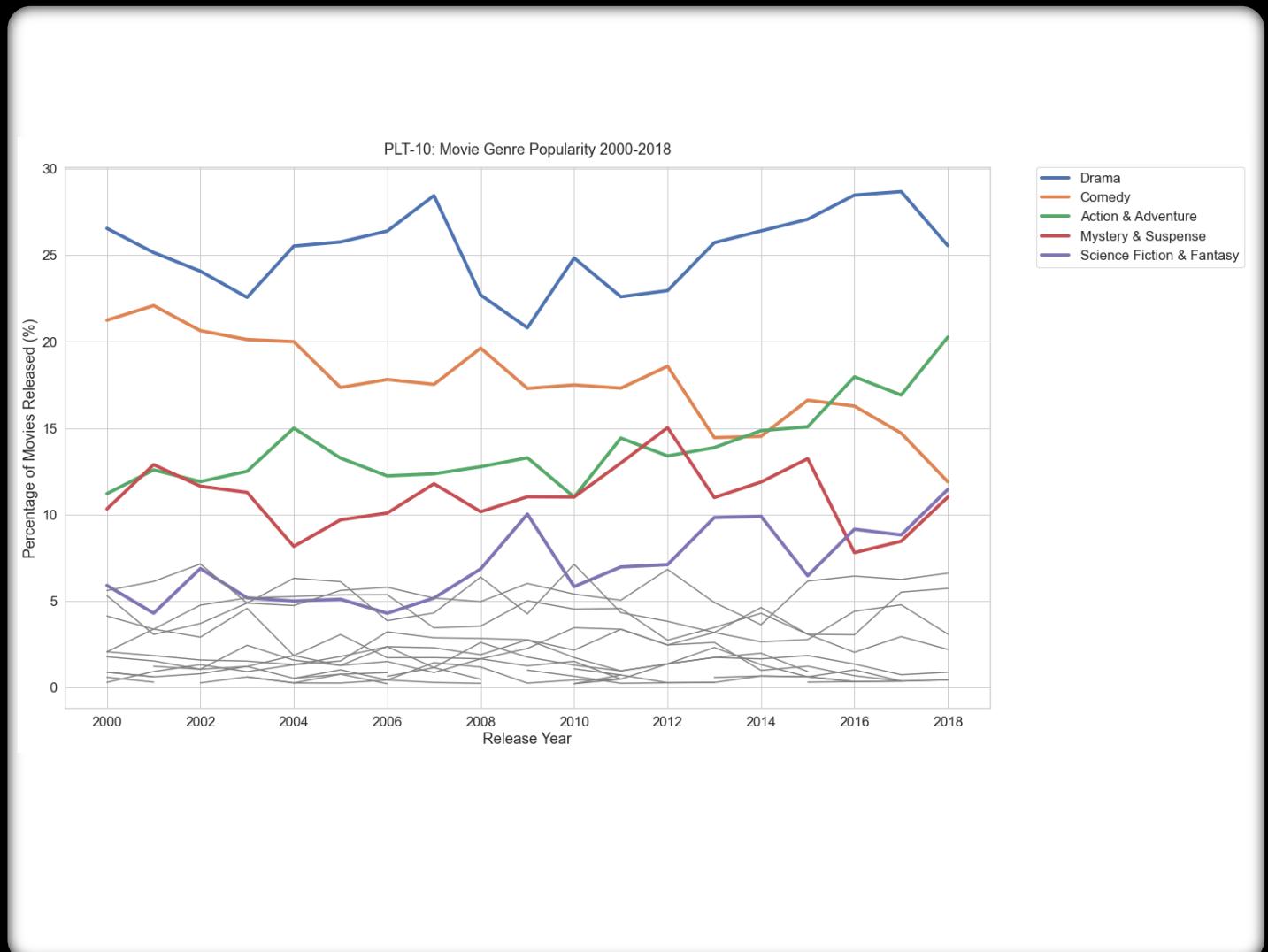


RESULTS

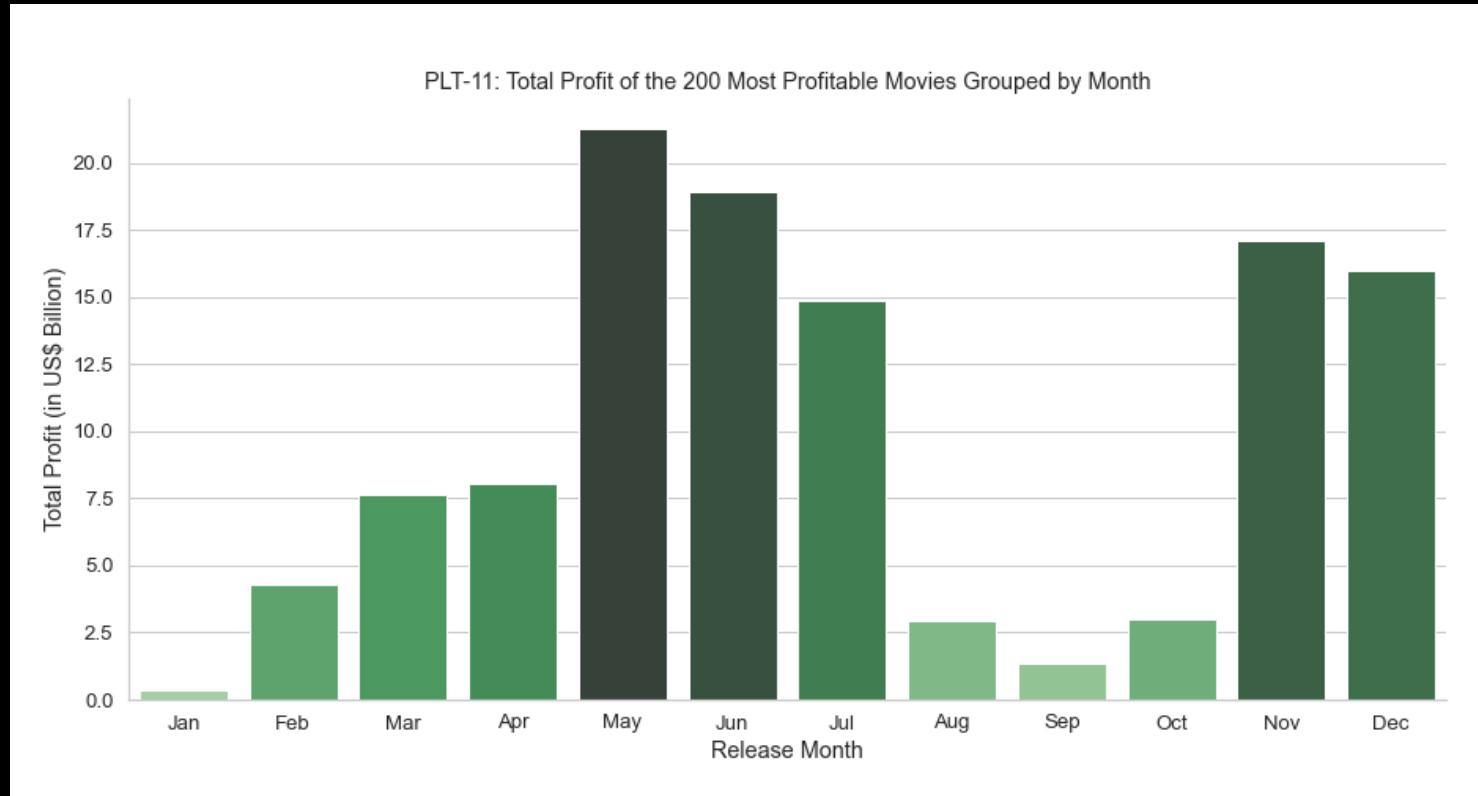
Combining different GENRES attract more demographics, which generally boosts profit and return on investment

Slight upward trends in:

- **Action & Adventure**
- **Science Fiction & Fantasy**

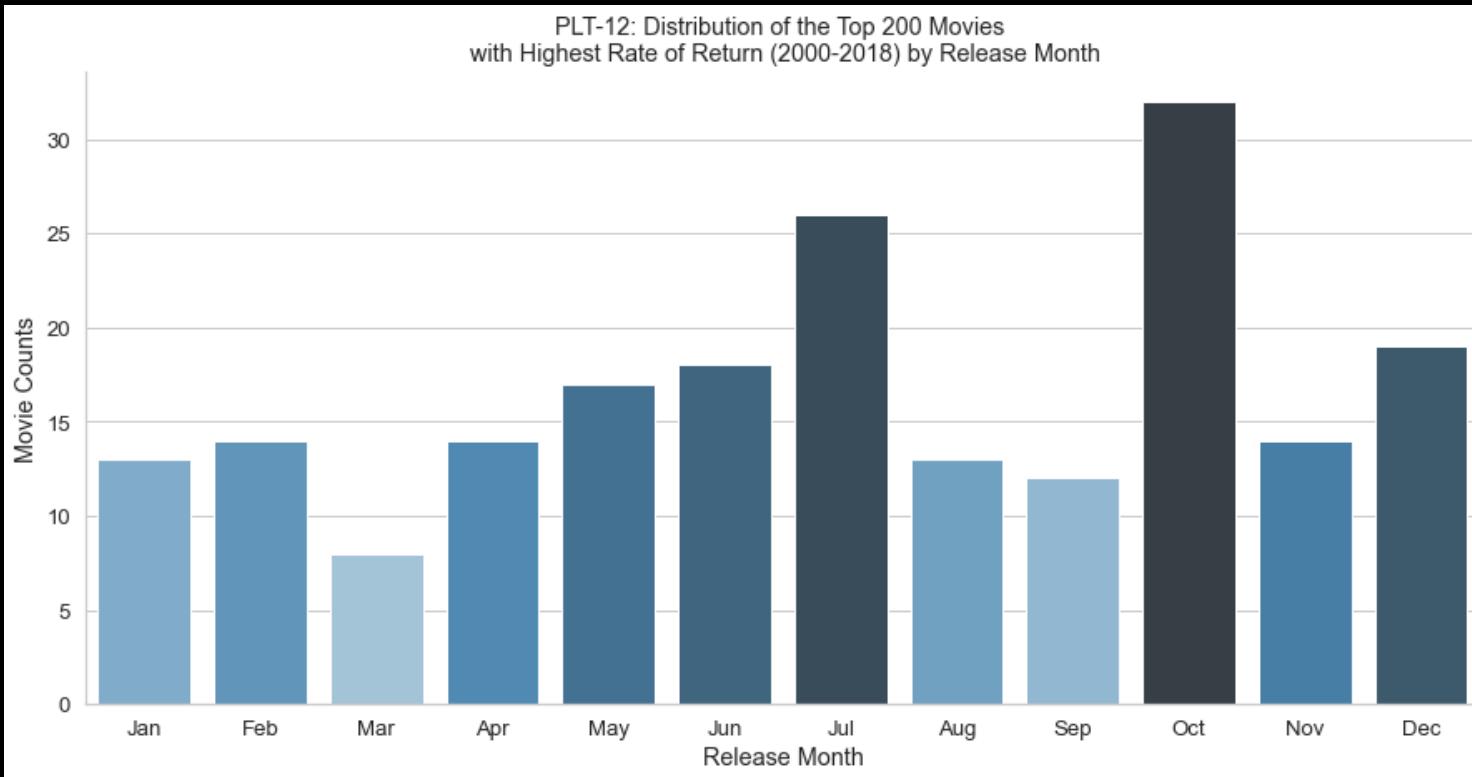


RESULTS



- BEST TIME TO RELEASE a movie for **profit** is during the summer (**May & June**)
- Second best time is around the Holidays (**November & December**)

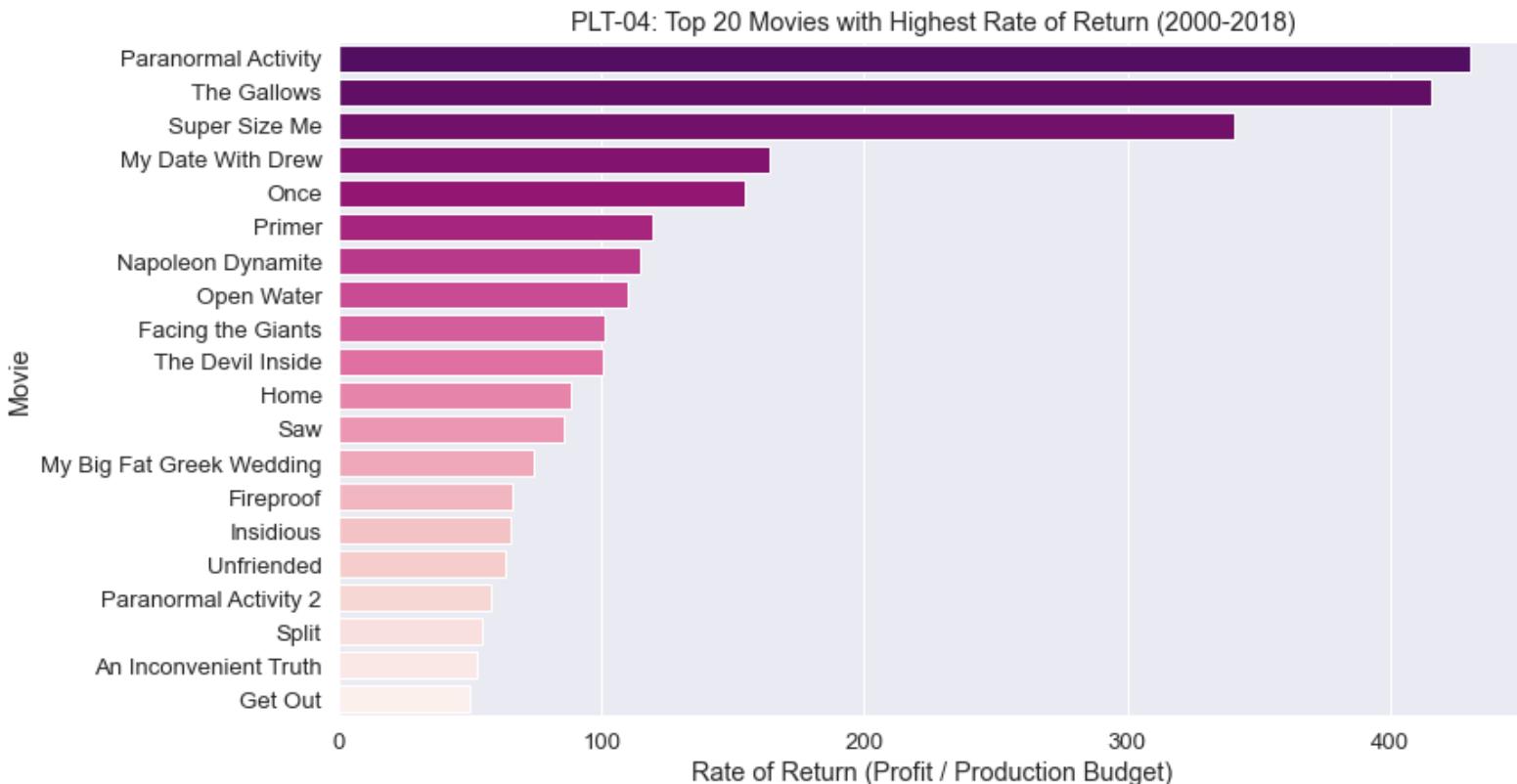
RESULTS



- BEST TIME TO RELEASE a movie for **return on investment** is **October**, the month of Halloween

RESULTS OVERVIEW

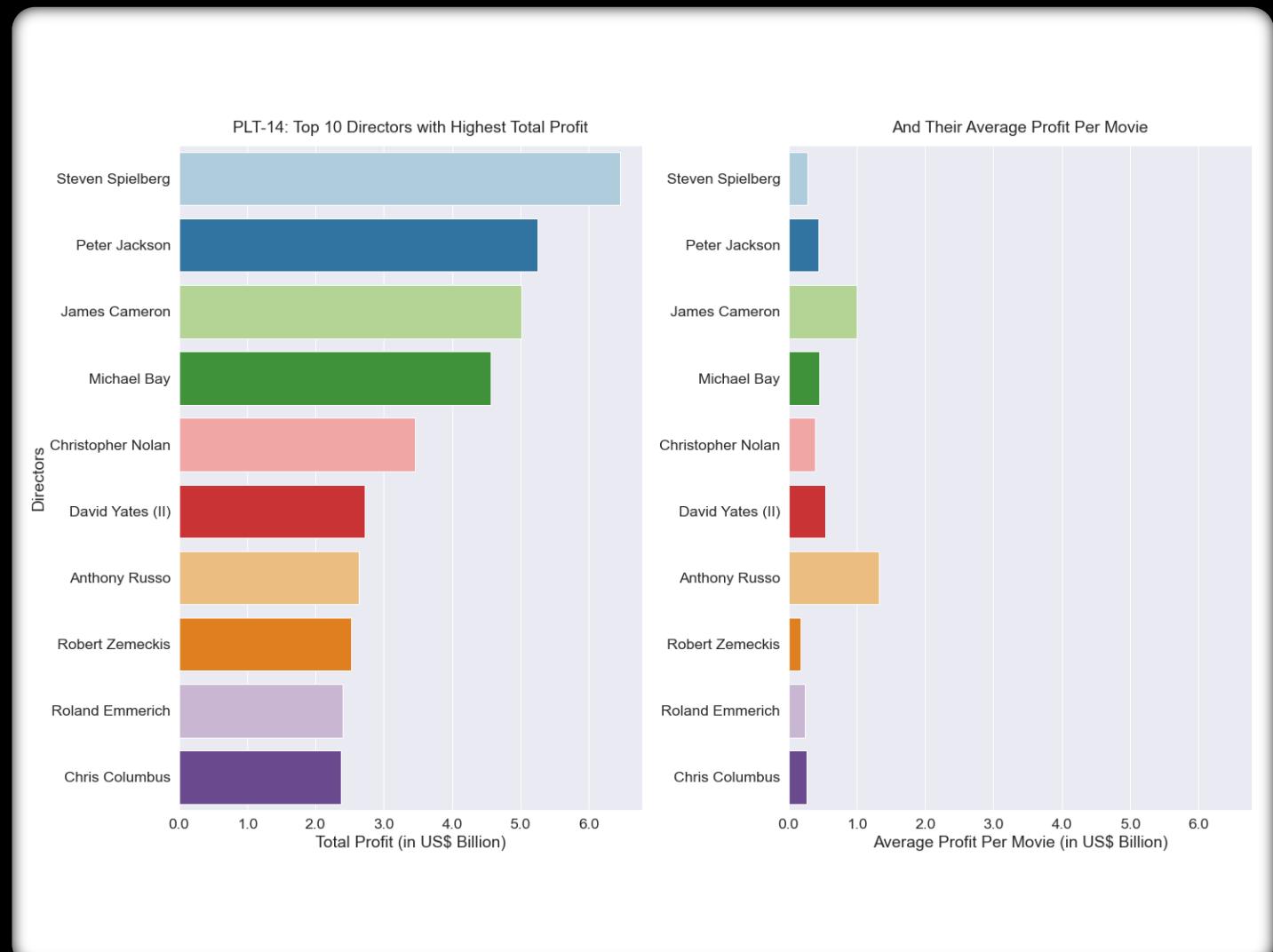
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RESULTS

Top choices to assume
the role of DIRECTORS:

- **Anthony Russo**
- **James Cameron**



CONCLUSIONS

1. GENRES: A combination of **Action & Adventure**, **Science Fiction & Fantasy** with some elements of **Drama**, **Comedy** and **Mystery & Suspense** tends to do relatively well
 - Avoid over-saturating the market by incorporating elements of novelty
2. MONTH OF RELEASE: Best time is **May/June** or **November/December**
 - for Horror and/or Mystery & Suspense: October
3. DIRECTORS: **Anthony Russo** or **James Cameron**

NEXT STEPS

Further analyses on some of the followings could potentially yield more relevant insights:

- How the trends for different genres might be correlated
- Number of awards/recognitions that the movie's crew have earned prior to the release of that movie
- Whether the movie is part of a sequel, adaptations (e.g., comics, best-selling books)
- Data of economical/cultural events that might have altered the relevancy of a movie's subject matter in a short period of time