Star Wars Movie Ratings

A look at how the fans and critics have rated each of the twelve Star Wars movies.

This project takes a look at how fans and critics rated each movie on Rotten Tomatoes. I am a huge Star Wars fan, so I wondered how each was received by the audiences and critics. The order of my own favorites is hard for me to decide on, so I wondered how closely others ranked these.

I also wondered if other factors would present themselves during this analysis. What about popularity by year? Or maybe if Star Wars movies were released too closely together.

But before I could do any of this, I needed the data. To that end, I tried to find the best way to scrape the data from Rotten Tomatoes using Python. It didn't take long to find that there was already a library for that, rotten_tomatoes_scraper, which made this process much easier.

Using the scraper library in Python, I obtained the data for each Star Wars movie, which I then saved into a .csv file for later use in Tableau. I then opened the .csv to verify my data was there. That's when I realized I was missing the release date, which I wanted to show in this analysis. At this point, considering the small dataset I was working with, I manually typed this into the file.

Here's a look at the Python code I used:

```python
#This is a library I found to scrape movie data from Rotten Tomatoes
from rotten_tomatoes_scraper.rt_scraper import MovieScraper

from csv import writer

#I manually entered these because it was the simplest way for this project
movieURLs=("https://www.rottentomatoes.com/m/star_wars_a_new_hope","https://www.rottentomatoes.com/m/star_wars_the_empire_strikes_back",
"https://www.rottentomatoes.com/m/star_wars_episode_vi_return_of_the_jedi","https://www.rottentomatoes.com/m/star_wars_episode_i_the_phantom_menace",
"https://rottentomatoes.com/m/star_wars_episode_ii_attack_of_the_clones","https://www.rottentomatoes.com/m/star_wars_episode_iii_revenge_of_the_sith",
"https://www.rottentomatoes.com/m/star_wars_episode_vii_the_force_awakens","https://www.rottentomatoes.com/m/star_wars_the_last_jedi",
"https://www.rottentomatoes.com/m/star_wars_the_rise_of_skywalker","https://www.rottentomatoes.com/m/solo_a_star_wars_story",
"https://www.rottentomatoes.com/m/rogue_one_a_star_wars_story","https://www.rottentomatoes.com/m/clone_wars")

with open(r'C:\Users\Owner\Desktop\StarWarsMoviesRottenTomatoRatings.csv','a',newline='') as f_object:
    writer_object=writer(f_object)
```

```
for  mov in movieURLs:

    #Get the URL and scrape the data for that movie
    movie_url=mov
    movie_scraper=MovieScraper(movie_url=movie_url)
    movie_scraper.extract_metadata()

#Now open the csv and write the data we need for this movie
#with open(r'C:\Users\Owner\Desktop\Data Analysis Stuff\testStarWars.csv','a') as f_object:
   # writer_object=writer(f_object)
    StarWars=movie_scraper.metadata
    myList=(StarWars['Score_Rotten'],StarWars['Score_Audience'],StarWars['Rating'],movie_url)
    writer_object.writerow(myList)

f_object.close()
```

I then uploaded that file to Tableau. In Tableau, I gave the columns proper names (these were lacking in my .csv). I then created a calculated field which used regular expressions and text replacement to extract and upper case the titles from the URL (Rotten Tomato Page).

The next step was to get at some of this data and see how fans and critics liked the movies. For this I created a vertical bar chart that shows the critics score in blue and fans score in orange for each movie. This gave me some solid idea of which movies were most popular.

To get an idea of how the fans and critics opinions are split, I created a pie chart to show what percentage of the movies are rated fresh (at least 60%) by critics, and how many are rated fresh by fans.

I decided a good step would be to look at the popularity by release year. With additional data in the future (such as other blockbuster movies released in the same timeframe), this could help us find reasons why some were better received. It also could provide an insight into the waxing and waning of Star Wars popularity overall, if there was any consistent difference.

I had the release date saved, but I wanted it in a year format, so I created another calculated field to extract just the year from that date. I then charted all of the movies in a double line chart, showing critic ratings for Star Wars movies by year in blue, fans in orange. This provided a bit of insight as well, since I had no idea how many of these movies were more popular with fans than critics. It showed that fans liked the movies slightly better than critics early on, with later movies often liked better by critics than fans.

Looking at the data I had available, I also decided to chart whether the popularity of Star Wars movies varied by MPAA (Motion Picture Association of America) rating. For that I created another bar chart, showing critics in blue and fans in orange.

Lastly, it seemed it may be easier for some to recognize patterns when viewing this particular set of data in a table form, so I created a ratings table that listed each movie, the critics score, fans score, and release date.

I combined these into a dashboard, and then into a story, which you can see on [my portfolio page](#) or [at Tableau](#).

Conclusions

Varied Reception

Star Wars movies have received quite varied ratings over the years, from the well received Empire Strikes Back to the very unloved Clone Wars.

Fan Reaction

Fans really liked the early Star Wars films. While fans and critics alike enjoyed these movies, fans consistently ranked them higher than critics for the first four movies. After than point it is back and forth, with fans liking some more than critics and critics liking some more.

The top three ranked films, according to fans, were The Empire Striked Back, A New Hope, and Return of the Jedi. Fans had a very strong bias toward the early movies over the prequels, but the movies released in the 2010s regained a lot of the fan love.

Critic Reaction

While critics liked the early movies, they were much lass impressed with Return of the Jedi in 1983 and all the movies afterward up until The Force Awakens in 2015. Critics were especially hard on Clone Wars, which didn't receive a lot of kudos from either critics or fans.

Critics also ranked The Empire Strikes back as number one, but they had A New Hope and The Force Awakens tied for second. That's a big surprise. Fans rated Return of the Jedi as number three, but it dropped all the way to number six on the critics list. On the other hand, fans had The Force Awakens in number six, but critics gave it a tie for second. This shows quite a rift between the two groups' opinions.

Freshness

Critics ranked 75% of the Star Wars movies above 60%, or fresh in Rotten Tomato lingo. Fans only ranked 66.67% that way. While this is only one less movie overall, it's interesting to note that two of the movies critics rated fresh (Attack of the Clones & The Last Jedi) didn't make the rating with fans, while the fans liked one movie a lot (The Rise of Skywalker) that critics ranked low.

MPAA Ratings

Whether a movie is rated PG vs PG-13 didn't make a massive difference in how fans and critics liked it. There was a small difference, but it was exactly opposite between fans and critics. Critics rated the PG-13 movies a little better overall, with fans liking the PG rated movies a little better.

My initial thought was that this may actually play a larger role overall. Movies like these are often given a PG-13 rating because of a lot of violence, and in my experience there is always a portion of the fans and critics will cite that as reasons why they don't like a movie. That doesn't seem to be the case here, though. This may be because none of these movies are overly gory or bloody, and all have at least some violence.

Big Differences

Usually there are a few points between the ratings the fans gave a movie and the ratings critics gave it, but both fans and critics disliked Clone Wars. Fans liked it a little more, but it was still their least-favorite of all the movies. I imagine the fact that it is the only animated film among the group played at least some role in how poorly it showed, but I have no data to back that up.

But it didn't have to be an animated movie to split the fans and critics; the last two entries into the saga have created an even larger rift. Critics really liked The Last Jedi, giving it a 91, but fans thought it was a dud, and rated it only 42. But with The Rise of Skywalker we got the complete opposite, with fans loving it and giving it an 86 and critics only rating it 52.

It's clear that fans and critics are often going to disagree on how good a movie is, but it's also clear that most Star Wars movies are going to be relatively well received by at least one of these groups as long as it isn't animated.