

Over-The-Top (OTT) Platform Analysis during Pandemic

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Abstract

COVID-19 is a global pandemic unlike any other, and it has transformed the way people consume media. During this time, an indisputable trend emerged: the adoption of over-the-top (OTT) services. Many studies show that the market for on-demand content on OTT platforms is rising, as is customer demand for it. OTTs provide consumers with a never-before-seen advantage: a wide range of content, ease of access, and device/medium options (hand phone, laptop, tablet or TV screen). Gone are the days when family members argued over who got the most screen time on the household's single home gadget, the television. The researchers looked at the evolution of the OTT space in India and around the world for this study. An examination of the rise in OTT uptake is also included - Pre- and post COVID 19 in India, as well as the elements influencing audience preference and ratings, according to IMDb. To track the material release around the world, a k-means clustering technique is used.

Keywords

COVID 19 , OTT platform , consumer, Netflix, Amazon Prime, entertainment

Introduction

The term "OTT" refers to any streaming service that offers content over the internet. The service is provided "over the top" of a different Platform. OTT (over-the-top) is a platform that, unlike traditional cable TV, provides movies and TV series/shows through the internet. These OTT platforms work just like any other app or service on the internet; all you need is a device that supports OTT and an internet connection, and you're ready to go. Television, movies, and advertising have always had an impact on society, as well as the other way around. Content has evolved over time to fit contemporary sensibilities, ranging from drama to politics to sports to shifting gender roles, revolutionary ideas, realistic issue-based topics, and parallel film becoming more mainstream. From carefully regulated television and film censorship to today's free-to-all internet-enabled OTT entertainment, new generation mediums have empowered consumers to make their own decisions.

Sr. No.	Most Preferred Content	Percentage of respondents
1	Documentary	10
2	Movies	27
3	Reality Show	3
4	Tv Serial	3
5	Web series	54

6	News	3
7	Sports	1

Table 1 : Preferred content of OTT

Adoption of OTT in India

While OTT has become the new buzzword, people may be surprised to learn that OTTs have been in India for more than a decade. Reliance Entertainment launched India's first over-the-top (OTT) platform in 2008. 5 Following that, India got its first OTT mobile app, nextGTV, which provided live and on-demand content, as well as live-streaming of one of the most popular sporting events, the Indian Premier League, during the 2013-14 season. The medium gained traction when big brands like Zee and Sony entered the market with DittoTV (Zee) and Sony Liv, respectively. DittoTV went on to gather programming from Star, Sony, Viacom, Zee, and other channels, resulting in a wider platform adoption. In India, there are around 40 OTT providers, including domestic and international businesses like Netflix, Amazon Prime, Disney+ Hotstar, Zee5, and Eros Now.

It will not be re-thought how the OTT business will be the substance of the Media and Entertainment Industry in the next few years. The worldwide OTT market has a significant growth potential, according to Allied Market Report's research on the OTT Service Market, with a CAGR of 16.7%. (2018-2015). India's OTT industry is still in its early phases of development when compared to the global market. In any case, the rising popularity of online media sources among Indians has transformed the subcontinent into a massive OTT showcase. According to PricewaterhouseCoopers' (PwC) research "Worldwide Entertainment and Media Outlook 2019-2023 (Outlook)," India's OTT sector is anticipated to earn Rs 11,977 crore by 2023. The study looks at Netflix and Hotstar, two of the most popular OTT platforms in India's media and entertainment industry.

Sr.	OTT Platform	Pre-Covid Viewers by Age (in %)			Post-Covid Viewers by Age (in %)			Overall Growth By %
		50+	20-50	10-20	50+	20-50	10-20	
1	Netflix	20	64	75	32	72	82	45
2	Amazon Prime	37	62	59	42	69	71	38
3	Hotstar	67	40	49	80	79	82	54
4	Hulu	41	39	49	32	51	42	5
5	Zee 5	34	29	17	39	43	27	12

6	Sony LIV	28	37	42	45	54	63	24
7	Jio Cinema	12	38	25	28	67	53	32
8	ALT Balaji	14	57	29	22	60	35	28
9	Viki	0	10	21	1	17	34	16
10	Voot	2	14	31	1	17	42	10

Table 2: OTT platform's growth in pandemic in India

Sr. no.	Genre	Netflix	Hotstar	Amazon Prime	Hulu
1	Horror	266	88	1878	124
2	Animation	315	430	983	105
3	Adventure	318	258	1166	111
4	Crime	372	84	1423	100
5	Documentary	511	146	1895	132
6	Action	545	88	2049	129
7	Romance	551	106	1691	151
8	Thriller	652	176	2632	221
9	Comedy	1308	281	3004	272
10	Drama	1501	162	5437	438

Table 3: Preferred Genres

Literature review

An analysis of customer preference towards OTT Platform

The goal of this research was to see how Indians responded to the new digital powerhouse media. The participants in the research were all aware of OTT platforms and utilised them to replace cable broadcast and DTH. The acceptance of the platforms foreshadowed a greater shift in the near future. Due to its content and Indian flavour, Hotstar enjoys a wider range of connection among Indians. India's digital market will grow at an exponential rate, surpassing the United States as the world's second biggest platform. The media and entertainment industry will have changed dramatically by 2021, with major firms

shifting to OTT platforms. You must constantly refresh your content and availability while being cost-effective to reach a bigger audience and stay competitive.

Emergence and future of Over-the-top (OTT) video services in India

With Xiaomi as the most popular Smartphone brand and Jio as the most popular networking service, Hotstar dominates the market of non-paying OTT customers. In addition to streaming, India's online gaming sector is expected to grow to a billion-dollar industry by 2020. Indian teenagers are more interested in gaming on their smartphones than in watching videos. The Indian television sector, which had a revenue of 13,314 million dollars in 2017, is expected to expand at a CAGR of 10.6% to 22,003 million dollars in 2022; at the same time, the global growth rate of television viewing is just 1.4 percent. Over 90% of people in Tamil Nadu, Karnataka, Kerala, and Andhra Pradesh have access to television.

Adoption Of OTT Platform In India during COVID-19

In young India, the number of channels available on an average household television has reduced. OTT Platform delves into and explores the creativity of young India during COVID-19, and it is adaptable to a wide range of content on personal devices such as smartphones and tablets, allowing young India to watch whatever they want. OTT subscriber growth surged by 60% during the pandemic, according to a recent Boston Consulting Group research (BCG). In urban regions, COVID-19 performs better as a medium than in semi-urban and rural locations. OTT gained in popularity as individuals were frightened to go out during the outbreak. Most filmmakers are delighted, at least in part, with the favourable interventions they receive from video streaming companies. Another advantage is that one person can take care of the entire family, which saves time and money.

Data Analytics Changing the Pace of Entertainment Industry

People's feelings about watching their favourite shows on television. Fewer people prefer to watch television via satellite or cable. People in the working class have significantly less time to watch television. The majority of customers prefer to watch videos on the internet. This trend could be attributed to the emergence of low-cost, high-speed data plans. There are an increasing number of applications that display the same content as television. Because there are so many options out in the open, analytics might be utilised to figure out what content consumers prefer to consume. People skip anything that doesn't grab and maintain their attention during the first few minutes or even seconds of a video's playback. Advertisements that appear at the beginning or in the middle of online streaming and can be skipped after 5 seconds can be made engaging in the first 5 seconds to entice viewers to watch it rather than skip it. This helps content providers and commercial partners to work together more effectively. The weekday shows should be sharp but rich enough for the viewer to enjoy. This could help with the footprints on weekdays.

An Analytical Study of Use of Data mining for Entertainment

Consumers may want to acquire a particular date-by-date analysis for events such as cricket, award shows, and so on because a live concert is a one-day event. Season-by-Season Popularity Analysis: We can forecast which types of shows will be popular over a given period of time. Reality shows, for example. Month-by-month Analysis of Popularity: We can analyse the popularity of shows by month and establish a watch list. Soap operas, for example. Customers should be able to choose individual channels rather than a group of channels because it has been revealed that one or two channels may have higher or lower TRP than others. It means that each channel can be modified and combined in order to create a new group based on the customer's choices. Although many service providers are always launching new types of shows, customer preferences vary depending on region and season.

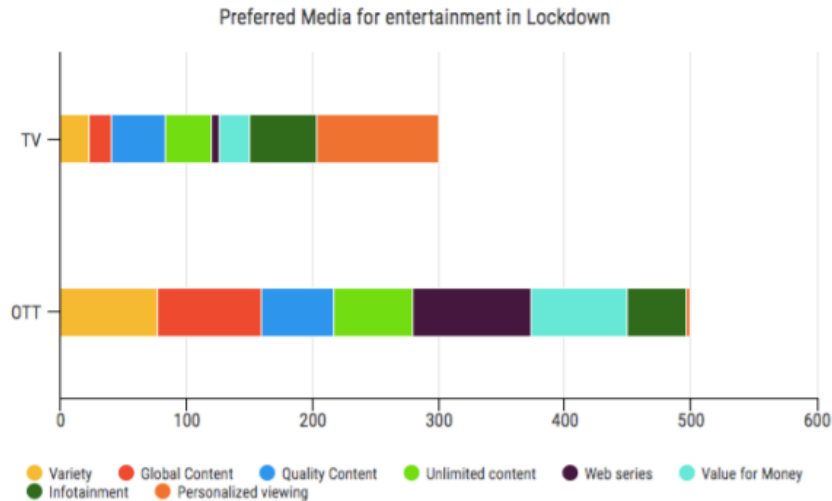
Consumption of OTT Media Streaming in COVID-19 Lockdown

There's always room to improve the psychometric and diagnostic properties of the measures, as well as expand the scope of future studies by incorporating other essential variables into the research framework. Providers want to develop a 'fan-base' of customers who are emotionally invested in the firm and its offerings. Providers re-bundle or re-aggregate their content libraries to include more services like video, music, and gaming. Consumers can be offered ad-supported content, or advertising in exchange for "free" (non-subscription) material.

Usage of OTT Platforms during COVID-19 Lockdown: Trends, Rationale And Implications

The availability of cross-cultural content, a subscription to virtually unlimited content, and access to educational content in documentary/ docu-series format all point to a paradigm shift in the way information is generated, conveyed, and consumed. In India, factors such as the expanding use of smartphones and the affordable availability of internet data are also important. The blockade had a considerable effect on Indian viewers' viewing habits and patterns. While television continues to be popular, a potential trend toward over-the-top (OTT) entertainment appears to be gaining traction. Binge-watching is a habit made easier by lockdown settings, and it could signal a future shift in the OTT sector. Web series are another popular television type.

The case of media choice was inverted for the sake of enjoyment. The majority of respondents were more interested in OTT platforms because of the variety of content available, the availability of global content, and the seemingly endless selection of programmes and web series that can be a good way to pass the time when time is limited, as it is now, especially for those who are required to work from home for no or limited hours. Homemakers have witnessed an increase in OTT usage when it comes to family viewing time as opposed to solo viewing time.



A Study on Growth of Over the Top (OTT) Video Services in India

In general, India's use of over-the-top (OTT) services is growing. OTT video services, which were formerly considered a luxury, are now considered a need. The number of paid users is increasing as Netflix, Amazon Prime, and Hotstar emerge as the most popular OTT services. The findings back up previous Deloitte research, which indicated that the most popular device for watching OTT video is a smartphone. The majority of respondents thought that the rise of OTT services had influenced their TV and movie viewing habits. The bulk of users utilise it as a source of nocturnal entertainment on a daily basis. For the data collection, a total of 106 people were chosen as samples. Among the respondents, there were 93 users of OTT services and 13 non-users. Approximately 81 percent of customers used some type of paid subscription to utilise OTT services, while 19 percent did not. Users' preferred device for watching OTT video is their smartphone. Around 56 percent of consumers own a smartphone. The Firestick came in second with 25% of the vote, and laptop users came in third (11 percent). The regularity with which consumers use OTT services shows a lot about their acceptance of these services. OTT services are used on a daily basis by 48% of users, and twice a week by 30% of users. As a result, we might conclude that audiences have grown accustomed to over-the-top entertainment.

Proposed Methodology

This article analysed data collected across multiple OTT platforms, as well as the characteristics of the movies and series offered on those platforms. This will give you an idea of how people nowadays consume television or other forms of entertainment. The k-means clustering algorithm was used to discover which OTT platform is the most successful globally in terms of a variety of factors. Netflix, Amazon Prime, Disney, and Hulu videos and metadata were included in the dataset.

Algorithm:

```

#Importing the dataset
dataset = read.csv('MoviesOnStreamingPlatform.csv')
dataset = dataset[8:11]
View(dataset)
#Using the elbow method to find the optimal number of clusters
set.seed(6)
wcss = vector()
for (i in 1:4) wcss[i] = sum(kmeans(dataset, i)$withinss)
plot(1:4,
     wcss,
     type = 'b',
     main = paste('The Elbow Method'),
     xlab = 'Number of clusters',
     ylab = 'WCSS')

#Fitting K-Means to the dataset
set.seed(29)
kmeans = kmeans(x = dataset, centers = 4)
y_kmeans = kmeans$cluster

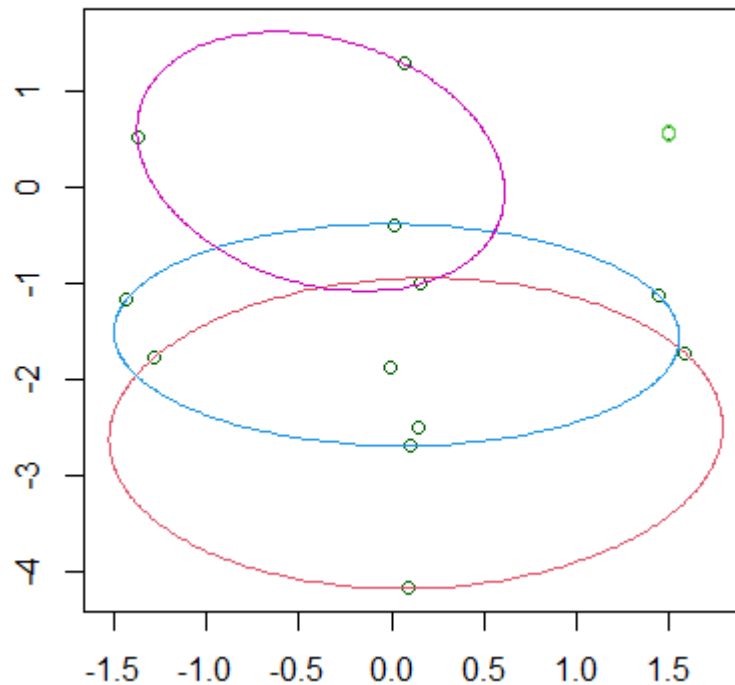
#Visualising the clusters
library(cluster)
clusplot(dataset,
         y_kmeans,
         lines = 0,
         shade = FALSE,
         color = TRUE,
         labels = 1,
         plotchar = FALSE,
         main = paste('Comparison of OTT Platforms'),
         xlab = "",
         ylab = "")

```

Result/ Discussion

Output observed:

Comparison of OTT Platforms



These two components explain 71.28 % of the point variability.

From this we observe that considering the release of movies across different countries, people have voted for Netflix as the most popular platform while Disney has been chosen as the least preferred platform. However, In India, Disney + Hotstar has shown tremendous growth due to its quality Hindi content during the pandemic after the collaboration of Hotstar and Disney as it now includes a wide variety of content for all age groups including the famous cricket league IPL (Indian Premier League).

Conclusion

Viewing material on any medium is a sort of behaviour that can become habitual over time. Indians have desired a varied choice of information for a long time. A shared household television set with few channels restricted the imagination of young India. OTT players used this creativity during COVID 19, and the ability to access a diverse range of content on personal devices like smartphones and tablets gave young India the flexibility to watch whatever they wanted. OTT providers, on the other hand, have barely scratched the surface of the iceberg; there is a huge opportunity to expand into the regional Indian market in the future. With barely 40 OTT outlets and minimal regional programming, this medium has carved out a unique niche for itself in urban India. COVID 19 has had a significant impact on media uptake in urban

areas, where people have more disposable income than in semi-urban or rural India. COVID 19 introduced a number of features that have now become the new normal, such as working from home, which has looked to allow many people more schedule freedom. A spontaneous walk and tea time with a coworker have been replaced by a fast 20-30 minute episode of one's favourite series available on an OTT platform. Every survey reveals that the length of time spent watching video material grows year after year, and COVID 19 has shown to be a turning point in this trend.

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