

# Flatiron School Data Science

Module 1 Final Project

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# Microsoft Movie Studio

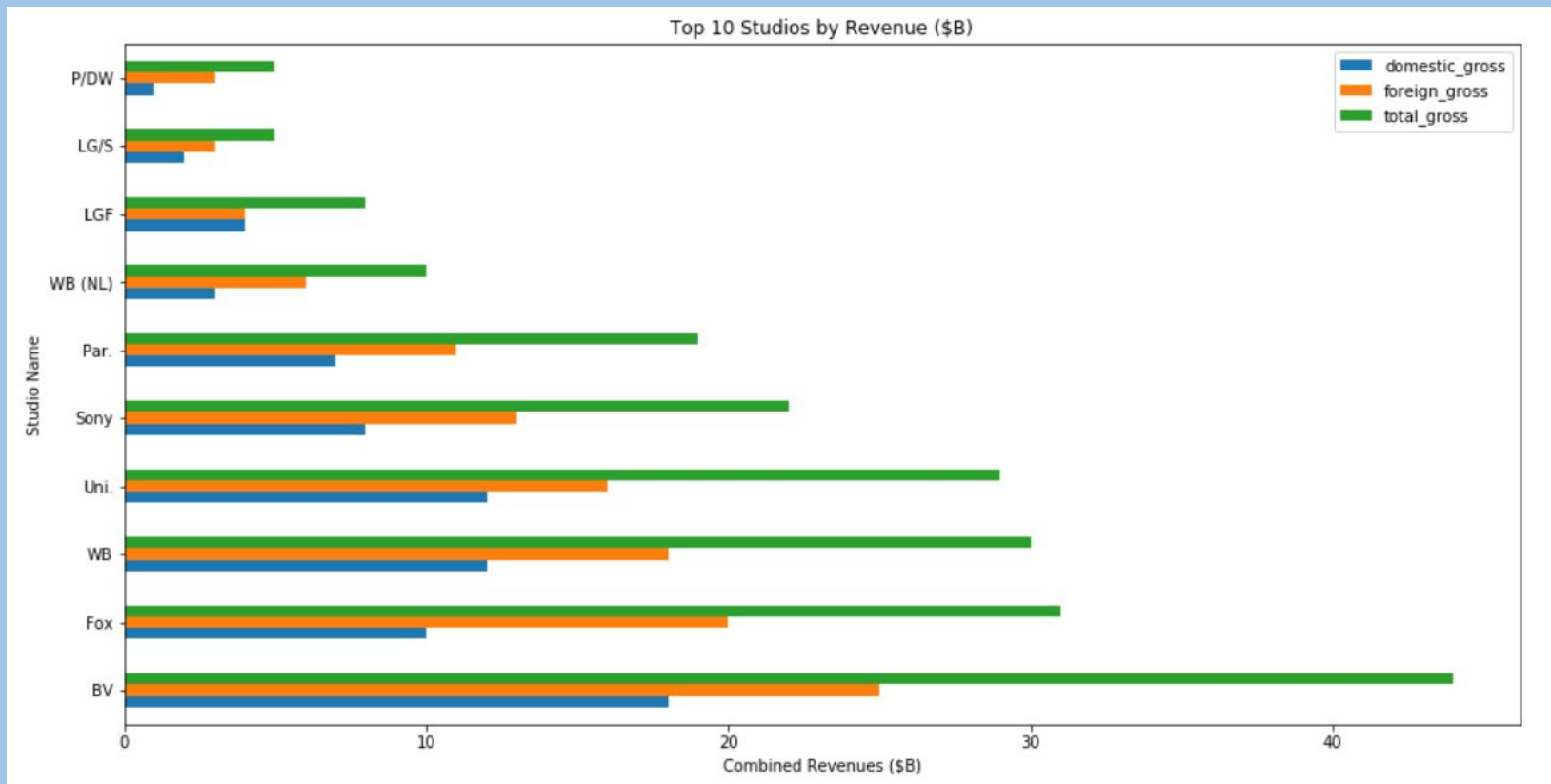
## Questions:

1. What do successful movies have in common?
2. Do certain factors correlate with greater box office success domestically vs internationally?
3. What specific recommendations would we make based on what we learned?

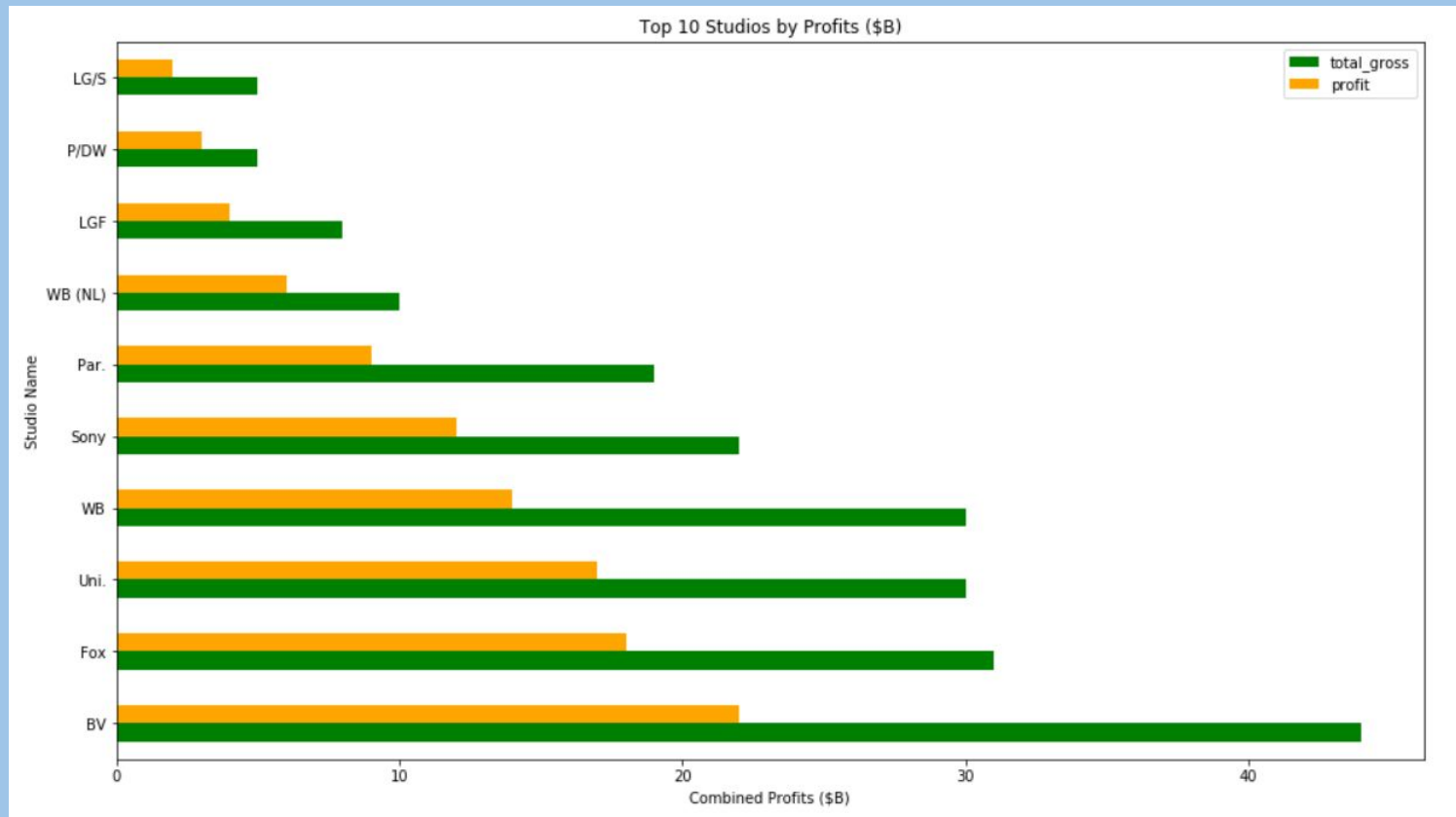
# Deeper Questions

- What metrics define success in our dataset?
  - Revenues, Profits, Popularity, Ratings
- What genres are correlated with the most success?
- Which studios have the most success?
- Do writers/producers/actors also correlate with successful movies?
- What other factors should we look at?
  - Domestic vs international focus
  - Multiple languages, regions
  - Number of reviews

# Top 10 Studios by Combined Revenue



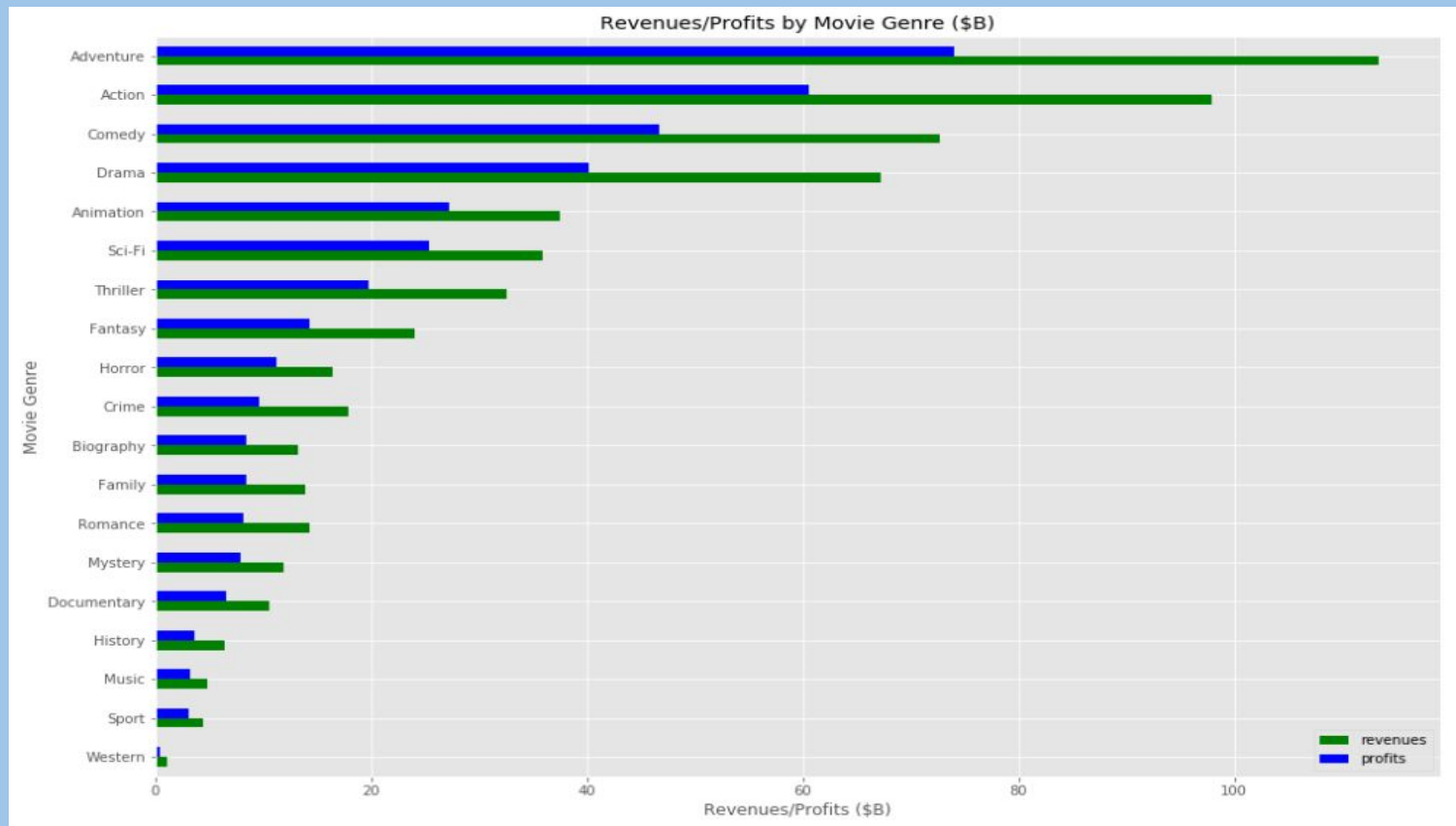
# Top 10 Studios by Combined Profits



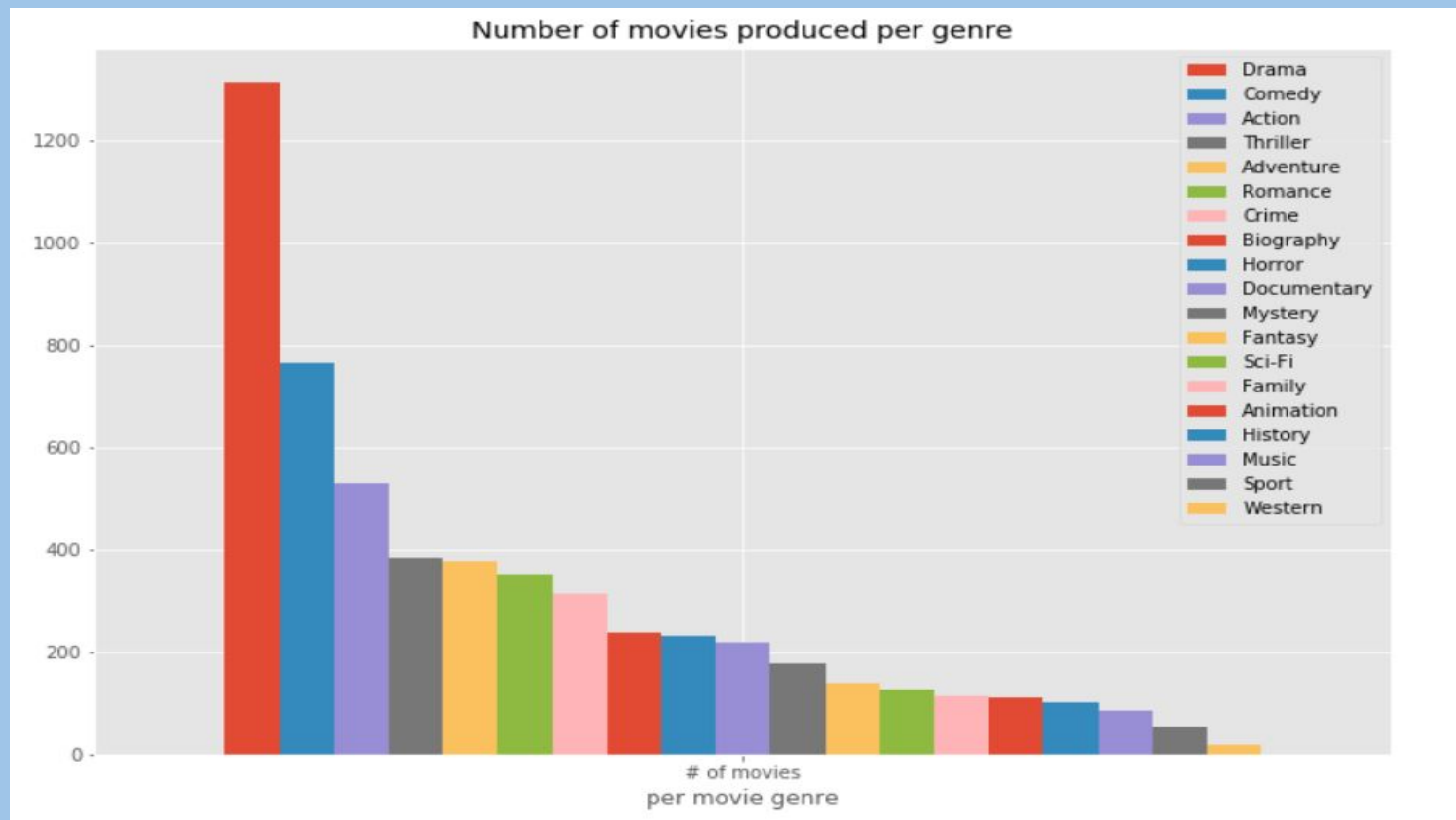
# What have we learned so far?

- The top 10 studios by revenue and profit are the same (albeit slightly different order)
- The amount of public data on movie production budgets is way more limited than revenues
- It appears some studios always release budget figures while others never do
- The dataset is likely skewed to be missing unfavorable data, such as a movie having costs greater than revenues

# Revenues and Profits by Movie Genre



# Number of movies produced per genre





# Analysis For Movies Without Financial Data

- There do not appear to be correlations with movie genre, average ratings and movie length (runtime)
- The 'average' (median, mean) movie length for 'popular' (rating > 8.0 out of 10) movies is ~87 minutes or slightly less than an hour and a half
- The most produced movies by genre for this group were Documentary, Drama, Comedy, Biography and Music (respectively)
- These non-fiction genres likely represent a niche audience who are more forgiving in average ratings
- Drama was the #1 and #2 most popular genres for this group and for the top 10 studios with the most financial success

# Conclusions and Recommendations

- Microsoft should look to the top 10 studios to partner with for producing movies or for deeper analysis into their common elements
- When analyzing movies without financial data, there were no clear indications if a longer or shorter movie might do better
- Audiences for non-fiction categories (Documentary, Biography, Music) appear to rate these movies more favorably.. However this may be a reflection of less diversity
- Drama is the one top common movie genre that appears to a 'solid bet' - correlated with higher financial success and average ratings