

THE GENRE EFFECT: NAVIGATING CINEMA’S TOP PERFORMERS

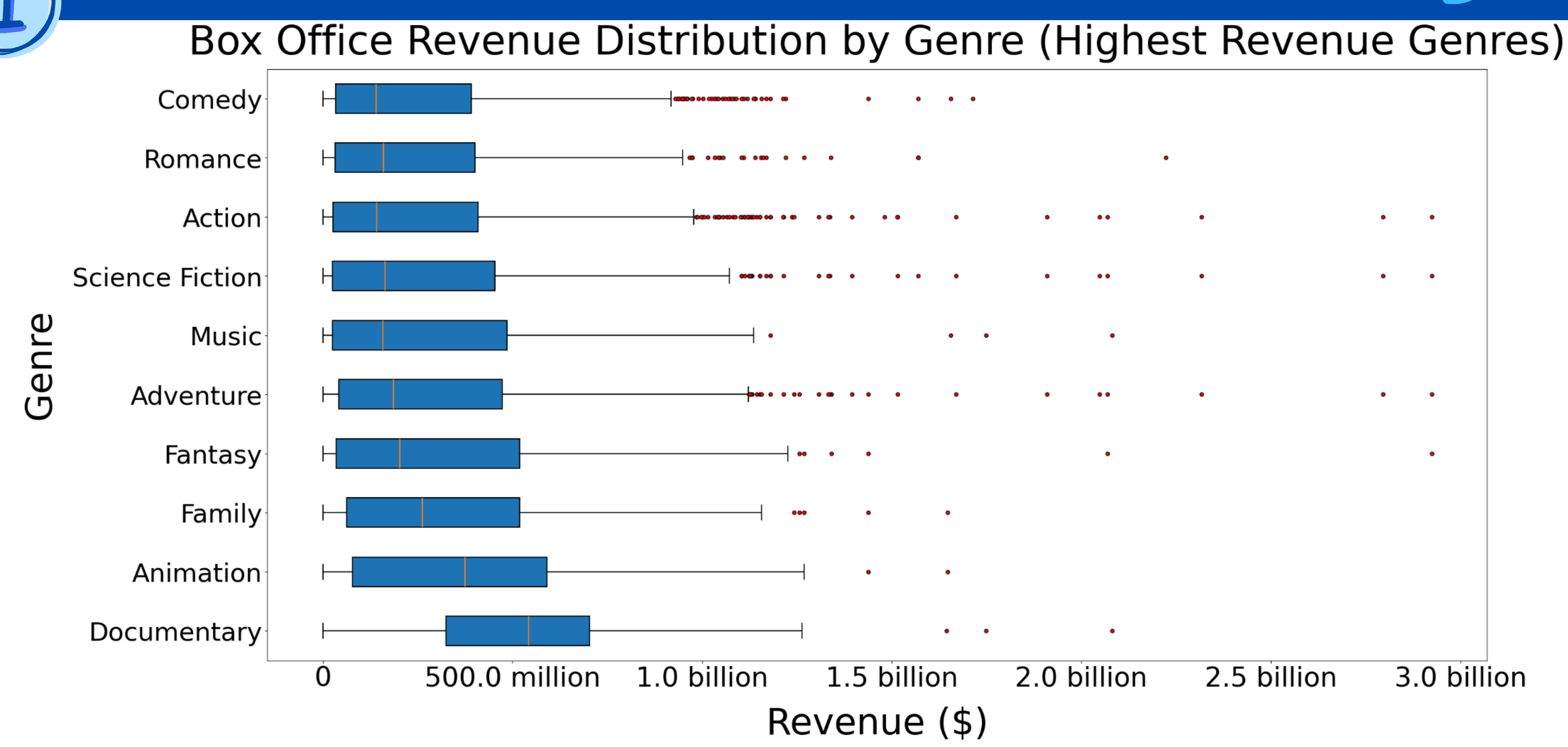
Mallika Charagundla & Patrick Church

IN THIS EXPLORATION, WE DISSECT GENRE SUCCESS IN FILM. WHAT MAKES A GENRE SHINE? WHAT DO AUDIENCES LOVE? ZOOM & SCROLL TO FIND OUT!

FIRST, SOME BACKGROUND.

1

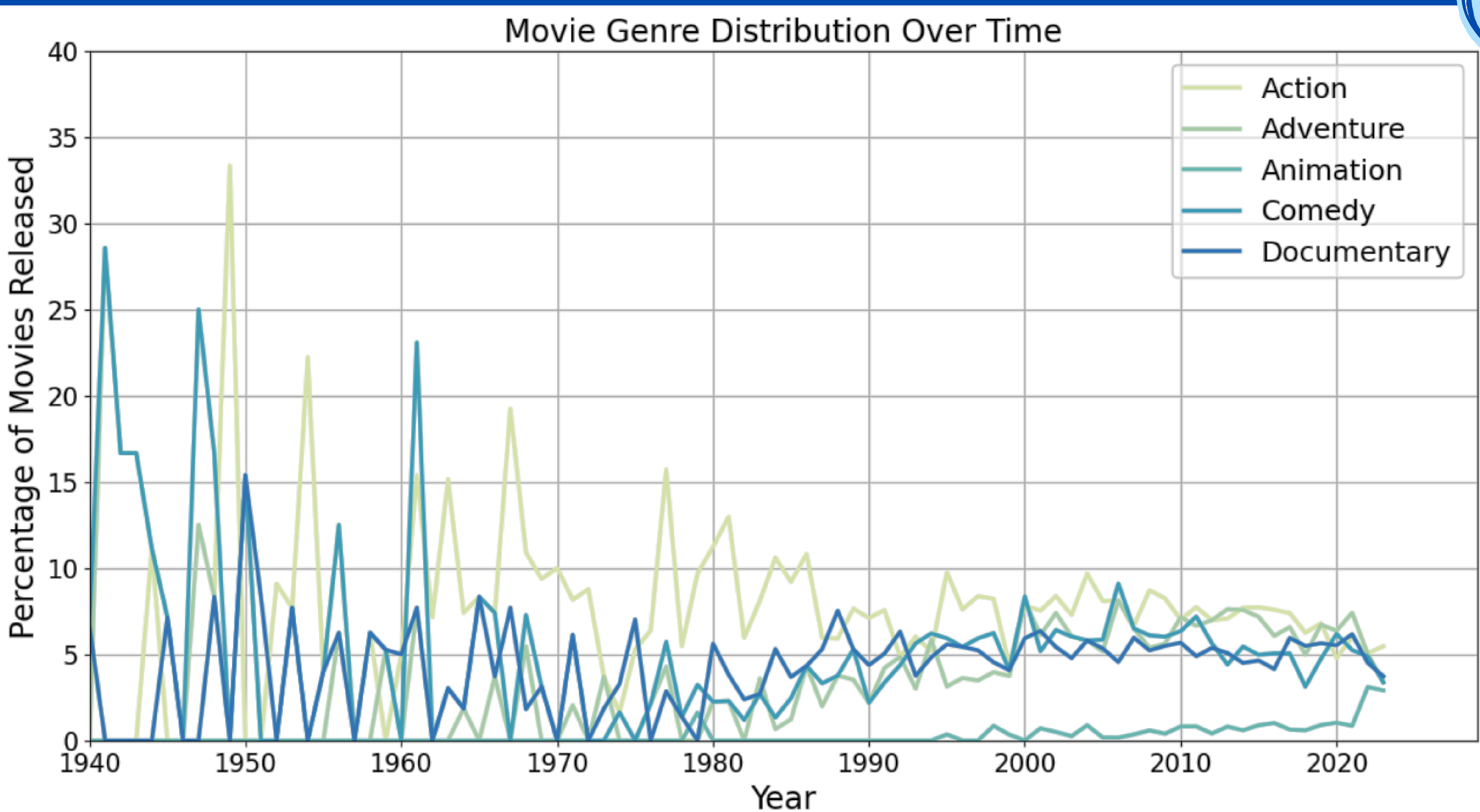
Various movie genres have reigned supreme over the past ~120 years. This boxplot depicts the distribution of box office revenues across the highest grossing movie genres. **Documentary, Animation, Family, Fantasy, and Adventure** take the cake for the highest grossing genres of all time.



HOW HAVE THESE GENRES FARED OVER TIME?

Notably, Documentary films emerge with the highest median revenue, demonstrating consistent financial success. Additionally, the plot highlights that genres like action, science fiction, and adventure boast a few exceptionally high-grossing films, which underscores their potential for blockbuster success.

2



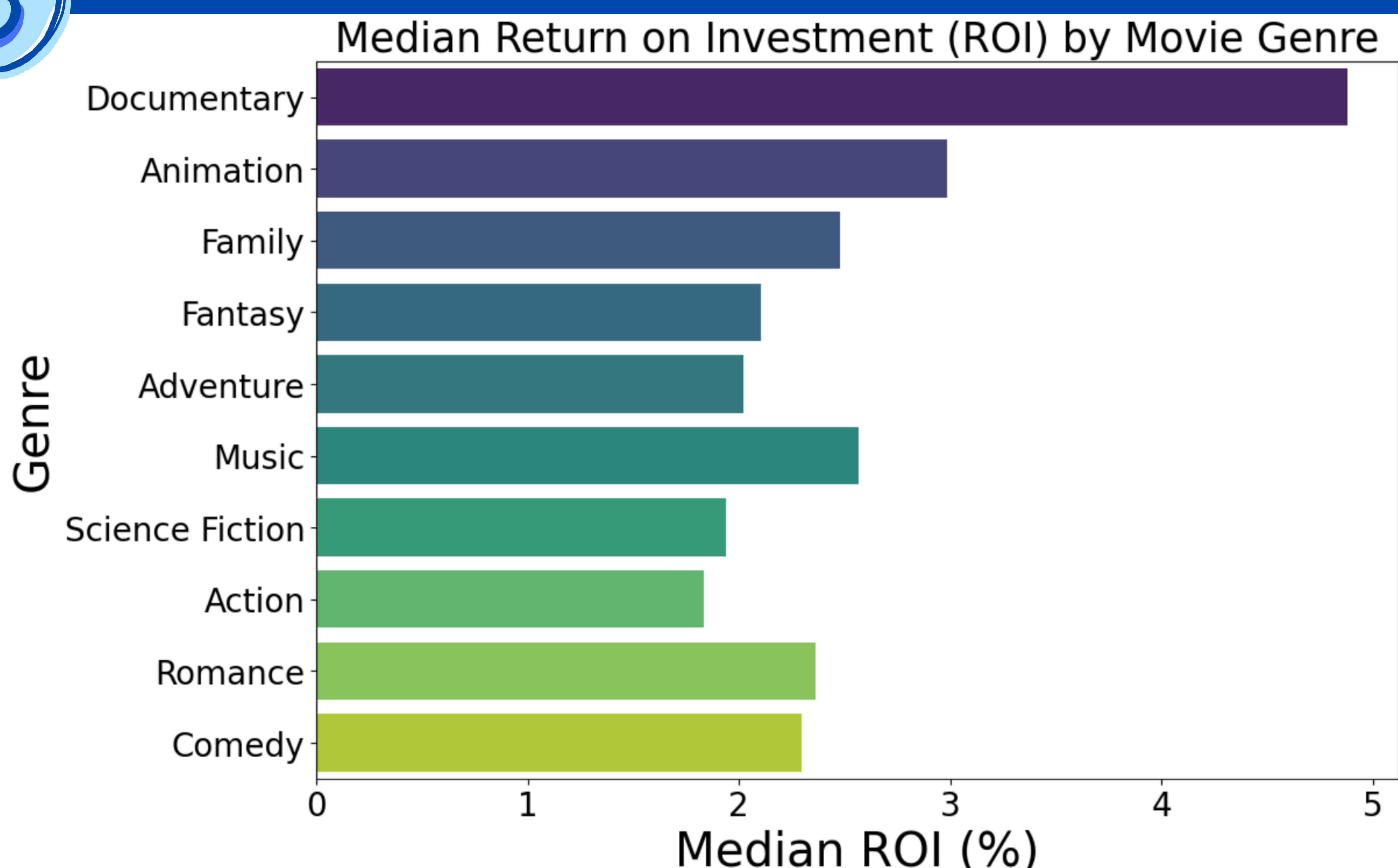
This time series illustrates percent of total movie releases per year attributed to each of the top 5 highest grossing genres. **Action** movies consistently remain one of the larger fractions of movies released, though as more genres emerge and as more movies release each year, its percentage becomes similar to other genres.

In earlier decades, far fewer movies released each year. Therefore, percentages for each produced genre were much higher than in recent years. Technological capacity, of course, limited the large-scale production of Animation movies until the mid-1990s when they took a more significant percentage of releases.

PROFITABILITY

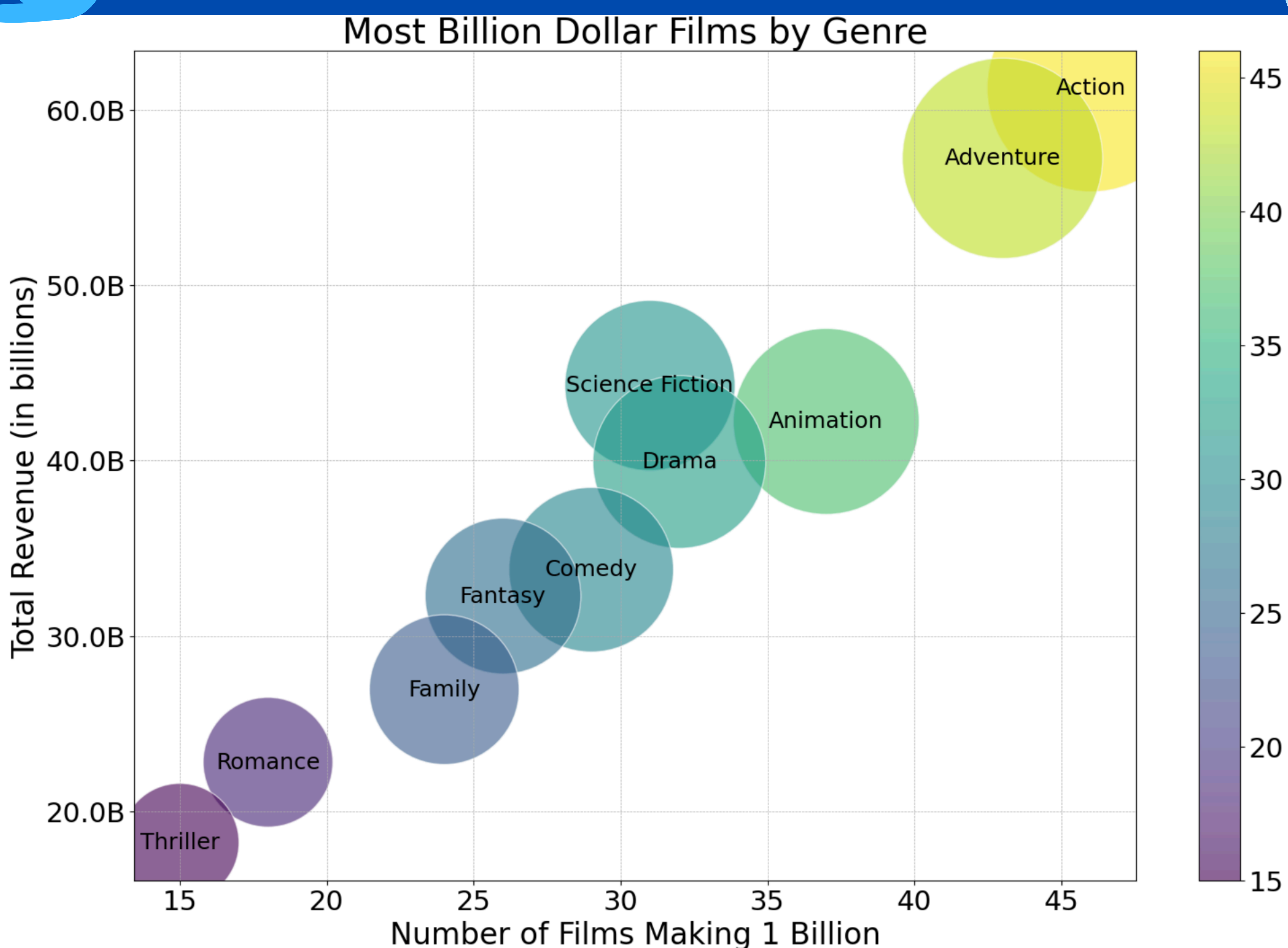
3

To the right, we see the median Return on Investment (ROI for the highest grossing movie genres. **Documentaries** stand out with the highest ROI by far in comparison to other genres, showcasing their profitability in the film industry. This highlights their strong potential for financial success, and that their profits far outweigh their costs.



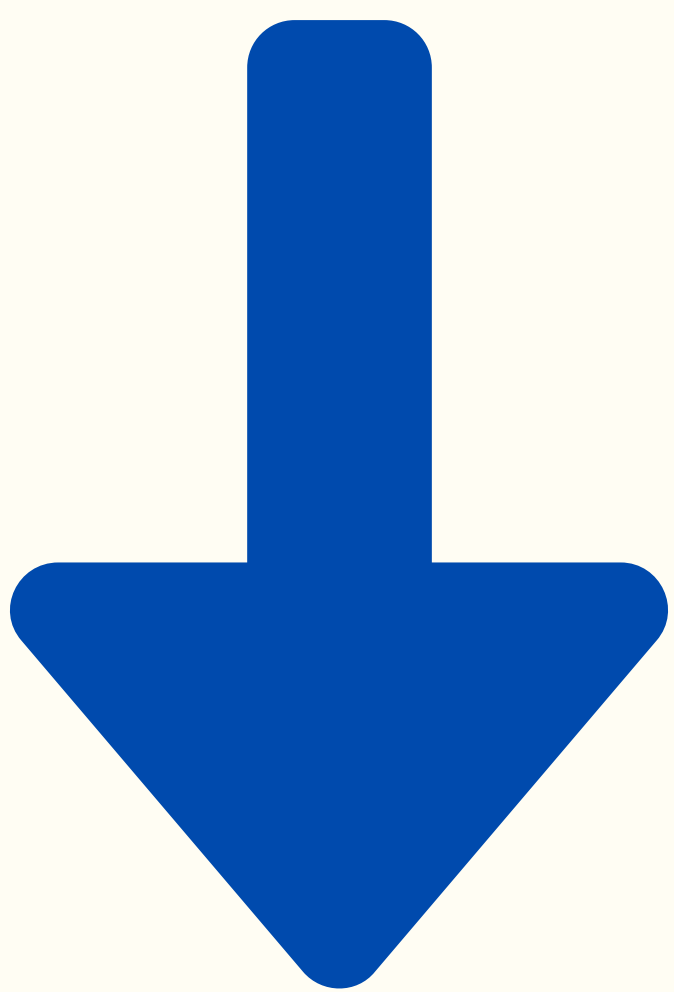
THE BILLION DOLLAR QUESTION...

4



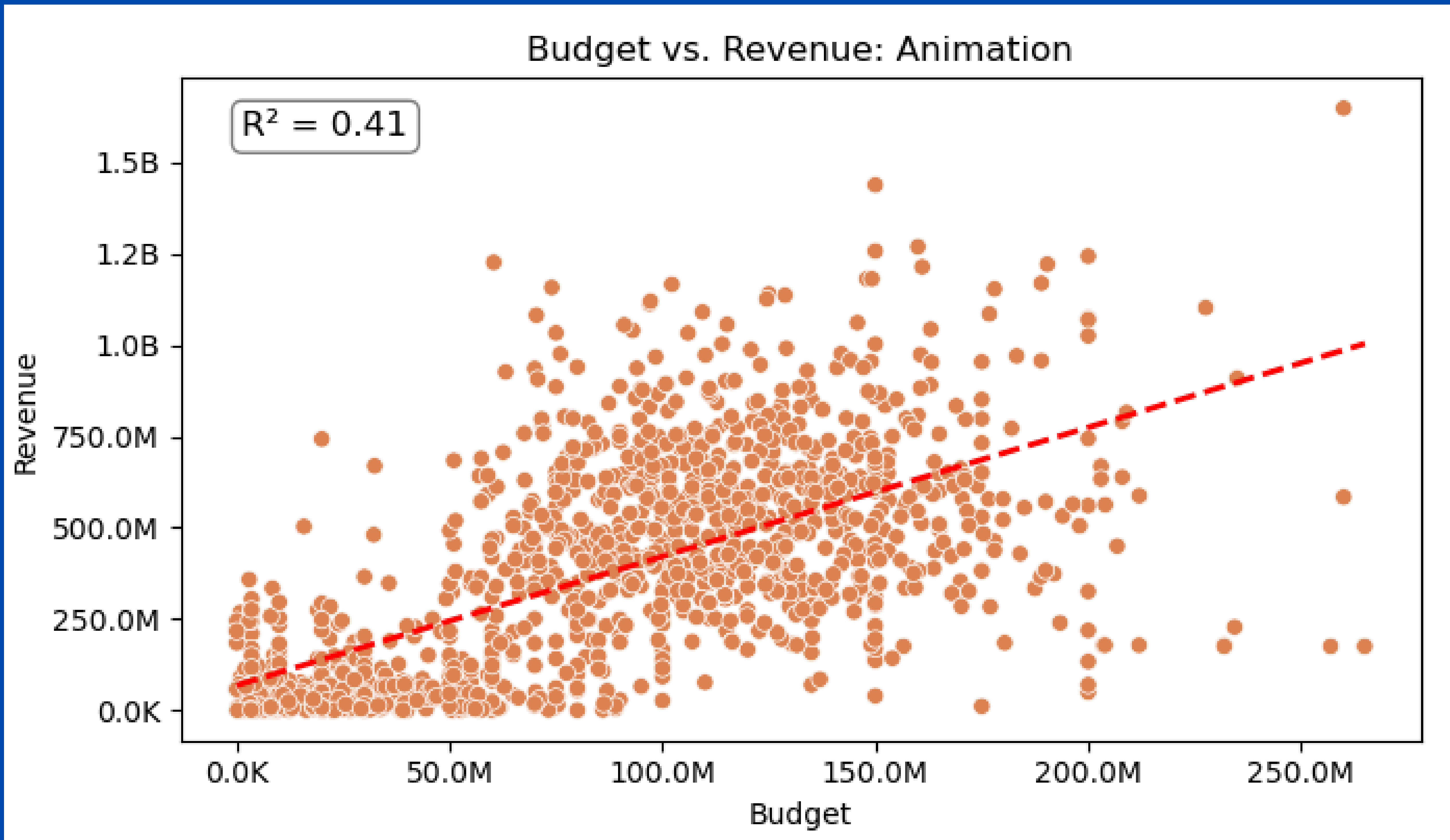
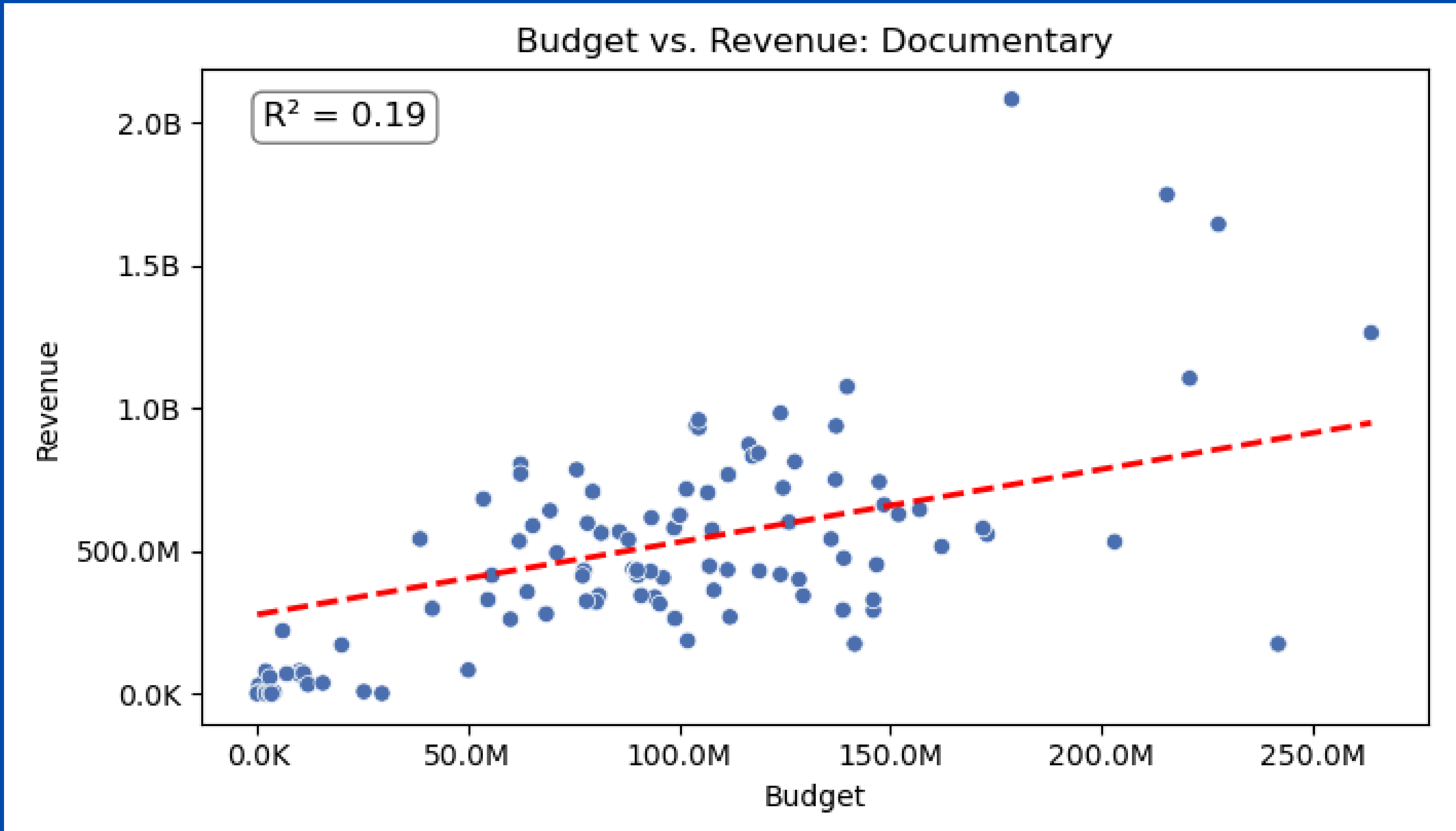
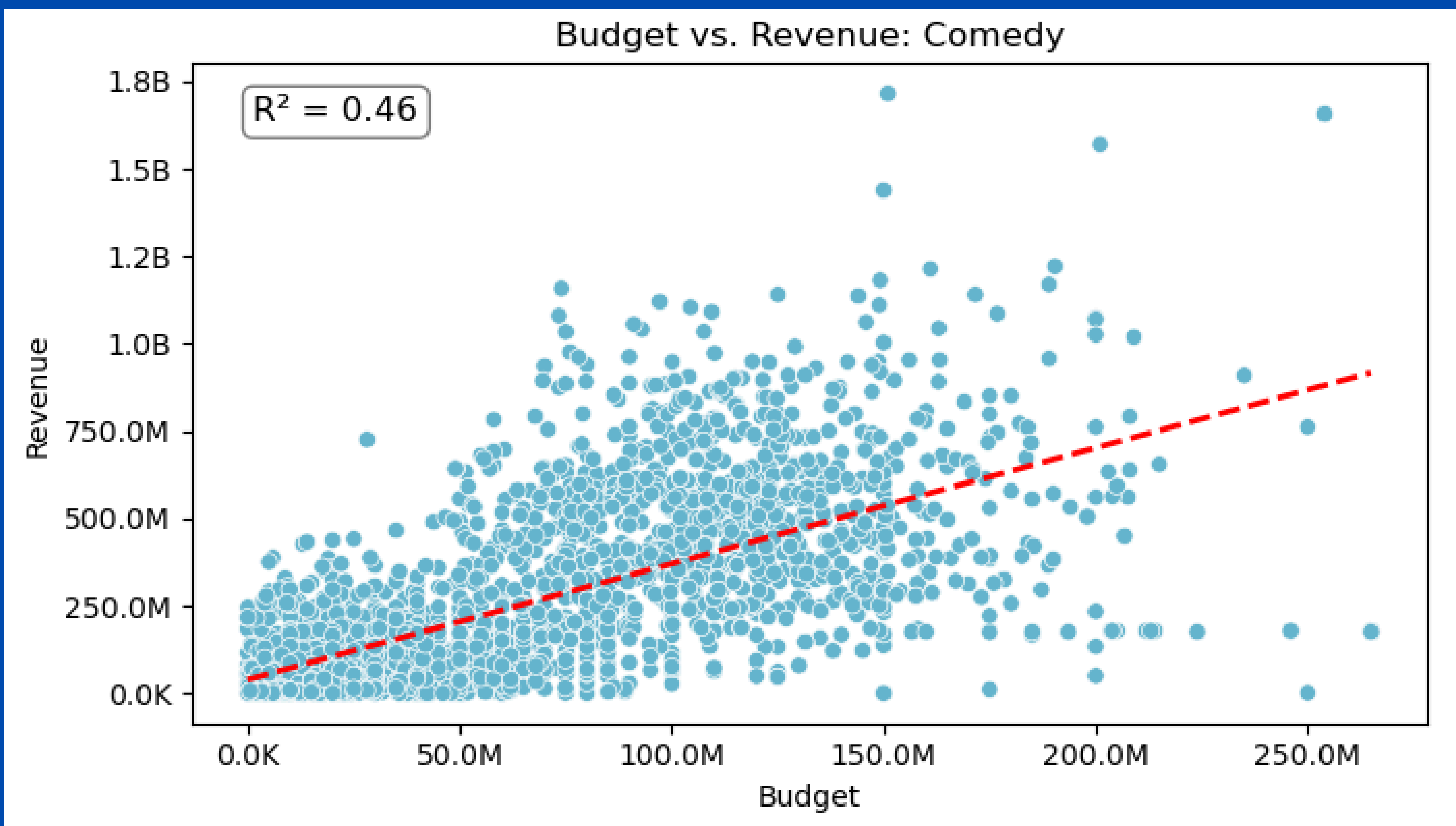
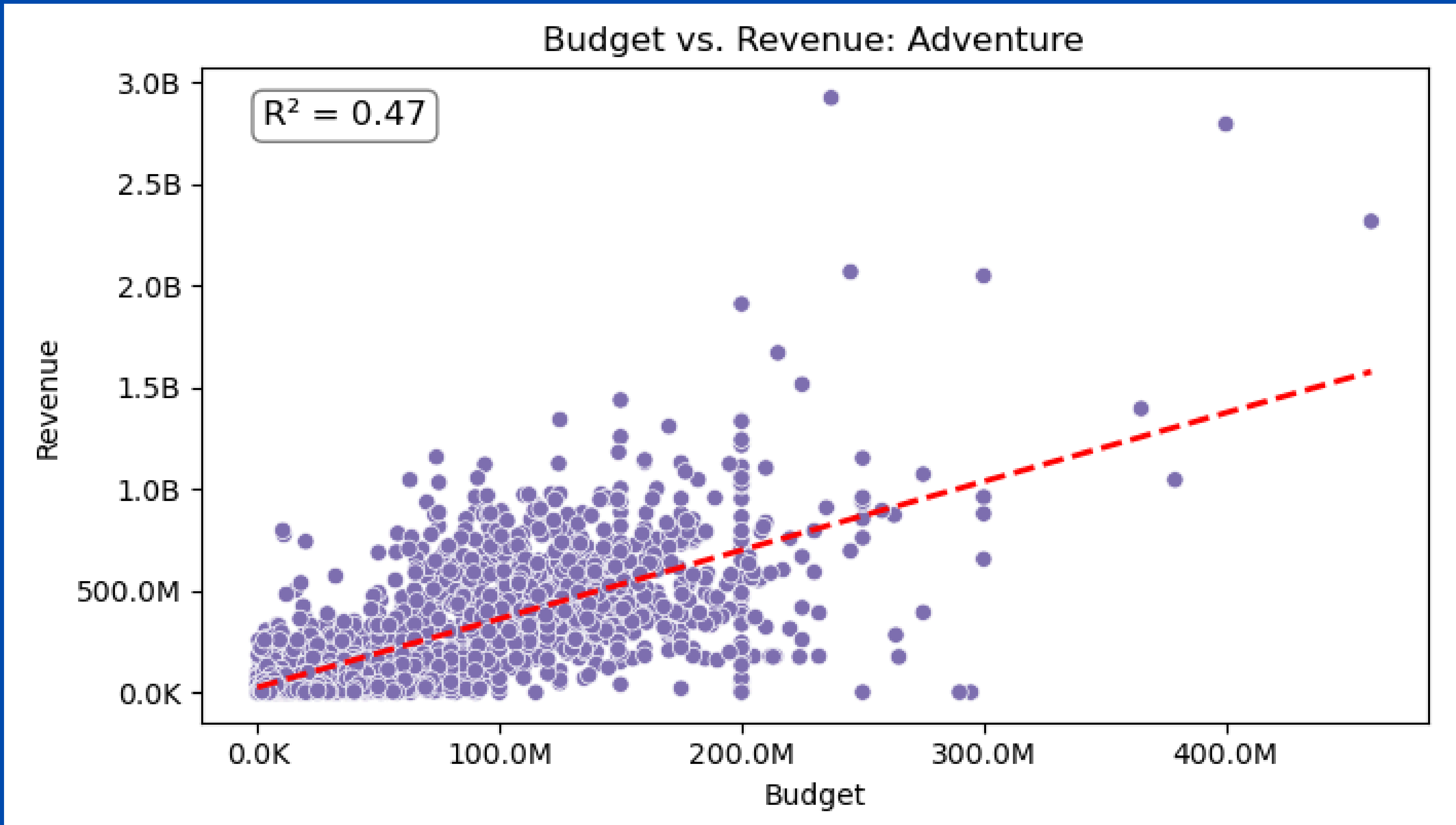
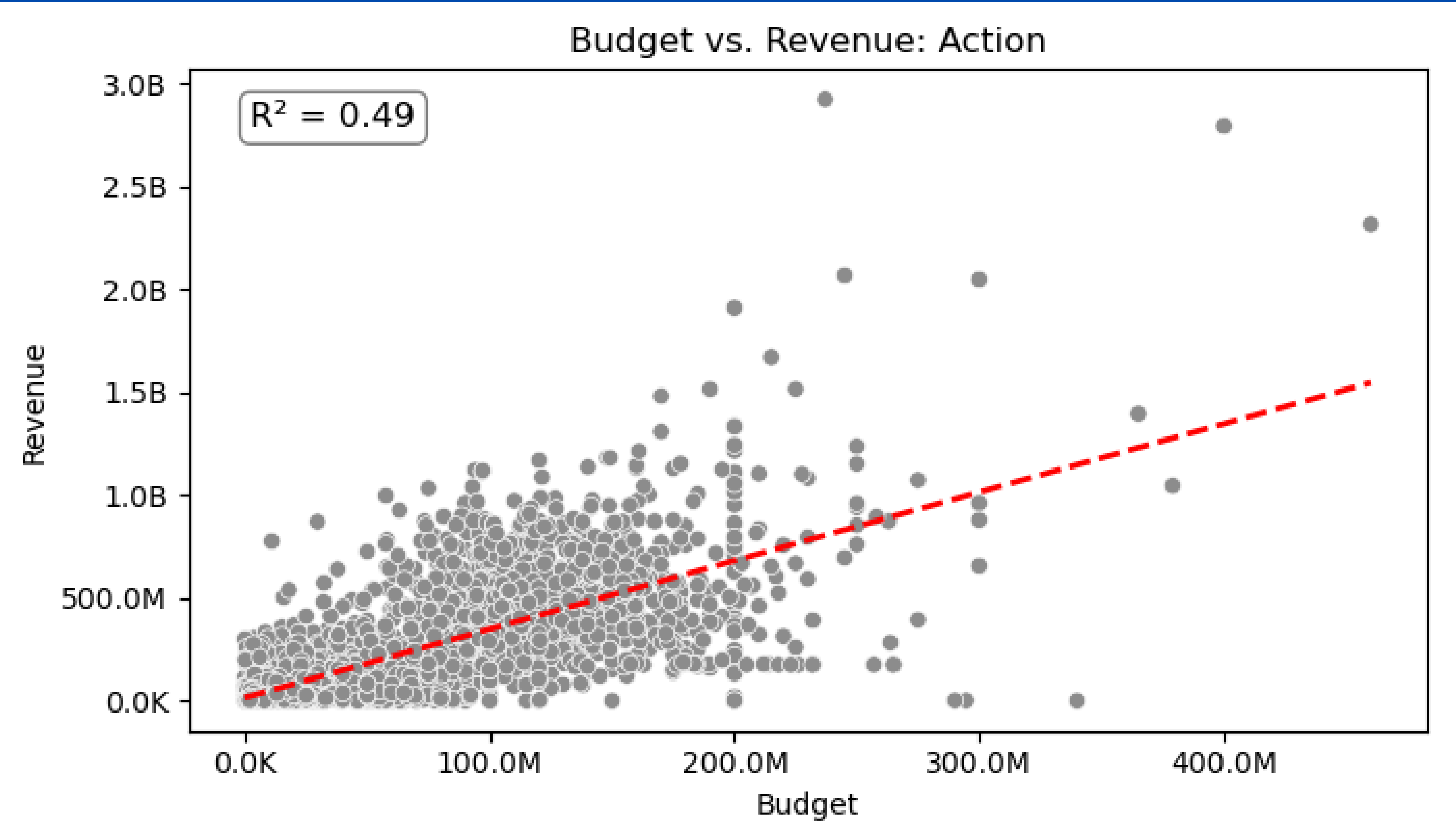
On the left, a bubble chart provides a visual comparison of different film genres based on the number of movies that have grossed over \$1 billion and the total revenue generated by these movies. The **Action** genre leads in terms of number produced. However, despite having a lower count of billion-dollar films, the **Drama** genre stands out for generating the highest total revenue from such films. Drama films, while fewer in number, tend to be more lucrative on average, achieving greater total earnings from their high-grossing released compared to other genres..

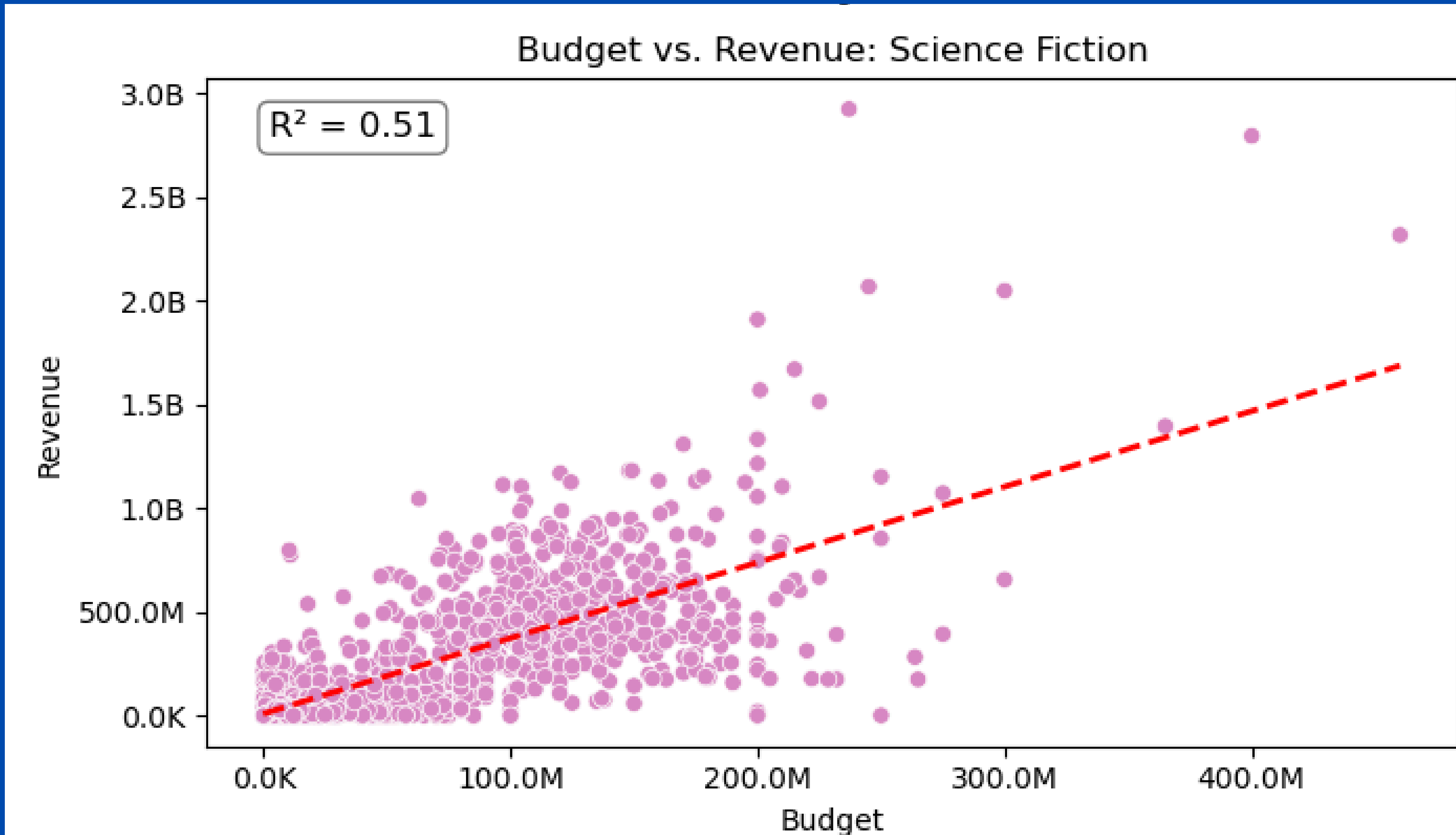
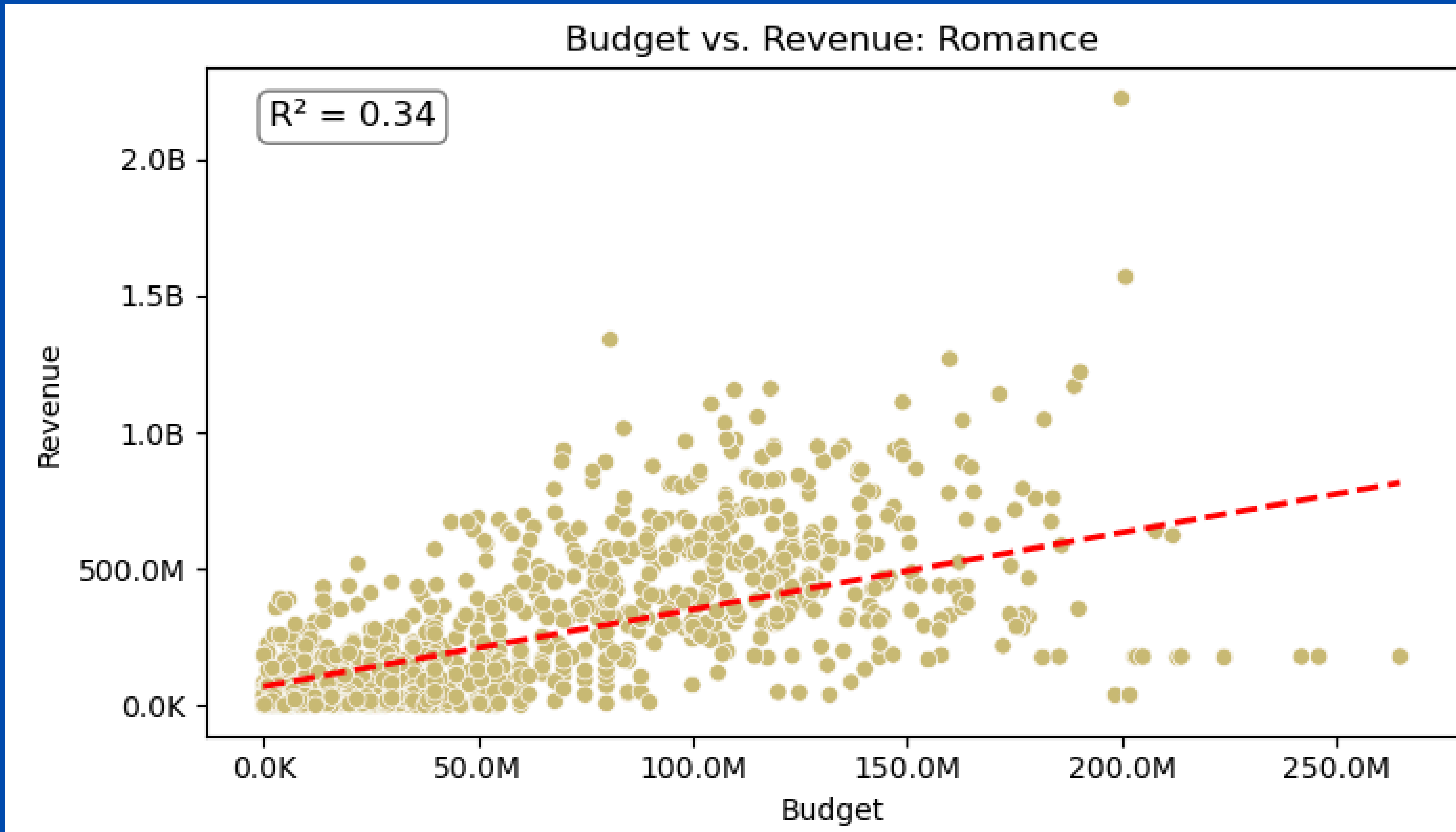
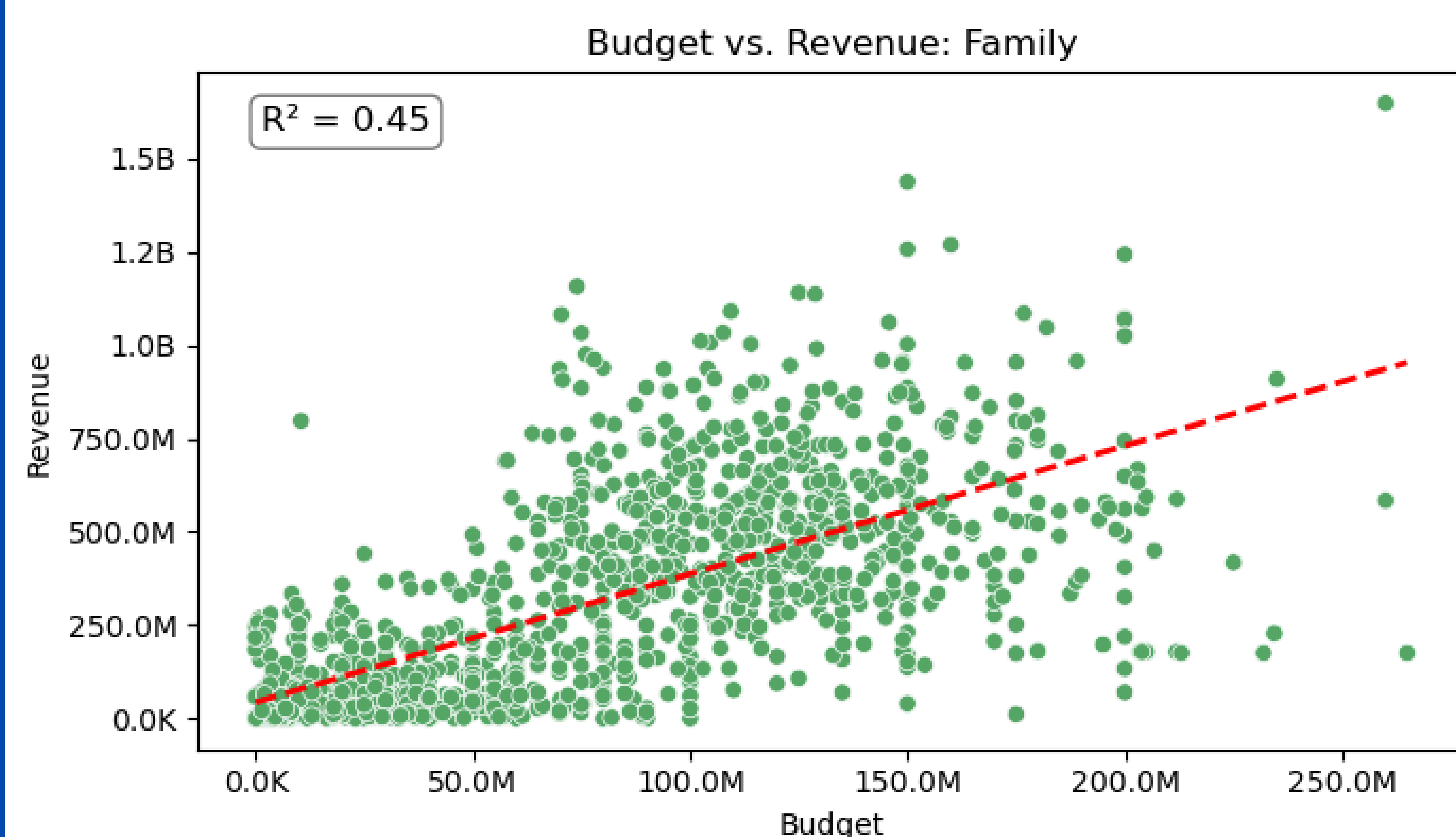
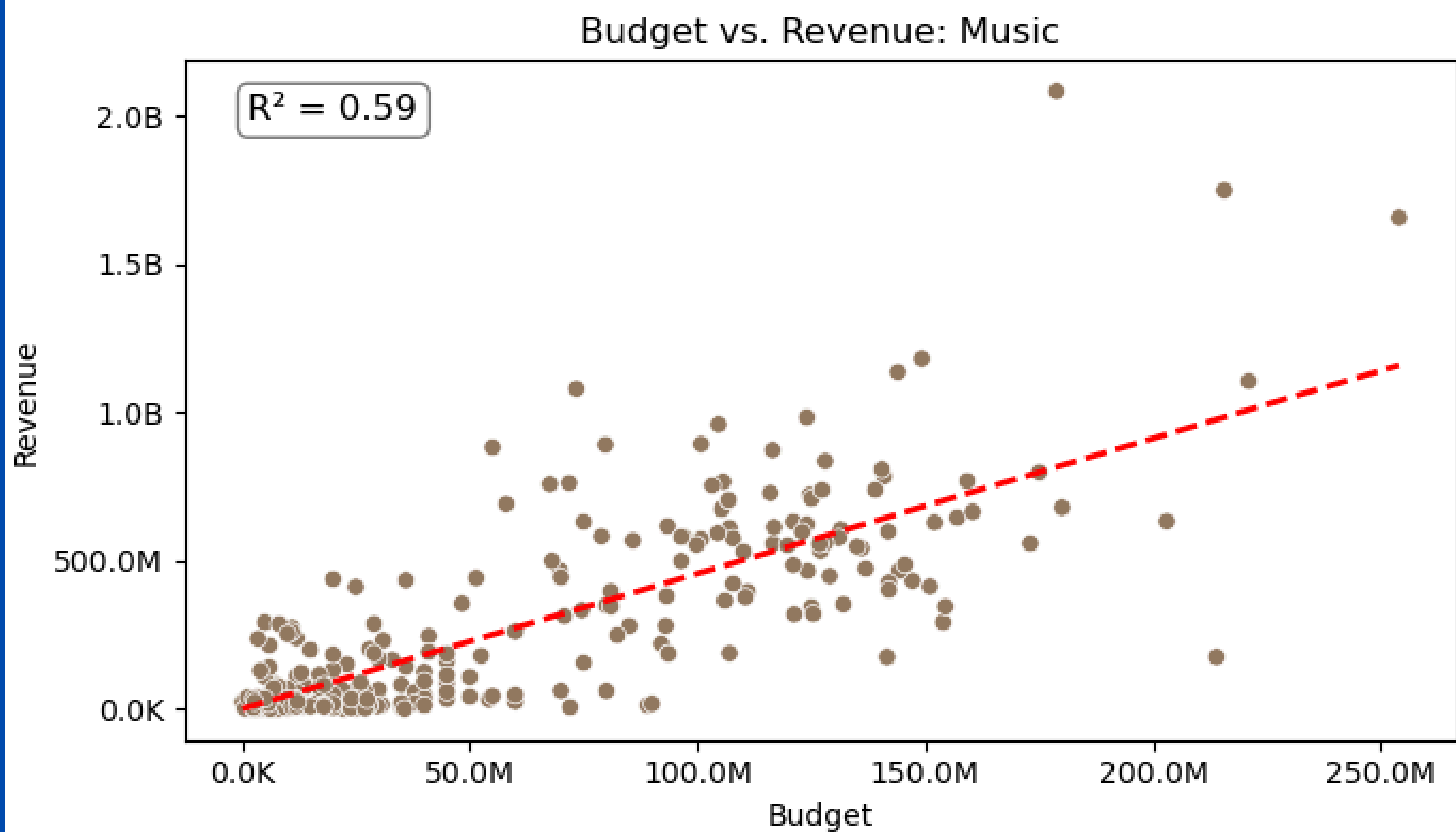
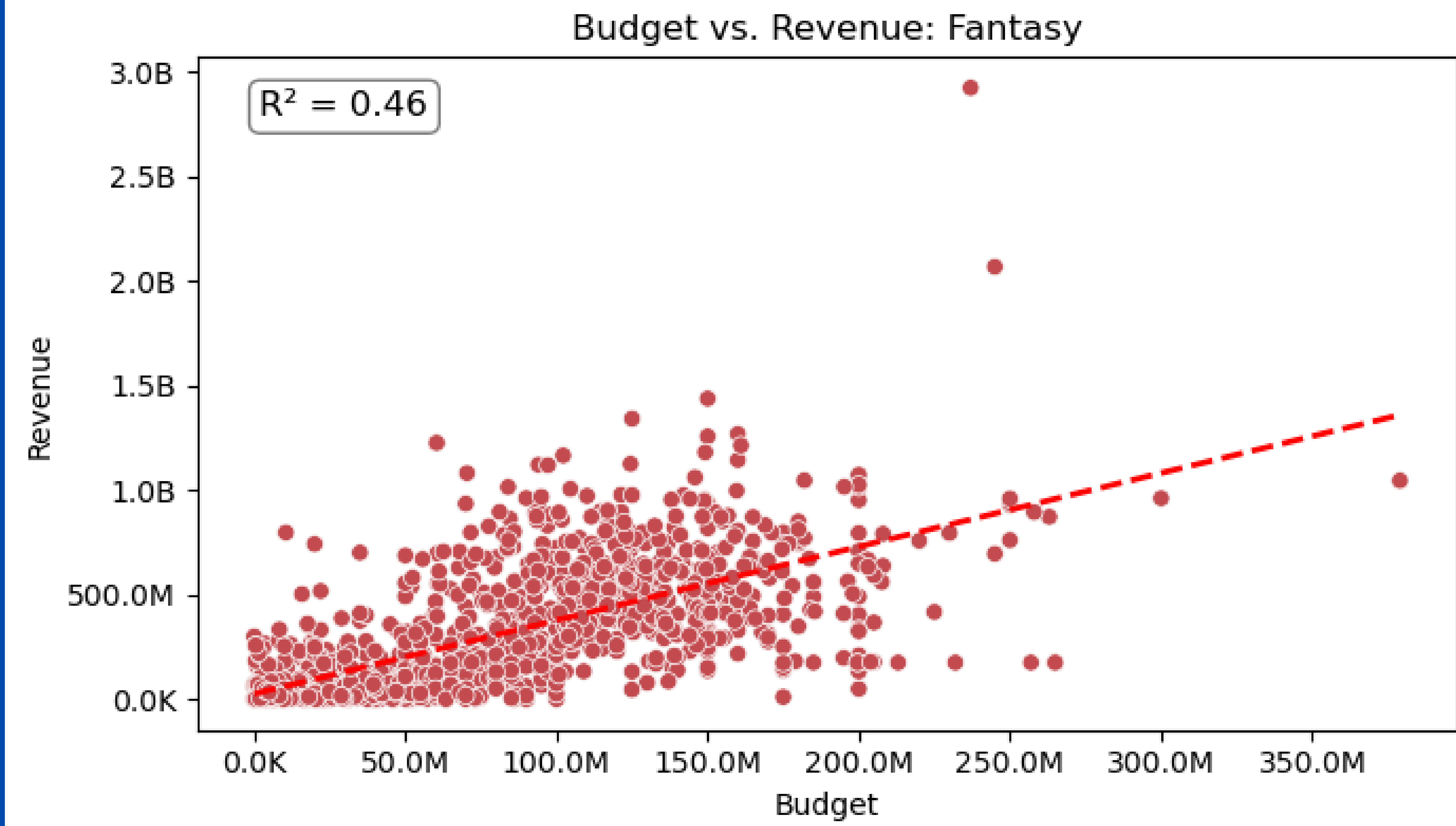
NOW LET’S TALK MONEY.



BUDGET VS. REVENUE

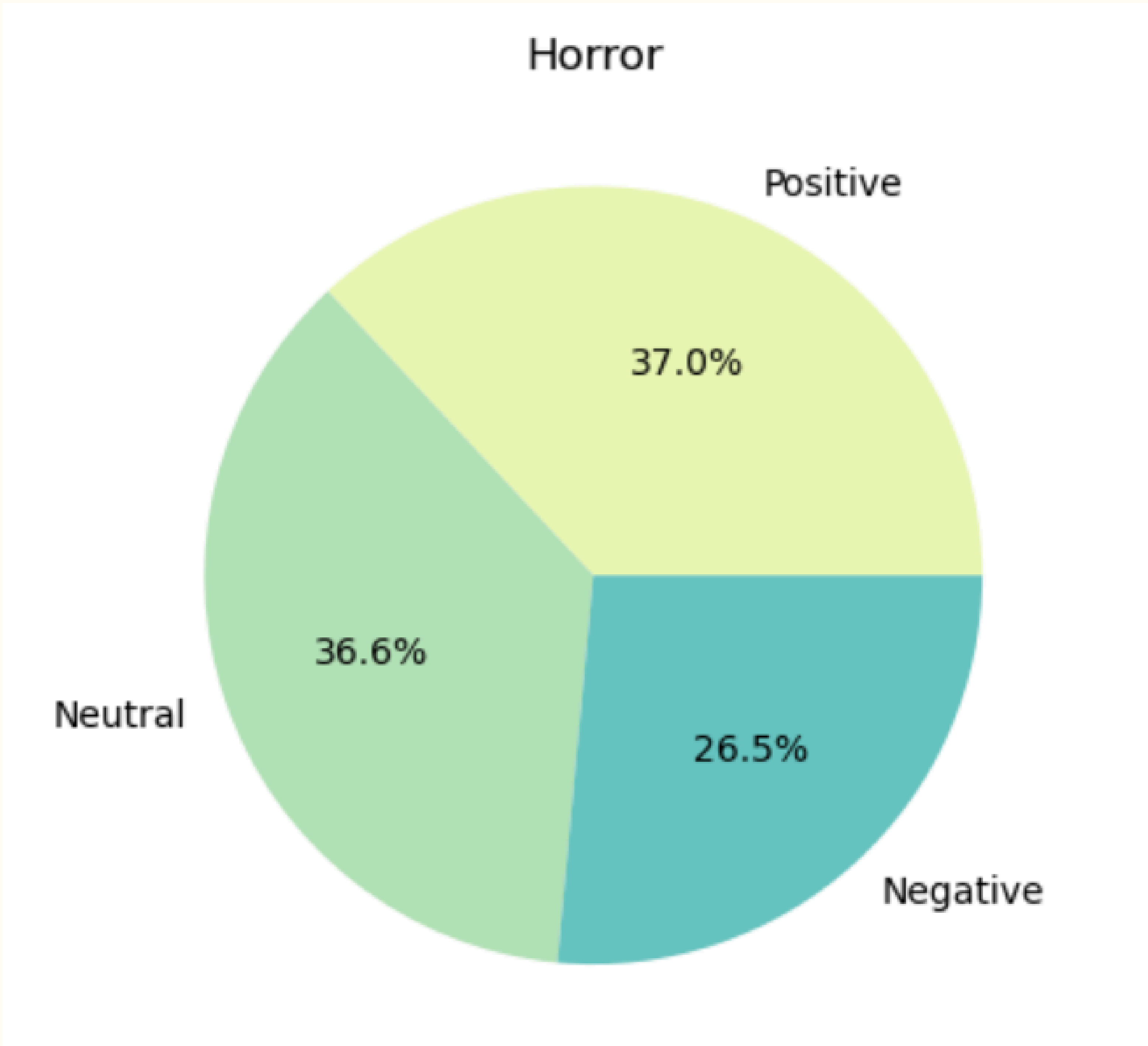
These figures showcases scatter plots highlighting the relationship between film budgets and revenues across the top ten genres. Lines of best fit derived from linear regression are showcased, with the R-squared (r^2) value demonstrating predictive accuracy. Standing out with the highest r^2 value, the **Music** genre reveals a strong correlation between budget and revenue, demonstrating notable predictability in this aspect. These visualizations effectively identify which of the highest grossing movie genres benefit most from increased budgets in terms of revenue growth.



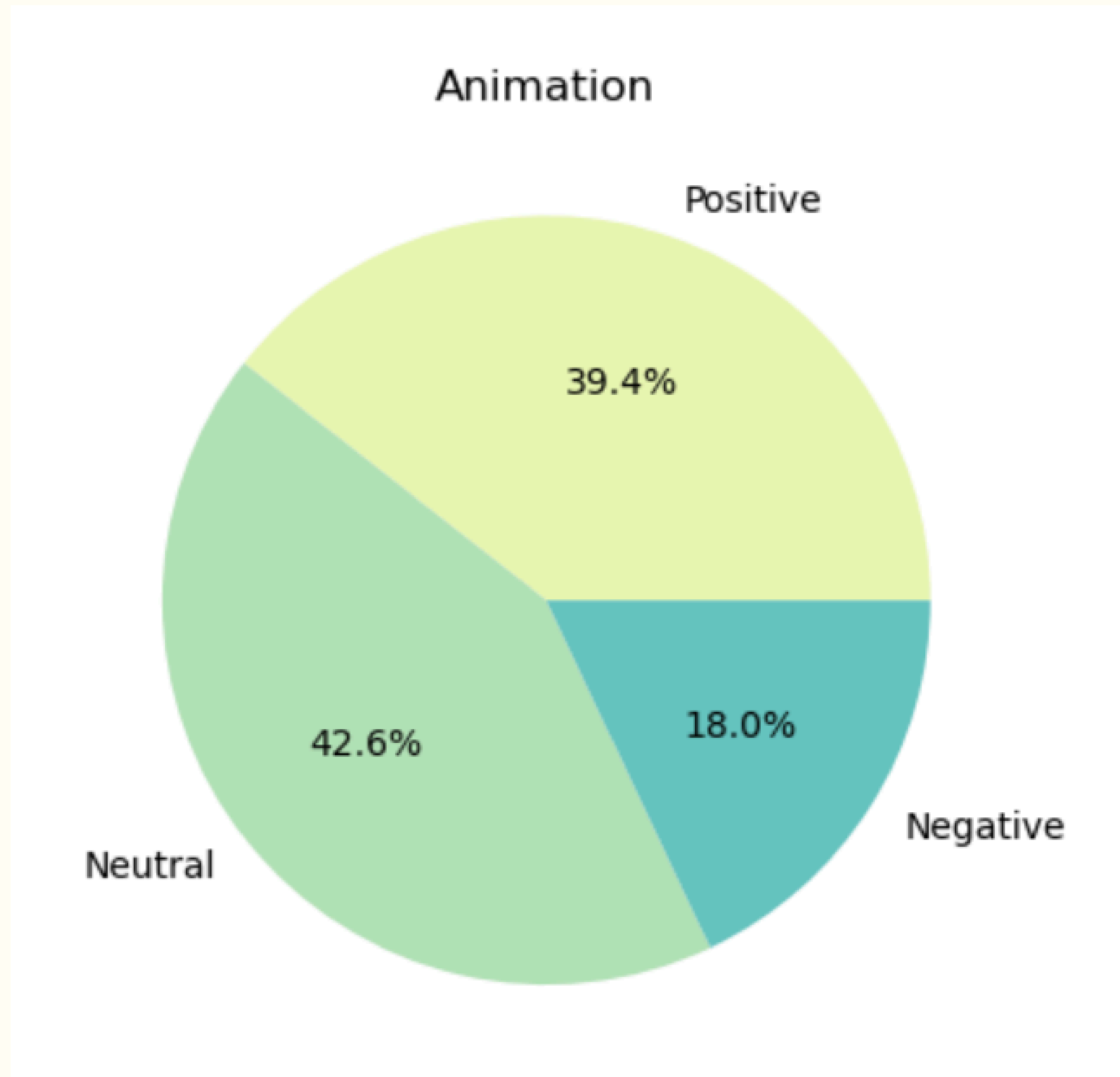


ALL THAT’S GREAT...BUT WHAT DO THE PEOPLE WANT?

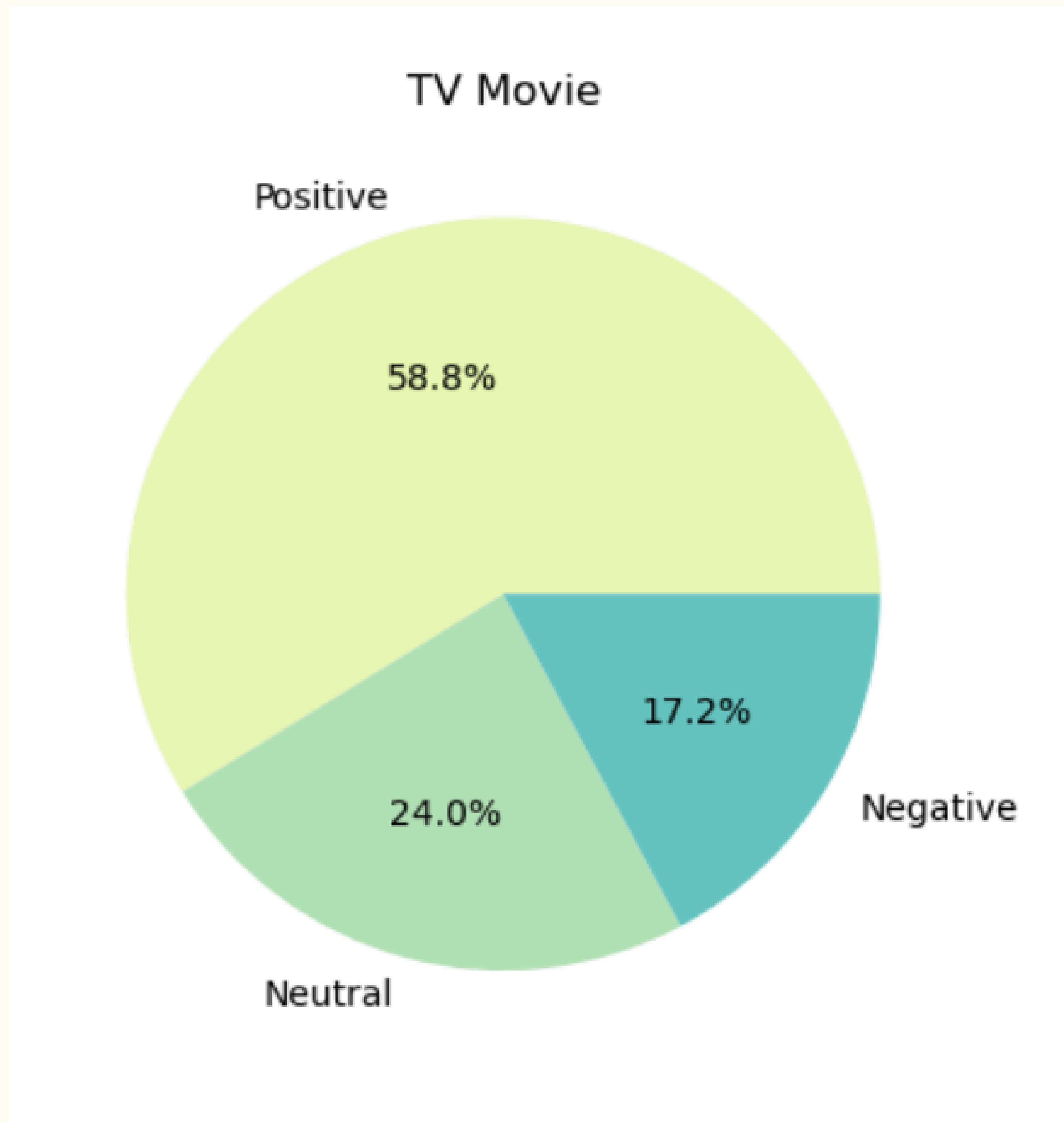
Using sentiment analysis data from movie trailers posted on YouTube, we charted each genre’s average sentiment distribution. Sentiments were determined through comments written in response to the release of movie trailers, and percent positive, neutral, and negative were calculated using the total comments posted on each trailer. Here are some notable discoveries.



HORROR
received the largest **negative** sentiment percentage.



ANIMATION
received the largest **neutral** sentiment percentage.



TV MOVIE
received the largest **positive** sentiment percentage.



AND THAT’S A WRAP! THANK YOU FOR READING!

SOME NOTES + SOURCES

For figure 1, the years start at 1940 due to there being so few data points from years prior.

Sources:

<https://www.kaggle.com/datasets/dineshvasired/movies-youtube-trailers-and-sentimentdinesh-dinesh>

<https://www.kaggle.com/datasets/ashpalsingh1525/imdb-movies-dataset>

Patrick worked on Graph 1, Graph 3, Graph 4, and The Scatter Plots + writeups.

Mallika worked on Graph 2 and the pie charts + writeups and designed the final infographic.