

ENTERTAINMENT GOES ONLINE

A \$5 BILLION OPPORTUNITY



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EXECUTIVE SUMMARY

THE PAST DECADE HAS seen a transformation, global, in how consumers watch videos and listen to music. From the days of terrestrial broadcast and social viewing of television to highly personalised, small screen consumption - the media industry is witnessing a transformation like no other. The rate of change in the industry continues to accelerate, with hyper-competitive dynamics coming into play in India. In addition to the traditional players, there is a strong push from global and more nimble companies to get into the over the top space. At the same time, India's appetite for entertainment continues to increase as high speed broadband connectivity, ease of payment options and availability of multiple platforms the right environment for consumers.

Powered by a first-of-its-kind consumer survey, this report seeks to address the changing Indian consumer, learnings from other global markets, niche areas such as internationalization, music and regional acting as the key strategic imperatives and the agenda which can drive success in a market with a potential for \$5 billion.

ONLINE VIDEO

EXPONENTIALLY GROWING PHENOMENON
IN INDIA AND GLOBALLY

GLOBALLY, OTT HAS BECOME the key driver for video and media consumption growth, with an increasing number of people consuming over the top (OTT) content through varied platforms. In the last few years, OTT content, which is video is delivered over the Internet as an alternative to traditional media, has seen substantial prevalence compared to conventional video. Revenues from OTT content have seen a CAGR of over 40 percent for the period 2005-2017 and are expected to grow by 20 percent in the period 2017-2023. In comparison, Public TV, FTA TV and Pay TV have seen growth rates of 2 percent, 1 percent and 6 percent, respectively, in the period 2005-2017.

A Plethora of Services and Devices are Driving OTT Adoption, Globally

A key factor perpetuating this growth in consumption of OTT content is the fact that a considerable part of OTT content is delivered over smart and mobile devices (as shown in Exhibit 1). Key players are giving an additional fillip to this demand by investing in innovative technology and developing original content exclusively for OTT consumption. Furthermore, broadband connectivity has increased its footprint globally. Hence other Internet-enabled devices including smart TVs, STBs and gaming consoles can also be used for the provision of OTT services. The advan-

tage of using OTT service is that it is less costly and more efficient and customized for specific consumption.

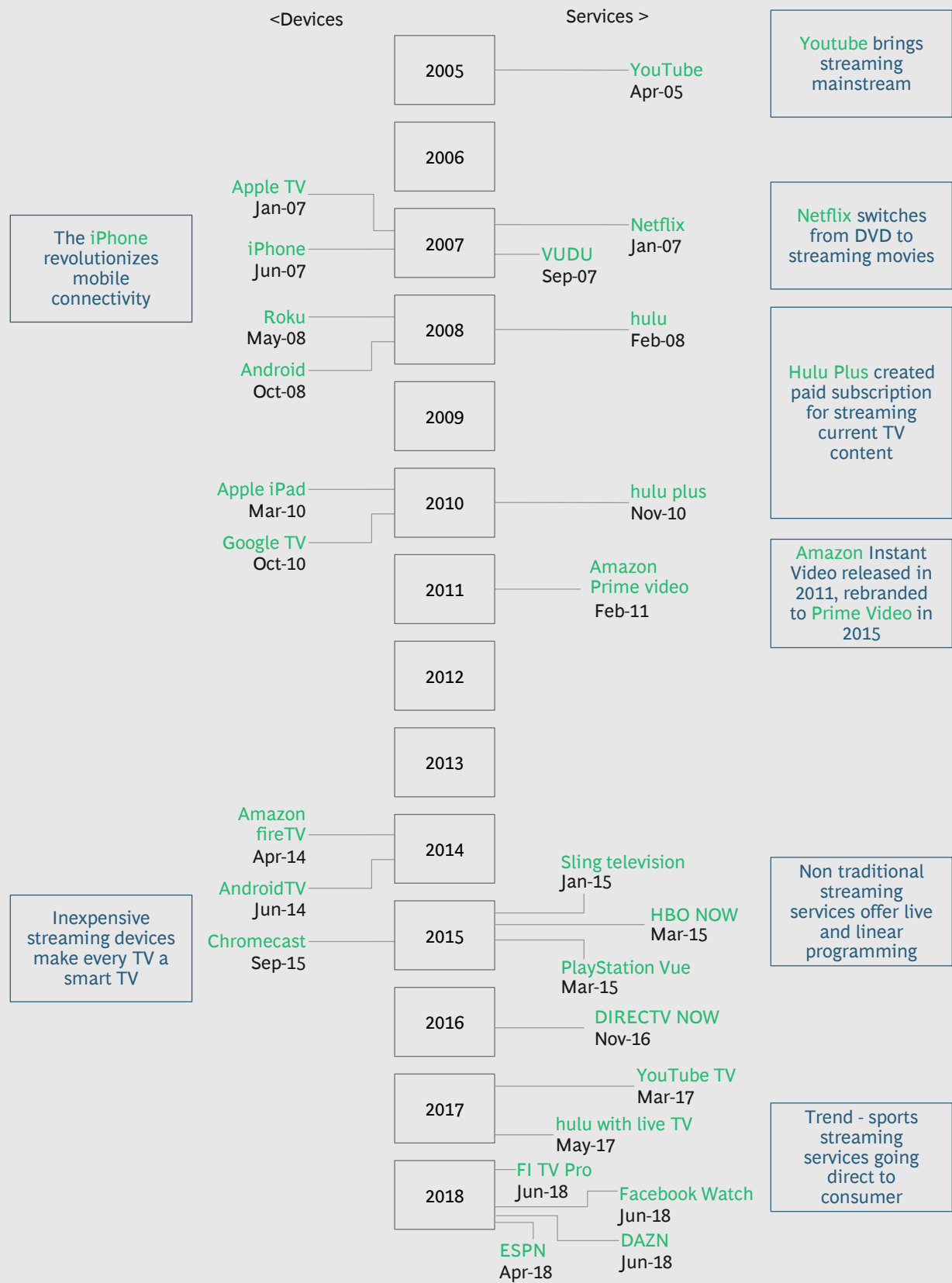
The Global OTT Opportunity

The global OTT opportunity has been pegged at ~USD 76 billion for 2018 (as shown in Exhibit 2). Such a large canvas allows both SVOD (subscription video-on-demand) and AVOD (ad-supported video-on-demand) models to thrive and even co-exist. The United States and Canada dominate the OTT market due to better connectivity which facilitates OTT app circulation, in addition to the availability of high-speed connectivity, the presence of established content creators and providers in the region and the significantly higher costs associated with more traditional modes of media consumption (like PayTV) which has made OTT a more cost-effective solution.

APAC—Growing at a Fast Clip

The OTT market is growing rapidly in Asia-Pacific (APAC), Europe, the Middle East and Africa (MEA), and Latin America. Therefore, OTT platforms in these regions have immense scope for enhancement. Asia Pacific is expected to be the fastest growing market for OTT content during the forecast period 2017 to 2022 (as shown in Exhibits 2, 3). This is primarily attributable to the increas-

EXHIBIT 1 | A Plethora of Services and Devices are Driving OTT Adoption



Source: Press Runs, BCG analysis.

ing number of viewers as consumers adapt and get used to OTT consumption and a steady but significant rise in local content creators and providers. It is also driven by the rest of the enablers (connectivity, payment ecosystem, device availability) coming together.

The Indian media industry seems to be an outlier relative to more developed markets in terms of ad growth and penetration. This gap creates an opportunity for India to grow from its current levels. As per our estimates, India reaching China / Brazil levels implies 6 percent CAGR + GDP growth (5-7 percent), i.e. 10-13 percent CAGR for the next 10 years for the overall media industry.

As more people spend a larger portion of their time in the digital realm, it is inevitable that advertising goes digital as well. While traditional media, with an overall share of 84 percent, continues to be the media of choice for consumers, India is seeing an increase in the share of digital in media consumption (as shown in Exhibit 4). This will most likely impact the growth of digital advertising.

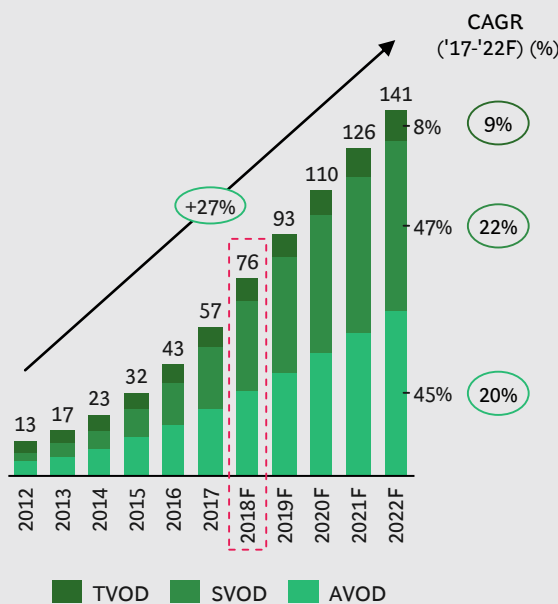
The Indian OTT Phenomenon, Already Large, So Far Additive Not Cannabilizing

Overall, it is estimated that 16 percent of media consumption in India is already on digital platforms. Relative to developed countries, India is lagging. However, for the Indian youth, already 25 percent of media consumption is digital (as shown in Exhibit 4). This indicates that digital growth in India is likely to catch up.

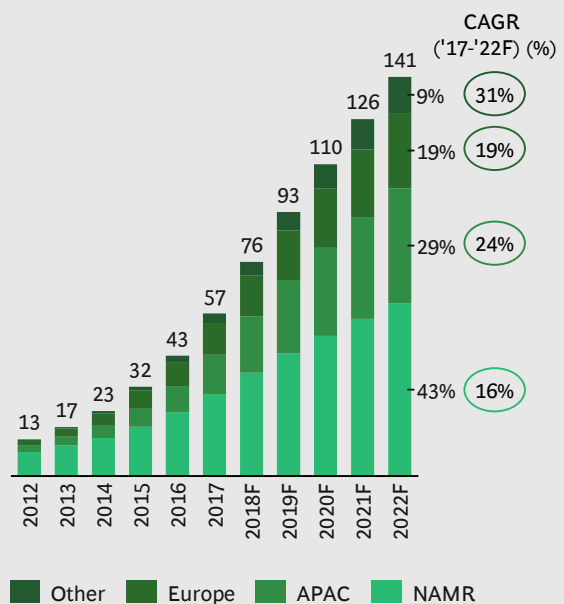
There is a distinct difference in the shape of digital consumption in India. Relative to traditional TV and print, digital consumption in India has been additive and not cannabilizing traditional media consumption. For e.g. in the past one year (between 2016 and 2017), overall media consumption grew for all segments of consumers. Among digital consumers, the total consumption grew more rapidly while the consumption of traditional media did not decline substantially (as shown in Exhibit 5). This indicates the robustness of the underlying consumer trend in India—there is headroom for overall media growth with digital media growing more

EXHIBIT 2 | Global OTT Market is a ~ \$76B+ Pie With Both SVOD and AVOD Models Co-existing

27% GROWTH IN OTT MARKET, SVOD PROJECTED FOR 22% IN 2017-22F

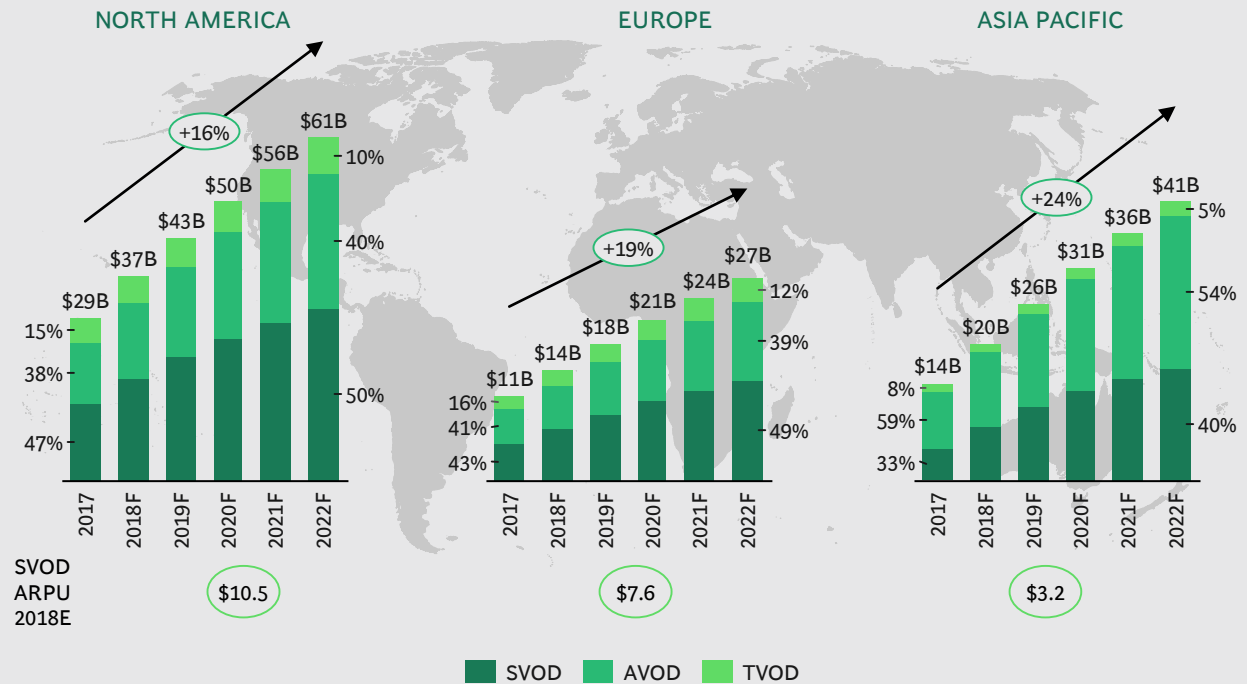


APAC ROUGHLY 30% THE GLOBAL OTT MARKET



Sources: Ampere analysis, Magna Global, BCG analysis.

EXHIBIT 3 | APAC is a fast Growing Market for OTT

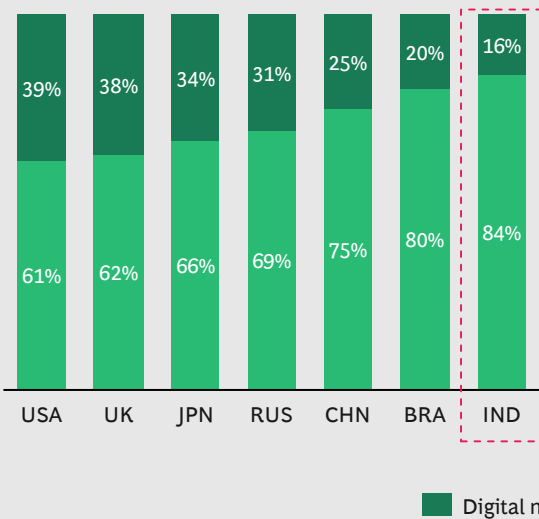


Sources: Ampere analysis, Magna Global, eMarketer, January 2018, BCG analysis.

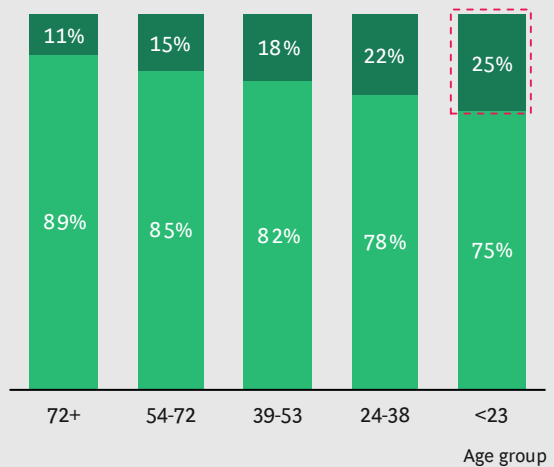
EXHIBIT 4 | Digital Video Consumption in India has Become Sizeable and Very Relevant

DIGITAL MEDIA CONSUMPTION BY COUNTRIES

Share of digital in media consumption (2018E)
(Hours/week)



INDIAN YOUTH IS AT 25%



Sources: PQ Media, BCG analysis, Digital advertising includes search, video, display, social media.

sharply. This is in stark contrast to developed markets where OTT has captured share from traditional media.

The Indian OTT Space is Already Hyper Competitive With All the Ecosystem Players Vying for Consumer Attention

Indian OTT space is hyper competitive and has attracted varying types of players which offer varied value propositions to the consumers and have different business models.

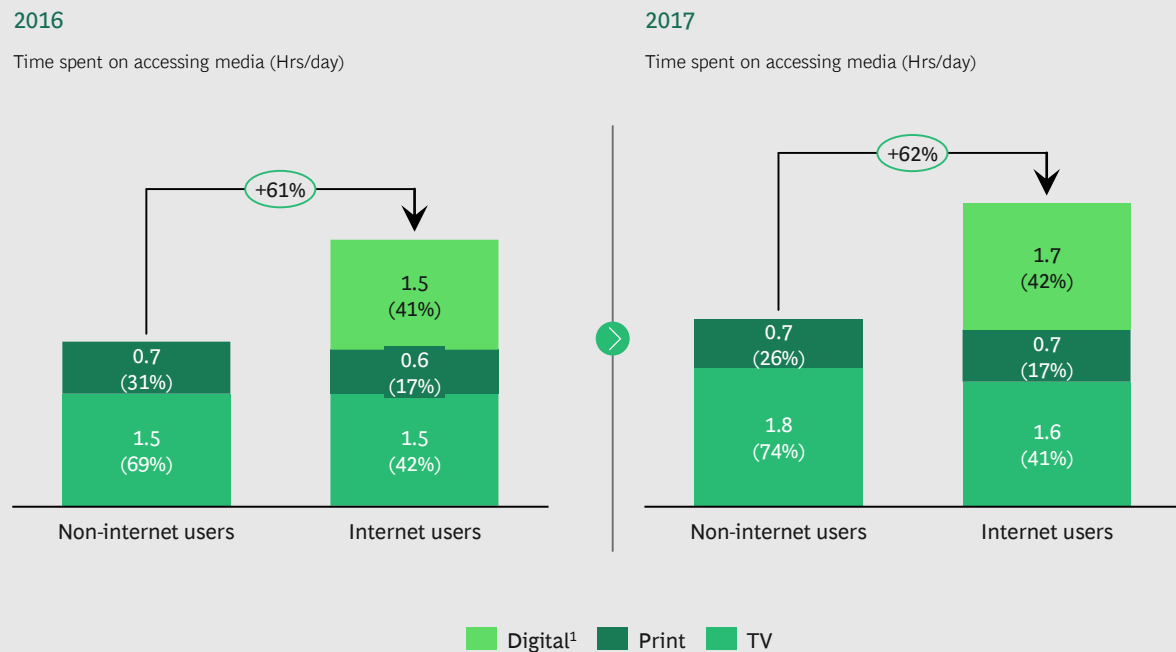
There are multiple business models evolving in India (as shown in Exhibit 6).

- All large successful broadcasters in India have launched their own OTT platforms e.g. Hotstar, Voot, Sony Liv and Zee 5. These broadcasters have put their extensive TV content libraries online, supplemented by additional content through licensing and originals. In India, these players enjoy a strong brand and consumer awareness driven by their strong TV

brands. These OTTs have a combination of ad supported and behind the paywall content. This is unique to India—Indian broadcasters have been quick off the block and hence well-entrenched in the OTT space.

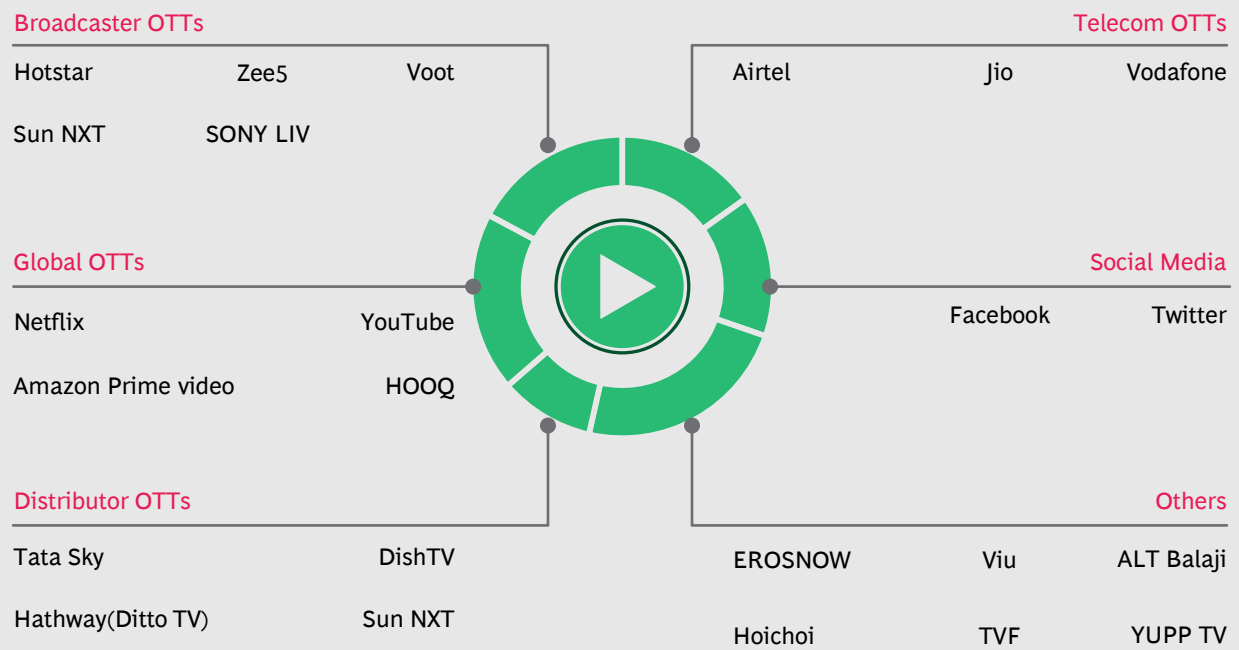
- Global OTTs like Netflix, YouTube, Amazon Prime have extended their services into India. Historically, YouTube set the trend for online video watching among Indians. In recent times, other global OTTs have started investing in local Indian content in a significant way.
- In addition, the telcos e.g. Airtel, Jio and Vodafone-Idea are building aggregator models- aggregating content across multiple platforms and providing a payment interface. They are also leveraging access to other OTTs as a differentiating factor to drive consumer retention and acquisition.
- We are also seeing independent OTTs evolving, being supported by content creators.

EXHIBIT 5 | Digital has been Additive to Overall Media Consumption in India



Sources: BCG CCI Digital Influence Study 2016, 2017 BCG analysis (N=18,000).
¹Digital - Respondents accessing internet for non-work related purpose.

EXHIBIT 6 | Indian OTT Market is Hyper Competitive and has Attracted Various Players With Different Business Models



Source: BCG analysis.

- Social media platforms continue to be an important source of video consumption, and social media players are leveraging this by increasing their focus on video content.
- Traditional TV distributors (cable, DTH) are also experimenting with different models to participate in the digital media space.

Most of these players and models have evolved and entered the market in the past five years. The year 2017 saw the first burst of “big money” being deployed behind Indian content on OTT. Heavy investments in multiple players are now underway. The numbers of players in the Indian OTT market has witnessed a 3.5x increase in the last six years growing from just nine players in 2012 to 32 in 2018 (as shown in Exhibit 7).

Investment for original content by OTT players is increasing at a fast clip. In addition to live sports rights, the nature of shows produced is also evolving—tent pole properties built for OTT cost three to four times that of traditional TV content (as shown in Exhibit

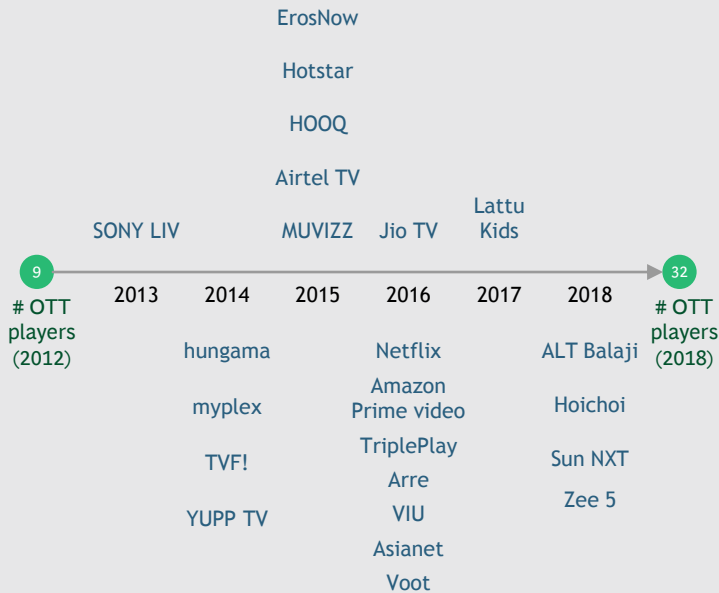
8). The need to differentiate to attract eyeballs is enabling aggressive bets on original content.

We have analysed the types of investments being made on OTT content across platforms. These investments are in very varied forms of content with different propositions (as shown in Exhibit 9) e.g.

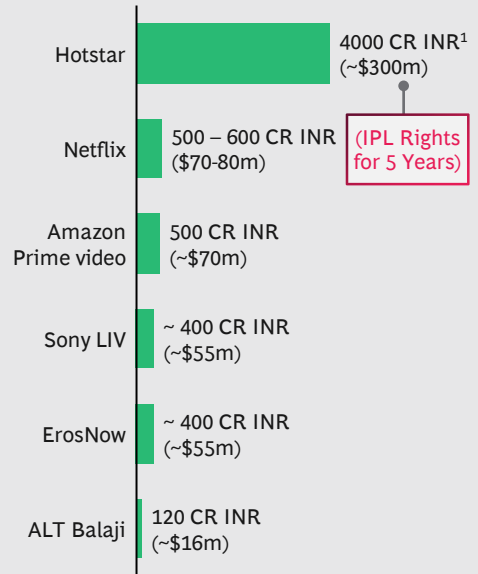
- “Tent poles” or “hero content”: Heavily marketed, premium content (higher cost of production)—meant to bring new eyeballs on the platforms.
- Hit movies—Expensive to buy, but attract eyeballs.
- High profile sporting events.
- Syndication of international content.
- Original content / web series (Hindi, English and regional): build up library of differentiated content.
- CAC (Content around content) specifically

EXHIBIT 7 | Heavy Investments in Content by Multiple Players Also Already Underway, No Longer "Just Lip Service" as Market Clearly Important

NO. OF PLAYERS IN THE OTT MARKET HAVE INCREASED 3.5X TIMES IN THE LAST 6 YEARS



2017 INVESTMENTS (IN INR CRS) FOR ORIGINAL CONTENT BY OTT PLAYERS



Sources: Ovum OTT tracker, Media Reports, BCG analysis.
¹Factor of winning bid for digital rights assumed to be same factor as winning global bid.

EXHIBIT 8 | Cost of Content Significantly Increasing as OTT Platforms Bet Aggressively on Originals

AltBalaji Example

"UPGRADE TO TV"

- TC Stars in a newer digital format
- Storylines and ideas that would not work on traditional TV
- Appeals to mass audiences
- Example *karrle Tu Bhi Mohabbat* Season 2 launched within 9 months of Season 1

"RETELL CLASSICS"

- Adapt Classical stories for newer audiences
- Build and develop on the immense fresh talent pool
- Appeals to Large segments of the audience
- Dev DD – a modern take on Devdas has over 1m viewers already and soon entering Season 2

"TENT POLE"

- Original and exclusive high impact content
- Utilize the best talent available including Film talent
- Appeals to niche but still large segments
- *Bose Dead/Alive* has an IMDB rating of 9.4 – one of the highest for a web series

- Costs per hour at 2x to 3x cost of TV content
- Costs per hour at 2x to 2.5x cost TV content
- Costs per hour at 3x to 4x cost of TV content

Source: Balaji Investor Presentation, BCG analysis.

EXHIBIT 9 | Different Types of Content developed and syndicated by OTT platforms



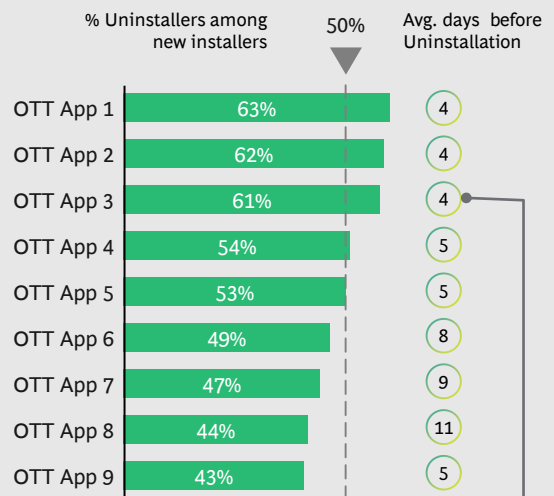
Source: BCG analysis.

EXHIBIT 10 | Competition for User Share is Intense

OVER 80% USERS HAVE 3 OR LESSER VIDEO APPS ON THEIR PHONES

Segment	Share of users (%)
1 app	32%
2 apps	27%
3 apps	22%
4 apps	11%
5 apps	5%
5+ apps	3%

~50% USERS UNINSTALL AN APP WITHIN 7 DAYS OF USING IT¹



Avg. time before uninstallation = ~6 Days

Sources: Nielsen Panel of ~15000 smartphones recorded from Q2 '16 to Q2 '18, BCG analysis.
¹Based on numerical average across select group of 9 apps.

around reality TV, sports and others also covered on traditional TV.

Intense Competition among Video Apps: Race for the Top Three Positions

Most consumers (81 percent) have up to three video / OTT apps on their smartphones (as shown in Exhibit 10 on previous page). Further, all platforms struggle with retention of consumers—on an average 50 percent of OTT apps installed are uninstalled in the first seven days of installation. The competition for user share is intense—every OTT platform is vying to be among the top three of the consumer’s attention.

Lessons from the Dragon Nation

CASE-STUDY: CHINA—CONTENT DRIVEN SVOD GROWTH

It would be instructive to observe the evolution of the OTT landscape in China. In both India and China, OTT is unlikely to be driven by consumer price advantage. In the United States, the average revenue per user (ARPU) per month is USD 89 and USD 11 for Pay TV and SVOD, respectively. In contrast, in China and India the ARPU for Pay TV is USD 3 while the ARPU for SVOD is USD 3 and USD 2, respectively. When compared with other more evolved markets like the United States, Canada and Australia, the gap in what consumers in India and China are willing to pay for online content is significant.

Interestingly, China has witnessed an exponential growth of over 200 percent (2014-2017) in SVOD subscribers. Over a mere five-year period, >35 percent of its OTT revenues are from subscription services.

THE CHINESE STRATEGY—GIVING LEGS TO SVOD GROWTH

Top players leverage AVOD users base to create hits and drive SVOD conversion—good quality original content lies at the heart of the OTT industry. A heavy push was made by AVOD / SVOD platforms to build new categories of “web series” that would allow for the manufacturing of hits and higher user engagement. These “hit” shows were used as a vehicle to drive conversion of

free viewers into paid subscribers. Efforts were also made to have a deeper engagement with “free users” in an attempt to create more watch-time and therefore ad-sales opportunities.

The Chinese SVOD model enabled by a “paying members watch first” model that was successful to get Chinese consumers to pay for content—consumers are generally more inclined to pay for exclusive content.

The Chinese developed a “paying members watch first” model that created exclusivity and enticed non-paying members to start paying for exclusive content. The four-step process of this model are as follows:

1. Free access to all users to the weekly release of a single new episode.
2. Free users are teased with trailers of episodes to be released in future weeks.
3. On the other hand, paying members are given instant access to future episodes which may sometime comprise an entire season
4. After the shows completes all its weekly releases, all the episodes except for the first one become exclusive to paying members.

Led with few big bets, built watch-time with cheaper content library—in order to stay ahead in the OTT game, players need to constantly invest in creating original content (as shown in Exhibit 11). However, in order to be profitable, these investments need to be done judiciously, keeping in mind the preferences of the target audience and their inclination to pay for exclusive content. The Chinese model got this right by making a few large investments in non-exclusive content and building watch-time with a cheaper content library.

Heavy original content investments triggered the huge SVOD uptake—the main factor that perpetuated a huge uptake in SVOD was heavy investment in creating original content. The ubiquity of technology and consequently access to a large amount of content makes it difficult for content providers to

EXHIBIT 11 | Led With Few Big Bets, Built Watch-time With Cheaper Content Library

iQIYI example

TV RIGHTS PURCHASE PRICE (\$/EPISODE)	CURRENT # OF TITLES IN LINEUP	PROFITABILITY/BENEFIT FOR VIDEO PLATFORM	FUTURE INTENT
> \$5M (>\$750k)	3-5 series	<ul style="list-style-type: none"> 30% shows profitable Break even on ability to improve traffic 	↑
\$3–5M (\$450-750k)	10-15 series	<ul style="list-style-type: none"> 60% shows profitable 	Stay put
\$1.5–3M (\$225-450k)	20-30 series	<ul style="list-style-type: none"> Mostly unprofitable Limited ability to improve traffic 	↓
< \$1.5M (<\$225k)	10 series (not incl. indies)	<ul style="list-style-type: none"> 70% shows profitable 	↑
> \$5M (>\$750k)	2-3 series	<ul style="list-style-type: none"> Can bring in millions of paid users (The Lost Tomb brought 3.5M) 	↑
\$1.5–5M (\$225-750k)	~5 series		
< \$1.5M (<\$225k)	~10 series	<ul style="list-style-type: none"> Dual income from paid and ad sales 60% shows profitable 	

Source: Press Runs, BCG analysis.

attract and retain the consumer’s attention. The number of original series for the top three players in China has been consistently increasing and has risen from just 13 in 2012 to 143 in 2016 (as shown in Exhibit 12).

Using Social Media to Drive Fandom and / or Fan Engagement—Social media is used to connect fans with celebrities and bring them closer to the content and the content creators. Any social media platform helps strengthen the connection between fans, celebrities and the content, consequently enhancing user engagement and stickiness.

Paopao, for instance, is a social platform built and used by iQiyi. iQIYI Paopao features a wide range of social functions. Within each topic of interest, fans can generate content by posting texts, images and videos, as well as interact with others through features such as commenting, giving ‘likes’ and private messaging. By virtue of its social media nature, iQIYI Paopao serves as a base for online and

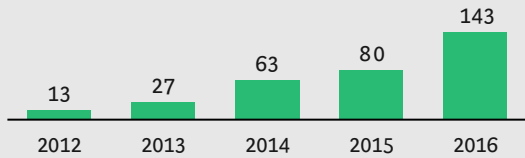
offline fans activities. Moreover, they frequently organize celebrities to interact with fan on the platform in real-time, to attract and retain users. iQIYI Paopao also serves as a key publicity platform for video content, including inviting popular actors of original drama series to interact with the fans in the “Celebrity is Here” section of the platform to boost the content’s popularity.

In addition, with enabling mobile payments and telecom infra, subscription has over-taken advertisement revenues for the top players—for any industry to thrive, a supportive eco-system needs to be built around it. A robust digital and telecom infrastructure was instrumental in giving a fillip to the OTT industry in China. It has been noted that a 26x increase in mobile payment value coupled with a 4.6x increase in broadband speed between 2013 and 2014 enabled strong revenue growth in the industry, especially for subscription-based revenues (as shown in Exhibit 13).

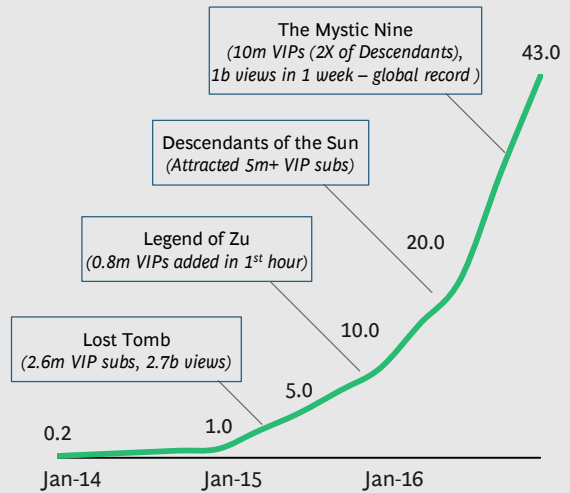
EXHIBIT 12 | Heavy Original Content Investments Triggered the Huge SVOD Uptake

IQIYI example

NUMBER OF ORIGINAL SERIES¹ FOR TOP 3 PLAYERS

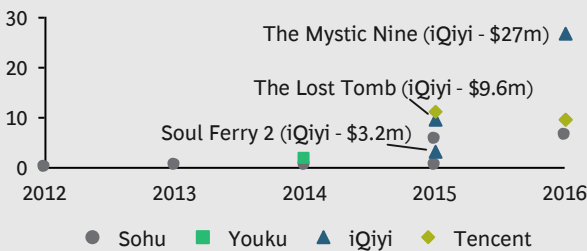


IQIYI: FROM 18 MONTHS TO THE FIRST 5M "VIPS"; 20M+ NEW SUBSCRIBERS ADDED IN LAST HALF (2017)



WITH CONSISTENT INCREASE IN COST/EPISODE FOR ORIGINAL PROGRAMMING (UP TO \$0.3-1 M/EPISODE)

Cost/series \$(M)



Sources: Entgroup research, JP Morgan, Press Runs, BCG analysis.

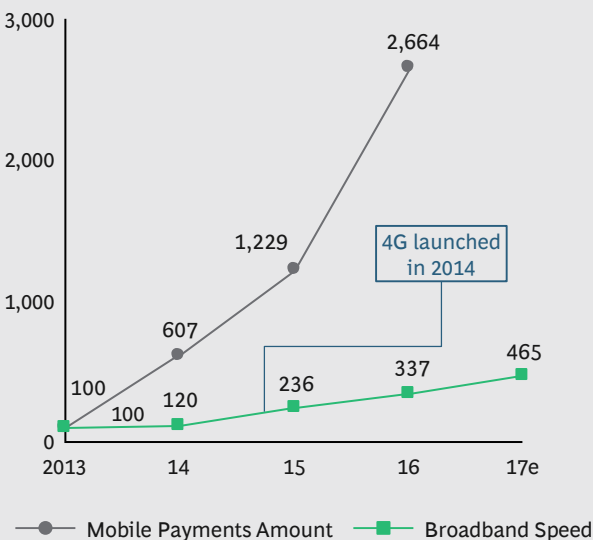
Note: 1 RMB = 0.16 \$ conversion rate used.

¹The original content numbers include TV series, Event, Movies, etc which are exclusive/original to one of the 3 channels, Tencent, Yoku, IQIYI

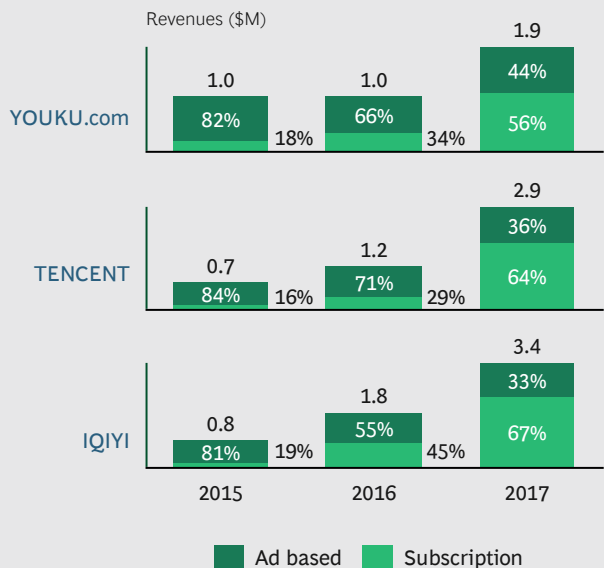
EXHIBIT 13 | In Addition, With Enabling Mobile Payments And Telecom Infra, Subscription Has Over-taken Advertisement Revenues For The Top Players

26X INCREASE IN MOBILE PAYMENT VALUE + 4.6X INCREASE IN BROADBAND SPEED ...

Indexed, 2013 (to 100)



...HAS ENABLED THE STRONG GROWTH, ESP. FOR SUBSCRIPTION BASED REVENUES (56-67% OF TOTAL REVENUE)



Sources: KPCB - Mary Meeker, JP Morgan, Press Runs, BCG analysis.

Note: 1 RMB = 0.16 \$ conversion rate used.

India is Potentially at an Inflexion Point for OTT Growth

Several drivers for growth of OTT in India are falling in place:

- Improving connectivity and fall in data prices.
- Increased smartphone penetration.
- Favourable demographics (age, affluence).
- Increase in supply of content.

It is estimated that by 2020, India will have more Internet users than the population of the G7 countries combined (as shown in Exhibit 14).

Improving Connectivity and Fall in Data Cost

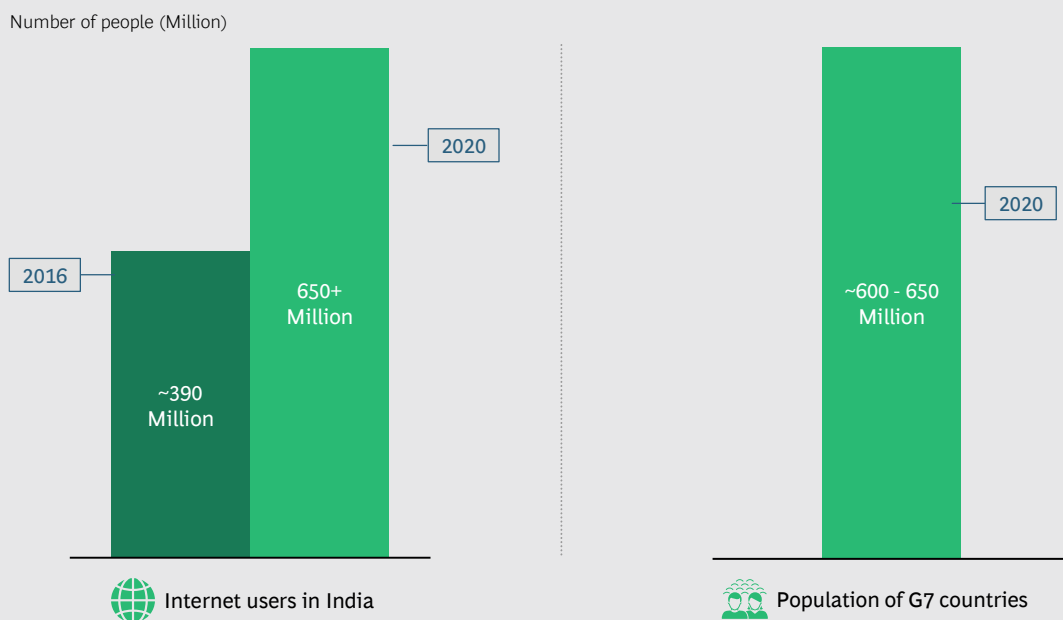
Access to affordable data has perpetuated a sharp growth in the consumption of data. The launch of Jio heralded a new era of affordable data in the country. It has been observed that post the launch of Jio in September 2016, the quarterly consumption of data has in-

creased nearly ten-fold (as shown in Exhibit 15). This unprecedented growth has largely been driven by media consumption on mobile. While on-the-go consumption of content is simple and efficient, the launch of Jio has also made it affordable, creating a latent demand for digital consumption by the Indian consumer.

Increase in Smart Phone Penetration

Over the last five years, India has witnessed a tremendous growth in TV and smartphone penetration. This growth has been more of a global phenomenon as smartphones have become an integral part of every individual's life. Today, there are 3 billion smartphones across the world, of which the Indian market accounts for over 450 million (as shown in Exhibit 16). When it comes to television, smart TV has evolved over the last couple of years, freeing the customer from dependence on the set top box or cable for content. Consumers now have the choice to watch content on the web or on a mobile app or on their smart TVs.

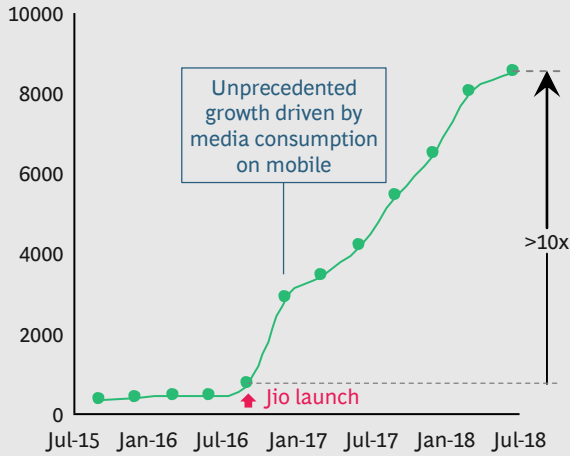
EXHIBIT 14 | India Already has more Internet Users than USA and By 2020, # of Internet Users in India Will be More than G7 Population



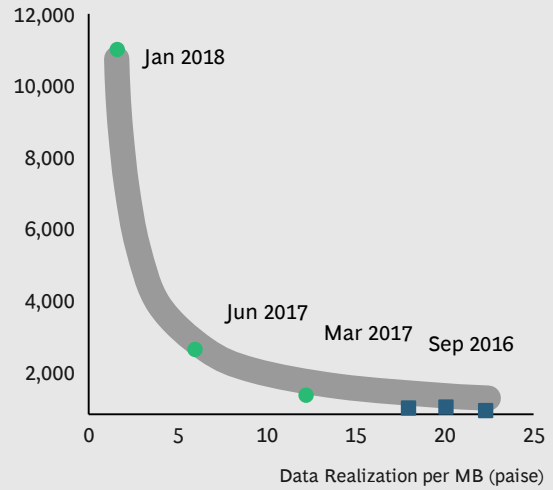
Source: TRAI, March 2017, BCG CCI Digital influence study, 2016.

EXHIBIT 15 | India Saw Content Consumption Exploding With Data Usage Exponentially Increasing as Jio Launched and Prices Dropped

QUARTERLY DATA CONSUMPTION (M GB)

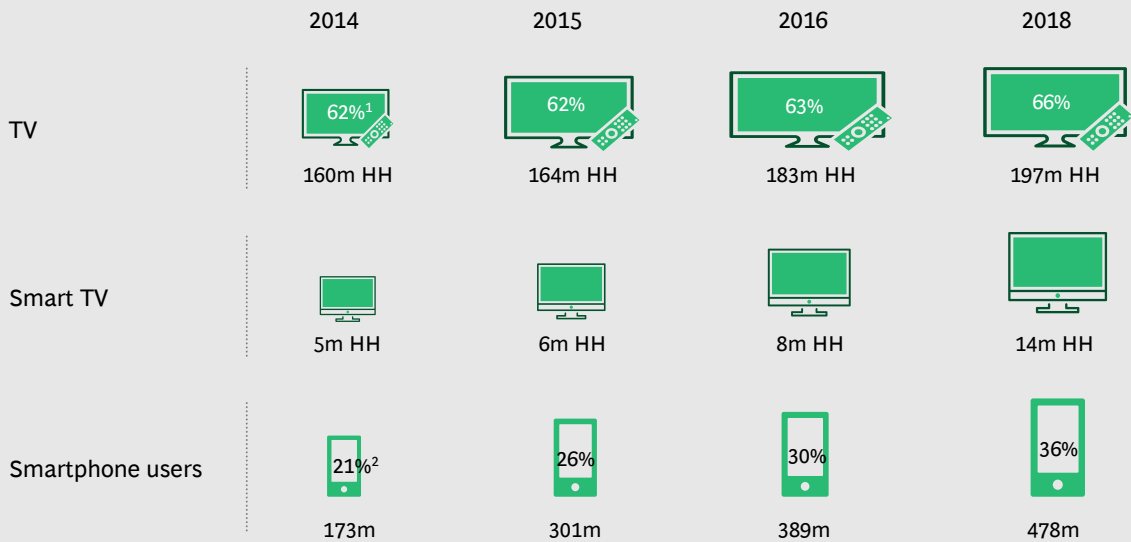


DATA CONSUMED PER USER (MB) VS. PRICE PER MB



Sources: Tefficient Industry analysis 2016, TRAI, BCG analysis.

EXHIBIT 16 | Tremendous Growth in TV and Smartphone Penetration has Been Witnessed in the Last Five Years With More Scope for Growth From Rural India



Sources: Internet and Mobile Association of India, Ovum, BARC, BCG analysis.
¹TV penetration measured as % of households which have a TV.
²Smartphone penetration is % of mobile phone users.

Supply of Content

When most OTT platforms first made their entry into the market, they started off with catch-up shows. However, the entry of global players like Netflix and Amazon Prime Video that brought with them a plethora of rich, original content, has now compelled existing Indian players to move beyond just catch-up, syndicated and licensed content. The entry of Netflix also indicated that the Indian consumer is now ready to pay for compelling content.

Availability of a wide variety of content has attracted a large number of people across the country with differing sensibilities and choices. With a growth in viewership, share of online video advertising is also set to increase.

Favourable Demographics

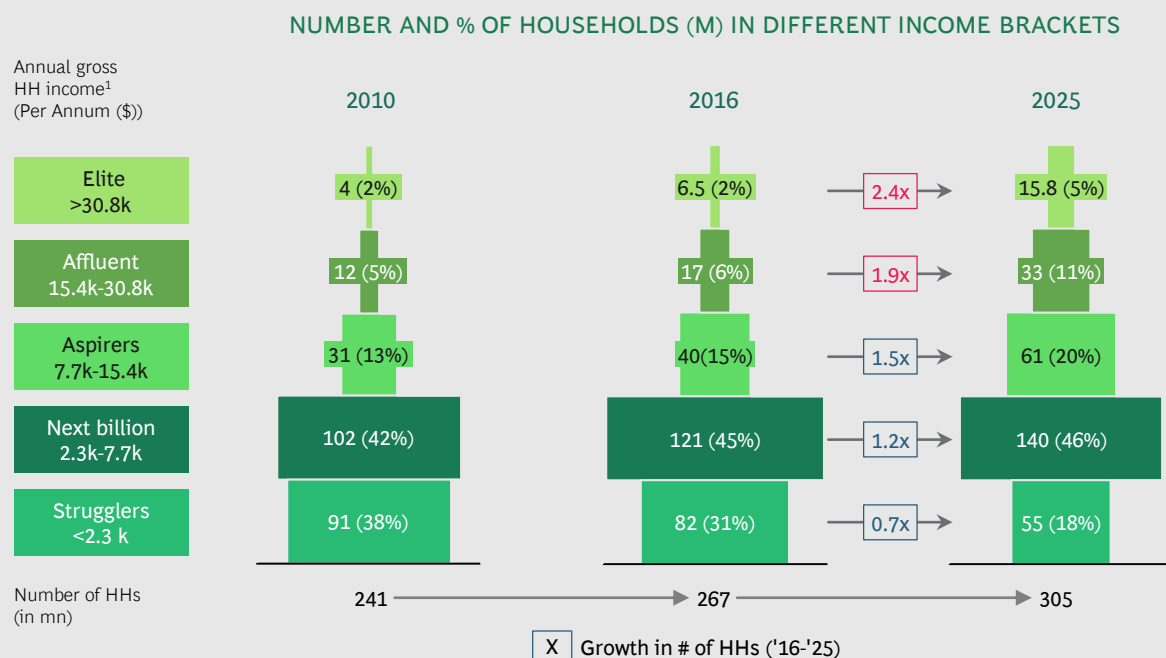
India is witnessing significant shifts in income distribution patterns with a rise in “affluent and elite” (as shown in Exhibit 17). With increasing urbanisation, we are seeing a shift in demographics as more and more people become upwardly mobile. This, coupled with increasing connectivity and easy avail-

ability of smartphones, has led to a spurt in the consumption of online content.

In addition, there is a democratization of Internet access taking place which will expand the consumer sets (beyond just metro, male, millennial), and penetrate into rural India (as shown in Exhibit 18).

The rural story in India is likely to be even more interesting. There are an estimated 197 million households with a TV, of which 160 million are (cable and satellite) households—while smartphone penetration is in multiples of that and growing. Given the challenges of electricity availability, TV screens and C&S connections, it is possible that rural India will adopt OTT even ahead of C&S viewing in some pockets. Our estimate is that by 2020 nearly 50 percent of Internet users in India will be from rural India and rural Internet penetration could grow to as much as 35 percent (as shown in Exhibit 19). This creates a very healthy environment for OTT to take off in rural India. There is a strong possibility, given prices and penetration, that rural India may be an OTT first market.

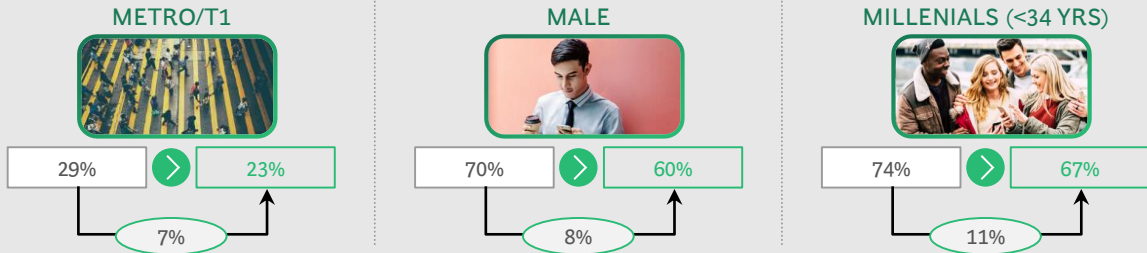
EXHIBIT 17 | Significant Shifts in India's Income Distribution with the Rise of “Affluent and Elite”



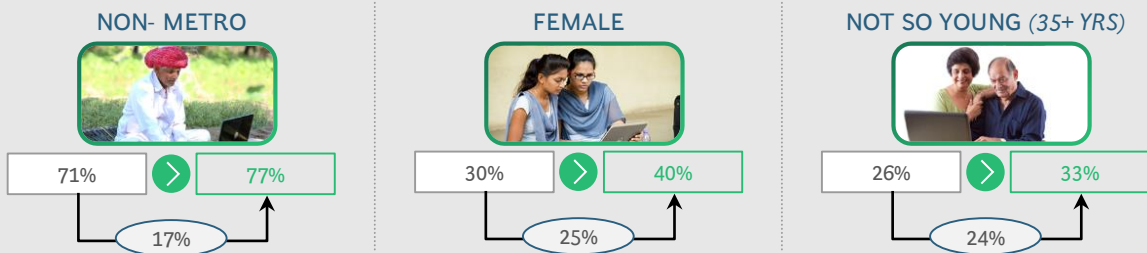
Sources: CCI City Income Database 2016, BCG CCI analysis.
¹Income distributions on 2015 prices.

EXHIBIT 18 | Profile of Users to Go Beyond 3M's—Metro, Males, Millennials's

PEOPLE WHO WE THINK USE INTERNET IN INDIA...



... BUT PROFILE OF INTERNET USERS WILL BE BEYOND 3MS BY 2020



Digital consumer's profile is well beyond the stereotype!

White box: % of all Internet users in 2016
Green box: % of all Internet users in 2020

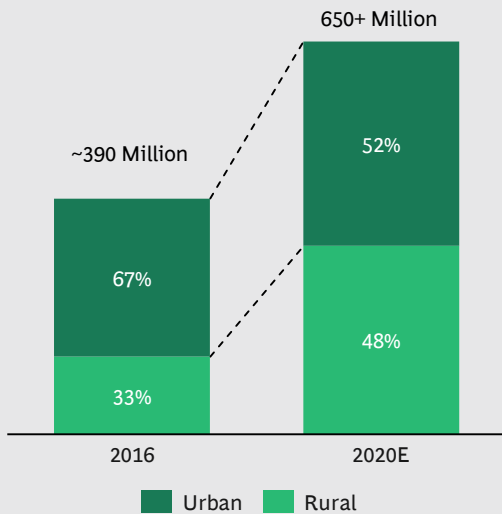
Source: BCG CCI Digital Influence Study 2013, 2014, 2015, 2016 analysis (N=18,000 per year), BCG CCI analysis. Gender data only for urban India.

EXHIBIT 19 | Next Wave of Internet Users will be From Rural India, Will Contribute to >50% of the Growth in Next 3-4 Years

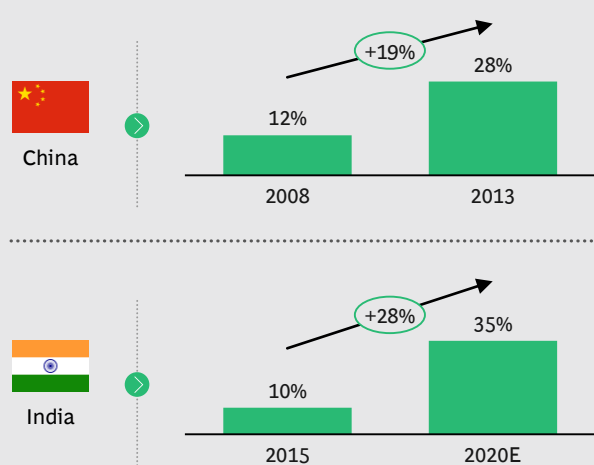
>50% OF INDIA'S INTERNET GROWTH IN NEXT 3-4 YEARS IS EXPECTED TO COME FROM RURAL INDIA

FUTURE GROWTH IN RURAL INTERNET USERS SHOULD BE SIMILAR TO WHAT CHINA WITNESSED A FEW YEARS AGO

Internet users (Million)



Rural internet penetration (%)

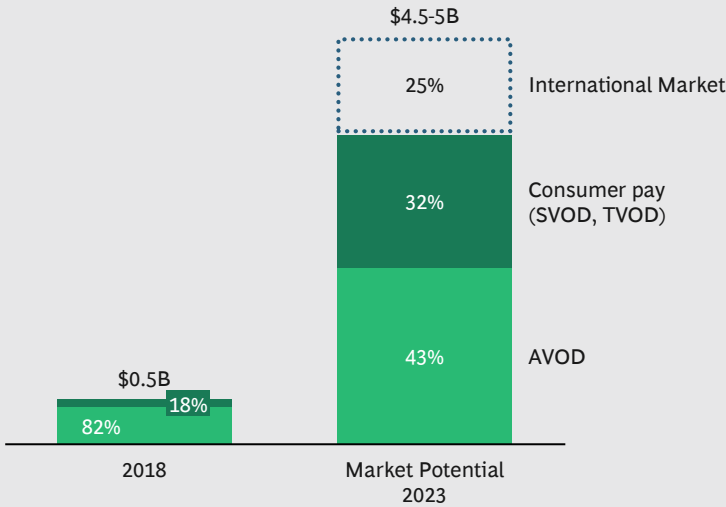


Source: BCG Digital influence study 2016, CNNIC reports – 2008 & 2013, TRAI, March 2017, BCG analysis.

EXHIBIT 20 | \$5 Billion: The Potential of the Indian OTT Market in 5 Years

INDIAN VIDEO OTT MARKET, 2018-2023

Revenues (\$B)



Underlying drivers for SVOD growth: strong content development & ability to pay

We expect ~40-50 mn paying subs in India by 2023, while ~600 mn users will be users of AVOD

As in developed markets, the phenomenon of multiple apps per person also playing out

On an average¹ Indians use 2.3 OTT video apps; 68% users¹ have 2 or more than 2 OTT video apps

Source: Ampere analysis, Ovum, Magna Global, BCG analysis.

Note: YouTube revenue included in AVOD.

¹Nielsen Panel of ~15000 smartphones recorded from Q2 '16 to Q2 '18.

Just the Tip of the Iceberg

We believe that the Indian OTT market is poised for growth and both ad-supported and consumer pay models will continue to co-exist. The consumer pay model could take many different shapes ranging from pure OTT SVOD to a telco-driven aggregator model as well as TVOD, particularly in categories such as films and sports. It is expected to reach a market potential of \$4.5 to 5 billion by 2023 (as shown in Exhibit 20). However, tapping this potential will require a host of player actions to fall in place; these include availability of relevant differentiated content, development of regional markets and many others. They are described in the next section of this report. As content evolves and becomes differentiated, we believe that consumer pay models will evolve further in India—with SVOD becoming a substantial part of the market.

As the market evolves, the phenomenon of second screen, privacy etc. will surface more strongly. Consumer are likely to continue to have few apps on their phones that are actively used. Consumer pay models will evolve driven by supplier actions and consumer behavior. However we believe that in India AVOD, SVOD, TVOD etc. will all co-exist and serve different consumer needs, while consumer pay models will grow faster than ad-supported ones.

INDIAN CONSUMER GOING ONLINE FOR ENTERTAINMENT

INSIGHTS FROM CONSUMER RESEARCH

OVER THE LAST FEW years, consumer behaviour in India has witnessed several major upheavals.

From a cost-sensitive, middle-income demographic, the country is now more affluent, with a concurrent preference for convenience, as a key driver. Almost 60 percent of urban consumers prefer saving time over money. By 2025, India's two leading income segments will double and account for 40 percent of all consumption. With increasing reach and influence of Internet in India, the general profile of Internet users is also widening. Research suggests that by 2020, Internet penetration among users in non-metro cities will reach 77 percent, with 40 percent of viewers being female. This is propelled primarily by the mass adoption of smartphone technology. This isn't simply because smartphones are perceived as a modern necessity—55 percent buyers report purchasing a smartphone for an 'upgrade' factor, without any real need or 'push' (as shown in Exhibit 21).

Online Video Viewing has been the Highest Growth Category

In less than a year, the time spent on video has jumped 11 percent, even as smartphone users spend incrementally less time on social media, browsing, gaming and calling (as shown in Exhibit 22).

This transition of today's consumer towards increased watching of video opens a major opportunity for OTT players who can provide highly immersive and engaging viewing experiences. In order to decode the size and shape of the OTT opportunity, a detailed consumer research (n=5000) and analysis of Nielsen's smartphone panel (n=15000) was undertaken. The objective of the research was to gain insights around consumer behaviour on the triggers and objectives for OTT usage, patterns of actual usage and how those are evolving, to retention and churn behaviour. The in-depth qualitative research also threw up insights on the content and genre preferences of consumers.

Insights from Consumer Research

The consumer research threw up many interesting insights. Many data points confirmed our hypotheses while others challenged them.

The following are the top six consumer insights from the research, and their implications.

1. Three archetypes of consumers based on their current usage patterns—TV heavy ("traditionalists") ~60 percent of our sample; AVOD-heavy (OTT experimenters) ~30 percent of our sample; and SVOD-heavy (the early adopters) ~10 percent of our sample (as shown in Exhibit 23).

EXHIBIT 21 | The Indian Consumer is Changing



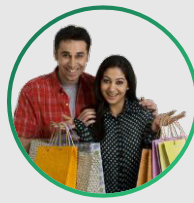
RISING AFFLUENCE WILL DRIVE UP CONSUMPTION

- India's top 2 income classes (>2M) combined share to increase from 8% to 16% in 2025,
- Accounting for 40% of the total consumption



DIGITAL INFLUENCE AND SPENDING NO LONGER STEREOTYPED

- Profile of Internet users in India is changing, with 2020 penetration expected to rise among non-metros (77%), females (40%) etc.



SHOPPING IS A 'LIFESTYLE REFLECTION'

- ~55% of urban consumers bought a new smartphone or TV as they simply wanted an upgrade, with no real need to change



CONVENIENCE AT ANY AND ALL COSTS

- ~60% of urban consumers prioritize saving time over money

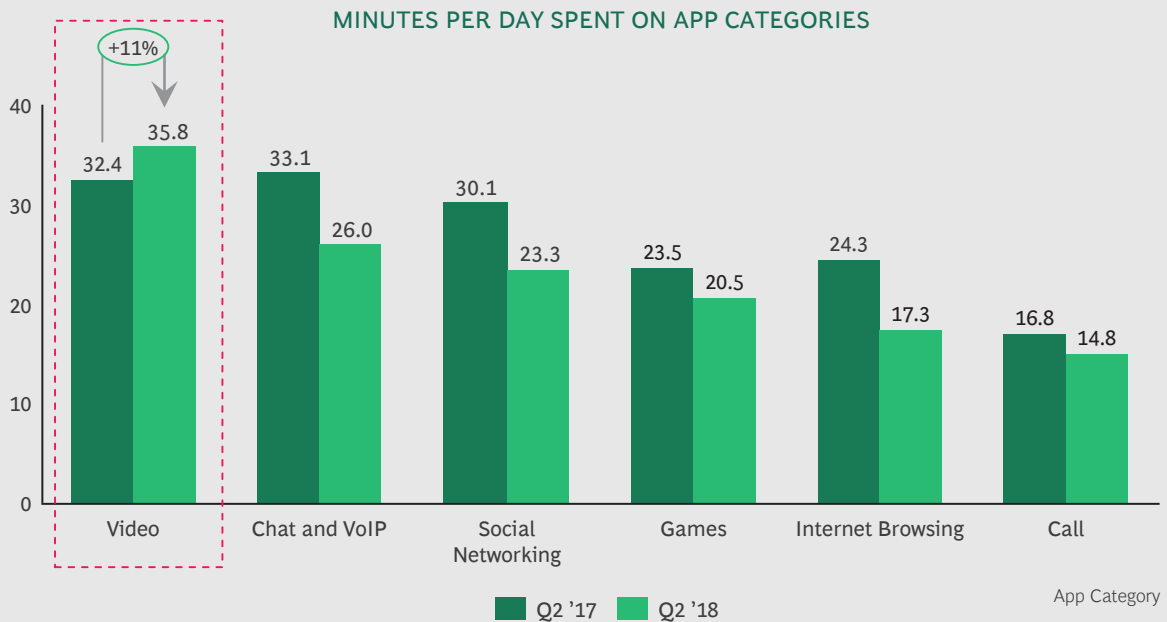


CONSUMERS SEEK VALUE, NOT NECESSARILY DISCOUNTS

- ~60% of recent smartphone buyers believe their purchase was value, though they did not avail any deals

Sources: BCG CCI Digital Influence Study 2013,2014,2015,2016 analysis (N=18,000 per year), BCG CCI Consumer Trends Study 2018 (N=5000); BCG CCI analysis.

EXHIBIT 22 | Video Streaming is the Highest Growth Consumption among Smartphone Users in India



Source: Nielsen Panel of ~15000 smartphones recorded from Q2 '16 to Q2 '18, BCG Analysis. Minutes per day for users that use the app categories. Video includes video streaming and media player apps

- Experimenters using AVOD heavily—to watch on the go, create a “second screen” in the household, and fulfilling specific watch occasion of “snacking in break times at work” / “while commuting”
 - SVOD installation driven by desire for popular / exclusive content as well as ease of use
 - Consumers seek “value for money”—with so much free content available demand justification for premium charged by paid platforms. Hence, there is an overall discomfort (among both experimenters and early adopters) against subscription charges. There is a need to establish a distinct value proposition for consumers so that they try services and then continue to pay
 - Lapsing on AVOD driven by undifferentiated value proposition, high / hidden data usage, overall drain on mobile battery and preference to watch some types of content on the large screen still after experimenting with mobile usage
2. Despite the abundance of existing content, consumers seek greater variety in content, tailor-made to their specific needs; specifically, regional language content is a key need voiced by consumers
 3. App combinations have a really long tail. Hence being in the top 2-3 apps will be really critical for players to gain scale in this market
 4. “Hero” content is able to get consumers on the platform, but cannot retain all of them
 5. Awareness of available propositions continues to be a challenge. There is a need to find ways to break the clutter
 6. Music has traditionally not been a large opportunity, however, it does attract eyeballs

EXHIBIT 23 | Three Archetypes of Consumers

TRADITIONALISTS

Heavy Watchers of TV but not OTT



50% metro; 50% T1+T2

smart TV ownership at 8% and laptop ownership at 25%

OTT EXPERIMENTERS

Heavy watchers of AVOD



60% metro

smart TV ownership at 11% and laptop ownership at 30%

EARLY ADOPTER

Heavy watchers of SVOD



Overindexed on metro (70%)

Smart TV ownership at 20% and laptop ownership at 30%

Source: Consumer Research, BCG analysis
Q: How much time do you spend watching in a week?
N= ~5000
 JioTV, Airtel TV and Vodafone TV included in AVOD

Three Archetypes of Consumers Based on Their Usage Behaviour

- TV-Heavy Users—The Traditionalists (~60 percent of those surveyed)
- AVOD-Heavy Users—The OTT Experimenters (~30 percent of those surveyed)
- SVOD-Heavy Users—The Early Adopters (~10 percent of those surveyed)

In today’s market, SVOD is a more “metro” and higher affluence phenomenon; of the traditionalist TV watchers are, 50 percent live in tier 1 & 2 cities (as shown in Exhibit 23).

The profiles below describe a typical traditionalist / OTT experimenter / early adopter. Traditionalists prefer watching their preferred genres on a bigger screen, which is a key trigger for their use of TV. On-the-go watching is the key driver for OTT use, as it allows access to their favorite content on demand. There is a demonstrated willingness to pay to access favorite content in high quality, and subscribers tend to stop using SVOD apps if they feel that the content does

not justify the subscription charges.


Exhibit 27 shows the genre preferences of each of the archetypes—as being quite distinct. SVOD usage only spikes for the third segment of “early adopters”, both the traditionalists and experimenters are not yet switching any significant viewing to subscription platforms.

FREELY ACCESSING FAVORITE CONTENT ON DEMAND—KEY DRIVER BEHIND CHOICE OF OTT EXPERIMENTERS (AVOD PRIMARY VIEWERS)

The OTT experimenters use the freely available content of AVOD to explore the offerings of the OTT space. The research indicates that on-the-go watching is a key reason for AVOD use.

On-the-go accessibility of content has allowed these users to watch content when a television might not be available. OTT experimenters indicate that they heavily use AVOD while traveling, creating a second-screen at home to watch when the TV is occupied and fulfilling specific watch occa-

EXHIBIT 24 | Sample Profile—Traditionalist



Pramukh, 38
Occupation: Professional
Daily screen time: 2-2.5 hours
OTT apps: YouTube
City: Bangalore

"Unsubscribed Amazon Prime as I wasn't giving more time to my family, as soon as I come back I was into the phone, that was not good"

Platform choice

TV OTT

Genre choice

Any Specific

Willingness to pay premium

Low High

WHAT DOES HE LIKE TO WATCH?

- Preferred genres: News, Infotainment
- News on TV
- NGC and Discovery Channel on TV
- TV together with family


PAIN-POINTS

- Watching on phone means less time with family
- Lack of preferred genres on Global OTT apps, like inspirational videos
- High subscription cost of Global OTT apps
- Mobile apps have same content as TV, hence no need to use apps


TRADITIONALIST

INFLUENCES FOR WATCHING


- Content that can be watched by the whole family
- Availability of inspirational videos and content



WATCHING ACROSS A DAY



Context: Breaks during work
Content: Inspirational videos, online clips
Platform: YouTube
Screen time: 30 mins



Context: Family time after work
Content: News, NGC, Discovery, etc.
Platform: TV
Screen time: 1.5-2 hours

Key Reasons for lower OTT usage
 Preferred genres already on TV and mobile screen unsuitable for family watching together

Source: In-Person Interview.

EXHIBIT 25 | Sample Profile—OTT Experimenter



Diksha, 22

Occupation: Student

Daily screen time: 2-3 hours

OTT apps (highest usage):

YouTube, Zee5, Hotstar, Voot

City: Surat

"I like to watch the repeated shows sometimes I even miss some old episodes. That's why I like to watch online"

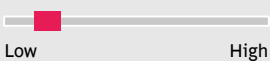
Platform choice



Genre choice



Willingness to pay premium



WHAT DOES SHE LIKE TO WATCH?

- Preferred genres: Movies and serials
- Movies, serials, trailers, workout videos, etc. on mobile
- News on TV and YouTube
- IPL on Hotstar

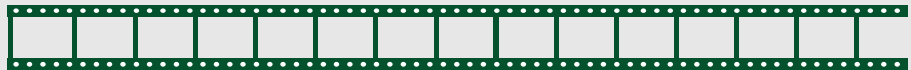
PAIN-POINTS

- Lack of variety in content in broadcaster OTT apps
- Time-crunch doesn't allow watching long durations

OTT EXPERIMENTER

INFLUENCES FOR WATCHING

- Content driven: Used mobile apps for specific content like Raazi and splitsvilla
- Older episodes of shows on demand
- Shorter duration content



WATCHING ACROSS A DAY



Context: After returning from college and tuitions
Content: Movies, serials
Platform: TV
Screen time: 1 hour



Context: Relaxation after completing chores
Content: Movies, serials, and online clips
Platform: YouTube, Zee5, Hotstar, Voot
Screen time: 1-2 hours

Key Reasons for AVOD Use:

Access to favorite content on demand and option of watching in shorter sessions

Source: In-Person Interview.

EXHIBIT 26 | Sample Profile—Early Adopter



Karthik, 38

Occupation: Professional

Daily screen time: 3-3.5 hours

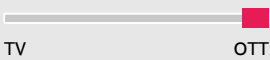
OTT apps: Netflix, Amazon

Prime, AirtelTV

City: Bangalore

"I can't even think of when was the last time I did a download, because I watch everything that I want to. I pay for the content, because of the easy availability of it."

Platform choice



Genre choice



Willingness to pay premium



WHAT DOES HE LIKE TO WATCH?

- Preferred genres: Web series, movies
- Web series on Amazon Prime and Netflix
- Movies on Airtel TV
- Content in Tamil language

PAIN-POINTS

- Buffering and freezing of content on the app
- Lag in videos on the app

EARLY ADOPTER

INFLUENCES FOR WATCHING

- Sci-fi and fantasy, horror, and crime
- Content in Tamil language
- Content in High Definition



WATCHING ACROSS A DAY



Context: After waking up
Content: News in regional language
Platform: TV
Screen time: 30 mins



Context: Short breaks during transit and office hours
Content: Serials, animated shows, YouTube Clips
Platform: YouTube, Netflix, Amazon Prime
Screen time: 1 hour (across day)



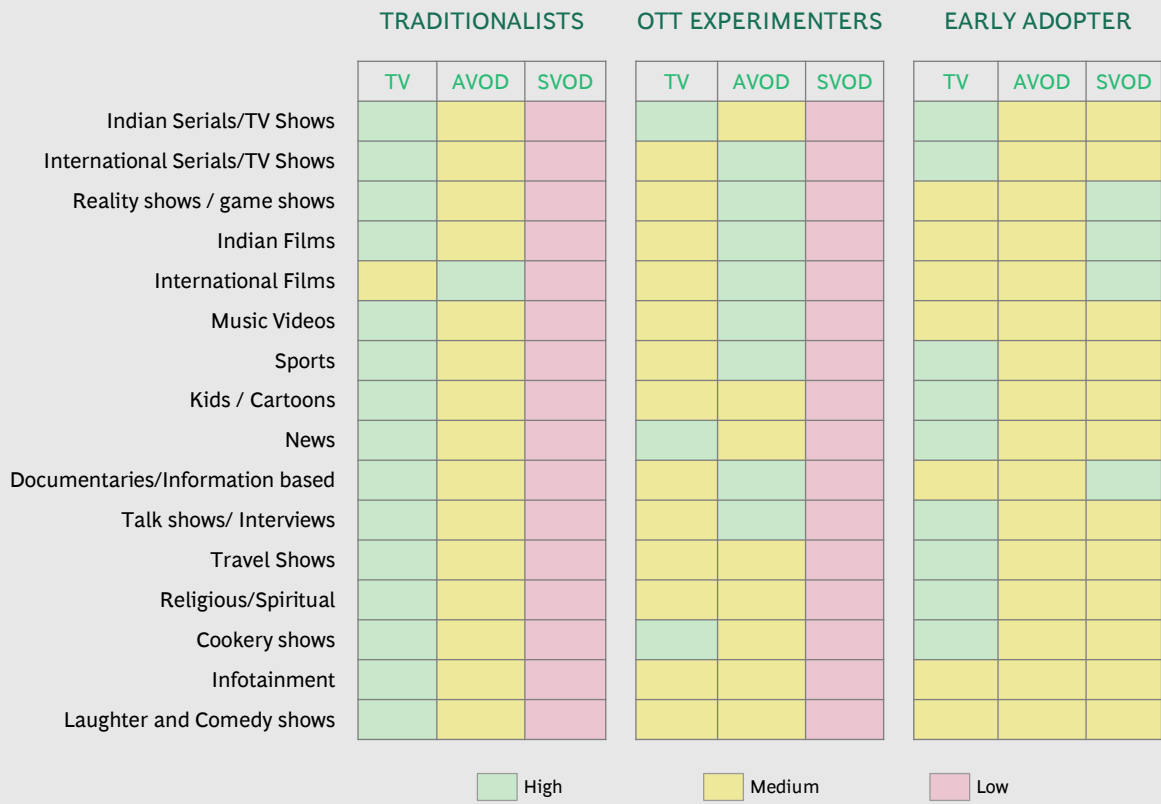
Context: Late night watch session
Content: Serials, animated shows, movies
Platform: Amazon Prime and Netflix
Screen time: 2 hours

Key Reasons for SVOD Use:

Access to favorite content in high definition

Source: In-Person Interview.

EXHIBIT 27 | Preferred Platforms for Genres for the Three Archetypes



Sources: Consumer Research, BCG analysis.
 Q: On each of the following that you use, which of the following genres do you watch
 N= ~5000
 High: Above 45% Medium: 15-40% Low: Below 15%

sions such as watching in short breaks during work (as shown in Exhibit 28). The discontinuation of AVOD is primarily driven by three reasons: the undifferentiated value proposition of AVOD content; the inclination against ‘small-screen’ devices as a viewing platform (after experimenting with these platforms; and the high consumption of data and mobile-battery life by AVOD apps (as shown in Exhibit 29).

Eighty eight percent of consumers are aware of at least one more AVOD app in addition to primary OTT (which is Youtube in most cases). There is also a healthy 48 percent trial / uptake with consumers choosing to use AVOD apps (as shown in Exhibit 30). Due to the vast content offering on the many available AVOD apps, consumers are quick to move past the apps they don’t like, as evidenced by the fact that over 25 percent of AVOD users delete their apps in order to

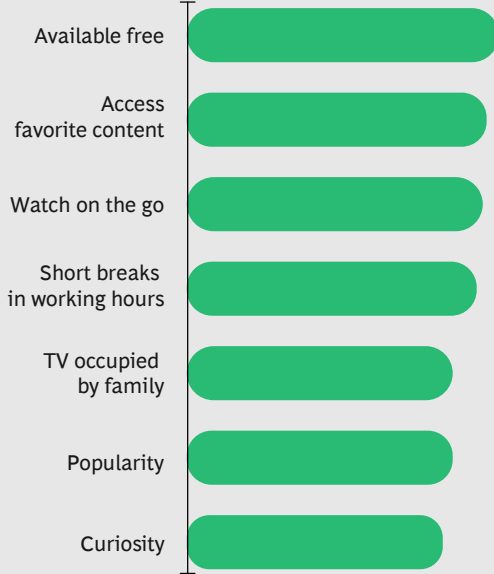
replace them with other apps (as shown in Exhibit 30).

VALUE-FOR-MONEY—KEY DRIVER BEHIND CHOICE FOR SUBSCRIPTION PLATFORMS

With so much content available freely, consumers who subscribe for video content seek value for the money they invest in SVOD. Consumers want to conveniently access their favorite content. Hence, when it comes to choosing SVOD apps, desire for popular and exclusive content and ease of use of the app drives installations (as shown in Exhibit 31). While there is an overall discomfort against subscription charges, in both the experimenters and early adopters, ‘not value-for-money’ is the primary reason for the discontinuation of SVOD apps. Research indicates that the top reasons for deleting SVOD apps are high subscription charges, and better content, sometimes with free access, elsewhere. Consumers demand justification for the premium

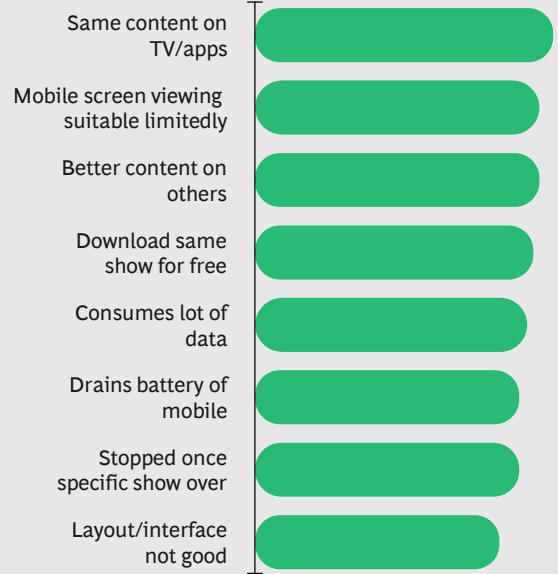
EXHIBIT 28 | AVOD Consumers Want to Access Favourite Content for Free, However Uninstall Due to Undifferentiated Content and Poor Experience of Watching

% AVOD CONSUMERS
REASONS TO INSTALL AN AVOD APP



Range of responses: 45% to 55%

% AVOD CONSUMERS
REASONS TO UNINSTALL AN AVOD APP

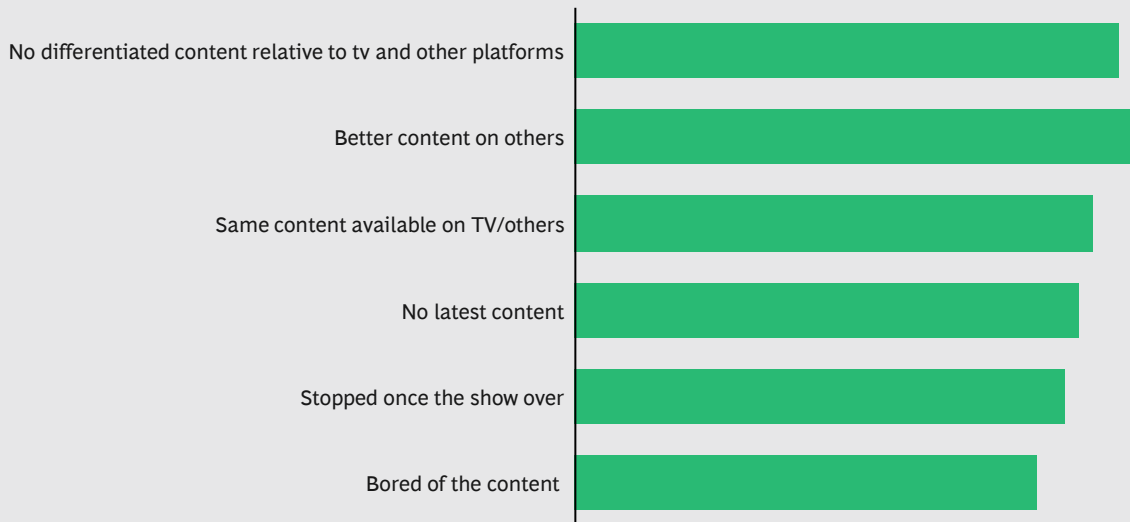


Range of responses: 36% to 44%

Source: Consumer Research, BCG analysis
Q: What are your key reasons to install the app?
N= ~5000

EXHIBIT 29 | Key Deterrent for Heavier AVOD Usage: Content not Customized for "Small Screen" Consumption and Undifferentiated Relative to Traditional Platforms Like TV and Others

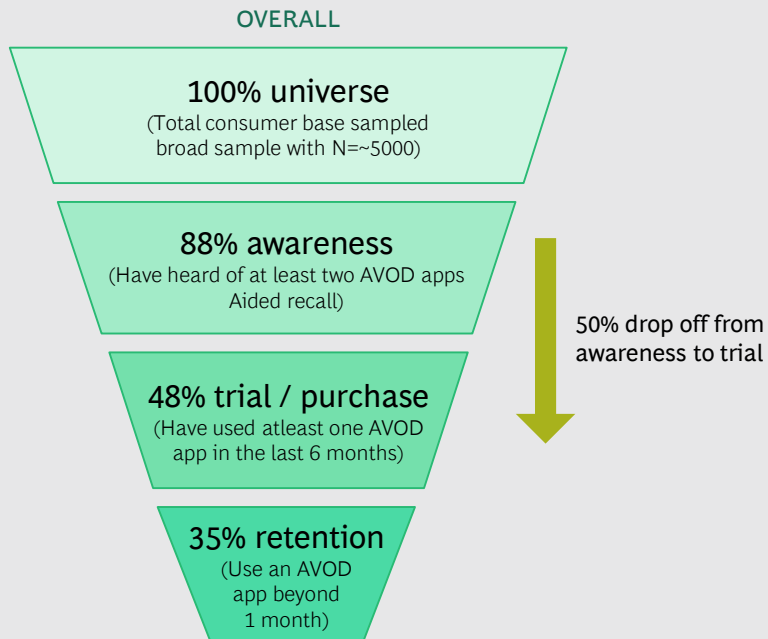
AVOD NON USERS (%)



Range of responses: 34% to 40%

Sources: Consumer Research, BCG analysis.
Q: What are the key reasons for you to not use apps?
N= ~5000

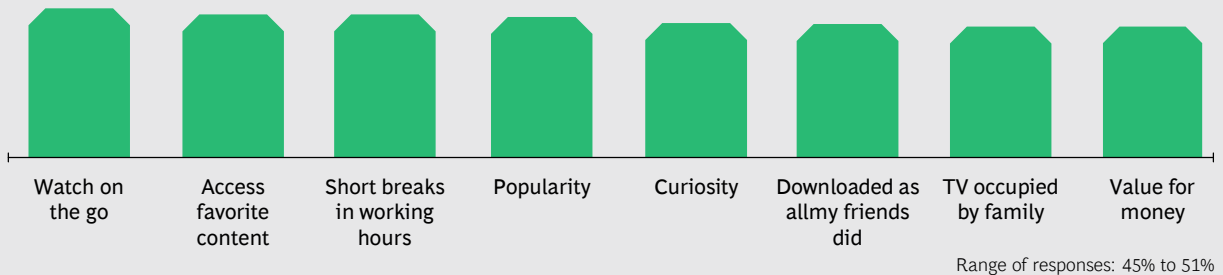
EXHIBIT 30 | Healthy Consumer Funnel for AVOD



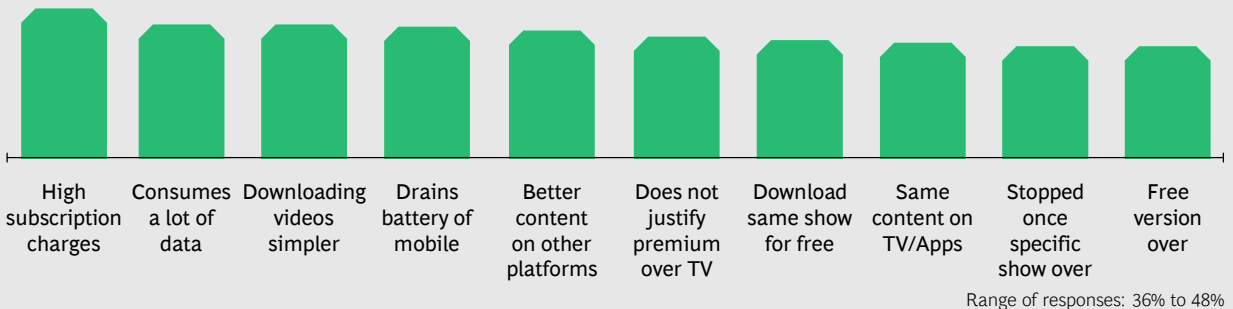
Source: Consumer Research, BCG analysis
 N= ~5000
 AVOD apps considered for the analysis are Airtel/Vodafone TV, Hotstar, Jio Cinema/TV, SonyLIV and Voot

EXHIBIT 31 | SVOD Drivers for Choice: Driven by Favorite Content and Popularity

% SVOD CONSUMERS REASONS FOR INSTALLING AN SVOD APP



% SVOD CONSUMERS REASONS FOR DELETING AN SVOD APP



Source: Consumer Research, BCG analysis
 Q: What are your key reasons to install the app?
 N= 1322 SVOD heavy users

charged by current OTT platforms, and hence, there is a need to establish a distinct value proposition for them to continue paying subscription charges for content (as shown in Exhibit 31).

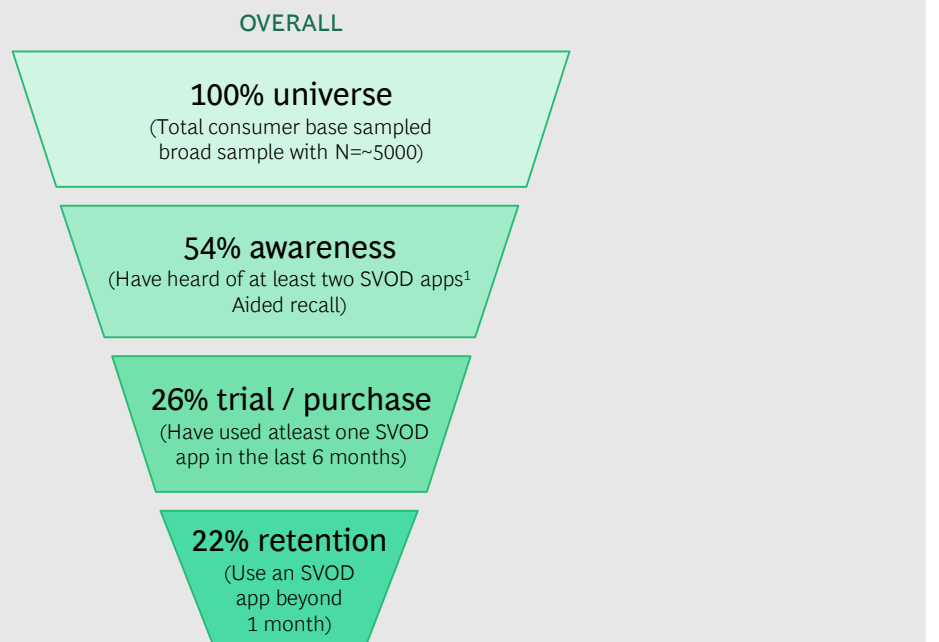
The key drivers for subscribing to SVOD platforms are access to favorite content, popularity and curiosity—quite different from the reasons for which viewers install AVOD apps. The issue among consumers seems to be one of “value for money”. Similarly it indicates why many consumers do not subscribe to SVOD in the first place (as shown in Exhibit 33).

SVOD apps have a healthy consumer funnel, with over 50 percent awareness (even when awareness is more tightly defined as recall of at least two SVOD apps) with over 25 percent using an SVOD app in the last six months. Four percent of the overall sample discontinued the use of their SVOD apps which is ~15 percent compared to those who have tried an SVOD app (as shown in Exhibit 32). The funnel indicates several implications for SVOD players:

- Improve awareness—create broader recognition among consumers.
- There is a 50 percent drop-off between recall and trial / purchase.
- Improving retention / reducing churn important for sustainable growth of user base.

In summary, consumer journeys are complex and evolving. They involve multiple decision points both as triggers for use and discontinuation of use. It is clear that platforms need to evolve and communicate a distinct offering to attract, and more importantly, continue to retain consumers. The Digital viewing behaviors are similar across consumer demographics. However, it is clear that consumers are willing, able and increasingly experimenting with online video viewing in the course of their normal day. India, therefore, is on the cusp on an online view boom which is likely to become the new norm—if players can create distinct propositions.

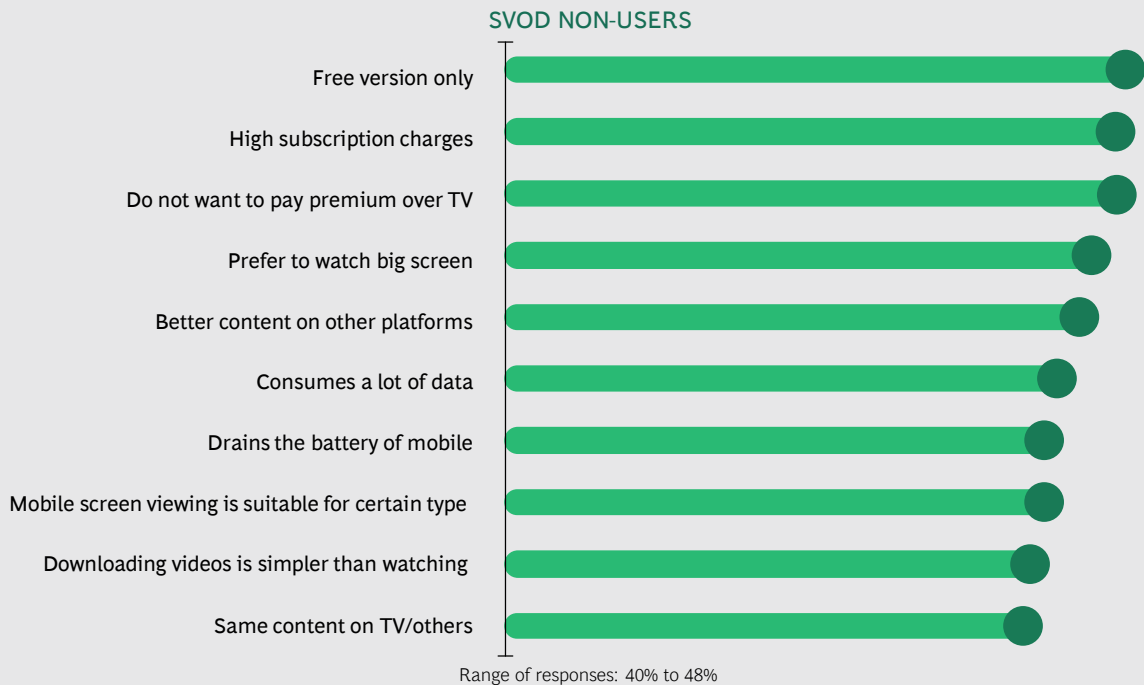
EXHIBIT 32 | Healthy Consumer Funnel for SVOD



Sources: Consumer Research, BCG analysis.
N= ~5000

¹SVOD apps considered for the analysis are Amazon Prime, Hoichoi, Hotstar Premium, Netflix, and Zee5 Premium

EXHIBIT 33 | Key Deterrent for SVOD—"Value for Money"



Sources: Consumer Research, BCG analysis.
 Q: What are the key reasons for you to not use apps?
 N= 3670 SVOD non-users

Regional Content as a Key Need Voiced By Consumers

With the diversity in India with its 22 official languages, content in regional languages has always been important. Historically, this preference can be seen in the circulation of newspapers. In the top 15 dailies (by circulation), seven are regional newspapers. In the last decade, circulation of newspapers in Hindi and vernacular language has grown at 8 percent, faster than English dailies, which grew only at 2 percent, as literacy numbers have climbed up across India. Content in regional languages is a part of the lives of consumers today (as shown in Exhibits 34 and 35).

STRONG PREFERENCE FOR REGIONAL LANGUAGE CONTENT AMONG CONSUMERS

In a survey of ~5000 consumers in India, over 40 percent of consumers said that they prefer content in regional languages, indicating the strong preference for regional language in the country (as shown in Exhibit 36). Consumption of content in regional languages has already seen a tremendous increase, with increasing demand and content offerings in regional languages. OTT players in India are

already recognizing this opportunity by adding specific regional content libraries to their product offerings.

OTT PLATFORMS HAVE ALREADY STARTED ON THE PATH TO REGIONAL CONTENT

Many OTT players are gearing up to tap into the regional opportunity. OTT players exclusive to regional languages and originals such as Bangla content-centric Hoichoi and Sun NXT, which has a library in Tamil, Telugu and Kannada, have already begun to emerge. There are many OTT players that are currently releasing originals in local languages. Hotstar ran an original show in Tamil, 'I'm Suffering from Kadhal, AltBalaji has original shows in Bangla and Tamil, while SonyLIV created shows in Gujarati (Kacho Papad Pako Papad,) and Marathi (Yolo).

While some OTT players are already operating in the local space, many global and broadcaster OTT players also have plans in place to invest in local content. Zee5 plans to release 90+ originals across 12 languages by 2019, and Netflix plans to release at least 10 original shows and movies annually in India. Am-

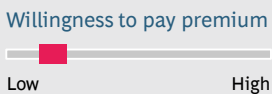
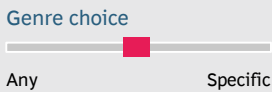
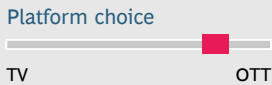
EXHIBIT 34 | Sample Profile—Power User with Regional Preference

SUPER USER WITH KANNADA LANGUAGE PREFERENCE



Spoothi, 22

Occupation: MBA Student
Daily screen time: 2 to 3 hours
OTT apps: YouTube, Jio TV, Jio Music, Voot, Wynk
Devices: Mobile (Oppo), Tab (Apple), Laptop (Lenovo)
City: Bangalore



NEEDS

- Reality shows, Kannada, Tamil and Telugu movies and music
- Needs only Kannada serials as Pitta Gowrie Mauve and Radha Ramana
- Religious serials like Shani and MahanKali are a win for her
- "Basically I watch only Kannada stuff"

PAIN POINTS

- Doesn't opt for Global OTT apps since she needs local content—"Again, not a lot of local language and again same with lot of Hollywood and Bollywood"
- Doesn't want to watch long ads
- Doesn't want to pay as content she likes is freely available

INFLUENCES

- Actors in serials of Colors Kannada suggesting to download Voot
- Celebrities in Tent Pole properties-Bigg Boss in her case



A DAY IN HIS/HER LIFE



Context: On the way to college in a bus
Content: Kannada Daily Soaps-Shani and MahanKali
Platform: Voot, Jio TV
Screen time: 30 mins



Context: Coming back from college to home on bus
Content: Music
Platform: Jio Music, Wynk, Offline music
Screen time: 45-60 mins



Context: Spending time with parents through TV
Content: Music, nothing specific, flip channels
Platform: TV
Screen time: 30 mins



Context: After dinner, watching movies or videos
Content: Old Bigg Boss seasons, Movies
Platform: Youtube, Voot
Screen time: 1 hour

Source: In-Person Interview.

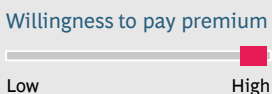
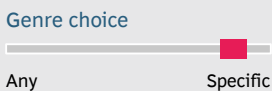
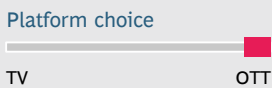
EXHIBIT 35 | Sample Profile—Power User with Regional Preference

"GIVEN A CHOICE, WILL ONLY CONSUME KANNADA"



Prajwal, 24

Occupation: Student
Daily screen time: 5 to 6 hours
OTT apps: Netflix, Amazon Prime, JioTV
Devices: Mobile, Laptop
City: Bangalore



NEEDS

- Prefers web series, movies
- Pursues Kannada content "If I am given a choice, I prefer Kannada only"
- Needs subtitles for other south languages—"Telugu and Tamil movies I do not understand in theatre. But, those will be good movies, if you go to online, we get subtitles on.. Amazon Prime"

PAIN POINTS

- Uninstalls OTT apps due to unattractive app interface and high loading time—"We cannot forward it as much as we want. Those things irritated me."
- Faced low storage space on phone so uninstalled heavy apps "If I run two apps at the same time, one app gets stuck"

INFLUENCES

- Friends in metro city suggesting new apps
- Specific actors and movies—"Wills Smith movie was released. I wanted to watch that movie.. So, I & my friend subscribed for Netflix"
- Curiosity of exploring new and popular content



A DAY IN HIS/HER LIFE



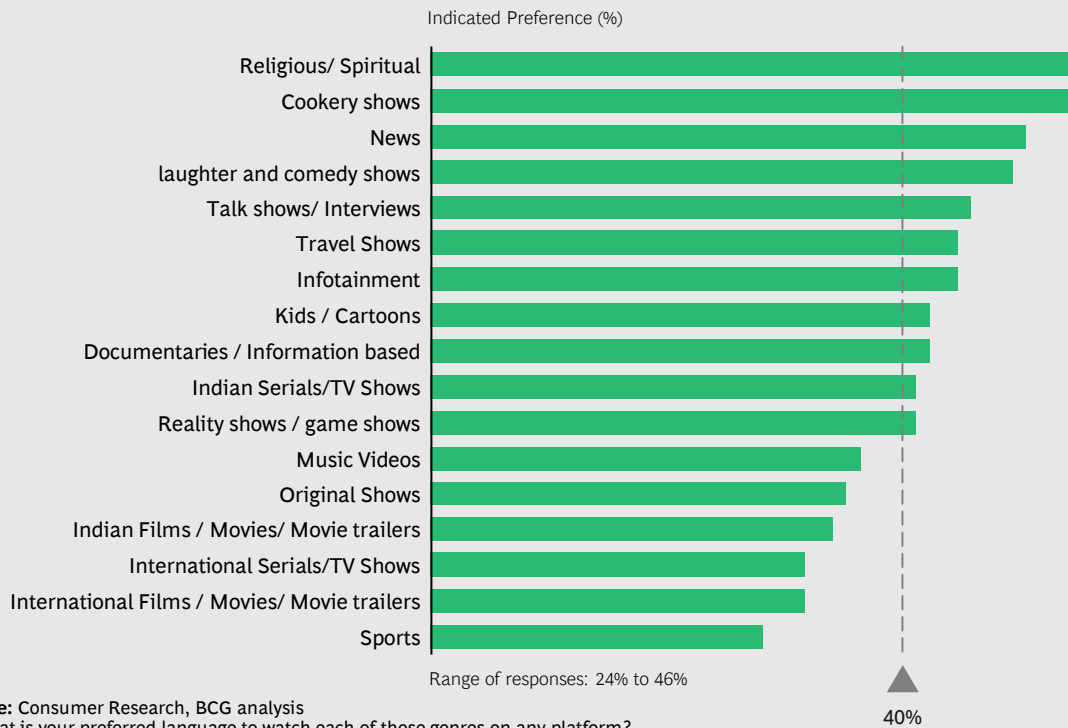
Context: After reaching home from college
Content: Movies, shows and online clips
Platform: Netflix, Amazon Prime, JioTV
Screen time: 1 hour



Context: Late night binge watching sessions
Content: Movies and web series
Platform: Netflix, Amazon Prime, JioTV
Screen time: 4-5 hours

Source: In-Person Interview.

EXHIBIT 36 | ~ 40% Consumers Indicate Preference for Content in Regional Languages



Source: Consumer Research, BCG analysis
 Q: What is your preferred language to watch each of these genres on any platform?
 N= ~5000

Amazon Prime recently announced a content library in Kannada, as the sixth regional language to have a dedicated content library.

In summary, there is a high latent demand for regional language content already in India. If players invest well in this space, it will bring many more consumers into the OTT space who are perhaps consuming content today on the more traditional channels or standing at the fringe.

App Combinations have a Long Tail—Need to be in the Top three Apps to Gain Scale

The Indian OTT market is hyper-competitive and has attracted various players, from major broadcaster-backed apps to apps that only cater to specific regional content.

Over 80 percent of users use three apps or less, and the share of users using over four apps is low and drops off. App-combinations are diverse and have a long tail. The top 2-app combination has only a 13 percent share in users, while the next 2-app combina-

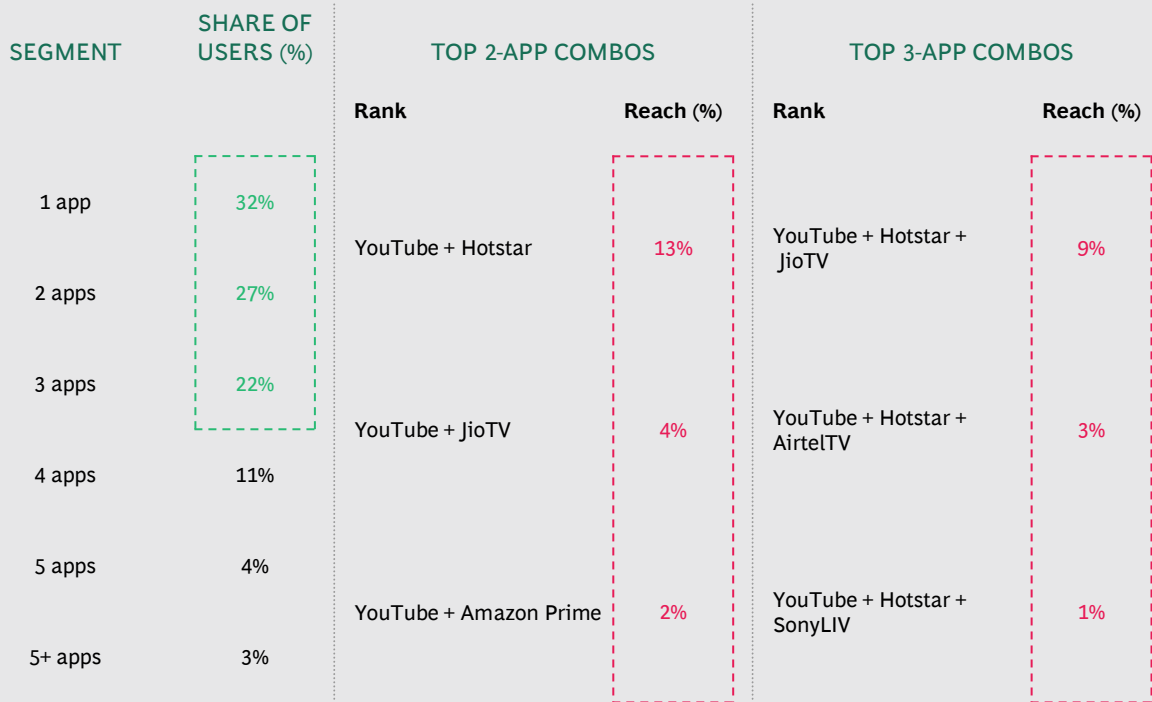
tion only has a 4 percent user share. Similarly the top 3-app combination has a 9 percent user share, and the next 3-app combination has only a 3 percent share (as shown in Exhibit 37). The single app consumers are currently almost fully on YouTube.

There are several implications for players:

- Breaking the clutter to create a differentiated proposition that can enable them to be among the top 3 VOD apps.
- Chances for potential consolidation in the long tail as apps fight to be the top three on consumers’ devices.

This long tail of apps creates significant clutter, making it difficult to differentiate between the content offerings of the various OTT players. Consumers today are quick to move past the apps they don’t like, and delete an unused app within seven days on average. These uninstallations are driven by the huge clutter. Awareness of available propositions continues to be a challenge, and the discovery of new OTT apps and content will be clouded due to this

EXHIBIT 37 | Most Consumers have 1-3 Video Apps on Their Smartphone...



... and app combinations have a long tail

Sources: BCG analysis, Nielsen Panel of ~15000 smartphones recorded from Q2 '16 to Q2 '18.

clutter. In this landscape, OTT players will need to stand out to differentiate themselves. In a space with an abundance of multi-content OTT apps, players with ‘specialized’ content, such as exclusively sports or exclusively kids, content, will have an advantage and will be more likely to stand out. Breaking this clutter and emerging as a top 3 app will be the winning agenda for OTT players.

“Hero” Content Can Get Consumers on the Platform But Does Not Retain All of Them

Consumption on OTT apps spikes dramatically with ‘hero’-content such as the Indian Premier League (IPL), Kaun Banega Crorepati (KBC), etc. as ‘hero’ programs have a very high demand among consumers. The usage of Hotstar doubled in April '18, while usage became 5x for Airtel TV, due to the high demand and popularity of IPL. Voot saw a consumption spike with the release of

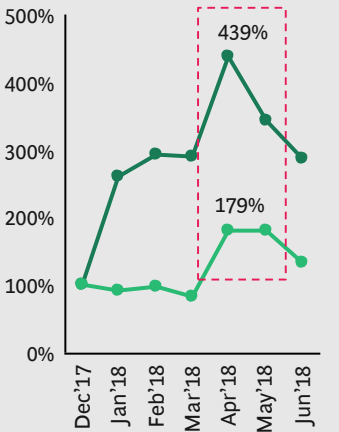
the 11th season of Bigg Boss. SonyLIV first saw a surge in consumption with the start of the 2018 FIFA World Cup, and also saw a surge when the 10th season of KBC began streaming (as shown in Exhibit 38). The introduction of the play-along feature allowed a higher engagement of the audience for this show.

However, ‘hero’-content cannot retain users on these OTT apps post conclusion of the preferred show / content unless consumers get deeply engaged in other content on the platform. The consumer survey indicated that 36 percent of users who deleted SVOD apps cited that they stopped when a specific show concluded as one of the key reasons, and over 40 percent mentioned finding better content as one of the key reasons. We arrive at a similar conclusion for app-wise analysis Exhibit 39 indicates this phenomenon among each of the top 3 SVOD apps in India (Amazon Prime, Netflix and Hotstar Premium).

EXHIBIT 38 | Consumption Spikes with Hero Content

IPL: APRIL '18 TO MAY '18

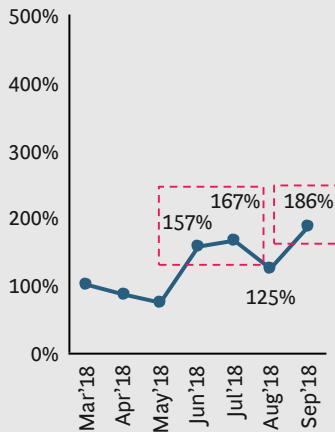
Change in consumption (%)



● Airtel ● Hotstar

FIFA WC: JUN '18-JUL '18
KBC S10: SEP '18 ONWARDS

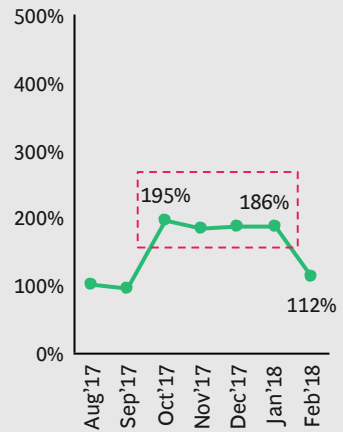
Change in consumption (%)



● Sony LIV

BIGG BOSS S11: OCT '17 TO JAN '18

Change in consumption (%)

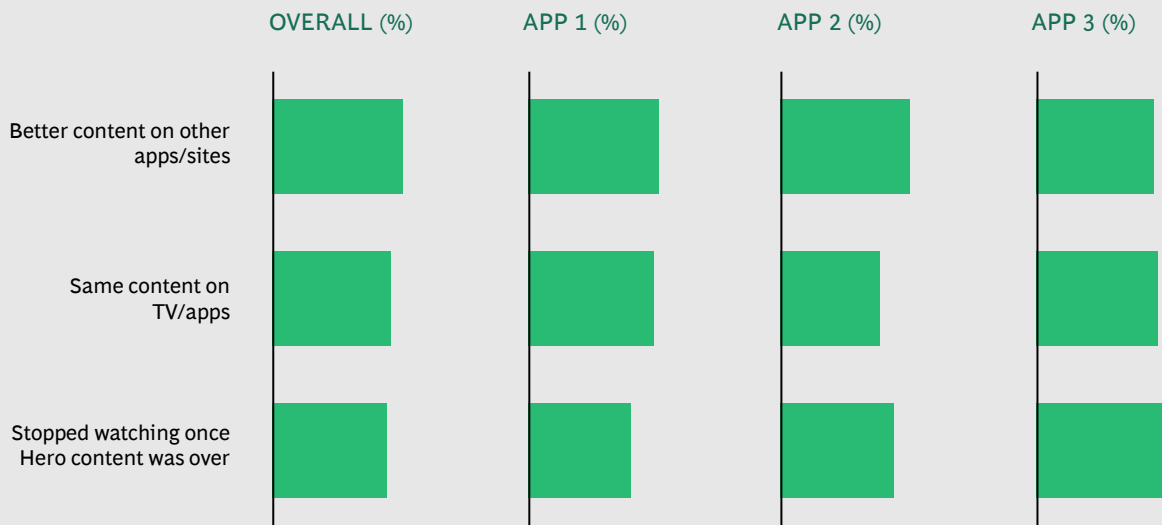


● Voot

Sources: BCG analysis, Nielsen Panel of ~15000 smartphones recorded from Q2 '16 to Q2 '18.

Notes: Change in consumption is measured by the change in reach of the app across months; Reach defined as % of app-installers who use the app in the month; IPL - Indian Premier League, KBC - Kaun Banega Crorepati.

EXHIBIT 39 | Better Content Elsewhere Drives Consumers Away When Hero Content Finishes



Range of responses: 34% to 45%

Sources: Consumer Research, BCG analysis.

Q: What are your key reasons to uninstall the app?

N= 189 SVOD lappers

Note: Apps considered are Amazon Prime, Hotstar Premium and Netflix

The smartphone panel data analysis also indicates a drop in the total installed apps post consumption of “hero”. There are only a few illustrative examples only, which indicate that the users who only used an app for a particular program will tend to drop-off after the program concludes. OTT players will need to ensure that their content caters to specific consumer preferences, to entice these consumers into continued usage of the OTT app, even post the conclusion of the ‘hero’-content by helping them discover similar content which is likely to keep them engaged on the platform for longer.

Marketing Challenge is High, Awareness Low for OTTs

A key barrier for OTT players is the awareness of the apps among consumers.

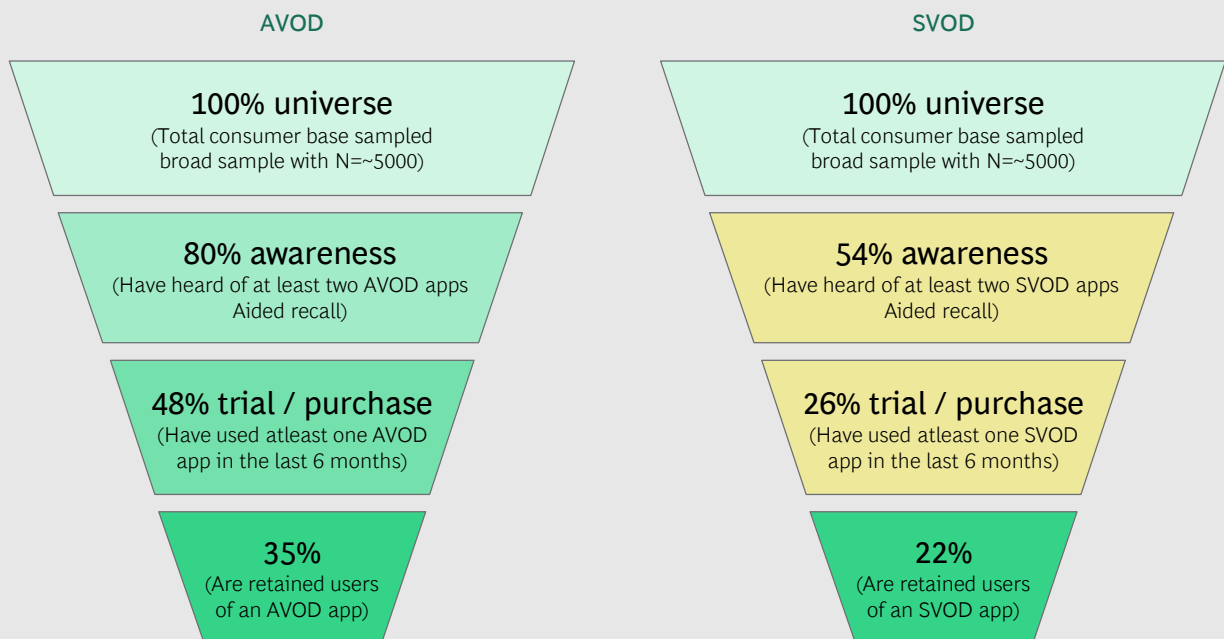
While the overall awareness about AVOD apps among consumers is 80 percent, the awareness about SVOD apps is only 54 percent. However, the awareness about trial / purchase is similar at 50 percent (as shown in

Exhibit 40). This indicates that SVOD penetration still requires a much higher marketing effort to build awareness and a differentiated proposition in the mind of the consumer.

The awareness of OTT apps is different for various segments of population. Females, for example, have lower than average awareness of various OTT apps, for both SVOD and AVOD (as shown in Exhibits 41 and 42). This difference in awareness indicates that marketing strategies will need to be tailored to cater to the various population segments; this will result in a significant jump in awareness and a subsequent rise in the use of OTT apps.

The low awareness of apps among consumers poses a significant hurdle. The benefit of investing in content for relevant markets will not be realized if the content doesn’t reach the consumer. There is a significant need to increase awareness about the OTT apps and content offerings. Overcoming the awareness barrier will be key in realizing the \$5 billion opportunity of the Indian OTT Market.

EXHIBIT 40 | Lower Awareness is a Hurdle for SVOD Players

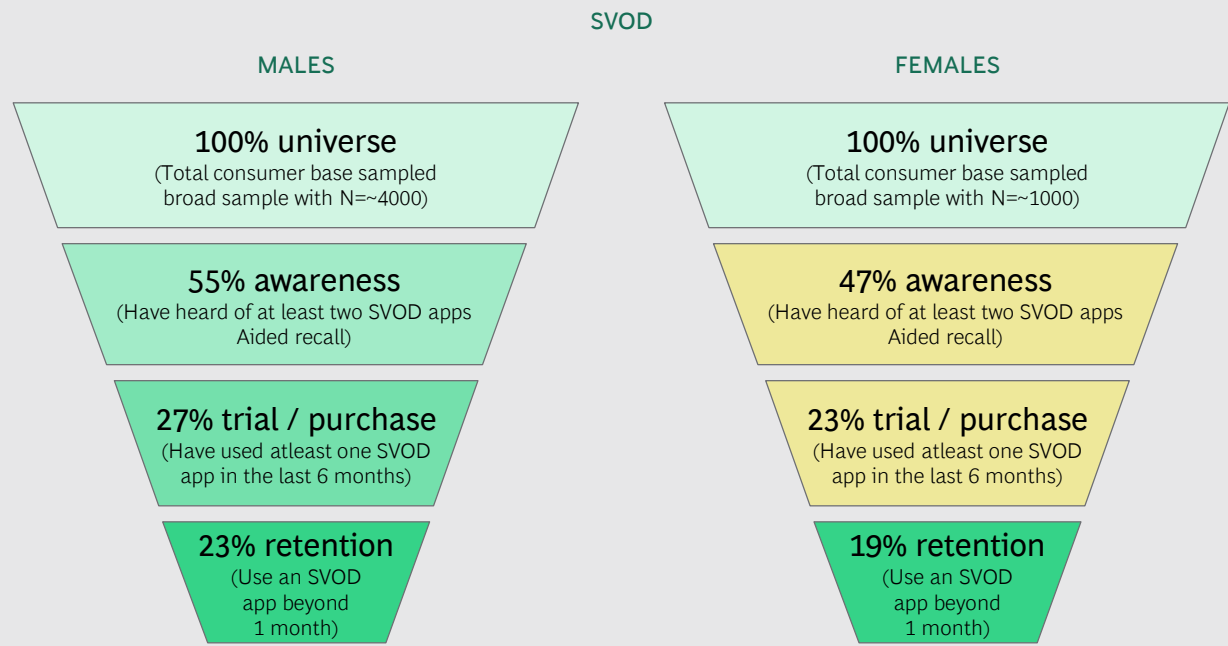


Sources: Consumer Research, BCG analysis.
N= ~5000

¹AVOD apps considered for the analysis are Airtel/Vodafone TV, Hotstar, Jio Cinema/TV, SonyLIV and Voot

²SVOD apps considered for the analysis are Amazon Prime, Hoichoi, Hotstar Premium, Netflix, and Zee5 Premium

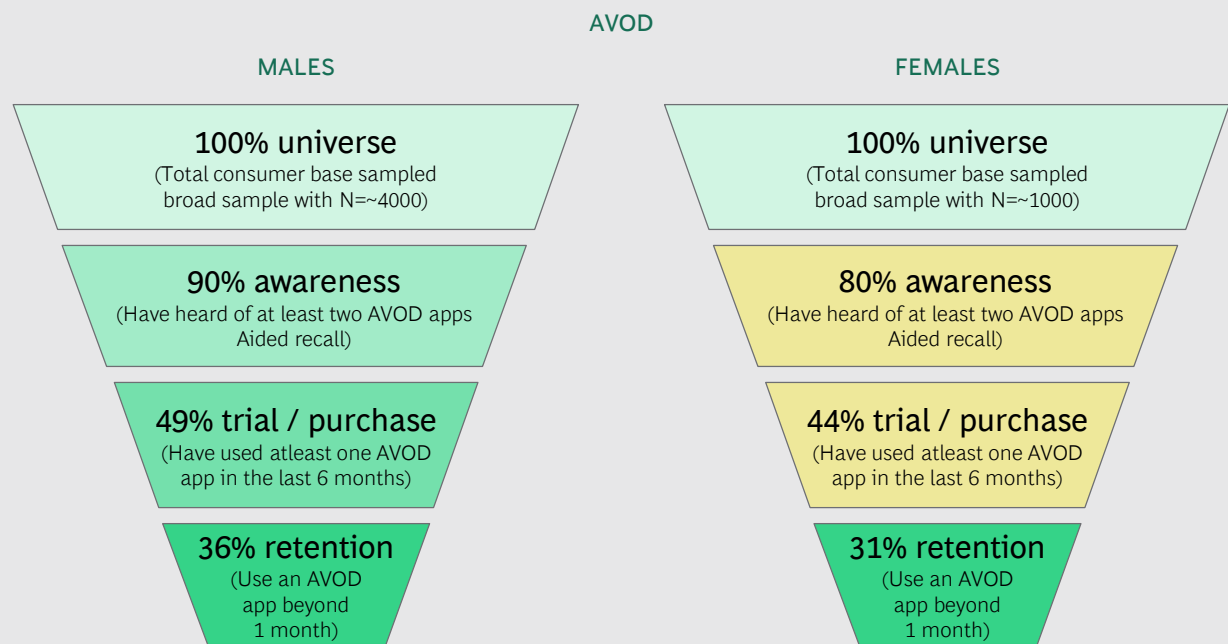
EXHIBIT 41 | Lower than Average Awareness and Uptake in Females



Source: Consumer Research, BCG analysis
N= ~5000

¹SVOD apps considered for the analysis are Amazon Prime, Hoichoi, Hotstar Premium, Netflix, and Zee5 Premium

EXHIBIT 42 | Lower than Average Awareness and Uptake in Females



Source: Consumer Research, BCG analysis
N= ~5000

¹AVOD apps considered for the analysis are Airtel/Vodafone TV, Hotstar, Jio Cinema/TV, SonyLIV and Voot

Music Has Traditionally Not been a Large Opportunity, However, It Does Attract Eyeballs

The music market in India is evolving. India has typically struggled with a device constraint. However, with every smartphone being used as a music playing device, this constraint has been lifted. While the market size in revenue terms continues to be small, there are ~100 million digital audio streaming users in India already. There are 4 apps that have really gained prominence for music in addition to YouTube, which serve the purpose of watch and listen (as shown in Exhibit 43).

Accordingly, many players in the ecosystem are investing in music (as shown in Exhibit 44). In general, music apps have been seeing a growing trend among smartphone users in India. There are a few distinct characteristics of music apps emerging:

- Most music apps are “self-discovered” as found in a Google survey. This highlights a much higher need for awareness. Targeted marketing by music-focused players will allow these players to gain significant

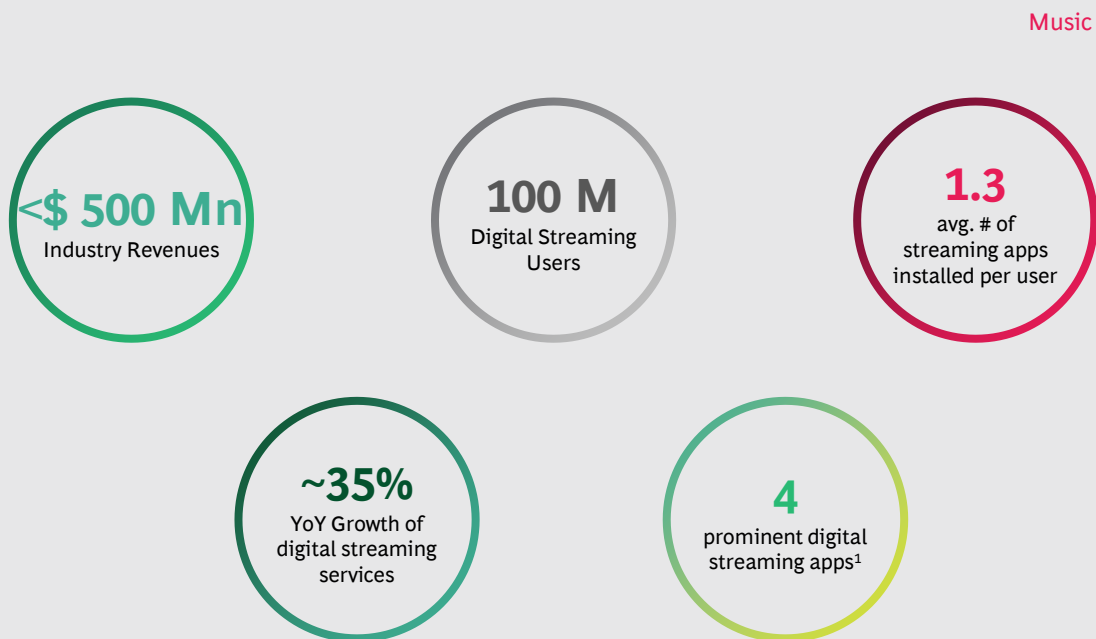
headway in this space (as shown in Exhibit 45).

- Over 50 percent of Google users surveyed indicated that they are willing to pay for music; this is really over-indexed compared to all other forms of content (as shown in Exhibit 46).

In India, as in the case of video, regional content emerges as an important genre for music as well—though English and Bollywood dominate. This indicates that it is possible to create more niche offerings with music platforms (as shown in Exhibit 47).

In summary, music can be an important “layer on” opportunity for players. Digital has already taken over from all physical recorded music, album downloads, and mobile based personalization to emerge as the largest segment. However, consumer awareness is low and there is a need for innovation in marketing to really penetrate a newer set of consumers and bring into fold the “paying consumers”.

EXHIBIT 43 | Indian Music Industry—by the Numbers

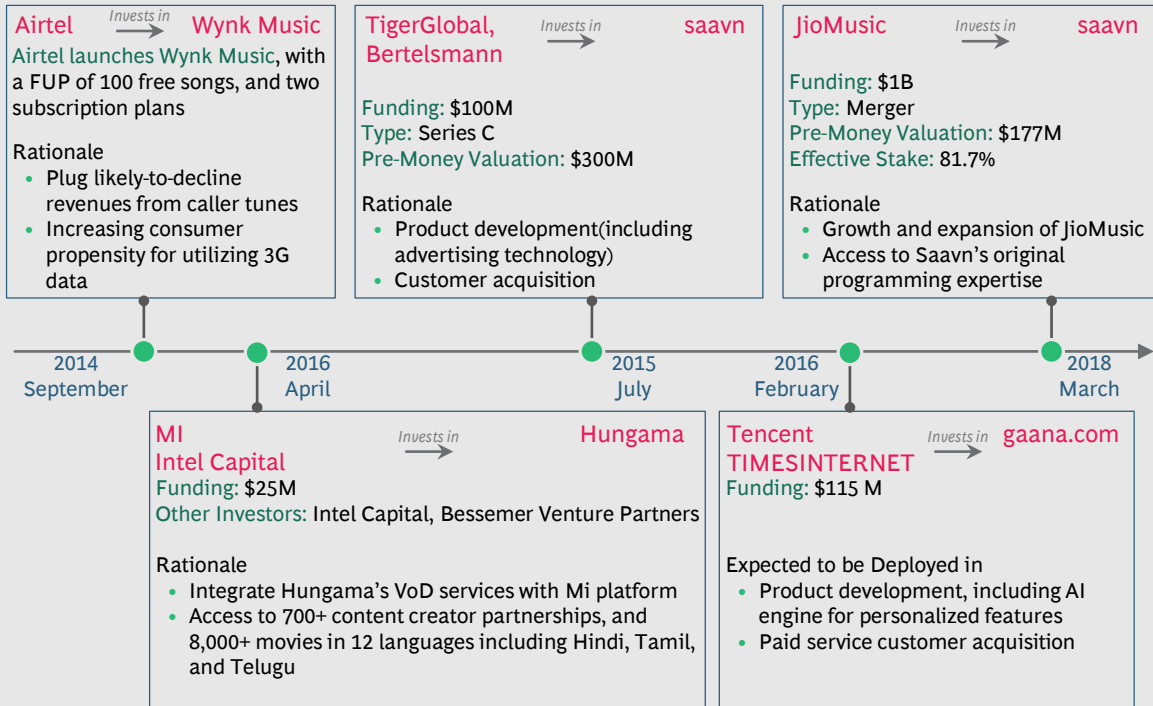


Source: IFPI Global Music Report 2018, BCG analysis

Note: All figures above are for FY17

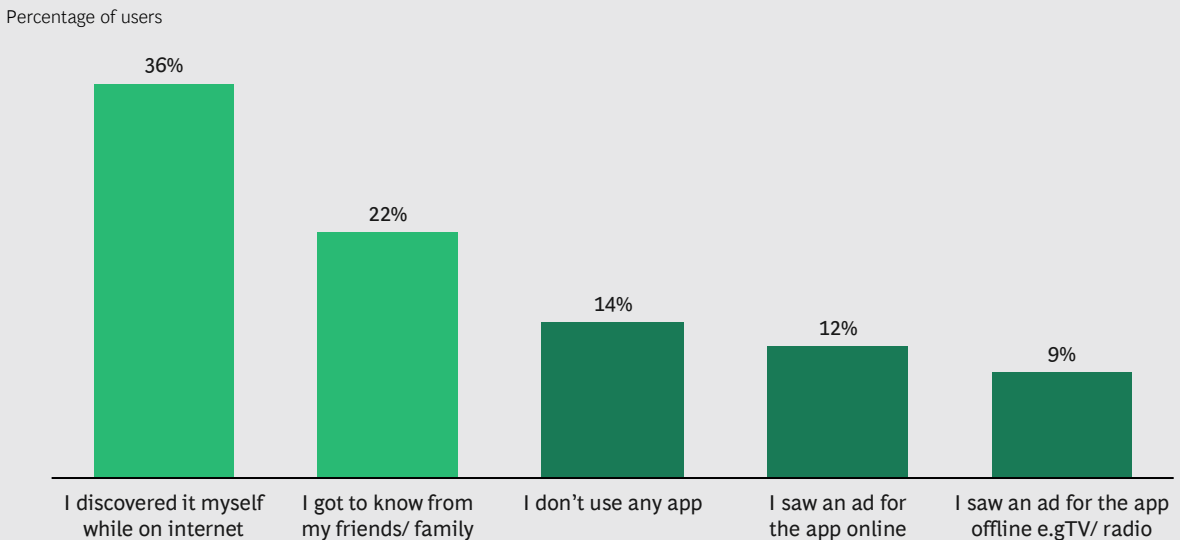
¹4 prominent apps: Gaana, JioMusic, WynkMusic and Saavn.

EXHIBIT 44 | Strategic Investments have been made by Telcos and Internet Focused Companies in Music Streaming Services



Source: Crunchbase, Press Search, BCG analysis.
 Note: VoD = Video on Demand, FUP = Free Usage Policy

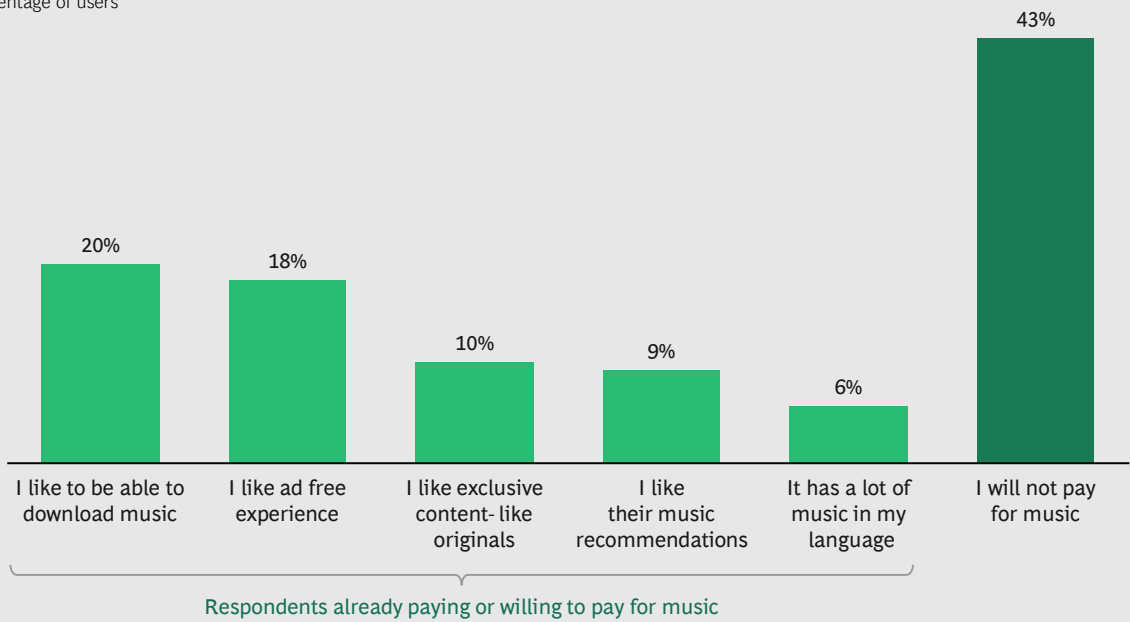
EXHIBIT 45 | Self-discovery Emerges as Top Reason Behind the Adoption of Music Apps / Sites
 Distinct Need for Enhancing Awareness, Digital Marketing, Reaching Consumers



Sources: Google Consumer Survey, BCG analysis.
 Q: How did you start using the app/site you use for listening to music?
 N= 706
 Note: 17% answered None of the Above

EXHIBIT 46 | Higher Propensity to Pay Among Music Consumers Already

Percentage of users



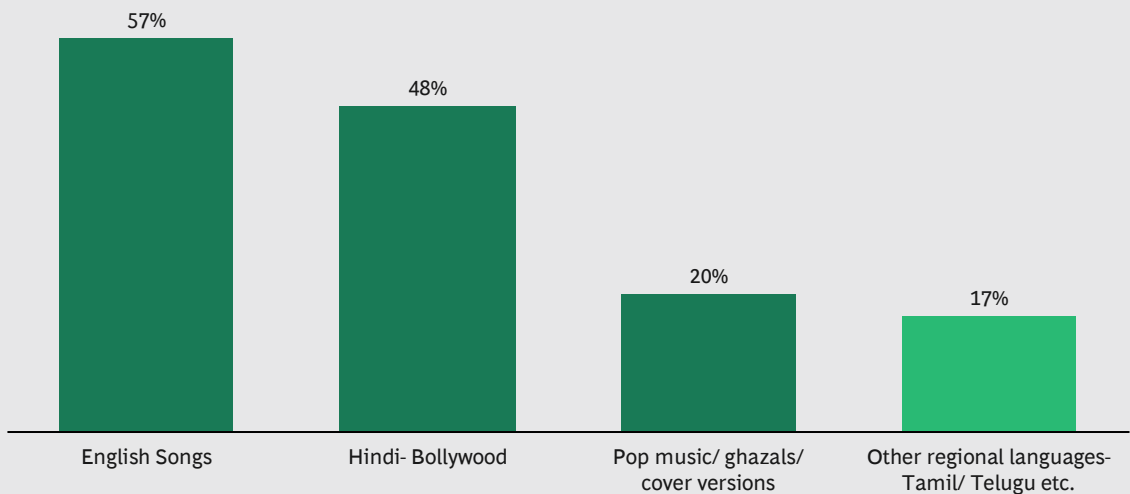
Sources: Google Consumer Survey, BCG analysis.

Q: Do you pay or intend to pay for music subscription? If so, what are the reasons for paying?
N= 706

Note: 19% answered None of the Above

EXHIBIT 47 | Music is Dominated by English and Bollywood

Percentage of users



Source: Online survey of Google users.

Q: What kind of music do you mostly listen to?
N= 706

INTERNATIONAL OPPORTUNITY FOR INDIAN CONTENT

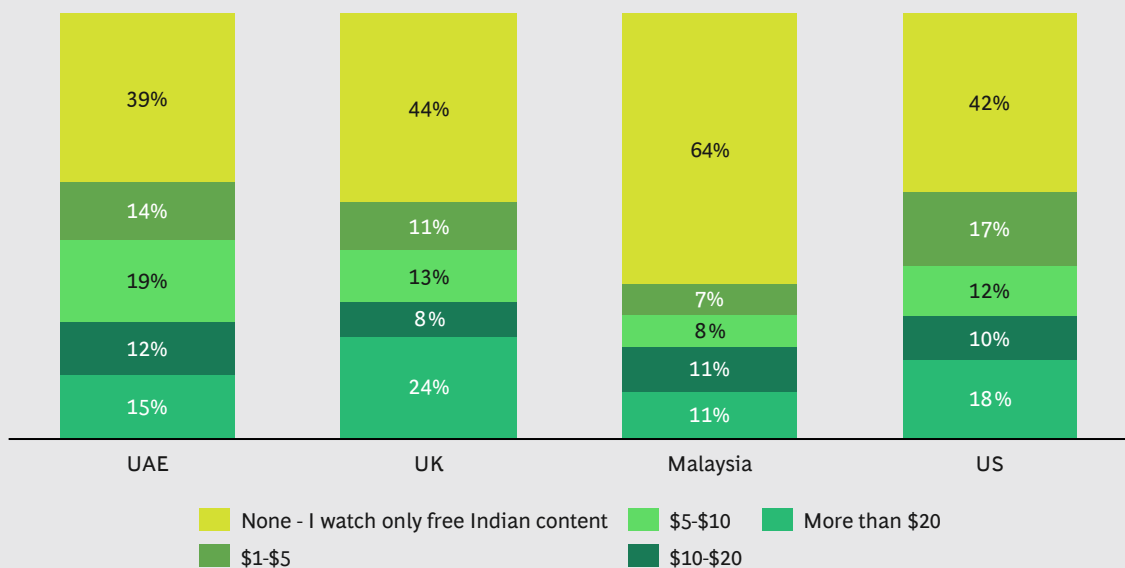
SERVING THE INDIAN DIASPORA

INTERNATIONAL MARKETS HOLD A significant opportunity for players in India. The innate demand for consuming Indian content on apps is already high as the Indian diaspora population of over 30 million is already consuming Indian content and is well attuned to OTT usage and paying for content. We conducted a survey among Google consumers (n=~2000) with viewers across UAE, UK,

Malaysia and the US to understand the demand for Indian content and consumer preferences. The demand for Indian content in international markets is clear as the survey indicated that over 50 percent of international watchers pay for Indian content in some form or the other, with ~15 percent paying over \$20 monthly to access Indian content (as shown in Exhibit 48).

EXHIBIT 48 | ~50% of Respondents on an Average Already Paying for Indian Content

Respondents who watch Indian content (%)



Sources: Google Consumer Survey, BCG analysis.

Q: How much money do you spend a month on average on watching Indian content?

N= ~100 from UAE ~200 from UK ~100 from Malaysia ~300 from US

The survey revealed a few stark facts:

- Low awareness of Indian OTT apps
- Consumption of Indian content is primarily through global OTT players
- Contrary to popular belief, cricket is important but not the primary source of consumption

Low Awareness of Indian OTT Apps

Users are largely unaware about Indian OTT players who are available internationally. Fewer than 20 percent of respondents reported that they have heard of top Indian OTT apps (as shown in Exhibit 49). This indicates that a strong content library solely isn't enough to tap into the international markets. There is a need to fill this awareness gap to tap into this opportunity.

Consumption of Indian Content is Primarily through Global OTT Players

The advantage of high awareness of OTT apps is demonstrated by the high proportion of global OTT players, as consumption of Indian

content is primarily through global OTT apps such as YouTube and Netflix (as shown in Exhibit 50). Users in international markets watch more on these OTT platforms than on TV. There is a sizeable opportunity at stake here for OTT players to tap into the international markets leveraging on the content libraries that are being built for viewers in India.

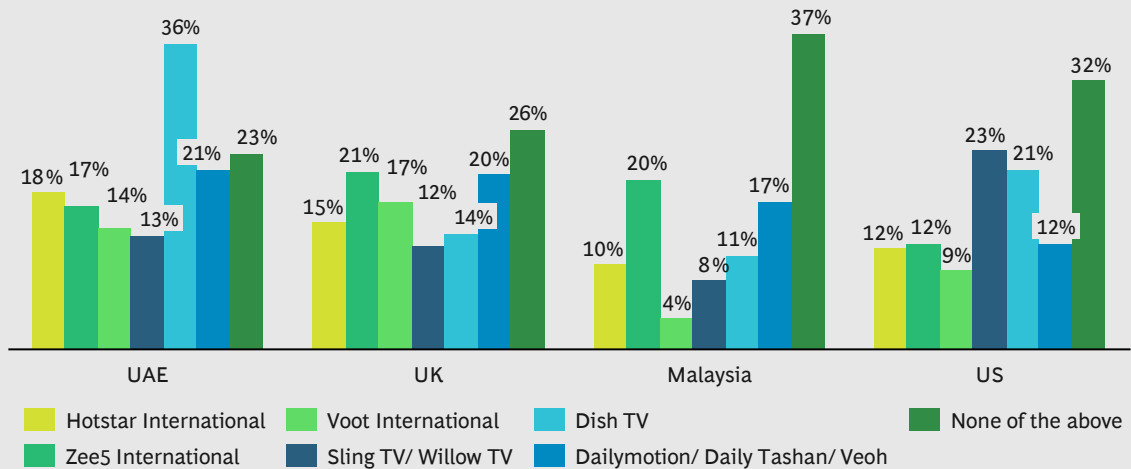
Cricket is Important but not the Primary Source of Consumption

Contrary to popular belief, Indian content watching in international markets is not dominated by cricket (as shown in Exhibit 51). Our survey indicates that Bollywood content (both music and movies) is the most preferred genre of Indian content watched in international markets, with over 40 percent respondents indicating Bollywood music and movies as one of their preferred genres of Indian content.

There are several reasons why consumers would prefer Indian content on apps, with the above few emerging as the top reasons. In most markets, watching Indian content on OTT apps is cheaper than watching on TV. The ability to watch on-the-go and to access latest content on demand, drives the demand

EXHIBIT 49 | Less than 20% of Respondents Reported Hearing of Top Indian OTT Apps

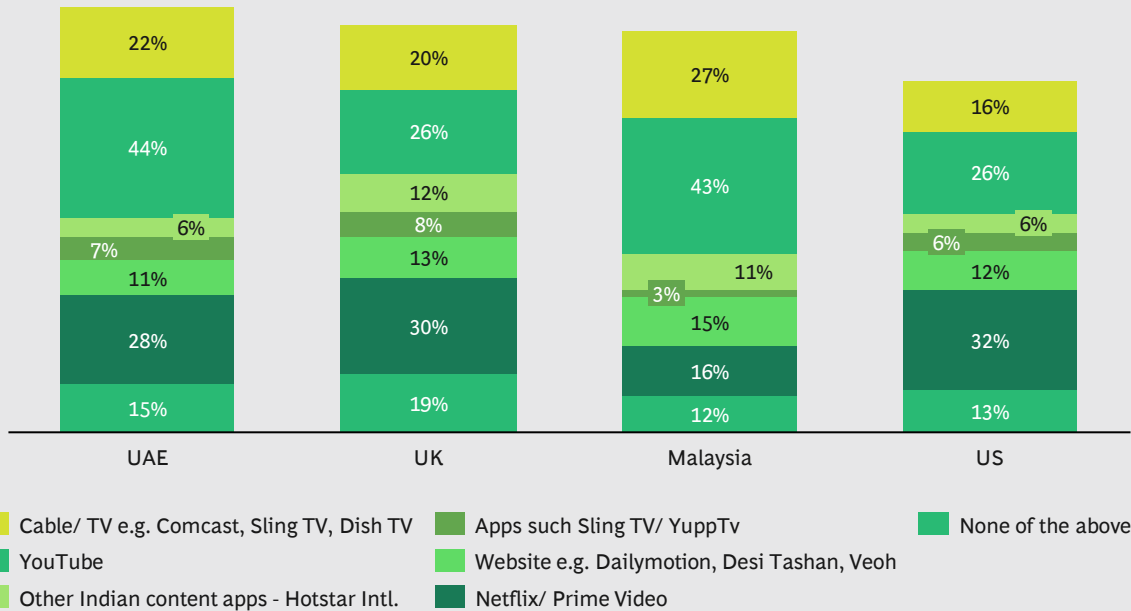
Respondents who watch Indian content (%)



Sources: Google Consumer Survey, BCG analysis.
 Q: Which of the following Indian content apps/sites have you heard of?
 N= ~100 from UAE ~200 from UK ~100 from Malaysia ~300 from US

EXHIBIT 50 | Most Viewers Used Global Apps as the Top Apps to Watch Indian Content

Respondents who watch Indian content (%)



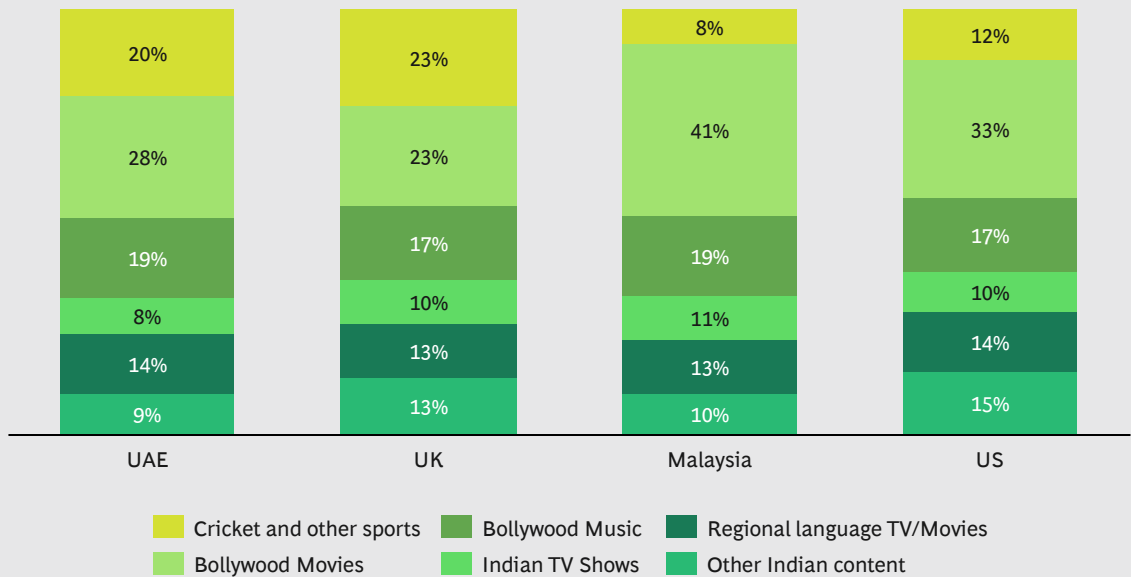
Sources: Google Consumer Survey, BCG analysis.

Q: Where do you usually watch Indian entertainment content? [Multiple choice question]

N= ~100 from UAE ~200 from UK ~100 from Malaysia ~300 from US

EXHIBIT 51 | Bollywood Dominates Viewership of Indian Content Followed by Cricket

Respondents who watch Indian content (%)



Sources: Google Consumer Survey, BCG analysis.

Q: Do you watch/ consume Indian content? If yes, which?

N= ~100 from UAE ~200 from UK ~100 from Malaysia ~300 from US

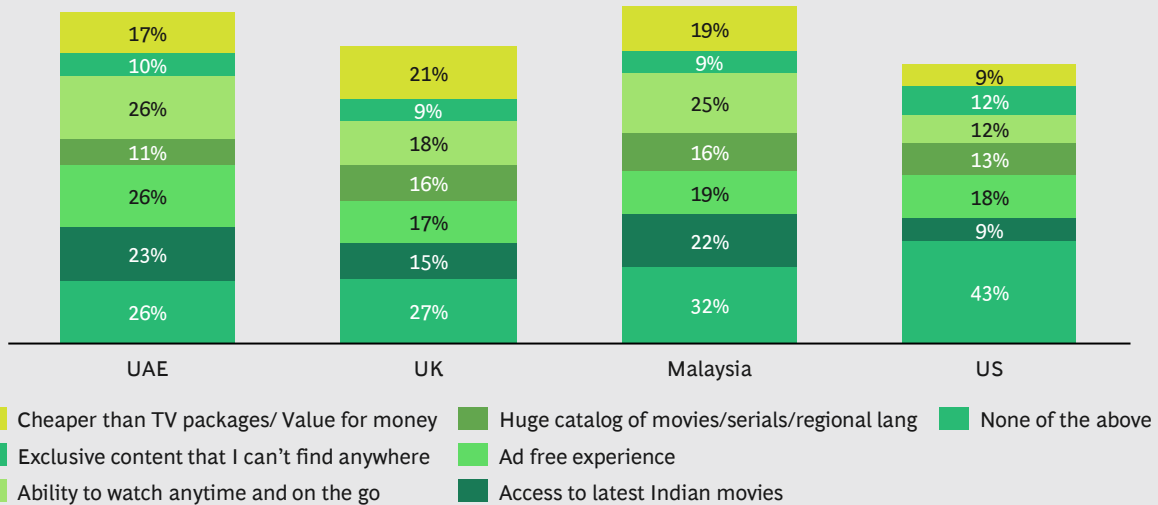
for consuming Indian content on OTT (as shown in Exhibit 52).

There is potentially a sizeable international opportunity for Indian OTT players which is currently untapped. We have benchmarked

OTT subscription prices to the respective countries and estimate a market size of over USD 1 billion by 2023 (as shown in Exhibit 53), assuming average penetrations of respective Indian population in the key diaspora countries.

EXHIBIT 52 | Value for Money, Ad-free Experience and Ability to Watch Anytime Emerge as Top Reasons for Watching on OTT

Respondents who watch Indian content (%)

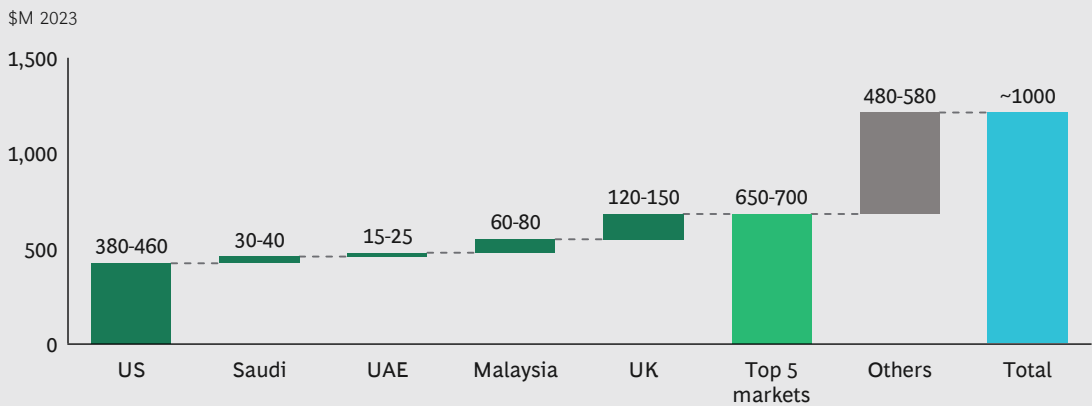


Sources: Google Consumer Survey, BCG analysis.

Q: What are the reasons you might subscribe to Indian content OTT apps rather than TV? [Multiple choice question]
 N= ~100 from UAE ~200 from UK ~100 from Malaysia ~300 from US

EXHIBIT 53 | Significant International Market Opportunity of ~\$1 bn by 2023

Player actions will determine how much of the potential is tapped



Population (M)	~5.5	~5.0	~4.5	~4.0	~2.0	~21	~22	~43
Penetration assumed by Market (%)	85%	35%	20%	70%	80%	65%		

Sources: BCG analysis, Min of External Affairs, Revenue estimated based on Indian diaspora & current OTT avg price in each market.

Notes: 2 apps per HH assumed

HH Size: US 2.6, Saudi 5.6, Malaysia 4.6, UK 2.3, UAE 5.9 (Source: UN report)

Subs of Indian OTT players in int'l market as a % of total Indian diaspora population

Current SVOD prices assumed to grow in line with respective markets

REALISING THE OPPORTUNITY

SIX-POINT AGENDA FOR THE INDUSTRY

FOR INDIA AND INDIAN players to realise this opportunity, all the key stakeholders will need to play their part. There is a significant agenda ahead for the industry.

Six-Point Agenda for the Industry

BREAKING THE CLUTTER: A STRONG MARKETING CHALLENGE

The consumer of today, and even more so of tomorrow, is spoilt for choice. There are over 30 OTT options available and these are mostly homogenous in the mind of the consumer. The trap is to believe that consumers will find their way on their own. In other words, there is a need to actively guide consumers to different choices, their specific propositions and the role that the platform can play in the consumer's entertainment bouquet.

All our consumer research shows:

- Low awareness about SVOD platforms.
- Significant churn across platforms—50 percent of consumers' churn within seven days of installing an OTT app.
- Undifferentiated subscription propositions—churning consumers not convinced of “value for money”.
- Consumers come to the platform for “hero” content; difficult to retain thereafter.

- There are a number of app combinations installed on viewers devices with a significant longtail.

There are real implications for marketers of OTT apps (as shown in Exhibit 54):

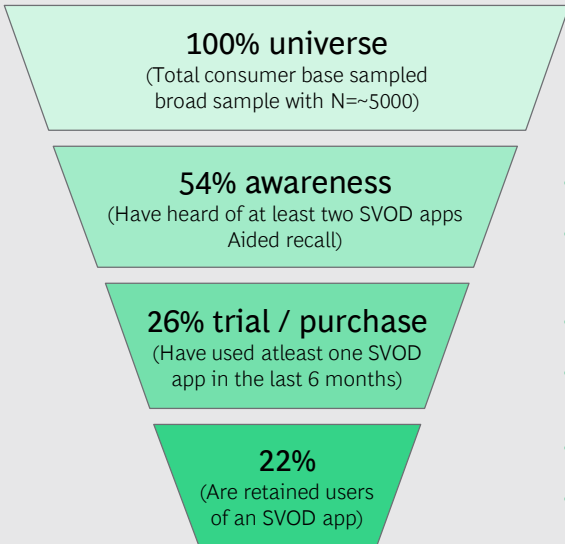
- Building broad awareness for platforms—recall but also a differentiated position to communicate, “what does the platform stand for”, to break the clutter.
- Marketing to target consumers—being focused and tight about who the platform will appeal to and engaging the right tools; identify consumers' innate and latent demand.
- Driving engagement when the consumer is on the platform to enable the consumer to go beyond “hero content”—help discover the full power of the platform

For instance, creating the right level of awareness requires being present across all important ATL and BTL options, especially the digital options. For instance, Game of Thrones, an HBO show is exclusively available on Hotstar and Star Network in India. However, the current search for the show online suggests limited linkage to the original source of the content (as shown in Exhibit 55).

To drive higher trials, it is imperative to create

EXHIBIT 54 | Implications for Marketers Across the Consumer Funnel

SVOD FUNNEL



- Enhance overall awareness for individual platforms (aided and unaided recall)
- Create a differentiated positioning in the market
- Improve conversion from awareness to trial - establish value proposition in the mind of the target consumer
- Induce trial with "hero content" and superior marketing
- Create engagement on the platform beyond "hero content" during first month of the consumer using the platform and trial period
- Appeal to the consumer with tight recommendations, targeted pricing and focused segment of one marketing

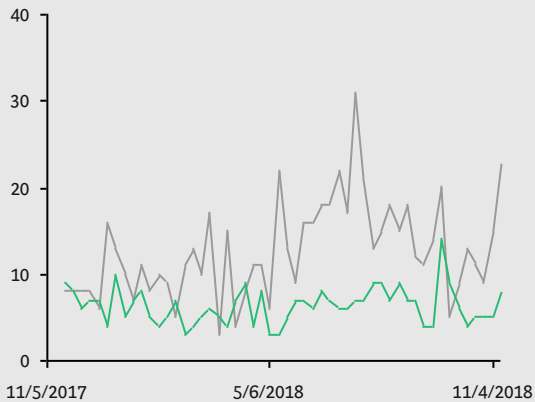
Sources: Consumer Research, BCG analysis.
N= ~5000

¹SVOD apps considered for the analysis are Amazon Prime, Hoichoi, Hotstar Premium, Netflix, and Zee5 Premium

EXHIBIT 55 | Online Search Trends Showed Limited Linkage to the Original Source of the Content

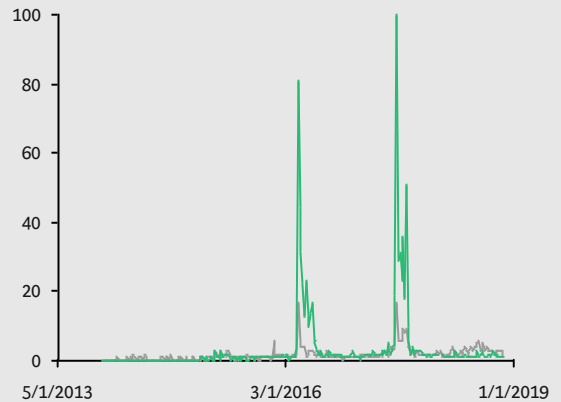
ONLINE SEARCH TRENDS SHOWED LIMITED LINKAGE TO THE ORIGINAL SOURCE OF THE CONTENT

Got has higher number of search queries in conjunction with Netflix than with original source—Hotstar and star network



— Game of thrones Netflix: (India)
— Game of thrones Hotstar: (India)

... HOWEVER, ASSOCIATION BECOMES HIGH DURING LAUNCH PERIOD DRIVEN BY MARKETING EFFORT



— Game of thrones Netflix: (India)
— Game of thrones Hotstar: (India)

Sources: Google trend.

a frictionless experience for the consumers and get them across the line at the “right” time. For instance, AltBalaji (similar to the Chinese OTT players) allowed for the first set of its tent pole show—Bose / Test Case to be viewed for free to pull users in and capture their interest; users then had to pay for access to continue watching

Similarly, it will be wise for companies to consider all potential options to ease the overall payment experience for the users. While credit cards, net banking and debit cards are commonly available across different platforms, some of the more commonly used methods such as mobile wallets, payment banks and UPI would also add more comfort to the overall payment process.

To drive retention, it is important for consumers to feel that there is still enough “value” in continuing with the platform post the consumption of the “hero” property. Hence, it is truly important to understand the consumer and put forward the right set of next recommendations to drive users to the next right show / property to keep them hooked to the platform. Globally, Netflix has been one of the pioneers in building the content recommendation engine which has become a key competitive differentiator.

To be successful, it is important for companies to think like a technology company first, leveraging not just the consumer data and behavior astutely, but also marrying it with great understanding of their own content and using meta-tags.

Equally important is to communicate to the users on the value proposition of the platform, especially closer to the point-of-decision (which is, at the end of the monthly cycle). Only when users feel that there is “enough” on the platform to continue for one more month, does the decision to continue become intuitive.

One more aspect worth exploring would be to provide intangible gains to a paid subscriber over other users—which either allows “bragging rights” or creates a social aspect around the entire viewership experience. For instance, iQiyi for their show, “The Rap of China”, a hip-

pop talent show asked users to vote for their favorite rappers via Qixiu and encouraged fans to enter lucky draws held in Paopao, the online fan community of iQIYI, for tickets to the finals of the program or to meet their favorite rappers at off-line gatherings.

Differentiated Content is King

Content differentiation in this space is key. There are several competing platforms vying for the same consumer eyeballs with so far minimal differentiation except “hero” and sports content. In this environment, platforms need to establish a distinct identity.

There are several “niches” in India where there is consumer demand but lack of credible options on content so far; these include:

Music: Requirements from music platforms in India indicate a desire to “view” along with “listen”; demand for related Bollywood content such as trailers etc. is also high. Currently, this need is met primarily by YouTube. However, there could be space to build other offerings specifically addressing the needs of Indian consumers in different music genres.

With the likely entry of global streaming giant Spotify in the near future, the space will possibly gather more steam in the future. Over the last year, with Jio Music and Saavn combining and the launch of Amazon Music, the market has already started heating up with all the players competing for consumers.

Similarly for Video SVOD, the key would be driving user stickiness on the platform which tends to be high with content availability, getting playlists created by users and driving the social aspect of listening to music and sharing with users. Such user-generated content, created by users, becomes one of the key factors behind users’ ability to cancel subscription at any time.

Ad-supported music platforms are also likely to continue with limited features like number of skips allowed, ability to listen to music offline, etc. to get users to try the platform.

Kids: Our qualitative research indicates that there is a strong need for kids-specific content

and platforms. There are two types of distinct preferences: willingness to install apps that offer rich content for kids; and investing in individual devices, such as tablets, for kids to watch content. There could be a unique and significant opportunity here.

- Latent demand not fulfilled as of now. Youtube is currently the preferred mode of viewership.
- Kids as consumers show higher engagement—higher than average watch times and international libraries used.
- It is possible to tap into this opportunity using not just the content but also the platform route e.g. user interface / controls / learning interface.

In case of kids' content, there are multiple factors which come into play, which will be important for players to address. Some of the aspects (non-exhaustive) to consider include:

- Kids learning—becoming “smarter” by using latest technology / smartphone / Internet and apps.
- Variety and options—not just entertainment, but also associated learning.
- Parental control—ability to control what / how much kids consume, to safeguard them from non-suitable content.
- Perceived detrimental effects—impact on eyesight, kids being addicted to content and disregarding outdoor / physical activity.

This indicates the need for different business models that extend beyond GEC and sports as a means to get deeper into India, expand the number of eyeballs available, and create specific positioning to allow the platform to be one of the top three apps for the consumer.

Build a Geographically Focused strategy... from Rural to Regional to International

There are several imperatives emerging for OTT businesses to scale—and there are conscious choices to be made.

- Regional content: there is a strong preference among consumers for regional language and culturally specific content as noted above in this report. This need for regional content, however, goes beyond films and GEC and extends even to niches such as news, religious / spiritual content, cookery, and comedy. While broadcaster-led OTTs are starting to make forays in this space, there is also space for relevant focused regional plays in different parts of the country.
- Rural forays: as noted earlier, there is potential for rural households in India to skip the C&S step and progress directly to OTT on their smartphones. Rural smartphone penetration is already significantly higher than C&S and is growing. However, in order to build a business that is targeted at rural India, there is a need to rethink the overall business model.
 - What kind of content does rural India need (storylines, characters, cultural context) etc. to truly capture their imagination and drive rural viewership?
 - Ad supported vs. subscription models: Build an approach to monetize the number of rural eyeballs which is quite challenging in today's context
 - Pricing strategy: particularly to replace the “C&S” connection
 - Marketing / branding / distribution: addressing the need to have clear positioning with the rural consumer, building brand and positioning as a credible alternative to traditional TV
- International business models: the Indian diaspora presents a significant market opportunity, particularly in the top 5 countries. However, the marketing challenge is quite steep with overall low recall and awareness of Indian OTT players / apps. This will require a concerted effort through digital marketing, on-ground presence in top markets, leveraging social media etc, to carefully build the business. It is important to prioritise, pick priority markets and invest wisely.

It is also critical for players to really pick their focus geographies and languages to really make a dent and not be a also player.

Consumer Data, Consumer Insight, Big Data and Analytics

It is a well-known fact that data is exploding. The use of this data can create true competitive differentiation for businesses that adapt well. There is a need to think of consumer data and analytics around two important business dimensions:

- Understanding consumers, deep consumer insight and segmentation.
- Using analytics to drive monetization of OTT businesses.

Traditionally, consumer demographic information has driven segmentation. While this captures basic consumer understanding, it misses several important motivators that really drive purchase around demand spaces e.g. short break at work vs. family viewing in the evening), functional and emotional needs (e.g. fandom), and attitudes (e.g. price sensitivity), etc. The exhibit below captures the difference between traditional consumer insight and segmentation vs. what is possible today with new sources of consumer insight (see Exhibit 56).

There are several sources for monetizing deep consumer insight that can not only help platforms differentiate their proposition to consumers but also to partners such as advertisers.

- Product design: e.g. recommendation engine, reducing the time taken to arrive at the content of choice, minimizing time between videos / shows
- Pricing: e.g. arriving at Price recommendation matrix for different consumer segments, differentiated pricing.
- Content acquisition: e.g. acquisition spend analytics (content green-lighting in line with expected consumer revenue
- Targeted advertising: e.g. selling specific

audiences to advertisers that enables higher monetization.

- Customer acquisition and prioritizing different marketing channels.

Considering the vast amount of data created and tracked on OTT, it is imperative for players to use it to best understand their consumers—where they come from, what they watch, and use it to best predict their likely evolution and interests going forward and service them in the most cost effective and efficient manner.

In the future, it won't be too far-fetched to assume that content viewership and user behavior on OTT platforms can be used to influence the overall content, even on the more traditional media. Considering the size of the audience, the ability to understand the exact triggers at a much more granular level can really drive overall content creation / optimization to the next level.

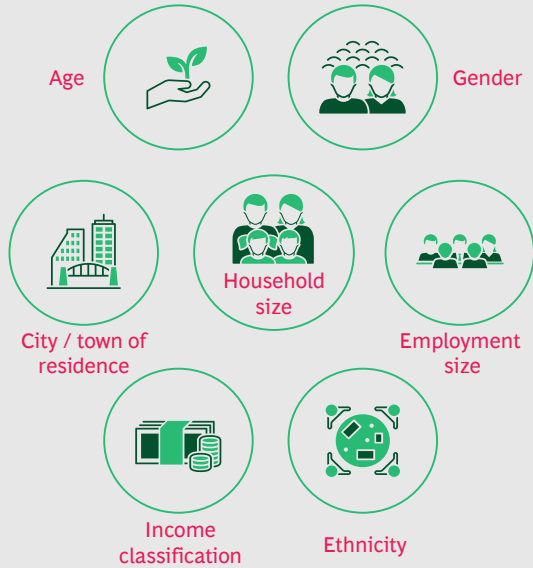
Establishing a New Measurement Currency for the OTT Industry

There is a need for the OTT industry to establish a "currency" that can help measure and understand the impact of advertising for different types of advertisers and price in line with value created. This is essential for the long term growth of AVOD models in the country. A new currency can help represent value more holistically and capture the audience delivered (quantum, quality, segments) more sharply and holistically by:

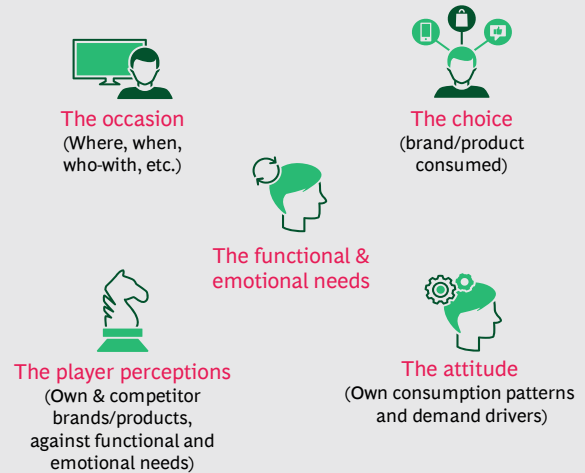
- Moving towards an industry common understanding e.g. BARC has established an industry standard understanding for TV.
- Triangulate across sources.
- Capture quality of audience.

Most importantly, a common currency will bring a larger degree of acceptance among the overall marketing machine across the key ad buyers and allow the overall potential of the OTT watchers to be unlocked.

HISTORICALLY, CONSUMERS SEGMENTED USING TRADITIONAL DEMOGRAPHIC MARKERS...



... HOWEVER THIS DOESN'T ADDRESS OTHER DRIVERS OF CONSUMER BEHAVIOUR



Source: BCG Case Experience.

Invest in the Right Tech, Create a User Friendly, Economically Viable Product

Consumer demand from platforms is on the rise. Consumers are influenced by different types of online touchpoints (e.g. e-commerce, search) and define their expectations from those platforms basis those touchpoints. Platforms that are not sharp in addressing consumer expectation on quality of technology and interface will struggle to scale up.

Our consumer research also indicates that quality of touch points is one of the key criteria by which consumers decide their OTT platforms.

Hence, it is important that every platform aspiring to gain scale reviews the technology and interface implications of having their own platform. Given the tech requirement, and the fact that typically consumers will have up to 3 OTT apps on their smartphones, there is a likelihood of consolidation. Every independent platform will require significant investment in technology and marketing / branding to really have the ability to build

critical mass. Such critical mass will allow platforms to invest in improving the overall consumer experience across the different devices of choice (mobile, tablet, smart TV and streaming media adapters-enabled TVs).

CONCLUSION: The online video opportunity is for real, and it is here and now. For players, who are successful in riding this wave to gain scale in eyeballs and area able to monetize this opportunity, it will result in significant gains, adding directly to their businesses and bottom line. However, the competition for space on consumers' smartphones is going to be intense and only a few shall emerge victorious.

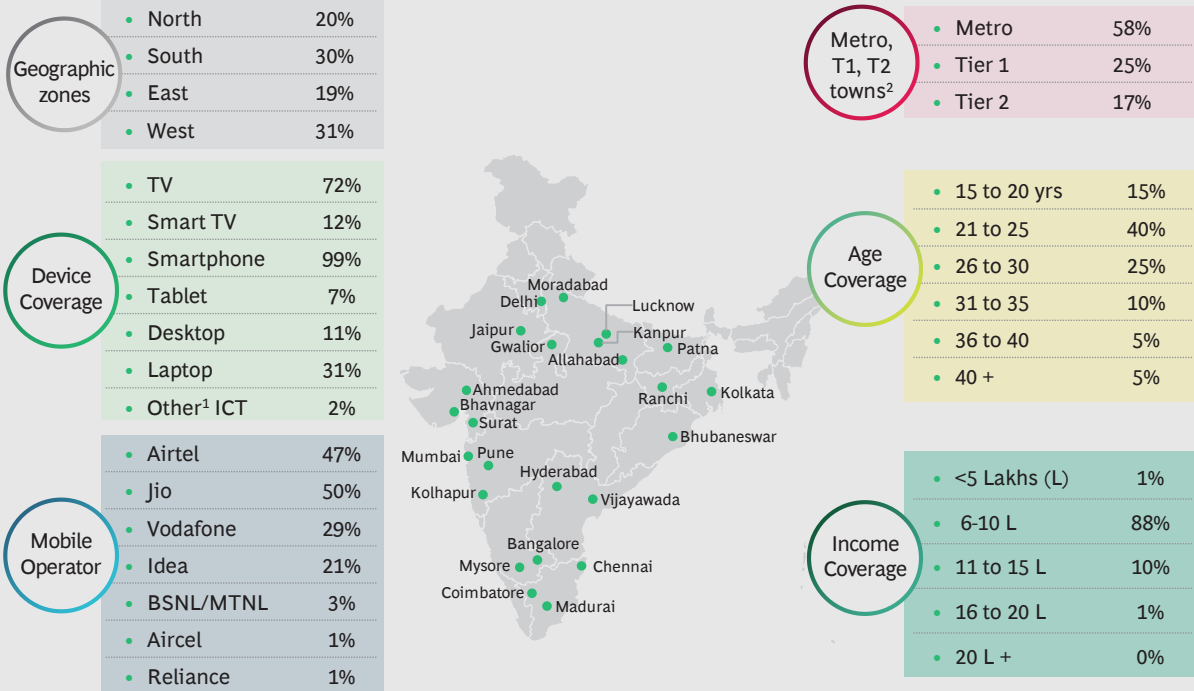
APPENDIX

Data Sources for Consumer Research

1. Consumer survey of ~5000 consumers from 24 cities:

Profiles of survey respondents, is shown in Exhibit 57 and 58 below

EXHIBIT 57 | Sampling Description of Quantitative Survey



Source: Conducted by Nielsen.

¹Includes Chromecast, Firestick, etc.; ²City segmentation on the basis of population: Metros – over 4 mn; Tier 1 – between 1 and 4 mn; Tier 2 – between 0.5 and 1 mn; Survey covered 8 metro cities, 14 T1 cities, and 2 T2 cities

EXHIBIT 58 | Research Methodology for Quantative Survey

RESEARCH METHODOLOGY



Interview method -
Face to Face CAPI¹
Study



Purposive Sampling



Length of the interview
: 30-45 min

Source: Conducted by Nielsen.
¹Computer-Assisted Personal Interviews

2. Passive Data from Nielsen’s Smartphone Panel of 15000 Smartphones from Q2 ’16 to Q2 ’18.

Profiles of users on panel, is shown Exhibit 59 and 60 below

EXHIBIT 59 | Passive Data of Smartphone Panel of ~15 K Consumers of Smartphones

Gender	Female	20%
	Male	80%

Metro, T1, T2 towns	Metro	45%
	Mini Metro	20%
	Tier 1	10%
	Tier 2	25%

Mobile Operator	Airtel	31%
	Jio	29%
	Vodafone	16%
	Idea	15%
	BSNL	5%
	Others	4%



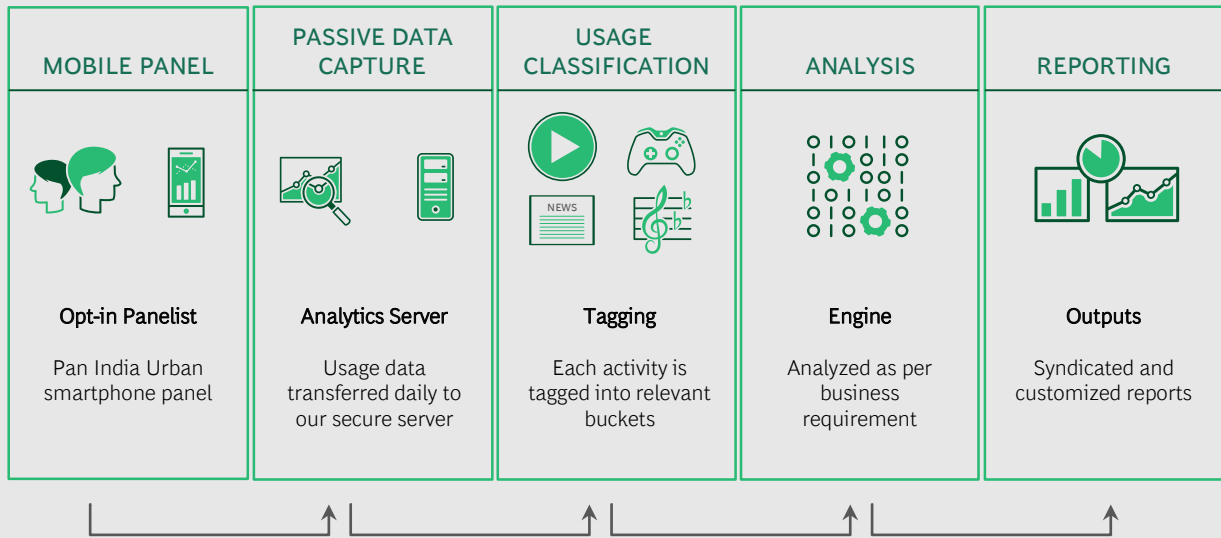
Age Coverage	15 - 17	10%
	18 - 24	40%
	25 - 30	25%
	31 - 35	10%
	36 - 40	5%
	Above 40	10%

Handset Price	Very Low 3-8K	23%
	Low 8-10K	20%
	Medium 10-15K	38%
	Expensive 15-25K	15%
	Very expensive >25K	4%

Source: Nielsen and data recorded from Q2 16 to Q2 18.

EXHIBIT 60 | Research Methodology for Smart Phone Panel Analysis

RESEARCH METHODOLOGY



Source: Analysis conducted by Nielsen.

3. In-depth qualitative research to form and validate hypothesis, is shown Exhibit 61 below:

EXHIBIT 61 | Research Methodology and Target Group for Qualitative Research

RESEARCH METHODOLOGY AND TARGET GROUP

IN DEPTH INTERVIEW

One on one discussions OF 1-1.5 hours carried out with respondents, at a place of his/her convenience, using structured discussion guide.



67 USERS INTERVIEWED

33 Males
34 Females

MINI GROUP DISCUSSIONS

Group discussions of 1.5-2 hrs conducted at a central venue resulting in a wealth of information pertaining to the topic of discussion.



FROM 4 CITIES

Bangalore
Bhubaneshwar
Delhi
Surat



ACROSS 3 AGE GROUPS

18-22
23-32
32-40

Source: Analysis conducted by Nielsen.

4. Consumer survey among Google users

Sample: International users—700 consumers across US, UK, Malaysia and UAE

Music: ~700 consumers in India

Methodology:

Google Surveys offers two panels of respondents: (1) internet users reading content on a network of web publisher sites using Google Opinion Rewards for Publishers, and (2) smartphone users who have downloaded and signed up to use an app called Google Opinion Rewards. The publisher network uses inferred demographics, while the mobile app asks users to self-report their age, gender and zip code.

We evaluate the representativeness of a survey by balancing its sample demographics to match the demographics of the target population: adult (18 or older) internet users. We match based on three demographic dimensions: age, gender, and geography. In the US, we use estimates for the national internet population from the US Census Bureau's 2015 Current Population Survey (CPS) Computer and Internet Use Supplement. In other countries, we rely on a combination of government data and internal Google data sources.

Google Surveys uses a two-step process to ensure each survey's representativeness. First, we use stratified sampling to dynamically target respondents with the goal of matching the demographics of the target Internet population. Next, we apply post-stratification weighting to more closely match those same demographics of the target internet population.

FOR FURTHER READING

The Boston Consulting Group publishes reports on related topics that may be of interest to senior executives. Recent examples include:

The Digital Revolution Is Disrupting the TV Industry

An article by The Boston Consulting Group, March 2016

The Future of Television: The Impact of OTT on Video Production Around the World

An article by The Boston Consulting Group, September 2016

The New Indian: The Many Facets of a Changing Consumer

An article by The Boston Consulting Group, March 2017

Digital Consumer Spending: A \$100 Bn Opportunity

A report by The Boston Consulting Group, February 2018

Television's \$30 Billion Battlefield

An article by The Boston Consulting Group, August 2018

Convergence: The New Multiplier for India Media & Entertainment's @100 Billion Vision

An Report by The Boston Consulting Group, October 2016

Media & Entertainment: The Nucleus of India's Creative Economy

An Report by The Boston Consulting Group, December 2017

For more on Google surveys, please visit

Google marketing platform: <https://marketingplatform.google.com/about/resources/>

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