

Pandemic Watching - Project Proposal

Brief Summary | Interest | Intent: Members of our team admitted to significant changes in Internet movie habits during 2020. This is what we will call “Pandemic Watching.” The Over the top (OTT) platforms are buzzing with new subscribers and content from various genres and styles which may not have been so popular in the past. We are curious to know if it is the Pandemic that contributed to this change or was it just a natural increment of the changing technology and user’s acceptability.

Description: In March 2020, global travel restrictions were put into place as a response to the pandemic COVID-19. As a result, people turned to at-home entertainment. Our project analyzes the trends in Internet movie viewing habits. We will examine data between 2019 and 2020 and look for shifts in genre and identify any other significant changes in viewing patterns. While 2020 may have been a boom year for organizations such as Netflix and Zoom, it is going to be interesting to see the impact on their numbers (if any) once things get better.

Scope and purpose:

The scope of the project will include the movies released between 2019 and 2020 encompassing a wide variety of genres. This project will serve as a platform to analyze trends and will also help the industries in the future understand a little more about mental well-being and happiness as it relates to choice of entertainment.

Detailed steps include:

- Formalize initial hypotheses
- Receive data from identified sources
- Analyze data within Jupyter Notebook using Python
 - Create visualizations using Matplotlib
 - Identify if there are any limitations to data
 - Prove or disprove our hypotheses
- Present findings to peers
- Publish results to github

Hypothesis:

H_0 : The number of ratings of a given genre has no relationship to the number of movie votes in that genre.

H_a : The number of ratings of a given genre has a strong positive relationship to the number of movie votes in that genre.

Questions we will be asking:

1. What were the significant changes or noticeable trends in movies between 2019 to 2020?
2. What were the most/least popular genres?
3. What was the total revenue made by the industry in 2019 vs 2020?
4. Are there any correlations between ratings and watch volumes?
5. What future predictions can we make based on 2020 data patterns?
6. Can we correlate viewing habits with Covid-19 cases?
7. Was there a trend in Covid-19 cases and Netflix subscriptions?

Kinds of data we will work with:

We will be using API keys to pull data from reputable websites containing both quantity and quality data sources that will provide insights to our questions. This may include but is not limited to:

- All major movie data including genres released in 2019 and 2020
- Netflix subscriptions for 2019 and 2020
- Data from CDC/JHU regarding the numbers and trends in Covid -19 during 2020 (USA)