

Will OTT(Over-the-Top; online streaming services) take over the movie theaters?

Asish Addepalli
N19960014
aa9335

Lakshmi Sai Anmol Ramayanam
N12320210
lr2947

Yashasvi Choukikar
N17770957
yc4953

Prasanna Kumar Chidire
N18329913
pkc4609

Abstract

The COVID-19 pandemic has brought about a significant change in the release and consumption of movies. Although online streaming platforms like Netflix, Amazon Prime, Hulu, and AppleTV have been in existence for over a decade, they have experienced a surge in popularity. The lockdowns in 2020 made these platforms the primary focus of audiences, providing them with a contemporary way of watching feature films. The excitement of watching new releases directly on these platforms and the nostalgic feeling that older, beloved movies evoke has attracted people in large numbers. However, this does not necessarily imply that online streaming platforms will replace movie theaters, as our survey-based findings suggest otherwise. Additionally, the study highlights that although the mode of consuming movies may evolve, their ability to elicit emotions remains timeless.

Keywords : Theory of mind, social connection, online streaming platforms, OTT, Cinema, Movie Theaters

1.Hypothesis

Movies have always been considered to be an integral part of human society. It has been said movies hold a mirror up to society , reflecting the belief and values of community. On the other hand, many critics opine that movies play a huge role in shaping and molding a society. For a long time, cinema theaters have been the most popular method of consumption for movies. *With the rising popularity of online streaming platforms popularly known as OTT(Over-The-Top), we hypothesize eventually OTT shall replace movie theaters as a means to consume movies.* This is based on factors such as change in content newly appreciated by the audience, time flexibility to watch movies at your own pace, on multiple mediums such as mobile, laptop, tablets as well as comfort to sit at home. This project aims to explore the role of

online streaming platforms in changing the movie-viewing experience , all the while shaping our social and cultural connections.

2.Business Canvas Model

2.1 Problem

The traditional movie theaters have rigid schedules for movie screening. They often lack the option for customization of movie genres, which means audiences have to wait for specific genres of movies to be released. while online streaming platforms do not . Average cost incurred by a family on movie tickets is about \$80^[1].

2.2 Customer Segments

Our target audience comprises individuals who have internet access and are interested in watching movies.

2.3 Unique value proposition

The benefits of online streaming platforms include the comfort of watching from home, portability for watching on-the-go on multiple gadgets, no time constraints for viewing, availability at one's leisure, and the ability to personalize the content.

2.4 Solution

The online streaming platform offers time flexibility and personalization options, and the average subscription cost is about \$68 dollars(which includes the internet costs and electricity costs)^[2].

2.5 Unfair Advantage

Exclusive content, Data-driven insights to analyze user preferences to boost their recommendations of movies, Global reach for wider audience connect internationally without the constraints of physical theaters or regional distribution agreements and Brand recognition. These unfair advantages can help the online streaming platforms business to gain a competitive edge and succeed in the market.

2.6 Revenue Streams

Online streaming platforms generate the revenue from subscription fees, advertisements, content license and deals(exclusively available on that platform).

2.7 Cost Structure

The costs incurred to set up a new online streaming platform would be the cost for infrastructure including expenses for servers, content delivery networks (CDNs), data storage, and bandwidth usage. The other costs associated with it would be to promote the platform using advertisement campaigns, marketing strategies and so on. The average cost incurred by the user is about \$68 subscription fees.

2.8 Key Metrics

We are collecting the data on the user preferences for watching the movie, and effects online streaming on their life and the cultural role movies are playing in their lives to measure the metrics of customer satisfaction and loyalty. We also used the revenue data for both online streaming services and box office collections in the US to see the trends.

2.9 Channels

Online streaming platforms are easily available on IOS and android devices, Smart TV apps(Samsung, Sony), Connected devices(Chromecast and Roku). These platforms have partnership with film studios and strategic alliances with telecommunications providers such as Verizon.

3.Assessing Business Model

3.1 Motivation

The rise of online streaming services, such as Netflix, Hulu, and Amazon Prime, has changed the way people consume movies. With lockdowns put in place consequently due to the pandemic, many movies in the past 3 years have been released directly online on these streaming services. As a cheaper mode of movie consumption is now made available at a fraction of costs associated with going to movie theaters, audiences are enjoying a plethora of options in terms of choice of movies on these services. As more and more people turn to these services for their

entertainment needs, there is a growing question of whether they will eventually take over the traditional movie theater experience.

3.2 Value Proposition

The average cost of a movie ticket is \$10 USD, with a drink and popcorn adding up to around \$10 USD. This implies for an average US family of four, a two-hour movie outing comes to roughly about \$80 USD^[1]. Online streaming platforms offer a bundle subscription at less than \$80 USD per month^[2]. This implies that at the same cost, a Hulu Bundle offers a wide variety of movies, TV shows, award shows as well as documentaries. Apart from the costs, the project will explore the impact of online streaming services on the movie theater industry and analyze the factors that could potentially lead to the demise of traditional cinemas in terms of convenience, time versatility as well as portability. It will also examine the benefits and drawbacks of both mediums, highlighting the unique value propositions of each.

3.3 Falsifiability

Although our hypothesis makes perfect sense from the economic point of view^[1], we aimed to consider other factors that motivate people to watch movies. We have analyzed the cultural and emotional aspect that binds audiences to movies. People consider movie viewing as a leisure activity, we have attempted to include that as a basis in our project too. We have dived into the theory of mind aspect associated with movies. Considering online streaming platforms to be an alternative to DVDs^[3], or pay-per-view, but online streaming platforms differ from DVDs since in the past the movies that became a direct DVD release were very few in number. To gain access to these DVDs people still had to go to the store and buy. With advancements in technology, online streaming service we believe is a perfect platform to make movies more accessible.

4.Prior Art Analysis:

4.1 Literature Review

While there are many noteworthy news articles explaining the same, they are restricted to a generalization pattern observing a shift due to pandemic. Few examples are as follows: Are online streaming platforms taking over theatrical experience^[4] and online streaming platforms Vs Theatre^[5], There are notable mentions of detailed studies published in conferences and journal studies.

Paper titled : Is Ott Industry A Disruption To Movie Theatre Industry^[6], highlights the assessments of young people's video viewing patterns on platforms and in theaters. The consumer's video consumption habits, their attitudes toward the movie theater, their use of online Streaming Platforms after it became the most convenient option for everyone, and their perceptions of the changing media and entertainment industry are all discovered using primary data from a survey of 28 questions that received 326

responses. Phone interviews from within the industry were taken of an online Streaming Platform provider, producer and a renowned director as well as a past distributor. Backed with these findings, the paper opines about 50% of respondents think that these platforms are hurting movie theaters. The paper concludes with 16 on point observations and conclusions with a remark stating both platforms strive to preserve the distinctiveness of their formats and the USP associated with them.

The paper : Ott V Theatre: Anticipating Trends Post Pandemic^[7] reflects upon how online streaming platforms remained untouched while the theater industry saw a significant drop in their viewership on the onset of opening up public gatherings post easing of lockdowns. The paper details the rise of online streaming platforms' viewership ever since 2020 both in terms of subscription model and heavy investments in this domain. It concludes by stating that although the way that people have been accustomed to media material has changed due to the online streaming industry, the movie business is not in decline. The expansion of over-the-top platforms has a tendency to cause a great deal of trepidation among filmmakers who believe that this multiplication will be the final death blow for the experience provided by theaters.

The paper titled : The Future Of Movies: Will Ott Take Over Theaters^[8] analyzes the descriptive statistics of its surveyors broadly parametrized in genders, occupation, monthly income, preferred online streaming platform, amount of time spent and frequency based on data collected from the users. The users contributed a total of 120. Version 25 of the SPSS program was used to examine the data collected. The paper used keymetric of 'mean' and 'rank' to examine the perception of online streaming platforms and Cinema Theatres. KMO assesses the data sufficiency for factor analysis. The paper concludes the rise of online streaming platform subscription to pandemic, predominantly male subscribers and asserts online streaming is the future.

4.2 Prior Art Improvements

While the aforementioned papers focused on producers(directors and film producers) as well as the cost of subscribing to these online platforms, they have not touched on the social and emotional attachment of movies to the human psyche. With the inclusion of theory of mind, we aim to bring the consumer(target audience of these movies) perspective in terms of the connection they feel with the entertainment industry. Movies are hugely celebrated, invoking a strong pride and expectations from their audience and we have attempted to delve into the aspect of movie viewing as social outing, maneuvering social connections. We have included theory of mind as a parameter, a novelty as no other literature survey has covered that. The listed papers concentrate on the producer side, we have concentrated on consumers(end users).

5. Minimal Viable Experiment

We sent out a survey covering a wide variety of questions to gauge the factors motivating people to watch movies. We took into account the emotional and cultural drivers as we sought to understand the urge for people to go to the movies. We also considered their emotional health and delved into their belief of a newer content quality now being dispensed in movies.. We concluded on the main question for our premise: In Spite of the many benefits of online streaming platforms, would they still go to movie theaters?

6. Data Collection:

6.1 Data Collection

We collected data mainly from two sources : Box Revenue collections over the years^[9] as well as online streaming platforms^[10] and survey form(5). In this project, we proposed a hypothesis (1), and tested our hypothesis by collecting data and analyzing the results (7).

6.2 Hypothesis Testing

The data collection vis-a-vis the revenue generation of movies from box office revenue^[9] and online streaming platforms^[10] covers the huge investment in the entertainment industry. The survey delves into choices of film screening on both platforms along with the bond people have for movies in terms of nostalgia, social outing, impact on culture. We also collected demographics data based on age and gender.

7. Data Analysis

7.1 Survey Analysis

We conducted a minimal viable experiment using a survey ([Google Form](#)) and collected 100 responses from our target audience, which included our NYU cohort, as well as their parents and friends. Our demographic group consisted of 36.4% females, 62.6% males, with 1% entry preferring not to disclose their gender. Our survey respondents was dominated by the age bracket of 20-35 years of age with 44%, followed by the above 50 years age group with 34%, 20% belonging to the 35-50 years age group, lastly with 2% of the under 20 years age group.

a. Despite Online platforms, there are few movies best experienced in a theater. On being asked which genre of movies are best suited to theaters, Action and SciFi dominated as first choice in movie theaters.

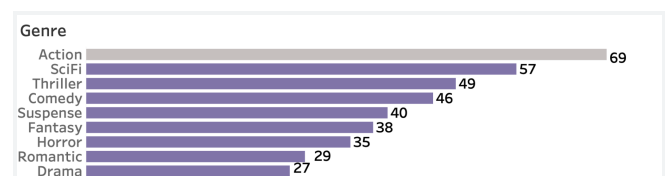


Fig 7.1 Popular genre

b. Humans are often said to be social animals. Our survey results prove that going to the movies is a social outing for them.

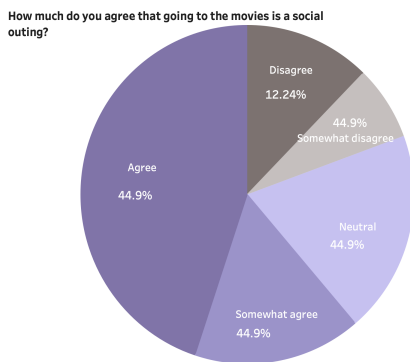


Fig 7.2 Movie as social outing

c. Movies help in the best depiction of human cultures. On being asked how they are instrumental in impacting our culture and molding our behaviors and thought process, 66.32% of our audience agreed with the statement. How much do you agree or disagree with the following statement: "Movies have a significant impact on our culture and the way that we think and behave"?

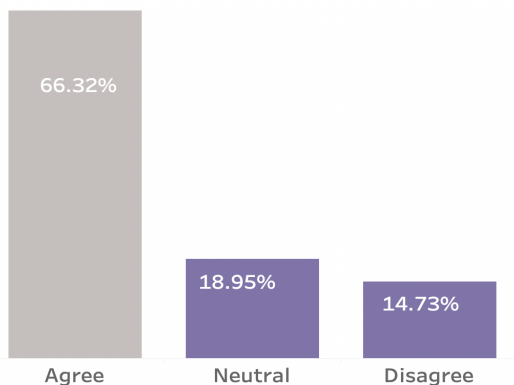


Fig 7.3 Impact of movies on culture

d. To better understand the importance of interpersonal relationships, 28.57% agreed movies play a huge role in empathy and connection of human culture.

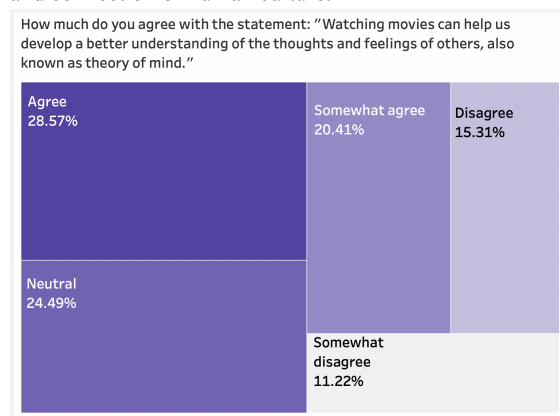


Fig 7.4 Role of theory of mind on movies

e. Movies are instrumental in evoking nostalgia as people are sentimentally connected to them and the same is reflected.

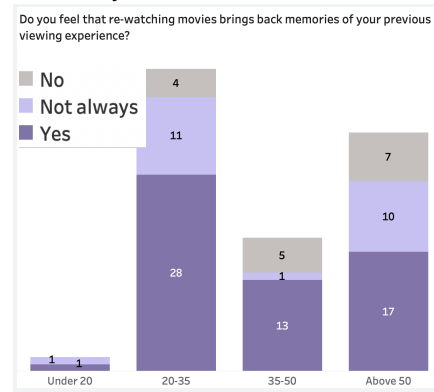


Fig 7.5 Nostalgic feelings while rewatching the movie

f. In an attempt to comprehend the shifting trend towards rewatching movies to analyze the popular choice of movie viewing, 58.33% have preferred to re-watch it on the online streaming platforms.

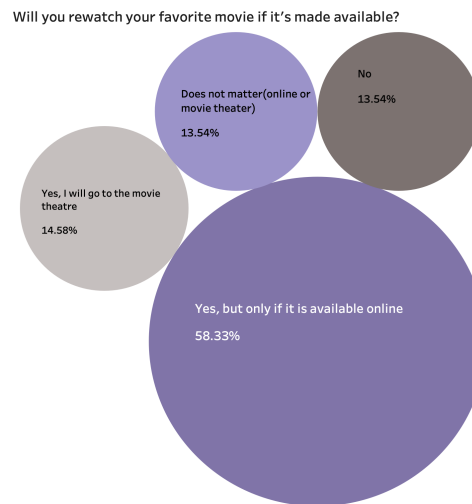


Fig 7.6 Preference of platform to rewatch the movie

g. With many online streaming services available we asked the people about their active subscriptions, and we can see that person has at least one subscription, with Netflix being the most popular one followed by Amazon prime video.

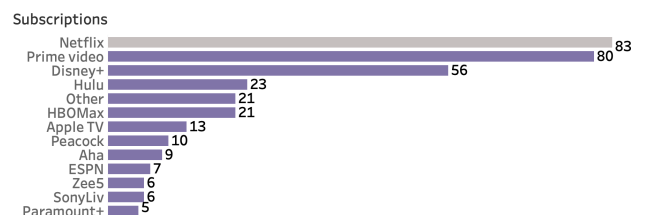


Fig 7.7 Subscriptions

h. Movie critics have long complained about good quality movies (according to them) unable to generate the box office numbers to be considered hits^[11]. For the audience who has gradually steered away from the movie theaters, quality of content was a huge contributor. Our survey observed that the majority of them (61.46%) nod when asked on "How much do you agree or disagree with the following statement: "The growing popularity of online streaming platforms

(Netflix, Hulu, HBO Max, etc.) platforms has led to a significant improvement in quality of content being produced?”(Fig 7.8).

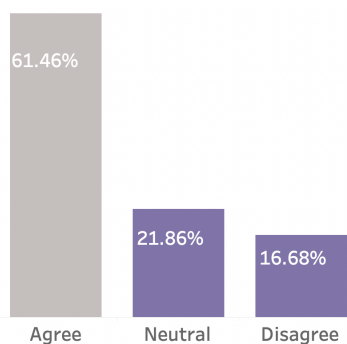


Fig 7.8 Role of online streaming services on movie quality

i.Our major rationale for the preference of online streaming platforms over movie theaters was comfort, portability as well no time constraint(fix 2 hours spent on movie in a theater setting):. 44% percent agreed with the statement

“Do you think online streaming services have made the viewing experience more comfortable, customized, portable while providing you with the flexibility of time?”

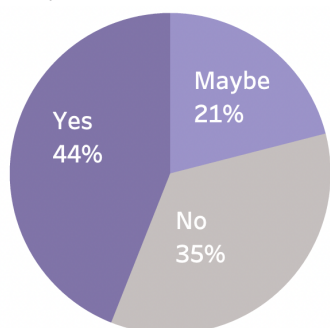


Fig 7.9 Online streaming service advantages

j.With the advent of online streaming platforms, to understand our hypothesis of online streaming replacing movie theaters, we asked if they are comfortable viewing the movies on online streaming along with their peers,families or watching in solitude.

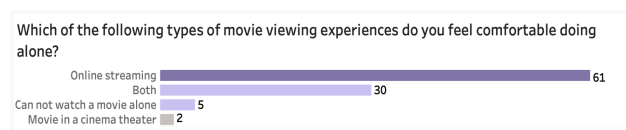


Fig 7.10 Personal space viewing preference

k. Online streaming platforms have given birth to a new phenomena known as binge watching. Defined as practice of watching entertainment or informational content for a prolonged time span, usually a single television show^[12], we aimed to understand the physiological dependence of the human psyche on binge watching. Having devoted so much time on viewing, we asked if it promoted a feeling of emptiness, a vid creation after binge watching has been

completed. We found both genders felt that to be true as depicted as follows.

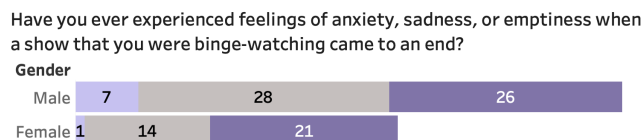


Fig 7.11 Binge watching and mental health

l.Finally, on being asked if based on all factors asked in the survey namely online streaming streaming providing comfort, time flexibility and portability of consuming content, do they believe it shall replace movie theaters, age groups of 20 years and above predominantly replied no with under 20 years age group split in their response

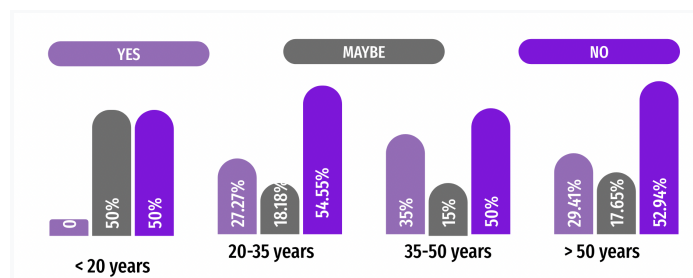


Fig 7.12 Movie theater Vs Online streaming service

7.2 Revenue

Based on open sourced online streaming platform statistics^[10], the revenue generation for online streaming platforms has seen a steady rise from the year 2017, reaching its peak in 2023 with \$273 billion.

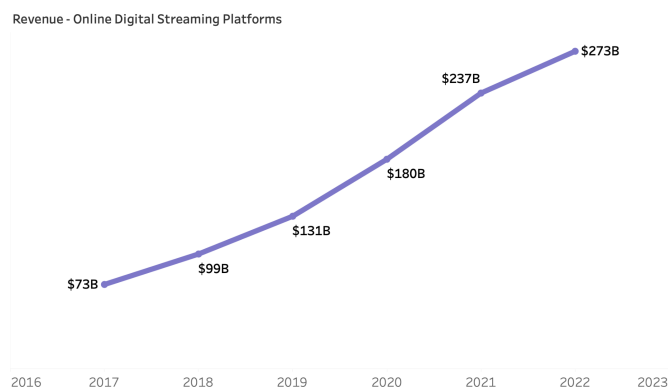


Fig 7.13 Online streaming platforms revenue

Based on revenue generation from box office data^[9], we see till the year 2019, revenue generation has been steady, oscillating around \$118 billion. With pandemic hitting US in 2020, the consequence of lockdown was too severe on movie theatres. 2021 saw a hump

in revenue with 2022 doubling it. Though there is a rise, it still is far off from reaching its previous peak.

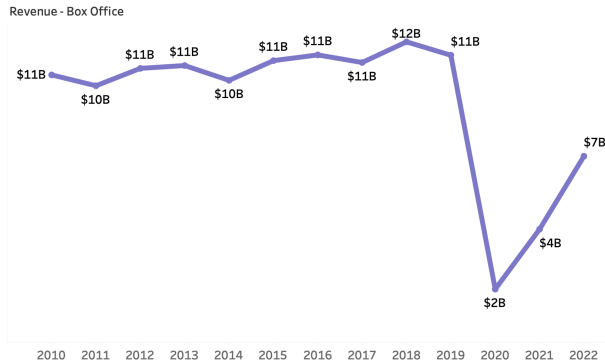


Fig 7.14 Box office US

8. Conclusion

Online streaming platforms have experienced a surge in their popularity with their revenue increasing steadily (Fig 7.13) in recent years. Although the users have found such platforms to enhance their viewing experience (Fig 7.9) and the quality of content they consume (Fig 7.8), our quantitative study concludes that theater experience will not be replaced by online platforms in near future. A large section of individuals in every age group still prefer going to the movies and may not want to stop the same (Fig 7.12). The lockdowns around COVID-19 did hit the revenue generated at the box office, as evident by the dip in Fig 7.14, the same is being corrected. Despite the tug-of-war between the two streams to entice audiences, our analysis shows that the sentiment towards the movie experience largely remains the same irrespective of the medium (Fig 7.4). The data collected, tableau workbooks, and our analysis of the same can be found at: https://github.com/ARamayanam097/CSCI-GA-3033-029_SocialNetwork

9. Pivoting Strategies for the Online streaming platforms vs Movies Hypothesis

By creating a hybrid model, i.e combine the convenience and flexibility of Online streaming (OTT) with the communal and immersive aspects of cinematic experience by offering online access to movies, creating online communities and discussions around specific movies or genres. Leverage innovative technologies like virtual reality to offer unique cinematic experiences in online streaming platforms. We can expand the platform reach by targeting new international markets, since it has the advantage of connecting with a global audience which helps in building bridges across various cultures by spreading awareness.

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