Movie Data Analysis: a report

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Movie Data

We are analyzing multiple datasets to determine 3 actionable insights into entering the movie production business.

The datasets are:

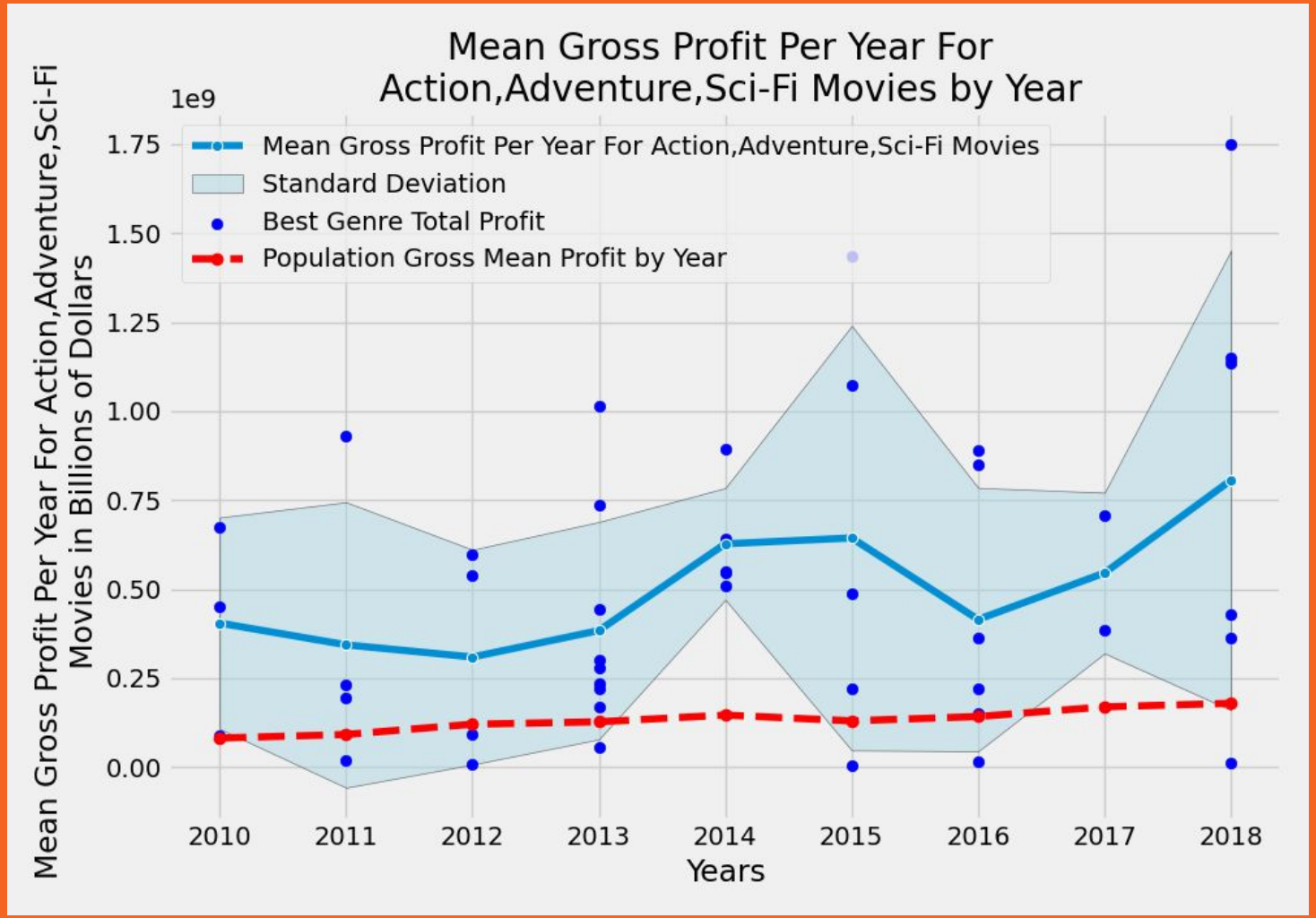
Box Office Mojo (https://www.boxofficemojo.com/)
IMDB (https://www.imdb.com/)
Rotten Tomatoes (https://www.rottentomatoes.com/)
TheMovieDB (https://www.themoviedb.org/)
The Numbers (https://www.the-numbers.com/)

Investing in High-Performing Movie Genres:

The analysis indicates that the Action, Adventure, Sci-Fi genre has consistently outperformed the overall movie market in terms of average total profit over the past three years.

Notably, this genre's profits have increased by over a quarter of a billion dollars during this period.

Given this consistent growth trend, we recommend that stakeholders consider allocating resources to the Action, Adventure, Sci-Fi genre as a strategic focus for future investments. This genre shows strong potential for continued profitability.

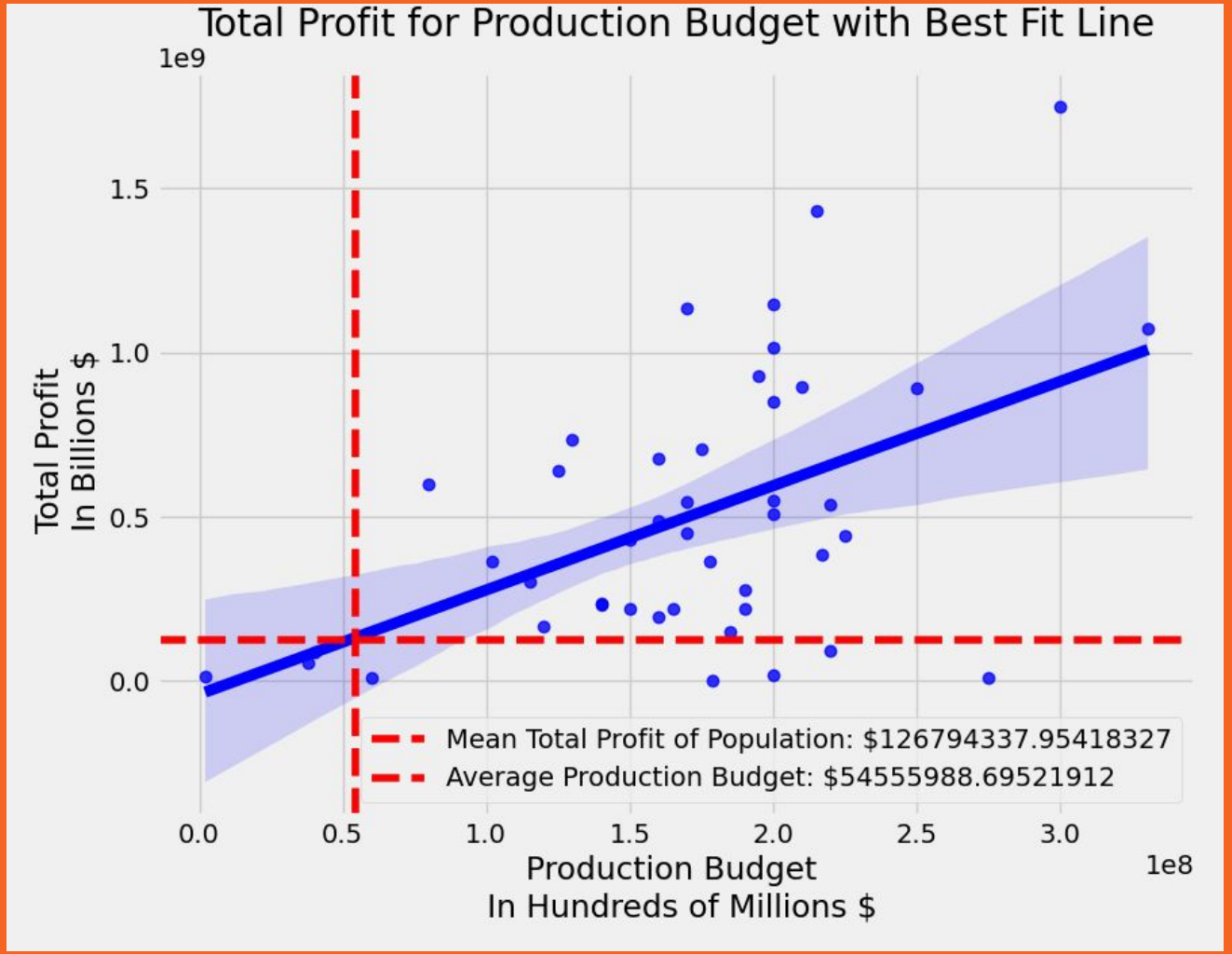

Mean Gross Profit Per Year For
Action,Adventure,Sci-Fi Movies by Year
1e9
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Mean Gross Profit Per Year For Action,Adventure,Sci-Fi Movies in Billions of Dollars
Mean Gross Profit Per Year For Action,Adventure,Sci-Fi Movies
Standard Deviation
Best Genre Total Profit
Population Gross Mean Profit by Year
2010
2011
2012
2013
2014
2015
2016
2017
2018
Years

Optimizing Investment for Maximum Returns

Our analysis reveals a statistically significant positive correlation between production investment and movie profits.

This suggests that increased investment directly leads to higher returns. Therefore, to maximize profitability, we advise the production company to increase their investment in future projects.

While this may seem intuitive, the data substantiates that larger financial commitments yield a measurable and reliable boost in profit generation.

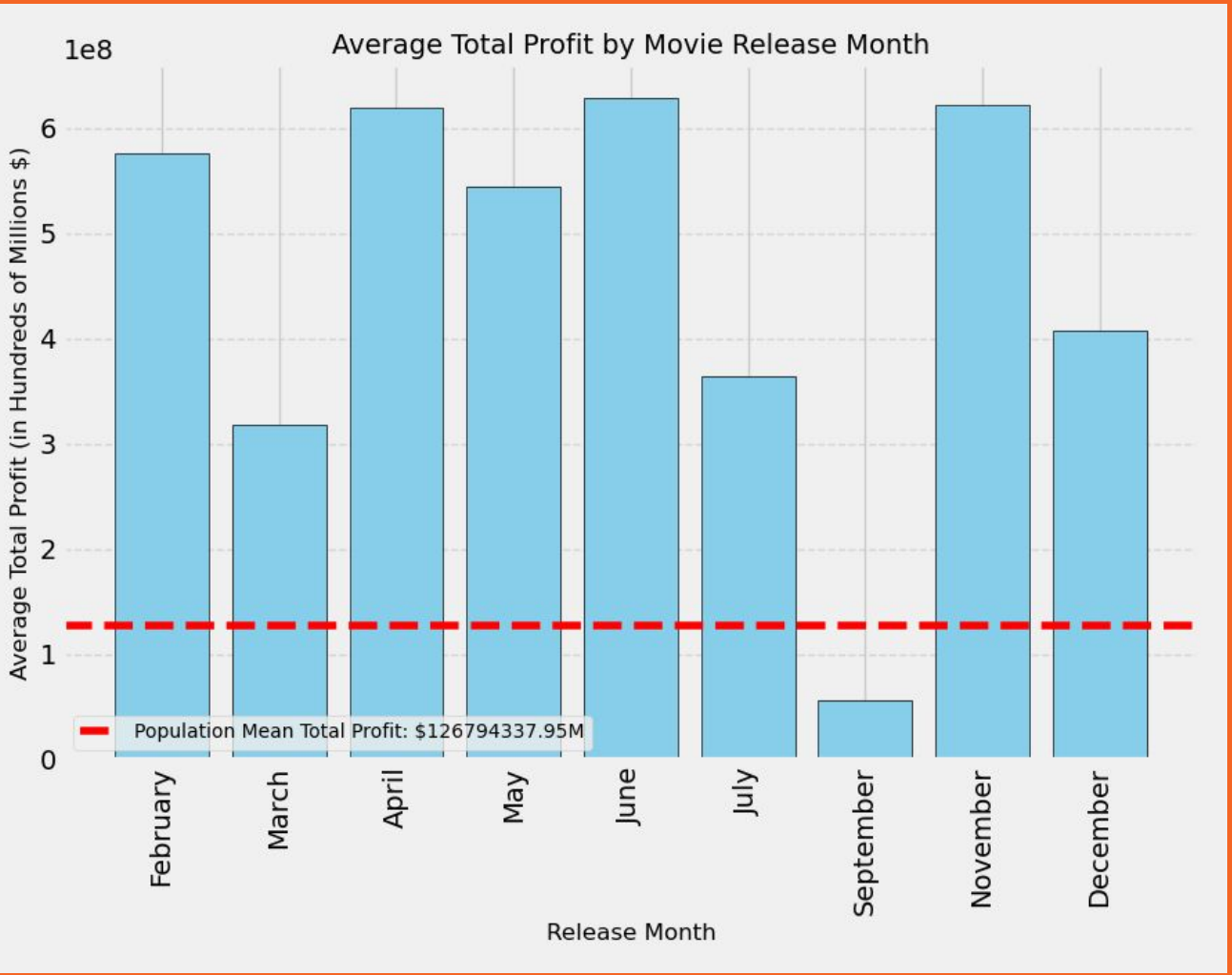

Total Profit for Production Budget with Best Fit Line
1e9
1.5
1.0
0.5
0.0
Total Profit
In Billions $
Mean Total Profit of Population: $126794337.95418327
Average Production Budget: $54555988.69521912
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1e8
Production Budget
In Hundreds of Millions $

Timing the Release for Maximum Profitability

The analysis of monthly performance trends shows that June, November, and April are the highest-performing months for movie releases, with average profits significantly exceeding those of other months.

Conversely, September is identified as the lowest-performing month, followed by March and July.

To capitalize on peak profitability, we recommend scheduling movie releases during the months of June, November, or April, while avoiding September and other underperforming months.


Average Total Profit by Movie Release Month
1e8
Average Total Profit (in Hundreds of Millions $)
0
1
2
3
4
5
6
Population Mean Total Profit: $126794337.95M
February
March
April
May
June
July
September
November
December
Release Month