INTRODUCTION

Over-The-Top (OTT) platforms represent a revolutionary paradigm in the realm of entertainment delivery, directly connecting with viewers without the need for traditional intermediaries like cable TV operators or set-top box providers. These platforms leverage the internet to deliver content, transcending the limitations of traditional broadcasting methods.

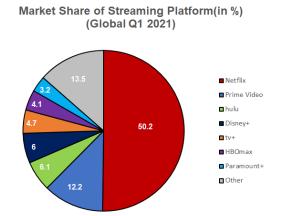
The evolution of the Indian television industry provides a backdrop to the rise of OTTs. The landmark moment on August 15, 1982, marked the initiation of colour broadcasting on Doordarshan through the INSAT 1A satellite. Subsequent milestones included the approval of Direct-to-Home (DTH) broadcasting by the Indian government in November 2000, with DishTV pioneering DTH services in 2003.

Web 2.0, introduced in more recent times, triggered an exponential surge in social media platforms and OTT applications. In 2009, Netflix, initially a DVD rental service since 1997, embarked on strategic partnerships with TVs and gaming consoles. The platform's innovative recommendation system played a pivotal role in its transformation into a content streaming giant. By 2010, Netflix had collaborated with major studios, broadening its content library. The ensuing years witnessed Netflix's entry into original content production, exemplified by the release of "House of Cards" in 2013.

In the Indian context, the OTT revolution gained momentum with Reliance's introduction of Big Flix in 2008, operating on a Video-on-demand (VOD) and Pay-per-view business model. The surge continued with the launches of Ditto TV by Zee and Sony Liv by Sony, establishing the foundation for a dynamic industry landscape. The entry of Hotstar in 2015, subsequently rebranded as Disney Plus Hotstar, and Netflix in 2016 further propelled the OTT market into mainstream consciousness, especially with the significant boost from Reliance Jio in the same year.

Fast-forwarding to 2023, the Indian OTT landscape comprises over 40 platforms, offering a diverse array of content to an increasingly discerning audience. This report aims to delve into the intricate economics of OTTs, exploring the industry's evolution, key players, business models, and the profound economic impact of this transformative force in the Indian entertainment sphere.

Among these the most famous OTT platforms based on revenue generated are:



If we talk about the OTT platforms in terms of subscribers (as of Aug 2022):

Platform	Subscribers
DISNEY+ HOTSTAR	4.29 crore
AMAZON PRIME	2.1 crore
SONY LIV	1.2 crore
ZEE 5	0.75 crore
NETFLIX INDIA	0.55 crore

The Indian OTT streaming video market experienced a robust second growth phase, generating \$3 billion in total revenues in 2022, as reported by Media Partners Asia (MPA). Capturing a 7-9% share of the entertainment industry's revenue, the market features over 40 players producing original content in various languages. With a current subscriber base of 45 million, it is projected to reach 50 million by the end of 2023. The industry is expected to become a ₹12,000-crore market in 2023, showcasing a remarkable compound annual growth rate (CAGR) of 36% from ₹2,590 crore in 2018.

THEORETICAL EXPLORATION

Let us understand the business model of OTT platforms. OTT platforms deploy diverse business models to generate revenue and cater to varied consumer preferences.

- Ad-Supported Video On Demand (AVOD) relies on advertising revenue to offer free content to users. Platforms like YouTube, Disney+ hotstar and JioCinema adopt this model, presenting add during content consumption.
- Subscription Video On Demand (SVOD) involves users paying a recurring fee for access to a library of content without interruptions from ads. Netflix and Amazon Prime Video are prominent examples of SVOD platforms relying on subscriber fees for revenue.
- Transaction Video On Demand (TVOD) follows a pay-per-view model, where users pay for individual pieces of content. iTunes and Google Play Movies operate on this model, enabling users to buy or rent specific movies or shows.
- Hybrid Models combine elements of AVOD and SVOD or TVOD, offering users flexibility. Hulu, for instance, provides both ad-supported and ad-free subscription options.

These models empower OTT platforms to diversify income sources, balancing user subscriptions, advertising revenue, and individual content transactions to sustain and expand their content offerings.

As of 2023, 50% of revenue is derived from AVOD, while 40% comes from SVOD. However, according to the <u>India Briefing report on OTTs</u> dated 11th April 2023, by 2030, SVOD platforms are projected to constitute 55-60% of India's OTT revenue, exceeding AVOD platforms, which may account for 40-45%.

In terms of monetary volume, as of 2023, the SVOD model accounts for approximately US\$1,696.00 million in the Indian OTT market, according to the <u>Statista report on OTT Video</u> in India dated November 2023.

Monetisation Strategy:

Monetisation strategies for OTTs have undergone a transformative shift, primarily relying on advertising and subscription fees. Traditionally, OTTs would acquire movie rights pre-release, but recognising potential losses, a strategic shift emerged. Contemporary models involve theatrical releases before OTTs secure streaming rights, mitigating financial risks. For instance, Netflix altered its approach, realising the economic prudence of post-theatrical acquisitions. This change not only safeguards against potential box office failures but also aligns with evolving consumer behaviour, emphasising streaming preferences. Consequently, OTTs now strategically time their content acquisition, optimising both revenue and viewer engagement in a dynamic media landscape.

According to Statista's Report dated Nov 2023:

- Revenue in the OTT Video market in India is projected to reach US\$3,666.00m in 2023.
- The market is expected to show an annual growth rate (CAGR 2023-2027) of 9.39%, resulting in a projected market volume of US\$5,250.00m by 2027.
- In the OTT Video market in India, the number of users is expected to reach US\$5,250.00m by 2027.

Content Acquisition Strategy:

Content Acquisition Strategies in the OTT industry involve two primary approaches:

- Firstly, OTT platforms traditionally acquired content by purchasing broadcasting rights
 from studios and production houses. This approach allowed platforms to offer a diverse
 range of existing movies and shows to their subscribers. However, a significant shift
 occurred as OTTs recognised the need for exclusive, original content to differentiate
 themselves.
- Consequently, the second strategy emerged the production of original content. This
 evolution led to a paradigm shift, with platforms like Netflix and Amazon Prime Video
 investing heavily in creating unique and compelling content. Original productions not
 only attracted subscribers but also gave platforms greater control over their content
 libraries, transforming the industry's competitive landscape.

As per the <u>India Briefing report on OTT</u> platforms dated 11th April 2023:

- In FY 2021, Indian OTT platforms attracted a total investment of INR 55.21 billion (US\$672.59 million), with major players like Netflix, Amazon Prime Video, and Disney+ Hotstar collectively spending INR 31.55 billion (US\$384.35 million).
- In 2022, these platforms significantly increased their investment in original content production, with estimates ranging from US\$600-700 million, excluding movies and sports content.
- According to Media Partners Asia, the estimated investment in online video content in India for 2022 was around US\$1.3 billion, and it is anticipated to reach US\$4.2 billion by 2027.

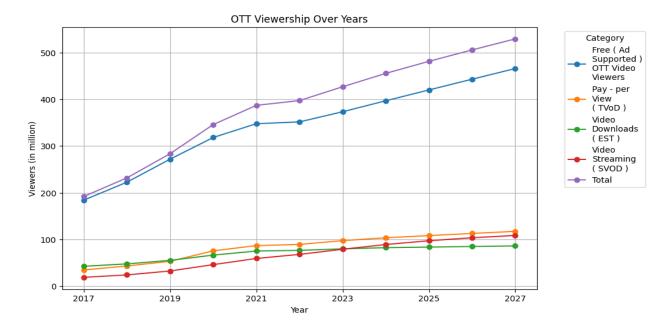
DATA ANALYSIS

1) Deloitte Report: All About Screens (Feb 2022)

Link: TMT Predictions 2022

According to the report, the trend in the number of OTT viewers from 2017 to 2027 is shown in the csv file: Deloitte.csv and the necessary calculations are done in FOE Report.

Plotting the above data into a line graph,



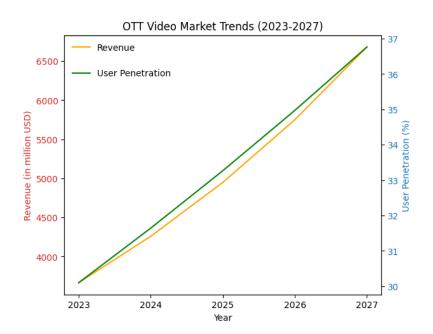
<u>Inference</u>:

The total OTT viewership in India grew consistently from 191.8 million in 2017 to 528.9 million in 2027 (predicted). Calculating the average annual growth rate (CAGR) over this period reveals an impressive 16.34%. The incremental growth each year demonstrates a steady increase, averaging approximately 41.1 million additional viewers annually. This escalating trend suggests a robust and sustained demand for OTT content, indicative of the platform's expanding influence and penetration in the Indian market.

2) Statista Report Analysis (OTT Usage and Revenue):

Link: OTT Video - India | Statista Market Forecast

- The OTT video market is set to attain a revenue of US\$3,666.00 million in 2023, showing an impressive 9.39% CAGR from 2023 to 2027, ultimately reaching a market volume of US\$5,250.00 million by 2027.
- The dominant segment is Video Streaming (SVoD), making a significant contribution of US\$1,696.00 million in 2023. The United States leads in global revenue, forecasted at US\$126,500.00 million in 2023.
- User engagement is robust, with an estimated 528.9 million users anticipated by 2027, and user penetration is expected to increase from 30.1% in 2023 to a projected 36.0% by 2027. The Average Revenue Per User (ARPU) is predicted to reach US\$8.59 in 2023.



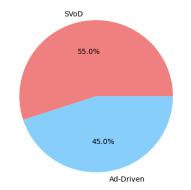
3) India Briefing Report (Market Projections and Trends):

Link: India Briefing - OTT

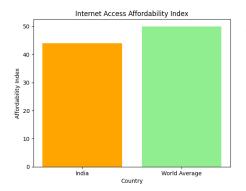
The Indian OTT landscape is transforming significantly, propelled by strategic initiatives from emerging players like JioCinema. JioCinema's broadcasting of major sports events, including the 2023 IPL, garnered an impressive 1.47 billion views over the opening weekend, marking a seismic shift in viewership patterns.

Projections indicate a robust growth trajectory, with Statista forecasting an increase in user penetration from 30% to 36% by 2027. The Average Revenue Per User (ARPU) is expected to reach US\$8.81 in 2023. The market, valued at INR 249.09 billion in FY 2021-22, is poised for substantial expansion, with a projected CAGR of 16.58%, reaching INR 581.21 billion by FY 2027. A CII-BCG report envisions a more ambitious CAGR of 20-23%, anticipating a market worth US\$11-13 billion by 2030.





By 2030, Subscription Video On Demand (SVoD) platforms will dominate, constituting 55-60% of India's OTT revenue. The industry contributes 7-9% of the entertainment sector. This vitality is fueled by the popularity of short-form content and affordable data plans.

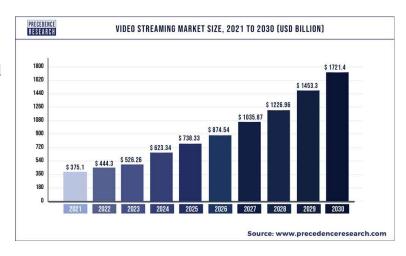


India's 44th rank in the affordability index, with competitive broadband costs, underscores the conducive environment. In FY 2021, a total investment of INR 55.21 billion marked a significant financial commitment. Leading platforms invested US\$600-700 million in original content in 2022, excluding movie and sports content. Projections anticipate a surge, with online video content investment reaching US\$4.2 billion by 2027, per Media Partners Asia.

4) Global Video Streaming Market (Precedence Research):

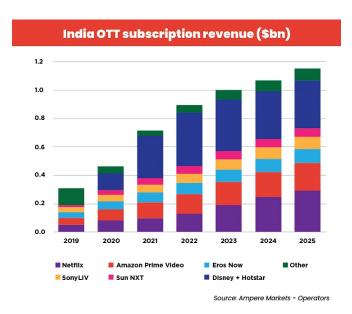
Link: Video Streaming Market Size, Trends, Growth, Report 2030

The global video streaming market size was estimated at USD 375.1 billion in 2021, and it is expected to hit around USD 1,721.4 billion by 2030 with a registered CAGR of 18,45% from 2022 to 2030.



5) Exchange for Media Report

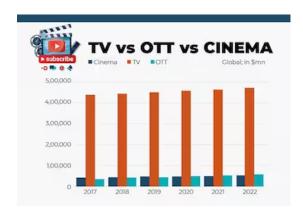
Link: OTT Revenue

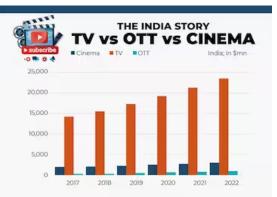


As per the report, the OTT subscription revenue in the world's largest consumer market grew by 30-80 per cent annually between 2019 to 2022. Its pace dropped to a mere 10 per cent in 2023 when IPL rights changed hands from Disney+ Hotstar to JioCinema.

6) CNBC Report on Indian OTT market

Link: <u>Indian video streaming market is headed for a boom</u>





The Internet and Mobile Association of India (IAMAI) report indicates a notable shift in expenditure patterns. In 2013, the average monthly spending on voice services was Rs 214, surpassing the Rs 173 spent on data. However, by 2016, this dynamic reversed, with voice service spending declining to Rs 124, while data expenditures increased to Rs 225. Video streaming dominates internet traffic, comprising 65–75%, as per the Nokia Mobile Broadband Index 2018. Despite only 5.3% penetration in rural areas, a PwC report forecasts robust growth in the Indian video OTT market at a CAGR of 22.6% from 2017 to 2022, surpassing the global market. By 2022, the Indian video OTT market is projected to be among the top 10 globally, with a market size of \$823 million.

ECONOMETRIC ANALYSIS

I conducted an econometric analysis on 10 major OTT platforms, investigating the interplay between subscribers, market shares, and revenue in the Indian context. Utilising qualitative data from reliable sources, I explored correlations and employed linear regression models to dissect the individual and combined effects of subscribers and market shares on revenue. Lasso and Ridge regression techniques provided additional insights into variable coefficients.

Platform	Subscribers(in millions)	Market_shares(in % age)	Revenue (in lakh Rs.)
Disney+	61.3	50	13875860
Netflix	36.23	8	13875860
SonyLiv	32.7	6	1413322
Amazon Prime Video	28	9	5034.115
Zee5	48.11	5	549600
Voot	1	5	1744869
TVF Play	11.3	4	4755.414
MX Player	78	2.6	86378.927
Eros Now	36.2	6	1578691
Alt Balaji	35	4	36800

This data is qualitative data as the yearly gross value for a particular OTT platform is being provided from the renowned site.

Variable description

Dependent Variable: Revenue from the Indian continent (or revenue for each platform). Independent Variables: Subscribers (for each platform) and Market Share (for each platform).

Descriptive Statistics

	Subscribers	Market_shares	Revenue (in lakh Rs.)
count	10.000000	10.000000	1.000000e+01
mean	36.784000	9.960000	3.317117e+06
std	22.250265	14.196024	5.606460e+06
min	1.000000	2.600000	4.755414e+03
25%	29.175000	4.250000	4.919473e+04
50%	35.600000	5.500000	9.814610e+05
75%	45.140000	7.500000	1.703324e+06
max	78.000000	50.000000	1.387586e+07

Correlation coefficient between Subscribers and Revenue: **0.24308649380394454**Correlation coefficient between Market Share and Revenue: **0.7039955729542534**

Regression Analysis(Model summary)

A)Linear Regression

1)For the case when only Subscribers are considered as independent variable

	coef	std err	t	P> t	[0.025	0.975]
const	1.064e+06	3.66e+06	0.290	0.779	-7.39e+06	9.52e+06
Subscribers	6.125e+04	8.64e+04	0.709	0.499	-1.38e+05	2.61e+05

2)For the case when only Market shares are considered as independent variable

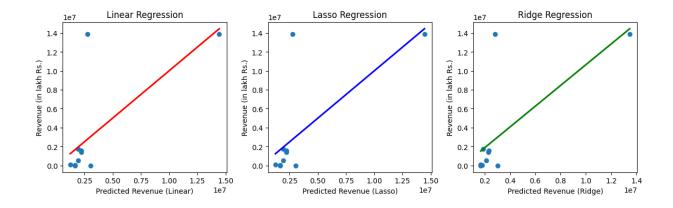
=========	coef	std err	t	P> t	[0.025	0.975]
const Market_shares	5.479e+05 2.78e+05		0.330 2.804		-3.28e+06 4.94e+04	

3)For the case when both Subscribers and Market shares are considered as independent variable

	coef	std err	t	P> t	[0.025	0.975]
const	5.669e+05	2.88e+06	0.197	0.849	-6.23e+06	7.37e+06
Subscribers	-603.7441	7.22e+04	-0.008	0.994	-1.71e+05	1.7e+05
Market_shares	2.784e+05	1.13e+05	2.461	0.043	1.09e+04	5.46e+05
==========						

B)Lasso/Ridge Regression

Variable	OLS Coefficients	Lasso Coefficients	Ridge Coefficients
Constant	566862.048266	0.000000	0.000000
Subscribers	-603.744115	-603.740124	-564.812810
Market revenue	278400	278359.743398	278185.122726



The constant in linear regression signifies the revenue estimate in the absence of any variables. Revenue experiences a decline of \$603.74 for every additional subscriber, whereas a rise of market share by one percentage point results in a corresponding revenue increase of \$278,359.75. Sparsity is introduced by lasso regression, which sets certain coefficients to zero in order to select variables. Coefficients are regularised by ridge regression without precise zeroing. In linear regression, the intercept is \$566,862.05, whereas in Lasso, it is zero, and in Ridge, it is regularised. Non-zero coefficients are interpreted similarly by both Lasso and Ridge, which prevents overfitting when multicollinearity or many features are present.

EFFECT OF OTT ON GDP

As per the <u>Times of India Report on OTT platforms</u> affect GDP (dated 2022), OTT platforms have a multi-faceted economic impact, which can be categorised into three main dimensions:

- Direct Impact: This pertains to the immediate effects resulting from the output and employment generated by companies directly involved in the film, TV, and over-the-top streaming (OVS) industries. For example, the direct impact encompasses the economic contributions of production companies, streaming services, and related entities engaged in content creation.
- Indirect Impact: The indirect impact unfolds through the growth in output and employment experienced by suppliers to the creative industries. As the film and TV sectors expand, there is a ripple effect on ancillary industries such as hospitality, transportation, and equipment manufacturing. Increased activity in the creative industries stimulates demand for goods and services, generating economic output and employment in these associated sectors.
- Induced Impact: The induced impact stems from the output and employment generated by the spending of wages by both direct and indirect employees. This consumption, triggered by the income earned within the ecosystem of film, TV, and OVS industries, further contributes to economic growth. For instance, when individuals in these industries spend their wages on various goods and services, it creates a downstream economic effect.

To illustrate, consider a scenario where the TV industry aims to increase its output by INR 1. If the TV industry requires INR 20 worth of cameras and INR 10 for catering to produce work worth INR 100, the first-round effect would be a total increased production of INR 3 by suppliers to the TV industry (INR 2 by the camera industry and INR 1 by the catering industry). However, to meet the increased demand, the camera industry would, in turn, necessitate additional production from its suppliers, creating a second-order effect of, for example, INR 0.5. This iterative process continues through various sectors, leading to an overall impact calculated using an input-output table.

In essence, the interdependence of industries within the creative ecosystem results in a cascading effect on production and employment, emphasising the intricate web of relationships in the economic landscape influenced by OTT platforms.

According to the report by <u>Creative First on Role of OTTs in India's GDP Growth</u> dated 17th Nov 2021,

India's flourishing online video streaming platforms, categorised as Rich Interactive Apps (RIAs) or OTTs, exert a transformative influence on the country's economic landscape. With a massive audience of 353.2 million and a projection to become the sixth-largest video streaming market by 2024, OTTs are set to significantly impact India's GDP. Projections suggest that the RIA market, comprising over 60 players, will make substantial contributions, reaching USD 15 billion by 2030, with USD 12.5 billion attributed to video content and USD 2.5 billion to audio (RBSA Advisors). Drawing parallels with the success of mobile phones and the IT sector, this essay emphasises the necessity for a growth-oriented approach, citing the Telecom regulator's (TRAI) successful model. The transformative influence of RIAs on education and the call for regulatory relief underscores the pivotal role of OTTs in propelling India's creative economy, fostering competition, and driving comprehensive economic prosperity.

CONCLUSION

In conclusion, the dynamic landscape of India's Over-The-Top (OTT) industry has evolved rapidly, transforming the entertainment delivery paradigm and fostering a robust economic impact. From the early milestones of colour broadcasting in 1982 to the present landscape featuring over 40 platforms and 353.2 million viewers, the industry's growth is undeniable. The economic prowess of OTTs is reflected in the significant revenues, with a projected market volume of US\$5,250.00 million by 2027, showcasing a remarkable compound annual growth rate (CAGR) of 36% since 2018.

The multifaceted business models of OTT platforms, encompassing Advertising-Supported Video On Demand (AVOD), Subscription Video On Demand (SVOD), Transaction Video On Demand (TVOD), and hybrid models, contribute to their financial resilience and diverse revenue streams. As of 2023, SVOD dominates with 50% of revenue, poised to increase to 55-60% by 2030.

Deloitte's data illustrates a consistent surge in OTT viewership, with an average annual growth rate of 16.34%, reflecting sustained and robust demand. Statista's revenue projections and user engagement forecasts underline the industry's significant economic potential. JioCinema's strategic initiatives, particularly its impact on major sporting events, as highlighted in the India Briefing report, signify a transformative phase in market dynamics. Globally, India, as illuminated by the Precedence Research report, stands out in the burgeoning video streaming market.

OTT platforms, with their expansive reach and transformative impact on India's creative economy, wield a threefold influence on the GDP. The direct impact stems from the output and employment generated by the film, TV, and OVS industries. Indirectly, there's a ripple effect on ancillary sectors, fostering growth in hospitality, transportation, and equipment manufacturing. Additionally, the induced impact arises from the spending of wages, creating a downstream economic effect. As projections indicate a burgeoning market, OTTs are poised to contribute significantly to India's GDP, emphasising the need for a growth-oriented approach and recognising their role in driving comprehensive economic prosperity and fostering competition.

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Collab File Link: © FOE Report

APPENDIX

OTT (Over-The-Top)	Content delivery directly to viewers via the internet, bypassing traditional intermediaries.
SVOD (Subscription Video On Demand)	Model where users pay a recurring fee for uninterrupted access to content.
TVOD (Transaction Video On Demand)	Pay-per-view model, users pay for individual content pieces.
AVOD (Ad-Supported Video On Demand)	Relies on advertising revenue, offering free content to users.
CAGR (Compound Annual Growth Rate)	Annual growth rate provides a smoothed measure of investment growth.
ARPU (Average Revenue Per User)	Average income generated by each user, a key metric for subscription-based models.
ROI (Return on Investment)	Measure of profitability, indicating gains or losses relative to investment.
Original Content	Content produced by the platform, contributing to exclusivity and brand differentiation.
User Penetration	Percentage of the population using a service, indicating market saturation.
Monetisation	Strategies to generate revenue, such as advertising, subscriptions, or pay-per-view.
Content Acquisition	Process of obtaining rights to content, either through purchase or in-house production.
Input-Output Table	Tool depicting interdependencies and economic relationships between different industries.
Ancillary Industries	Supporting sectors influenced by the growth of the primary industry.
Rich Interactive Apps (RIAs)	Applications offering advanced, interactive features, enhancing user engagement and experience.