

Analyzing the Expansion of Over the Top (OTT) Video Services in Punjab: A Consumer Behavior Study

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Abstract— The rise of Over the Top (OTT) services such as Netflix, Amazon Prime, and Hotstar has had a profound impact on the entertainment landscape in India. These platforms have not only gained widespread popularity but have also significantly altered the viewing habits of consumers globally. This study seeks to explore the shifts in content consumption patterns among Indian consumers following the advent of OTT services and to identify the key factors contributing to the success of these platforms.

The study employed a convenience sampling technique and gathered responses from 102 participants via an online survey questionnaire. The results of the research highlight that a majority of users (88%) acknowledge that the emergence of OTT platforms has influenced their television and movie-watching routines. Smartphones emerged as the preferred device for accessing OTT content, and a significant portion of viewers tends to consume content during nighttime hours.

In summary, the study suggests that the future of OTT services in India holds great promise. Both current users and non-users expressed a willingness to embrace OTT services in the coming years. The insights derived from this research can provide valuable information to the industry, shedding light on the prevailing trends in the entertainment sector post the rise of OTT platforms in the Indian market. Additionally, assessing the performance of OTT platforms across various facets of the entertainment industry can offer insights into their strengths and areas for enhancement within the Indian context.

Index Terms—Consumer Behaviour, OTT, Perception, Satisfaction, Streaming.

I. INTRODUCTION

There was a period when television held the position of being the predominant source of entertainment in India. However, in light of the ongoing technological transformations in the media sector, the patterns of entertainment consumption are undergoing significant shifts. These changing consumer preferences underscore the importance for media companies to embrace a differentiation strategy. It becomes crucial to comprehend the preferences of consumers before delivering content, particularly in response to the growing demand for convenience among users (Joshi Sujata, S.S, February 2015). The market is witnessing an increasing focus on customer-centric options with the advent of Over The Top (OTT) video streaming.

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II. CONCEPT OF OVER-THE-TOP VIDEOSTREAMING

Streaming refers to the technological means by which media content is continuously delivered to a user (Larsen, 2007). Over the top (OTT) refers to the delivery of digital content over the internet as an alternative to traditional distribution methods (BCG 2018). An Over The Top Video streaming service offers on-demand online entertainment, including various types of digital content such as TV shows, movies, live matches, and more. It delivers this digital entertainment content, such as music and movies, through an internet connection to the subscriber's hardware device, including computers, TVs, or mobile devices. Examples of such services include Netflix, Amazon Prime, Vudu, Hotstar, and Hulu.

Over The Top Video streaming services provide an alternative to traditional cable systems and Direct-to-Home (DTH) services. Access to these OTT video streaming services typically requires a membership, which can be either free or involve fees, either per view or through periodic subscription payments. The digital content is often hosted on cloud-based systems. The accessibility, content offerings, and cost of these services may vary from one location to another. Over The Top Video Streaming services play a pivotal role in meeting the global demand for downloading and watching substantial video content. This demand is fulfilled through video streaming technologies and the proliferation of devices that provide users with access to such content.

Over The Top video services can be accessed through various means:

- **Mobile devices:** OTT apps can be downloaded on smartphones and tablets from supported digital storefronts. For example, using the Hotstar app on a phone or iPad.
- **Computers:** Desktop-based apps or web browsers can be used to access Over The Top content. For instance, accessing Hotstar through the Google Chrome web browser.
- **Smart TVs:** Many modern TV models offer the option to download OTT apps or come with pre-installed OTT apps.
- **Digital media players:** Third-party devices often offer OTT access. For example, Apple TV. Additionally, many modern video game consoles also have the capability to download and run OTT applications.
- OTT falls under the Video on Demand (VOD) category, where digital content is distributed to users over the internet without the need for a traditional cable or DTH satellite TV subscription. There are various types of OTTs based on different Video on Demand (VOD) revenue models (Joshi Sujata, S.S, February 2015).
- **SVOD (Subscription Video on Demand):** SVOD

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services provide access to a digital video library for a periodic subscription fee, which can be daily, weekly, monthly, or annually. Continuous subscription is necessary to access the content. These services often offer unique and exclusive content and allow access across multiple devices. Examples include Netflix, Hotstar Premium, and Amazon Prime.

- TVOD (Transactional Video on Demand): TVOD charges users on a per-view basis. Users may sign up for free but are charged only when they watch specific content. Examples include Google Play and iTunes.
- AVOD (Ad-Supported Video on Demand): AVOD relies on advertising revenue to cover costs. It offers free access to a digital video library to users while generating revenue from advertisements shown during video playback. Examples include Airtel TV, Voot, Hotstar, and Sony LIV.

III. GROWTH OF OVER-THE-TOP STREAMING MARKET IN INDIA

Over The Top Video streaming has become an integral component of contemporary entertainment sources. Factors such as increased internet accessibility (owing to more affordable internet rates), enhanced average broadband speeds, the growing digital proficiency of users, and the development of supporting infrastructure are poised to drive the rapid adoption of Over-The-Top video streaming.

According to recent findings from the market research firm Velocity, as per the Syndicated study TV DTH subscription (March 2019), following the implementation of the sector regulator's new tariff structure, approximately 80% of individuals are expected to transition to online streaming platforms like Amazon Prime, Netflix, and Hotstar. In the major Indian metropolitan areas, more than a third of the population watches TV or online videos for 1-2 hours daily, with nearly 25% dedicating 2-4 hours each day. Online web series and TV series are increasingly outpacing TV soaps and reality shows in terms of popularity.

In another report, "App Annie's State of Mobile 2019" related to consumer spending, Netflix was identified as the most downloaded paid app in India, followed by Tinder, Hotstar, and Bigo Live. YouTube, Hotstar, and JioTV emerged as the top apps. The report forecasts that the total time spent on video streaming apps per device will increase by 110% from 2016 to 2019 (App Annie's State of Mobile 2019).

Additionally, according to a report by the Boston Consulting Group from February 2018, titled "Digital Consumer Spending in India: A \$100 Billion Opportunity," digital media consumption accounts for 16% of total media consumption. The report also reveals that approximately 81% of users have up to three Video or Over The Top applications installed on their smartphones. There has been an 11% increase in the time spent on video content, attracting numerous global players to enter the Indian market for Over-The-Top content.

Furthermore, a report by Statistia.com, titled "Distribution of the Video Streaming Service Market Across India in November 2018," highlights the most utilized streaming apps in India during November 2018, along with their respective market shares.

Fig. 3.1 Most used streaming apps by users in India during

November 2018

Streaming servicer	Market share
Hotstar	40.18%
Jio TV	17.6%
Voot	11.76%
Airtel TV	4.59 %
Sony LIV	3.17%
Netflix	2.07%
Jio Cinema	1.86%
Amazon prime video	1.43%

Source: Distribution of the video streaming service market across India in November 2018 by Staistica.com

IV. REVIEW OF LITERATURE

As the expansion of video streaming services is significantly influenced by internet usage, it's essential to consider the trends in internet services in Punjab, as indicated by the India Census 2011.

Fig. 4.1 Break up of Rural-Urban internet subscriber base (million)

Narrowband		Broadband		Total Internet	
Rural	Urban	Rural	Urban	Rural	Urban
1.04	1.22	5.46	13.45	6.50	14.67

Source: India Census 2011

Fig. 4.2 Number of Internet Subscribers per 100 population at the end of Sep-18

Internet Subscribers (in millions)			No. of Internet subscribers per 100 population		
Rural	Urban	Total	Rural	Urban	Total
6.50	14.67	21.17	37.39	102.05	6.5

Source: India Census 2011

According to a KPMG Report titled "Media Ecosystems: The Walls Fall Down" (2018), the revenue of Over The Top (OTT) players in India is projected to grow at a Compound Annual Growth Rate (CAGR) of 45 percent, reaching Rs 13,800 crore by the end of FY2023. In FY 2018, the OTT service market was approximately Rs 2,150 crore, with 20% coming from subscription revenue and 80% from advertisements (Rs 1,720 crore). It is expected that the growth in subscription revenue will constitute around 33 percent of the total revenue by FY2023.

TechSci Research's report from August 2018, titled "India Over The Top Video Services Market By Streaming Type (Live Vs. Video-on-Demand), Competition Forecast & Opportunities, 2017 – 2023," highlights factors contributing to the expansion of the OTT Video service market, including a shift towards regional content, the entry of existing online companies into the OTT market, and government regulations against piracy.

Hotstar's India Watch Report for 2018 revealed that videos longer than 20 minutes accounted for 96 percent of Hotstar's watch time, and approximately one-third of its subscribers preferred watching TV shows on Hotstar rather than on television.

A government publication, "The Indian Telecom Services Performance Indicators" (July – September 2018), reported that the total number of internet subscribers in India increased from 512.26 million at the end of June 2018 to 560.01 million at the end of September 2018, with a quarterly growth rate of

9.32%. The total urban-to-rural breakdown of internet subscribers in India was 365.94: 194.07, with the number of internet subscribers per 100 population being 88.26 in urban areas and 21.76 in rural areas.

According to a Boston Consulting Group (BCG) report from November 2018 titled "Entertainment Goes Online," based on a consumer survey of 5,000 users across 24 cities, the Over The Top (OTT) video content market delivered through the internet is expected to reach a market size of \$5 billion (INR 35,730 crore) by 2023, up from the current Rs 3,500 crore.

Additionally, a study by Firm VELOCITY conducted on March 25, 2019, in a syndicated study on TV DTH subscription found that 80% of 2010 respondents would either opt for fewer channels or switch to online streaming platforms or OTT platforms like Netflix, Amazon Prime, etc., following the recent TRAI regulations. It was also noted that more than one-third of people in the top Indian metros watch TV or videos online for 1-2 hours daily, with nearly 25% watching 2-4 hours every day. On average, people in top Indian metros spend approximately 2 hours watching TV/online videos.

V. RESEARCH QUESTIONS

Although research conducted in developed countries offers valuable insights into the success factors of OTT platforms, it's crucial to recognize that the context and dynamics of the entertainment industry can vary significantly in developing countries such as India. Therefore, conducting research in a developing country like India can make a meaningful contribution to the existing literature by delving into growth factors unique to such markets.

Research Question: What are the prevailing trends in the entertainment industry following the advent of OTT platforms?

VI. METHODOLOGY

To investigate the research inquiries, a survey was created employing Google Forms and shared with the participants. The survey encompassed eight questions aimed at investigating OTT service preferences. A convenience sampling method was employed, with a total of 102 respondents taking part in the study. Data analysis was carried out using straightforward percentage analysis.

VII. DATA INTERPRETATION

- Out of the 102 respondents, 91 were users of OTT services, while 11 were non-users. Among the user category, approximately 82% of users opted for some form of paid subscription for consuming OTT services, while 17% did not choose any paid subscription.
- According to the questionnaire responses, the most preferred OTT channel among Indian users is Netflix, with approximately 41% of viewers rating it as their most used OTT channel for watching online video content. Amazon Prime secured the second position with a preference rate of 26%, followed by Hotstar at 21%.
- When it comes to the preferred device for watching OTT content, smartphones are the top choice, with approximately 52% of users utilizing them. The second

position is held by Firestick at 22%, and laptops rank third with 14% of users using them.

- The frequency of OTT service usage indicates a high acceptance among viewers, with 43% of users consuming OTT services daily and 32% using them twice a week. This suggests that viewers have successfully adapted to the OTT mode of entertainment.
- The majority of users (55%) watch OTT content during the night, followed by viewers in the afternoon and evening. Only 6% of users watch OTT content late at night.
- The data from the survey aligns with the existing trend in the industry, where web series have attracted a significant number of customers to OTT platforms. According to the survey findings, 51% of users prefer to watch web series on OTT platforms, indicating the appeal and popularity of original and fresh content offered by web series.
- In comparison, 26% of viewers use OTT platforms to watch movies, suggesting that movies are also a significant component of OTT content consumption. However, it is worth noting that the preference for web series is higher than movies among the surveyed users.
- Regarding sports events, the survey indicates that the majority of viewers still prefer to watch sports channels on television rather than OTT platforms. None of the surveyed viewers reported using OTT platforms for watching sports events. This suggests that, currently, the OTT platforms may have limited offerings in terms of live sports coverage compared to traditional television channels.
- The majority of users (88%) agree that the emergence of OTT services has changed their television consumption patterns.
- Regarding future usage, 89% of respondents are willing to continue using OTT services, while 11% do not intend to continue with OTT services in the future.

VIII. CONCLUSION

In summary, this study underscores the remarkable expansion of OTT services in India. What was formerly deemed a luxury has now transformed into a commonplace phenomenon, with an increasing number of individuals subscribing to platforms like Netflix, Amazon Prime, and Hotstar. These findings align with prior research indicating that smartphones are the predominant devices for accessing OTT content. Most participants recognized the influence of OTT services on their television and movie consumption patterns, particularly with a tendency towards nightly usage. In general, the study points towards a promising future for OTT services in India, as users express their eagerness to persist in using such services in the days ahead.

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