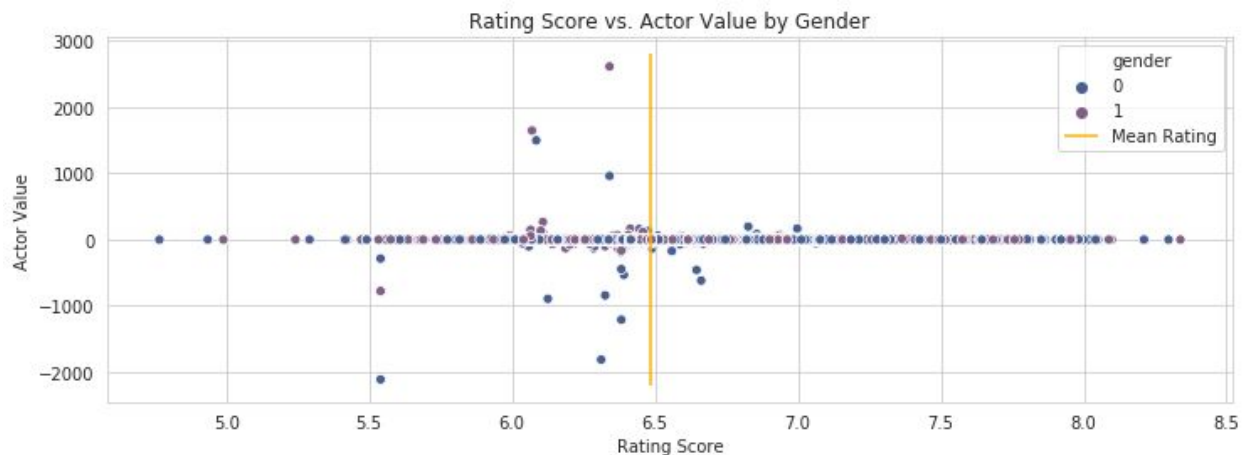


Capstone 1: Data Story

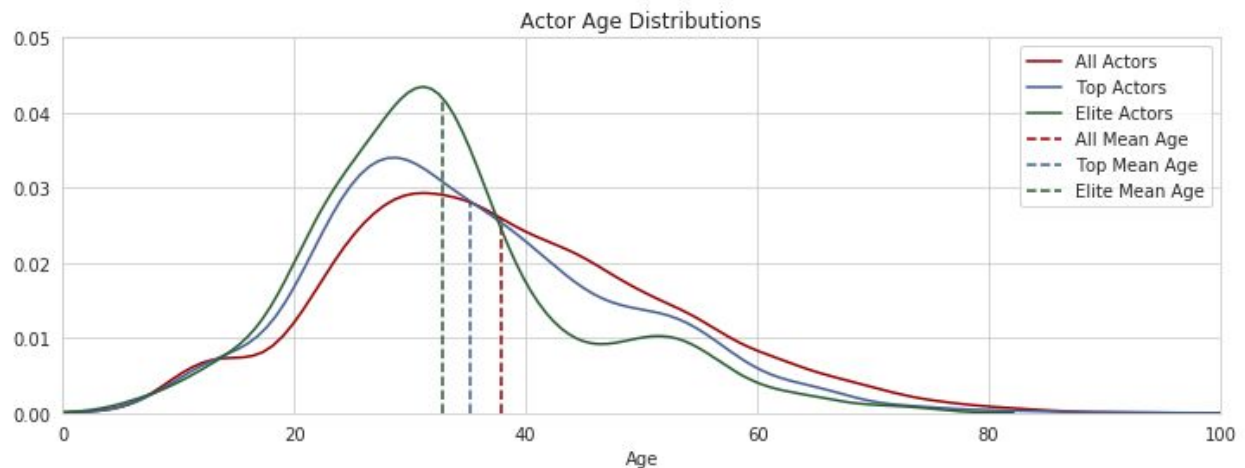
I began to visually analyze the data by searching for patterns in the actors' features of ages and viewer ratings with respect to their profitability histories..



First, it could be seen that the actors with extreme earning potential were mostly distributed below the average viewer rating. This suggested a lack of correlation between actors that consistently made profitable returns and the ratings they received for those movies. Also, most of the actors with the lowest profitability were male actors.

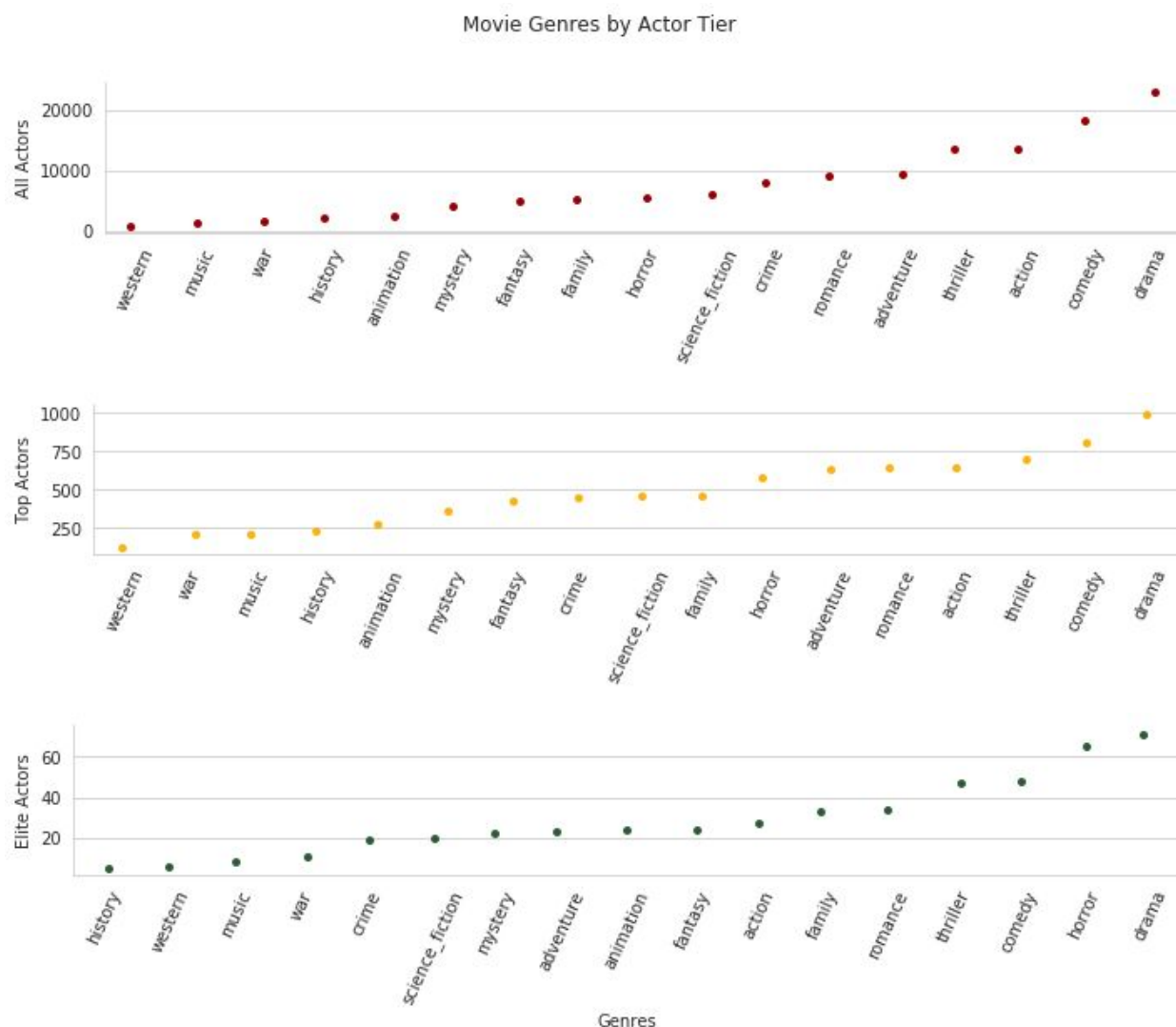
Next, I chose to group the actors by different tiers with respect to their earning histories. I decided to extract the top 10% and the elite 1% of the actors and to compare them to all of the other actors to identify any trends.

First, I looked for differences between these tiers with respect to the actors' ages.



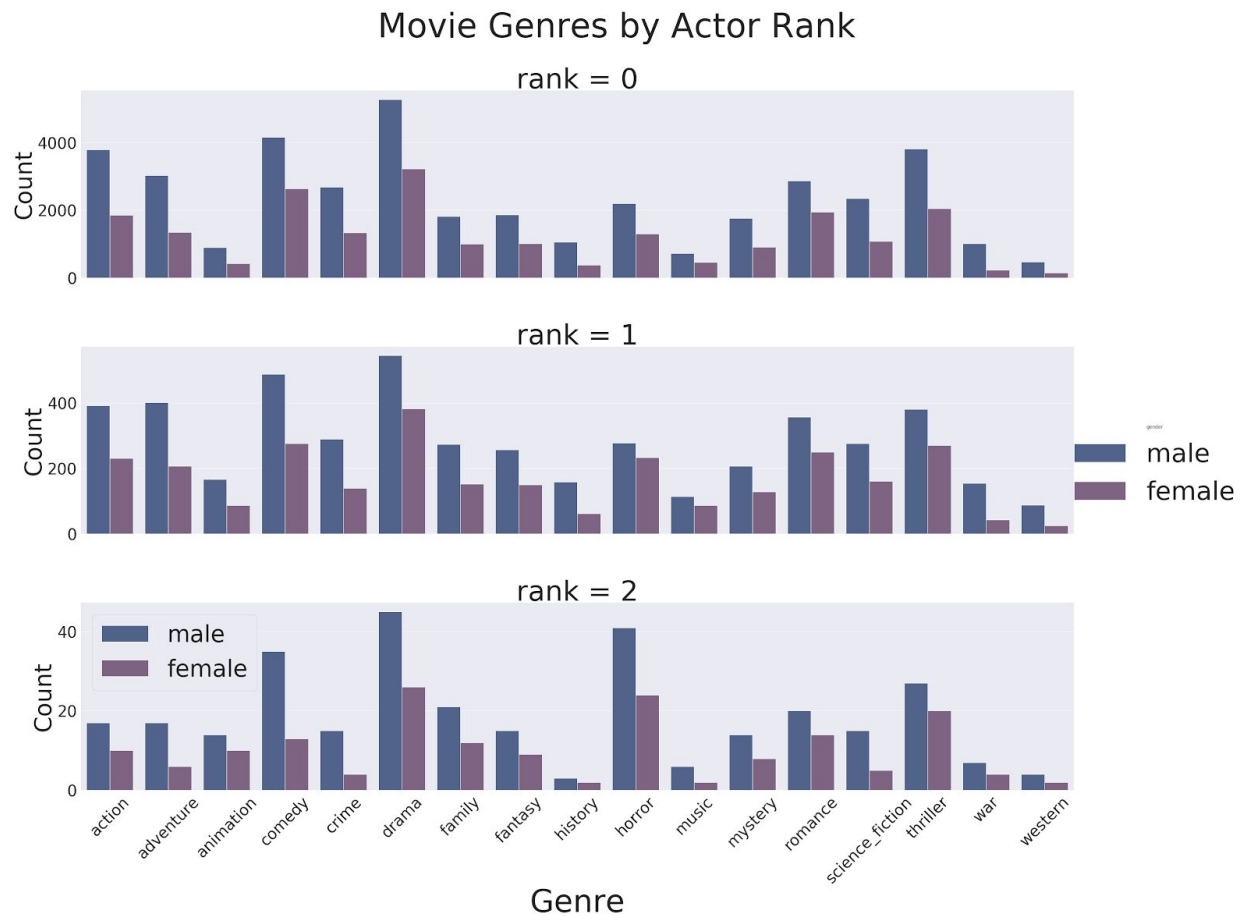
As was shown in the plot, the average actors' ages decreased as the actors moved up in the tiers. It was interesting to observe that there was a second peak for actors in their 50s. This peak was slight for the top 10% tier, but became more pronounced once the elite 1% of actors were observed.

Next, I observed how the movie genres were distributed among the different tiers of actors.



The drama genre was consistently the best when it came to tapping an actor's earning potential. As the focus proceeded up the ranks of actors, the horror genre replaced comedy for the second best genre for profitability. Family movies steadily made their way toward the top, as the tiers became more filled with higher earning actors. Western, music, war, and history genres stayed near the bottom of earning genres throughout the tiers.

Finally, I ranked the actors according to their tiers. Rank 2 was for the elite 1%, rank 1 was for the top 10%, and all other actors were assigned to rank 0. Then, I plotted the genres by actor ranks and split the distributions by gender.



As the male actors comprised over 60% of the observations in the dataset, the gender splits looked fairly consistent. There were slight gains by the female actors in the genres of action, animation, thriller, and war, while they declined in the comedy, crime, horror, music, and science fiction genres.