New Film Studio:
Guidance and Direction for Film Production

By Kawsar Hussain

Key Items To Keep In Mind

1. We Used Data from IMDB and TheNumbers
   - Merged IMDB film data with TheNumbers film financial data
   - Only utilized films where we had financial data

2. Statistical Tests Executed
   - Correlation Coefficient to compare Budget and Revenue
   - T-test to compare average revenue across different seasons of the year
   - ANOVA tests to compare average revenues across different performing genres

3. Business Recommendations
   - Plan for higher budget production to maximize returns.
   - Film releases during the spring months creates more sales.
   - Focus production towards profitable and compelling genres.

Recommendation 1:

# Plan for higher budget production to maximize returns.
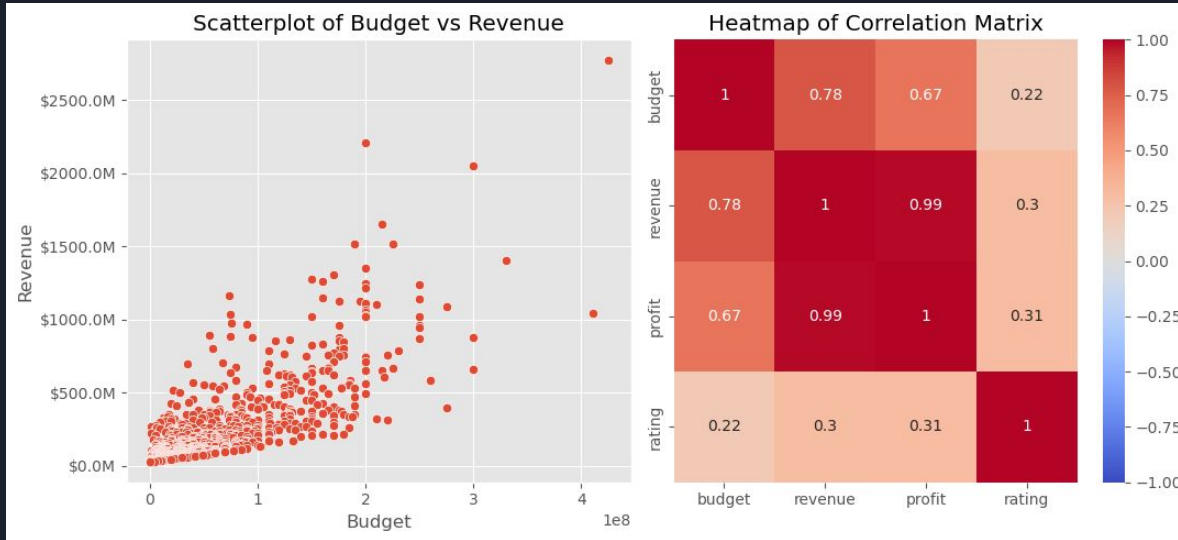
- Relationship between Budget and Revenue
  - Shows a positive trend
  - Correlation Coefficient of 0.78, close to +1

- The data has shown, as budget increases, revenue also increases.

- It is worth investing in a higher budget film as it proportionately connects to higher box-office revenues.

Recommendation 2:

Film releases during the spring months creates more sales.
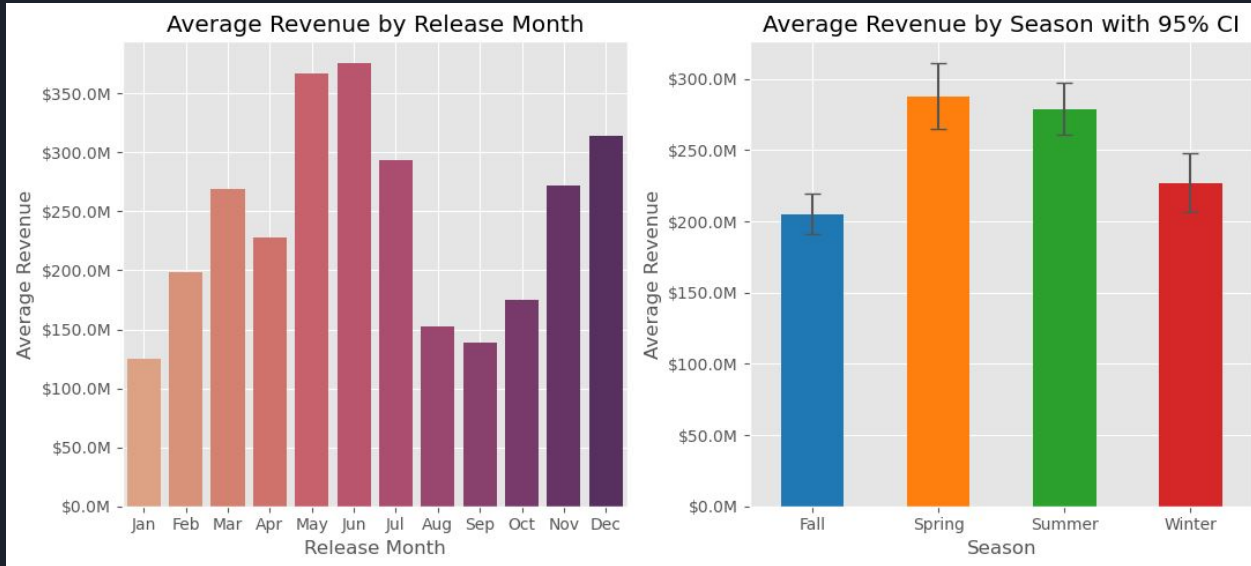
- Relationship between Revenue and Release Month
  - T-statistic: 2.2274083467843964,
  - P-value: 0.026169372030560103

- P-value is lower than our significance level of 0.05
  - We reject our null hypothesis

- Films released during spring months perform better than other seasons.
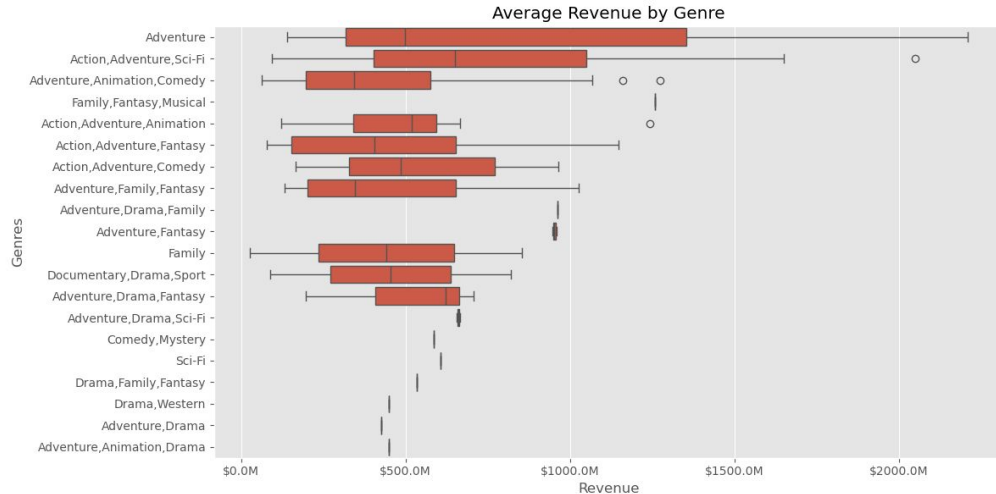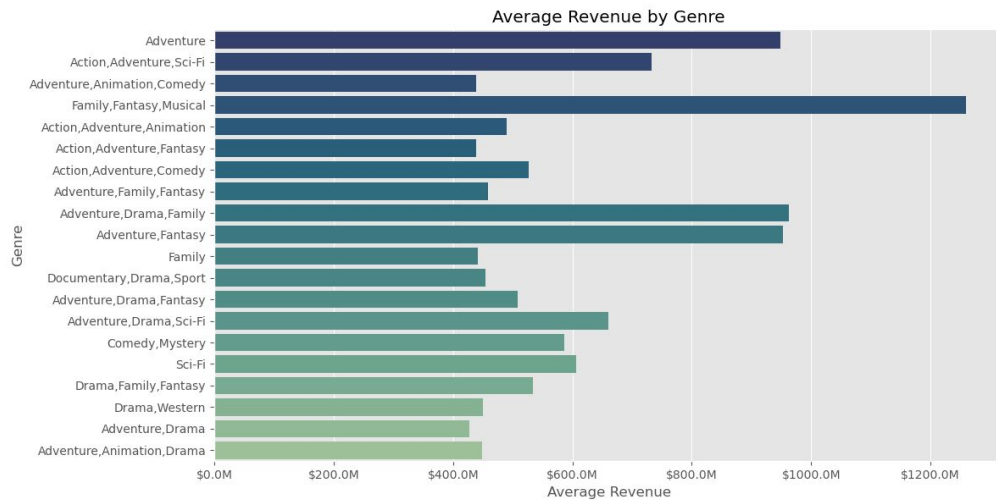
Recommendation 3:

Focus production towards profitable and compelling genres.

- Relationship between Revenue and Genre
  - F-statistic: 2.83,
    P-value: 5.19 x 10e-23
  - Significant Difference between avg revenues and genres

- P-value < 0.05
  - We reject our null hypothesis.

- Produce films with aspects of the genre-groups that are proven to drive success.

Summary

- Plan for a higher-budget film
    - Higher budget films correlate positively with revenue
    - Doesn't imply causation, coefficient is a good predictor

- Release films during Spring months
    - Spring films generate higher average revenues compared to other times of the year
    - Stats test show this differenc in average revenue across different seasons is statistically significant

- Focus production towards profitable genres
    - By focusing on genre categories that people love and proven to drive results, we can infer good results from performing genres
    - Stats test show that the difference in average revenues across different genres are statistically significant

QUESTIONS?