A Comprehensive Study on OTT Platforms

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ABSTRACT
The acronym OTT stands for Over-the-Top. This convenient little term explains the new delivery method of film and TV content over the internet whenever we want, across many different devices, without the need for traditional broadcast. With the growth of technology and the rise of the digital age - OTT platforms - video, audio streaming and viewing applications began as content streaming channels. The immediate objective of this study was to know the motive for viewers shifting from traditional television to OTT platforms. The analysis indicates that the popularity of OTT platforms over traditional television can be attributed to factors such as the ability to revisit content at any time, access to ad-free content, and exclusive pre-release of certain shows. Accordingly, one of the biggest boosts that the OTT platforms achieved was during the pandemic period of COVID-19, where this industry flourished many folds and Disney+Hotstar stands to be the most used OTT. With Abundant Indian and International content OTT plays an essential role in the information revolution and development. In the future OTT platforms with new updates gratifying viewers demand will upraise.

Keywords: OTT platform - its evolution, Choices of OTT, Production houses, Future of OTT, TV viewership, Factors considering OTT.

I. INTRODUCTION
As the world navigated through the pandemic and its resulting lockdowns, various industries faced unprecedented challenges and had to adapt to the "new normal". However, India's media and entertainment industry, with its unique characteristics, managed to find a way to reinvent itself. In the wake of the pandemic, both the industry and its audience shifted towards the smaller screen on OTT platforms such as Netflix, Amazon Prime, Disney+Hotstar, Aha, Voot and many more. The International Telecommunication Union (ITU) defines OTT services as "A service or application which is provided to a user over the internet." According to the Indian Brand Equity Foundation (IBEF)¹¹, during the period of January-July 2022, the Private Equity/ Venture Capitalists (PE/VC) investments in the Media and Entertainment Industry reached a total of US$3.389 billion. Furthermore, Foreign Direct Investments (FDI) inflows in the information and broadcasting sector, have accumulated to a significant US$9.85 billion between April 2000 and September 2022. Additionally, the latest market report projects a substantial increase in the number of connected smart televisions, estimated to reach between 40 to 50 million, with a considerable amount of content being viewed on these screens. Besides, PwC has forecasted that India's media and entertainment industry will attain an expected value of Rs. 4,30,401 crores (US$ 53.99 billion) by 2026.

Considering the projected growth of the media and entertainment industry by 2026, it is natural to question the industry's sustainability and potential for success. The inquiry arises as to whether the industry will survive, and if so, whether it will do so merely to maintain its status quo or flourish in the future.

2.1. EVOLUTION OF “OTT”

OTT platforms are video, audio streaming and viewing applications that began as content streaming channels but quickly expanded into the creation and distribution of short films, motion pictures, documentaries and then web series itself. OTT first came to limelight in 2007 when Netflix was launched in The United States of America. Although the trend started in 2007, it got accelerated in 2012 when platforms like Hulu, Amazon Prime, Disney+, HBO Now, etc. evolved around the globe. In India, Reliance Entertainment was the first to launch an Indian OTT- BigFlix in 2008. In 2010, Digivive presented India’s first OTT mobile application, known to be nexGTv which provided admittance to live TVs and on-request content and was the pioneer to live-stream Indian Premier League (IPL) matches on mobile phones during 2013 and 2014. Other Indian OTT’s like SonyLiv, ZeeTV made a significant mark in the entertainment industry from 2013.²²

The ability to easily re-watch our favorite shows and movies is a source of great pleasure for many individuals. The convenience of one-click access to high-quality content after paying for a subscription has created a market for Over-the-Top (OTT) platforms such as Netflix, Amazon, Zee5, Jio Cinema, SunNxt, SonyLiv, Disney+Hotstar, MX player, Voot, Aha, and others, particularly during the pandemic. Figure 1 depicts the increasing number of users (in millions) over a span of 6 years.
3. ANALYTICAL FRAMEWORK

The data presented in the sources\textsuperscript{1,2,3} suggests that the media and entertainment industry is currently experiencing substantial growth in investments and revenues. This trend is likely reflective of a corresponding increase in the number of users. This has been a motivation to undertake a project aimed at exploring and analyzing this growth in user numbers. The aim of this project is to conduct research on Over-The-Top (OTT) platforms and gain insights into current and future user preferences. Specifically, intending to gather data on popular OTT platforms, the most frequently watched content, the factors that influence users’ platform selection, and the rationale behind production houses investing in OTTs. Additionally, to explore public opinion on subscription plans for OTTs, changes in television viewership trends, and potential new features that could enhance the user experience on OTTs.

3.1 SOURCE AND METHODOLOGY

A survey was conducted using a Google Form to collect responses from individuals of various age groups. The data was analyzed using Chi-Square tests for m*n contingency tests, and data visualization techniques using SPSS version 14.0 to gain insights from the collected data.

Chi-square test for m*n contingency table is defined by:

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where: $O_i$ is the observed value
   $E_i$ is the expected value.
Assumption: All observations are independent.
Both variables are categorical.
Cells in the contingency table are mutually exclusive.

3.2 ANALYSIS

To enhance comprehension of the evolution of over-the-top (OTT) platforms, a survey was conducted on various critical aspects related to these services. The study involved an evaluation of prevalent OTT platforms, the features that influence user adoption and engagement, and an appraisal of the satisfaction levels of the current OTT platforms in use. The primary objective was to gain a deeper understanding of the current condition of OTT services.

- Table 1 displays the distribution of ages among the 811 respondents. The largest proportion of respondents, comprising about 79.9%, falls within the 15-25 age range. The age group of 25-35 accounted for approximately 7.9% of responses, while those aged 35-45 accounted for 5.4% of responses.
3.2.1. OUTLOOK OF OTT’s PRESENT

**Viewership percentage with respect to Age**: Table 2 presents the data on the usage of OTT services, with 76.3% (619) of respondents reported as OTT users and the remaining 23.7% (193) as non-OTT users. Among the OTT users, the majority 62.6% (508) belong to the age group of 15-25 years, followed by 7.2% (58) in the 25-35 age group. The data further indicates that the users above 45 years of age (16) and below 15 years of age (4) with OTT services are relatively low.

**Most watched OTT**: The popularity of Over-the-Top (OTT) platforms has skyrocketed in recent years, and it has become essential to analyze the viewership and satisfaction levels of these platforms. The data reveals that Disney+Hotstar had the highest percentage of viewership at 24.38%, with Amazon Prime following closely at 23.45% and Netflix at 20.96%. Additionally, other OTT platforms such as Zee5, Aha, and MX Player also hold a substantial percentage of viewership (Figure 2). The most pertinent point is that a majority of 76% of the viewers are predominantly satisfied with the OTT platform they are currently using. Categorizing the nine OTTs into two groups - foreign-based (Netflix, Amazon Prime, and Disney+Hotstar) and Indian-based (Aha, ZEE5, JioTV, Voot, SonyLIV, and MX Player), it is apparent that the foreign-based OTTs have a significantly higher number of users compared to Indian-based OTTs. Several factors contribute to the success of international OTT (over-the-top) platforms in the Indian market. Some of the most important include:

- Localization: Offering localized content and features, such as subtitles and audio tracks in regional languages, can help attract and retain Indian users and
- Affordable pricing: Many Indians are price-sensitive, so offering competitive pricing plans or free trials can help attract users.

![Age Distribution of the Respondents](image)

**Table 1**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15</td>
<td>7</td>
<td>.9</td>
<td>.9</td>
<td>.9</td>
</tr>
<tr>
<td>&gt;45</td>
<td>48</td>
<td>5.9</td>
<td>5.9</td>
<td>6.8</td>
</tr>
<tr>
<td>15-25</td>
<td>648</td>
<td>79.9</td>
<td>79.9</td>
<td>86.7</td>
</tr>
<tr>
<td>25-35</td>
<td>64</td>
<td>7.9</td>
<td>7.9</td>
<td>94.6</td>
</tr>
<tr>
<td>35-45</td>
<td>44</td>
<td>5.4</td>
<td>5.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>811</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

**Table 2. Age-Wise Distribution of OTT Viewers**

<table>
<thead>
<tr>
<th>Age Distribution of the Respondents</th>
<th>OTT Viewership percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>&lt;15</td>
<td>.4%</td>
</tr>
<tr>
<td>&gt;45</td>
<td>3.9%</td>
</tr>
<tr>
<td>15-25</td>
<td>17.3%</td>
</tr>
<tr>
<td>25-35</td>
<td>.7%</td>
</tr>
<tr>
<td>35-45</td>
<td>1.4%</td>
</tr>
<tr>
<td>Total</td>
<td>23.7%</td>
</tr>
</tbody>
</table>
Preferences of viewers on subscription plans: The comparison between “free streaming with ads” and “paid subscription with no ads” reveals that OTT viewers are willing to invest in an ad-free experience, indicating a growing preference for paid subscriptions over free alternatives. The statement is based on the insights provided in table 3.

Table 3. Subscribers preference on paid/free streaming

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>278</td>
<td>44.9</td>
<td>44.9</td>
<td>44.9</td>
</tr>
<tr>
<td>Free Streaming With ads</td>
<td>341</td>
<td>55.1</td>
<td>55.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Paid Subscription with no ad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>619</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reasons for production houses to invest in OTTs: Over-the-top (OTT) platforms procure content through two primary means: self-production or the acquisition of broadcasting rights. These platforms finance their content either independently or through collaborations with investors, in exchange for a share of the profits from that particular content. Therefore, production houses form the bedrock of the growth of OTTs. Many netizens believe that production houses are veering away from traditional theoretical releases due to various reasons such as the pandemic, guaranteed package or more profits from OTTs compared to theaters. The analysis of the data suggests that the predominant factor driving production houses to opt for OTT platforms over theaters is the pandemic, as reported by 54.6% of the respondents as in Figure 3.
Aspects affecting choices among OTT: In a recent study conducted by Byjus on OTT platforms\(^4\), several aspects were identified as significant considerations for users. To assess the relevance of these aspects, our respondents were asked to rate them on a scale of 1 to 5, with 1 indicating the lowest level of importance and 5 indicating the highest level.

The key factors are:

1. **Role of Censorship**: Censorship plays a crucial role in the entertainment industry. It decides what type of content or language to be agreed for telecasting for different age groups. Figure 4.i reveals that the viewers are concerned about the role of censorship before opting for an OTT provider.

2. **Access to international content**: India is a diverse country, so are Indians. The pandemic exclusively gave opportunity for people to watch diverse content, without any language barrier or national barrier. The data collected from the responses supports the claim that international content is considered a significant factor when selecting an OTT platform by viewers. (Figure 4.ii)

3. **The extra features - discounts and deals**: Although OTTs have many advantages than traditional television viewership, deals and discounts also have been another added advantage for people to choose a particular OTT provider. Looking at figure 4.iii the huge difference between rank 1, 2 and rank 3, 4, 5 depicts the importance of discounts and deals among the users.

4. **Reviews about the program from friends**: Discussing our favorite movies or characters with friends can serve as a fantastic stress-relieving activity. It is evident from a user's perspective that reviews shared by friends concerning a specific program, show, or movie can influence the selection of OTTs and the content added to our playlist or watchlist. (Figure 4.iv)

5. **Cost of the platform**: Despite OTT platforms being so popular, the cost of the platform seems to be a crucial factor for users. Our data suggests that many respondents find the cost of the platform very important while choosing an OTT. (Figure 4.v)
3.2.2. OUTLOOK OF OTT’s FUTURE

As of 2020, India registered ~803 million online video viewers, including streaming services and videos on free platforms such as YouTube. Mobile video viewers stood at 356 million in 2020, driven by the rising number of users preferring video content over the last few years [1]. In light of the current state of OTTs, it is natural for businesses to plan ahead for the future. With that in mind, a series of queries were compiled to gain insights into the prospects of the OTT industry to determine whether OTTs are likely to experience a sustained growth, or experience a sudden decline, or maintain their current trajectory.

**Subscription cost and its impact:** Given the high level of engagement with OTT platforms at present, it is possible that there will be increased demand for these services in the future. However, this could result in higher subscription prices, which may affect people's willingness to continue using OTT platforms. According to the analysis, 26.7% of individuals expressed agreement with an increase in subscription costs, indicating that the cost of the platform is a critical factor that can impact the number of viewers and the future of OTT. (figure 5)

**Figure 5. Viewpoint on continuing OTT services despite an increase in subscription cost**

- **Perspective on a combination of OTTs:** According to data, 78.1% users believe that an affordable subscription plan that combines multiple OTT platforms at a low price would be highly appealing and could potentially increase the number of subscribers. In light of this, it is important for OTT providers to take note of the wants and needs of their customers in order to remain competitive and sustain their position in the market. A clear depiction of peoples opinion on a subscription plan with a combination of all OTTs at an affordable price is given in figure 6.
A Comprehensive Study on OTT Platforms

Figure 6. Preference of subscription plan with a combination of all OTTs at an affordable price

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>42.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.7%</td>
<td></td>
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</table>

OTTs over television and theaters: The rise of OTT platforms has led to increased competition with traditional television and movie theaters, prompting the question of whether these traditional channels will be left behind. Based on analysis, it can be inferred that OTT platforms currently have several advantages over TV channels and theaters, including the ability to re-watch programs, time and place flexibility, pre-release of shows, ad-free content and others. Additionally, 55% of respondents believe that there is an expiration date for theaters, while 45% disagree. This implicitly explains that there is a guaranteed rise in OTT platforms.

3.2.3. NON OTT SUBSCRIBERS

Despite the fact that OTT platforms have gained a substantial number of viewers in recent times, there are still some individuals who have not yet engaged with these services. Our survey results show that 24% of respondents are non-users of OTT platforms. The presence of individuals who do not opt for OTT services has raised some important questions:

Reason behind not using any OTT: “Not Interested” (66.8%), “High cost subscriptions” (24.3%), “lack of internet facilities” (5.9%), “Lack of time”, “Lack of accessing applications”, were a few reasons mentioned by the people for not using OTTs. (Figure 7)

Non-users adopting OTT platforms in the near future: Out of the 24% respondents who do not opt OTTs, the responses suggest that 15.6% of the participants are open to using OTT platforms in the future, while 10.4% have no intention of doing so. This leaves a notable percentage of 74% who may potentially consider using OTT platforms in the future, as illustrated in Figure 8.
4. CONCLUSION

The goal of this study was to understand people’s preferences regarding their choice of OTT content both in the present scenario and in the future scenario. The present focused on areas such as the selection of top OTT platforms, preferred content for viewing and subscription preferences. The future aims to explore individual’s opinions on subscription plans and their viewership of traditional television.

According to our analysis, the pandemic has been a significant factor contributing to the growing popularity of OTT platforms. Among the various platforms, Disney+Hotstar has emerged as the most preferred platform by customers. A majority of respondents (55.1%) expressed a preference for subscription plans with no ads, indicating a willingness to pay for uninterrupted content. The study implied that a majority of respondents (55.5%) would continue with their subscriptions even in the event of an increase in subscription costs. While most users are satisfied with their current OTT platforms, the possibility of a combined offering of multiple OTT platforms at an affordable price could attract a considerable number of customers.

The future of the OTTs surely has a spectacular rise which impacts a rise in Indian Media and Entertainment Industry. To remain competitive and to meet the needs of viewers, OTT platforms should focus on providing a diverse range of content that is accessible and affordable to a wide audience. Additionally, incorporating new features and capabilities that enhance the user experience, such as social features that facilitate shared viewing experiences or language localization, could also help to increase user engagement and loyalty.

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AREAS FOR FURTHER RESEARCH

1. Study of impact of OTT platforms in youth.
2. Study the usage by users above 40 years of age in India.
3. Study on impact of OTT especially on production houses.
4. Detailed study on the revenue of OTTs from their evolution.
5. Detailed study on impact of OTT on conventional TV market and theaters.

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