Mini project 3 – Twitter Network Analysis – Alex Montoya Franco

Project questions:

- **RQ1.** Is the movie going experience still relevant in today's pop culture compared to the attention that streaming services are facing?
- **RQ2.** What is the evolution of consumer's behaviour, denoted by number of tweets, trending topics, hashtags, social interactions, in terms of theatrical experiences vs streaming services?
- **RQ3.** Is it possible to predict this behaviour for the next few years?

Problem statement

For a long time, going to a theatre to experience the latest movies was not only a very common activity, but consider a worthy one, that was the only way to watch the latest and biggest movies. Watching a movie at home was a lesser experience to say the least. Nowadays, the explosion of content produced by different streaming services (Netflix, Disney+, Amazon Prime, etc), in addition to the consumer shift caused by the recent pandemic, have shown audiences that there is plenty of quality content to be entertained at home. In some cases, even, the latest movies are now available at home for no extra cost just weeks after their release on cinemas.

However, one of the biggest differences between the theatrical release vs streaming releases, is that in the former, talent across the board (directors, artists, actors) can reach very good deals which usually includes a percentage of the movie's income, while on the other hand, streaming services do not offer these types of deals because revenue of a specific piece of content is not shared by the streaming services. For the actors, this is not a problem, they get paid millions of dollars sometimes. But for all other talent salaries are now based on estimates rather than the actual revenue of content. Sometimes this content might be generating hundreds of millions of dollars while the talent involved is just getting a fraction of it. The majority going to studio executives and actors. Should companies continue focusing on movie experiences that generate good deals to all? Let's see the consumer's perspective.

Problem importance

In 2021, Netflix spent at least triple what other streaming services spent on creating original content. The streaming service spent over six billion U.S. dollars on original content that year. On the other hand, some firms forecast that the 2022 global box office will reach \$33.2 billion. Billions of dollars are being spend and generated both by streaming services and cinema studios while salaries are highly unbalanced in the former. Global Box Office 2022 - Spending of streaming services 2021

Your proposed approach

For RQ1, a descriptive analysis of the current social media attention around movie going experiences vs streaming experiences. For RQ2, a trending analysis of cinema vs streaming. For RQ3, forecast whether cinema experiences will be relevant in the future or not. I will try to use Twitter historical data to identify trends in people's viewing experiences and will try to come up with possible predictions to identify how cinemas' influence in pop culture will change in the coming years.

I have set up the required permissions to access Twitter's data. However, my status in the platform is "Essential", which only allows for the fetching of recent tweets (recent week or so). I have requested access to the "Academic Research" tier which would give me access to tweets from past years. If this access is granted, I believe Twitter's API is going to be enough to answer the three questions. In case is not, other datasets will be explored.

The expected outcome

Data visualizations showing the online attention for streaming services and theatrical experiences. Intuition tells us that consumers are experiencing more content online, but still some movie going experiences generate big headlines. A time series analysis showing the online chat, hashtags, mentions of theatrical movie experiences vs streaming experiences. Time series forecasting of future consumer's behaviour.