

Microsoft Movie Analysis

by Valentina Valdez



Presenter

**Valentina
Valdez**

Data Scientist



Hello!



Agenda

- Summary
- Business Opportunity
- The Data
- Results
- Conclusion
 - Recommendations
 - Next Steps

Summary

This analysis of films between **2010** and **2019**, which uses **descriptive statistics** 📊 and **data visualization** 📈, reveals that Microsoft should:

- Invest in mostly **high budget films** 💰, with a mix of mid budget films.
- Select directors with experience delivering **high net profit** 💰 or have received **high critical acclaim** 🏆.
- If possible, hire directors that can **do both** things simultaneously.

Why these dates? To ensure that the conclusions are relevant to today's filmmaking conditions.





Microsoft

Business Opportunity

OR HOW TO MAKE MONEY MAKING MOVIES

Making movies is a risky business! There are many factors to come into play to make a successful film.

Ultimately, Microsoft's goal is to:

- maximize profit 💰
- increase positive brand awareness 🙌



Business Opportunity: 3 Major Keys



Finances

Ultimately, this is a business opportunity and we should look at this venture from a **business lens**.

In filmmaking, the important factors are:



- Production budgets
- Net Profit
- ROI



Awards

Winning awards would **legitimize** Microsoft as a studio and make it a contender in the filmmaking space. There is a difference between Hallmark and HBO.

Per [Atlantic Studios](#), awards provide films (and studios) with:

- Credibility 
- Boost in sales 



Directors

The director is one of the earliest people attached to new film projects.

What do directors do? They:

- Interpret scripts
- Hire cast and crew
- Follow budgets and schedules
- Coordinate with all stakeholders to create the final product

In short, a director is like a **project manager**.

The Data



IMDB

- Launched in 1990
- Owned by Amazon since 1998
- Houses a large amount of movie data like movie titles, directors, writers, regions, languages, and release dates.



The Numbers

- Started in 1997
- Largest freely available database of movie business information
- Contains information about movie titles, production budgets, and gross revenue



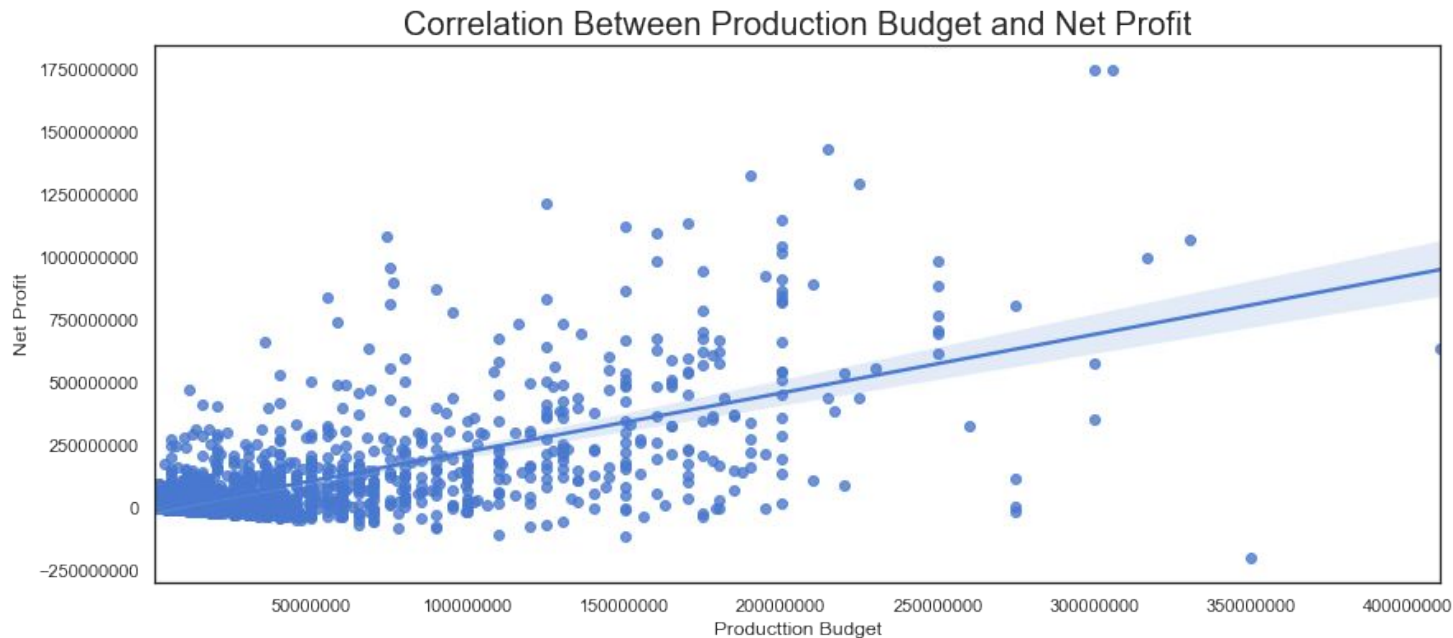
The Academy Awards

- Data created by scraping the Academy database for a Kaggle competition.
- Most prestigious filmmaking award in America
- Contains data on Oscar nominees and winners since 1927



Results

What is the right budget to maximize profits? 💰

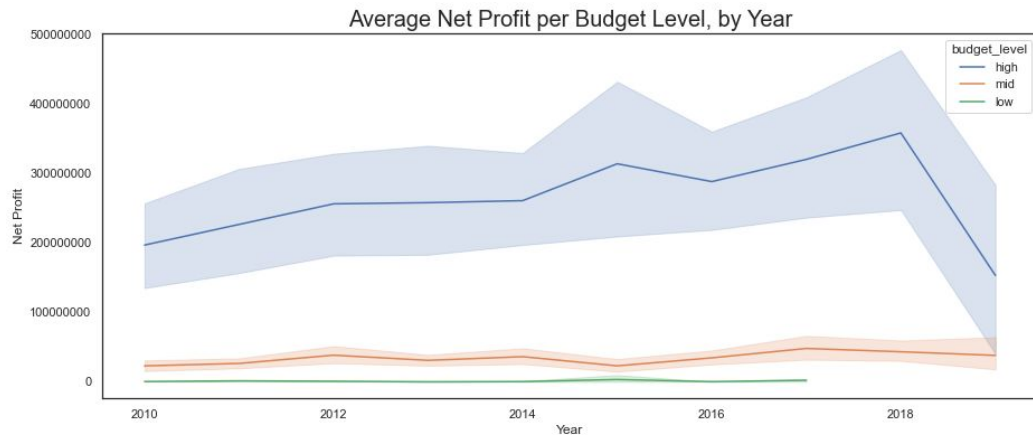
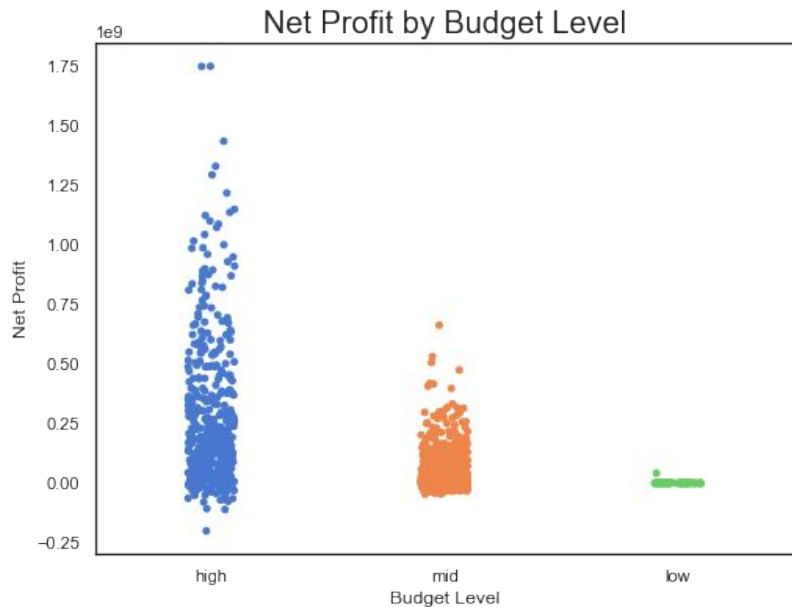


- **Moderate positive correlation:** the more you spend, the more you *can* make

What is the right budget to maximize profits? 💰

Production Budget Categories

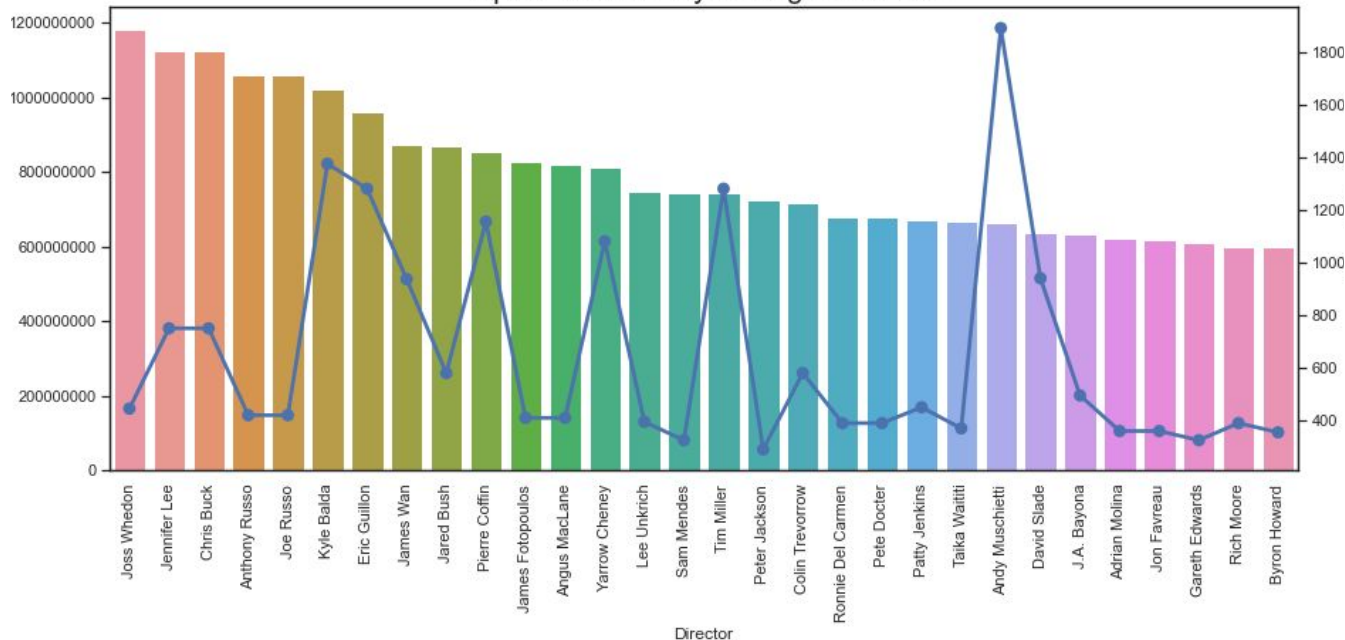
Low < \$5m Medium \$5m - \$50m High > \$50m



✓ **High budget films** have a much higher earning potential

Which directors can deliver high profits? 💰

Top 30 Directors by Average Net Profit



Highlights:

Joss Whedon - 2 x Avengers 🦱

High gross + very high production budgets

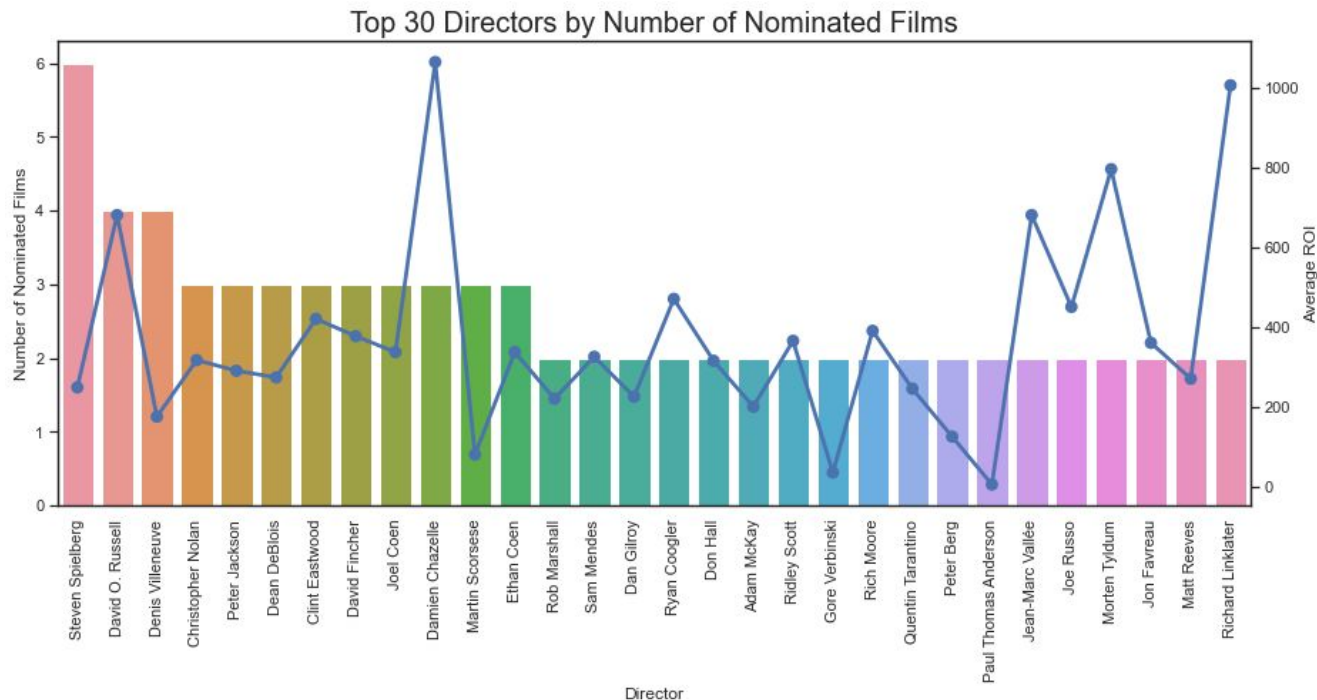
= Lower ROI

Andy Muschietti - 2 x It 🐼

Smaller production budget + high gross

= Higher ROI

Which directors can deliver acclaimed films? 🏆



Highlights:

Steven Spielberg 🏆

The Adventures of Tintin 🏆

War Horse

Lincoln 🏆

Ready Player One 🏆

Damien Chazelle 🏆

Whiplash 🏆

La La Land 🏆

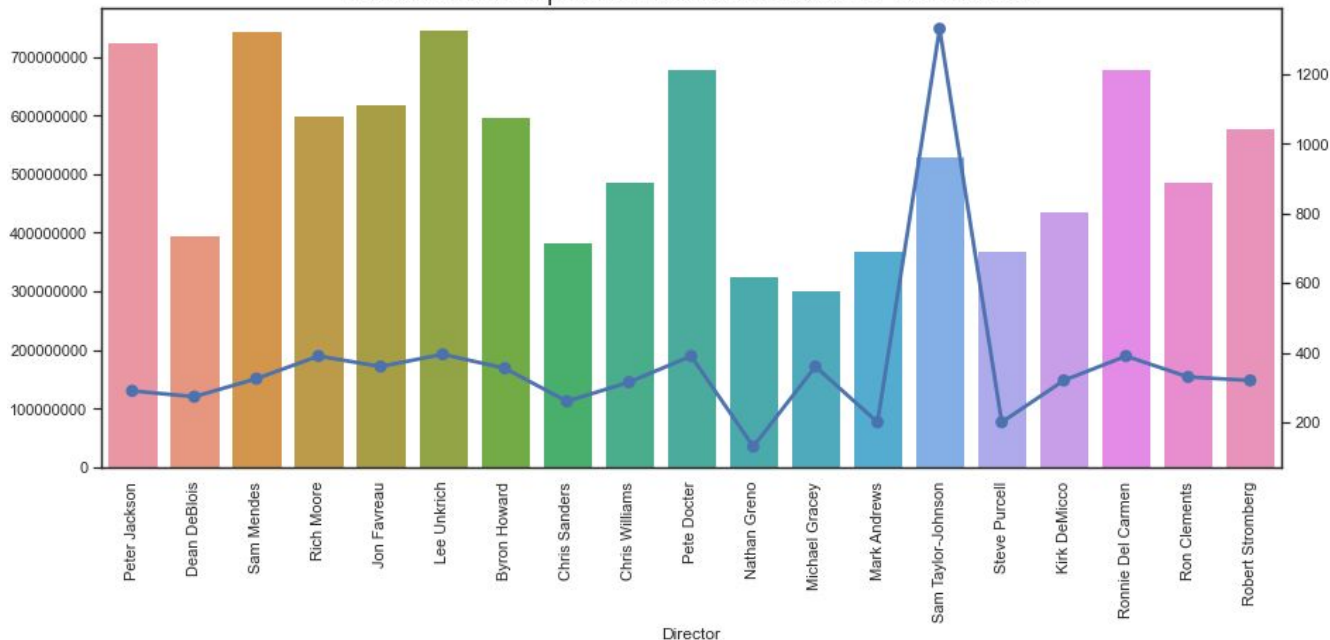
First Man

Paul Thomas Anderson 🏆

Phantom Thread 🏆

Are there directors that do both?

Directors in the Top 100 for Net Profit and Oscar Nominations



Highlights:

Sam Mendes 🧑

Skyfall 🏆 🇬🇧

Spectre 🏆 🇬🇧

1917 🏆

Peter Jackson 🧑

The Hobbit 🏆 🇬🇧

Sam Taylor-Johnson 😊




Fifty Shades of Gray 🏆 🇬🇧

In Conclusion

Recommendations

- 1 Invest in mostly **high budget films** , with a mix of **mid budget films**.
- 2 Select **directors** with experience delivering **high net profit**  or have received **critical acclaim** .
- 3 If possible, hire directors that can **do both** things simultaneously.
(They exist! ).

Next Steps

- 1 Investigate other **filmmaking talent**  aside from directors.
- 2 Research movie by **genres** .
- 3 Look into the role of **intellectual property**  as a success factor.

Thank You!

