The ‘Digital First’ journey

How OTT platforms can remain ‘on-demand ready’

October 2017

KPMG.com/in
Disclaimers:

- All product names, logos, trademarks, service marks and brands are property of their respective owners.
- The information contained in this report is of a general nature and is not intended to address the circumstances of any particular individual or entity. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.
- Although we have attempted to provide correct and timely information, there can be no guarantee that such information is correct as of the date it is received or that it will continue to be correct in the future.
- The report contains information obtained from the public domain or external sources which have not been verified for authenticity, accuracy or completeness.
- Use of companies’ names in the report is only to exemplify the trends in the industry. We maintain our independence from such entities and no bias is intended towards any of them in the report.
- Our report may make reference to 'KPMG in India’s analysis'; this merely indicates that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the veracity of the underlying data.
- In connection with the report or any part thereof, KPMG in India does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person / party to whom / which the report is circulated to and KPMG in India shall not be liable to any such person / party who / which uses or relies on this report. KPMG in India thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by any such person / party arising out of or in connection with the report or any part thereof.

- By reading the report the reader shall be deemed to have accepted the terms mentioned above.
Table of contents

Foreword

Executive summary

The Indian OTT market: Key themes

Road map to a new digital world

Pivoting traditional IT function to digital

Key considerations for digital implementations
Foreword

The era of on-demand content is here. Consumers are increasingly accessing media outside the confines of their couches and within the comfort of their personalised 5+ inch screens. Moreover, that screen is no longer restricted to the elite as video is going mass at a rapid pace and as the consumption grows, the OTT consumers will demand seamless access to services, compelling stories and value for money. To deliver the same, platforms would require an intuitive understanding of what the consumers want, without the users having to ask for it.

As the OTT landscape gets hyper competitive, organisations which are able to tick all the above boxes may stand a chance to emerge as the preferred platforms for consumers. To achieve a market leadership position, an internal organisational transformation initiative, which aims to harness the collective energies of all stakeholders towards a single minded ‘Digital First’ cause, is of critical importance.

It is this journey towards a digital organisation that we are outlining in this document. Right from telling the digital story to the internal stakeholders to implementing the digital architecture on ground, each step holds the key to survival and potentially, success in the market.

Girish Menon
Co-Head
Media and Entertainment
KPMG in India

Himanshu Parekh
Co-Head
Media and Entertainment
KPMG in India
Executive summary
The ‘Over the top’ (OTT) video consumption in India has rapidly evolved over the last year, given the advancements in digital infrastructure and efforts by platforms to create compelling content for consumers at price points which provide value.

Market potential
Growing internet penetration and data consumption is likely to help increase digital advertisement spends in India at 30.8 per cent CAGR between 2016 and 2021 with mobile advertisement spends and social media aided digital video advertisement spends expected to grow at 50.9 per cent and 40 per cent CAGR between 2016 and 2021 respectively.

Growth of digital advertisements in India and its constituents

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital spend</td>
<td>76.9</td>
<td>294.5</td>
</tr>
<tr>
<td>Mobile spend</td>
<td>16.9</td>
<td>132.5</td>
</tr>
<tr>
<td>Digital video</td>
<td>13.8</td>
<td>74.4</td>
</tr>
</tbody>
</table>

Source: KPMG in India’s analysis, 2017

Further, other enablers such as Government of India’s ‘Digital India’ initiative, growing usage of affordable smartphones, rising internet penetration in rural India and rapid growth of digital payments has further strengthen India’s digital infrastructure. This has resulted in video dominating data consumption, which is expected to continue to grow in the near future.

OTT content consumption and evolving trends
The OTT content consumption is evolving from niche to mass based content and long form content is gathering traction. The increased popularity of large screens and investments in original content creation is further driving the consumption. Live streaming has emerged as a focus area for OTT players, with the sports genre especially attractive from a viewership and monetisation point of view.

OTT distribution
The OTT distribution landscape is dominated by own platform players, although social media platforms YouTube and Facebook still constitute a major chunk of video viewership in India. With telcos betting big on data, partnerships with telcos is also emerging as an important medium to reach a fairly large, and a mass user base.
Monetisation models and associated challenges

While Advertisement Video on Demand (AVOD) remains the primary source of monetisation for the OTT players in the country, the Subscription Video on Demand (SVOD) and Freemium models are seeing traction, largely on the back of compelling content, including sports. Sponsored content has also emerged as an important monetisation tool, with brands baking in the advertising messages into the content itself.

The growth in monetisation though, is partially held back due to challenges around digital viewership measurement and rampant content piracy which must be addressed in order to realise the true potential of OTT platforms and build a sustainable model in the future.

Further, digital video businesses require high investments, and returns are currently not commensurate given the still evolving business models. Media organisations are currently attempting to bridge the gap between market share acquisition and economic viability, as they attempt to build long term sustainable digital video businesses.

Changing consumer demands mandate companies to transform digitally

When users stream videos on their mobile phone through an OTT platform, little do they know the entire digital infrastructure that is set in motion to ensure that the content streams flawlessly. It is this internal infrastructure that defines the ‘OTT player of today’, and is a key ingredient for ensuring continue success in the competitive OTT landscape.

The adoption of digital infrastructure has evolved from resistance towards digital technologies to their mass adoption. Success in the digital world is dependent on various factors such as time to market, customer experience and the will to constantly innovate and change with the relevant developments in the market. This requires OTT platforms to identify and design digital solutions comprising strategies to predict, influence and respond to customer behaviour.

Building a successful digital video business in the long run requires sustained commitment to the digital transformation process and a ‘digital first’ mindset.

Digital transformation rests on four pillars

The path to digital transformation encompasses a holistic approach including; clearly defining the organisation’s digital vision and strategy, thorough understanding of the customer proposition, accurately assessing the business design and, finally, carefully designing the execution plan.
Key drivers for successful digital transformation:

- **Innovation focussed mind-set**: Innovation has become hygiene for OTT players, given India’s crowded platform market. For a fruitful digital transformation, it is critical for the leadership to evaluate their business through a number of facets and set up in-house labs to drive both internal and consumer focused innovation. Companies could also look to set up incubation centres in the form of accelerator programmes, or partner with third-party innovation labs.

- **Integration across organisational DNA**: Digital transformation requires a holistic strategy that permeates across the entire organisation including front, middle and back offices. The OTT organisations should move past silos that have a traditional media (for eg: TV) bias and adopt a ‘Digital First’ mindset.

- **Data analytics**: Data has evolved in type, volume, and velocity with rapid uptake of digital technologies. It has become a new currency and key for OTT players to understand the consumers and decode their viewing patterns. Big data technologies along with advanced analytics help answer key content and engagement questions, enable quick reaction and draw meaningful and actionable insights to fuel the customer facing productivity and enhance overall performance of the platform.

- **Data protection and IP security**: With OTT business models inherently digital in nature, data and content security has become even more paramount. It is vital for the platforms to protect data and content across systems, devices and the cloud.

A successful transformation needs a strong technology foundation

A strong technology foundation acts as the backbone of any digital transformation initiative.

The pivot from a traditional IT to ‘today’s’ digital function is underlined by an architecture that is agile, flexible, and is able to deploy technology frameworks to give quick insights for decision making around customer behaviour and content strategies.

The ‘all-in’ commitment of the entire organisation to the cause is a non-negotiable and is a precursor to embarking upon the technology deployment.

In conclusion, the digital transformation journey of a media company comprises a marked strategic shift, with customer centricity at the core, and an internal thinking process that needs to change the organisational DNA into ‘Digital First’ mind-set.

As we transition into the new era where there is big focus in building direct to consumer digital businesses, one can derive substantially better results if one uses the power and the collaboration of the entire organisation – particularly the established broadcast businesses. Successful businesses will be built when both units (digital & broadcast) synergistically operate and when one ensures participation of maximum number of people in the organisation in this digital journey.
The Indian OTT market: Key themes
The Indian M&E sector is poised to reap the digital dividend

With increased digital media consumption, stakeholders across the M&E value chain are embracing the change and experimenting with newer models of media consumption. This has led to a marked shift in advertising spends with marketers increasingly apportioning a larger piece of their advertising budgets to the digital media platforms. Globally, the share of digital advertising spends is estimated to supersede television advertising spends by the end of 2017 and account for around 37 per cent of total advertising spends.\(^1\)

Digital advertising is expected to contribute nearly 27 per cent to the total advertisement spends in India by 2021, reaching a size of INR294 billion, up from INR76.92 billion in 2016, translating into a CAGR of 30.8 per cent over 2016–21.\(^2\) With mobile phones being the primary mode of digital consumption in India, mobile advertising spends are expected to grow faster, projected to reach INR132 billion by 2021 from INR16.9 billion in 2016, at a CAGR of 50.9 per cent.\(^2\)

Although search and display advertisements remain the largest component of digital advertising spends with a 47 per cent share,\(^3\) this segment is relatively mature and is expected to grow at a slower pace when compared to video advertisements. However, video advertisements, which is currently about 18 per cent of the digital ad spend, is expected to grow at a CAGR of 40 per cent by 2021. Non-metros now account for almost 30 per cent of YouTube watch time, backed by regional content, better devices and increasing internet access.\(^2\)

### Social media driving advertising spends

Advertisers are innovatively leveraging social media channels, such as networking websites and blogs to connect with their target audiences. Digital ads on social media platforms registered a 28 per cent contribution to global digital ad spends, with Facebook accounting for 15 per cent of the digital advertising spends.\(^3\)

In India, social media’s increasing traction amongst consumers is largely linked to platforms such as Facebook and Twitter, which have also tasted success by attracting the country’s marketers. Monetising social media is becoming lucrative and brands are allocating increasing digital budgets to social media promotions.\(^4\)

---

2. KPMG in India’s analysis and estimates, 2017
3. Digital advertising in India, 2016, Dentsu Aegis, March 2017
4. Google and Facebook duopoly in the consumer attention and ad space, The Economic Times, 15 February 2017
With improving digital infrastructure and falling data costs, digital consumption is expected to become more mainstream. The ensuing growth in investment by advertisers, buoyed by evolution of the audience measurement technologies are likely to continue to drive growth in digital ads over the next five years.

Source: KPMG in India’s analysis, 2017

India’s OTT landscape – Key players

<table>
<thead>
<tr>
<th>Content creators</th>
<th>Content aggregators</th>
<th>Digital platforms</th>
<th>Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>TVF</td>
<td>Culture Machine</td>
<td>AVOD</td>
<td>Voot</td>
</tr>
<tr>
<td>Scoop Whoop</td>
<td>Gyuki</td>
<td>Voot</td>
<td>OZee</td>
</tr>
<tr>
<td>AIB</td>
<td>One Digital</td>
<td>SVOD</td>
<td>Amazon Prime</td>
</tr>
<tr>
<td>Arre</td>
<td>Entertainment</td>
<td>Netflix</td>
<td>Sun Nxt</td>
</tr>
<tr>
<td>Alt Digital</td>
<td>Veqta</td>
<td>Freemium</td>
<td>YouTube</td>
</tr>
<tr>
<td></td>
<td>Nirvana Digital</td>
<td>Hotstar</td>
<td>Sony Liv</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Viu</td>
<td>Ditto TV</td>
</tr>
</tbody>
</table>

Sponsored content could co-exist with any of the other three models

Technology/ infrastructure enablers

- Vidooly
- RecoSense
- Preksh
- Purple Stream
The ‘Digital First’ journey

The pillars of an OTT platform

01 Content strategy
- Niche vs. mass content
- Original content strategy
- Regional content focus
- Live content

02 Distribution
- Build own platform
- YouTube/Facebook presence
- Third party licensing/syndication
- Partnerships with telecom operators

03 Monetisation
- Advertisement based
- Subscription based
- Freemium
- Sponsored content

Digital and payments infrastructure leading to rapid growth of VOD services

India is currently in the midst of a data consumption boom triggered by a growing and deepening digital infrastructure

- The launch of Reliance Jio in September 2016 has been a watershed moment, which disrupted the telecom data landscape and significantly contributed to the growth of internet usage and penetration.

- The government continues to make efforts towards its long-term focus of creating a digital economy with emphasis on mobile governance through the ongoing ‘Digital India’ and ‘Smart Cities’ initiative coupled with the ubiquitous Aadhaar as the backbone of digital addressability in India.

- Another critical long-term trigger is the evolution of the digital payments infrastructure, on the back of growing usage of mobile wallets, Unified Payments Interface (UPI), Bharat Interface for Money (BHIM) in addition to the traditional digital payment instruments. Currency demonetisation in November 2016 acted as a catalyst to push digital payments into the mainstream.

Digital India – Taking ‘Bharat’ online

The government’s ‘Digital India’ vision envisages a ‘connected’ India, right up to the villages, democratising information availability for all.

The BharatNet project under the ‘Digital India’ initiative aims to deploy high speed optical fibre cables in rural areas to provide connectivity to 2.5 lakh Gram Panchayats and deploy 25,000 Wi-Fi hotspots at rural telephone exchanges by 2019. Though the rollout has been slower than originally planned, the project has managed to connect 1 lakh Gram Panchayats and lay down nearly 2,20,000 kilometres of optical fibre cable as of August, 2017. The budget allocation for BharatNet has been increased to INR100 billion in FY18 from INR 60 billion in FY17 to further expedite the project.

Public Private Partnership (PPP) models are also evolving, with Google in partnership with RailTel as backhaul provider to enable 400 railway stations in India with public Wi-Fi hotspots; and BSNL partnering with Facebook to set-up community public Wi-Fi hotspots in rural India.

5. Centre asks states to follow Andhra Pradesh plan for BharatNet project, Economic Times; accessed on 18 September 2017
7. Future of public WiFi hot spots in India, The Mint, accessed on 15 September 2017
4G – Fuelling the digital economy

The entry of Reliance Jio has led to a fundamental shift in the way subscribers consume data. As on March 2017, 70 per cent of all wireless internet subscribers in India were consuming data at broadband speeds. Average data usage per subscriber took a huge leap from 147 MB/month in March, 2016 to 1 GB/month in March, 2017 backed by falling data costs, a trend triggered by Reliance Jio and followed by the incumbents. The average user outgo per GB of data for GSM connections declined sharply from ~INR 200 at the end of June 2016 to INR 6.4 at the end of March 2017.

The same has also led to surge in wireless internet connections, with India forecasted to have 730+ million wireless internet users by FY21. It is expected that high speed data connections (4G+3G) would comprise of 88 per cent of all wireless internet users by FY21, increasing from a base of 260 million in FY17 to 690 million by FY21.

Another positive contributor has been the steady growth in mobile device penetration, resulting in the smartphone becoming the primary device for media consumption. Number of smartphones crossed 300 million in 2016 and are expected to cross 650-700 million by 2020. The average selling price of internet-enabled mobile phones is currently just below INR9,000, which is half of that in China. However, with the launch of 4G enabled feature phone at INR 1,500 by Reliance Jio, and Airtel’s proposed 4G smartphone at INR 2,500, the market is set for the next wave of disruption, and the number of video enabled devices could go much higher than 650-700 million by 2020. Lower smartphone prices bundled with 4G data plans is set to create a ripple effect increasing the smartphone penetration, 4G consumer base and data consumption.

**Wireless data subscribers by technology (million)**

<table>
<thead>
<tr>
<th></th>
<th>2G</th>
<th>3G</th>
<th>4G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar-17</td>
<td>429</td>
<td>100</td>
<td>168</td>
</tr>
<tr>
<td>Mar-18</td>
<td>521</td>
<td>180</td>
<td>143</td>
</tr>
<tr>
<td>Mar-19</td>
<td>604</td>
<td>234</td>
<td>128</td>
</tr>
<tr>
<td>Mar-20</td>
<td>675</td>
<td>259</td>
<td>116</td>
</tr>
<tr>
<td>Mar-21</td>
<td>731</td>
<td>285</td>
<td>104</td>
</tr>
<tr>
<td>Mar-22</td>
<td>788</td>
<td>313</td>
<td>99</td>
</tr>
</tbody>
</table>

Source: KPMG in India’s analysis, 2017

Video - Driving the data traffic

An average consumer spends about 3 to 5 hours on media per day, of which, ~35 per cent time is spent on digital media consumption on mobile phone. Video currently accounts for almost 50 per cent of the data traffic and is set to increase to 75 per cent by 2020.

Consumers are starting to spend more time viewing media on the go, given the changing lifestyles. While sharing online videos on social media and consumption of short-form video content has been the first wave of data consumption, long-form content consumption is now seeing rapid growth on the back of improved connectivity and lower data costs. The consumers are moving from ‘what’s on TV’ to ‘what do I feel like watching’ mind set.

Rural internet – Growth 2.0

As growth in urban internet penetration moderates, rural India is set to drive the next phase of growth in India. Better digital infrastructure and entry of affordable smartphone segment is set to change the internet landscape in the years to come. As on March 2017, 34 per cent of all internet users in India were from the rural areas. However, at a 16 per cent internet penetration, the rural base holds significant growth potential. By 2020, 50 per cent of India’s internet users are estimated to be from rural India.

8. TRAI Performance Indicator Report March 2016 and March 2017, Telecom Regulatory authority of India, accessed on September 18, 2017
9. KPMG in India’s analysis and estimates, 2017
10. India to lead global growth of smartphone connections – GSMA, The Mint, accessed on September 18, 2017
11. India pips china in smartphone sales pace but lags in volume, Economic Times, accessed on 13 September 2071
12. Bharti airtel plans to launch bundled 4g smartphone at rs 2500 before diwali to counter jio, Economic Times; accessed on 17 September 2017
13. VNI Mobile Forecast Highlights, 2016-2021, Cisco, accessed on 14 September, 2017
15. 50% of India’s internet users will be rural & 40% will be women by 2020: BCG, Times of India, accessed September 24, 2017
Digital payments - The key enabler

The government’s initiatives to usher in an era of a cashless economy, have achieved a big boost through the demonetisation drive that was carried out in November 2016.

Digital payment methods such as mobile wallets, UPI and card payments achieved significant growth post demonetisation. There was a surge in wallet transaction volumes by over 250 per cent\(^\text{16}\). India currently has more than 50 million active wallet users, and is expected to reach 350 million by 2022\(^\text{17}\). The introduction of UPI and incentive by the government for promoting the usage of BHIM is likely to bring the masses on board the digital payments ecosystem.

Availability of seamless payment options is expected to increase the acceptance of digital payments amongst consumers, resulting in positive implications on the monetisation of digital assets. Further, direct carrier billing is also gaining traction especially among SVOD/Freemium players and will aid monetisation through integration of subscription costs with mobile bills. Players such as Ditto TV, Hooq and ALT Balaji have integrated carrier billing to offer unified payment options to their potential SVOD subscribers\(^\text{18}\).

Digital content consumption evolving due to changing demographics

The Indian media consumer, young Indians in particular, spend nearly 4 hours watching television per week as compared to 28 hours on mobile, of which 45 per cent of time spent is dedicated to entertainment\(^\text{19}\). There is a continuous shift towards convenience based, on-demand viewing. Further, given that most households in India are single TV households, there is a growing trend of solo viewing particularly among the younger generation. The OTT video viewing is likely to continue increasing by 32 per cent annually through 2020\(^\text{20}\), with half of the consumer population expected to follow solo viewing methods.

However, until recently, OTT video viewing was seen to be a niche play, targeting the youth, upwardly mobile, early adopter segment. However, 4G data wars have disrupted the consumption patterns with data consumption widening and deepening across the length and breadth of the country, demography and socio economic classes.

\(^{16}\) Mobile wallets see a soaring growth post demonetisation, Hindustan Times, accessed on 18 September, 2017

\(^{17}\) KPMG in India’s Analysis, 2017

\(^{18}\) Altbalaji goes global partners with boku for carrier billing to stream original video content, Pymnts, accessed on 18 September, 2017

\(^{19}\) “Internet Trends 2017- Code Conference”, Mary Meeker, accessed on 18 September, 2017

\(^{20}\) “How advertising in OTT will play out”, Financial Express, accessed on September 18, 2017
From niche to mass

Historically, OTT could not capture eyeballs in the mass consumer segments, and thus the content was being produced keeping in mind the niche target audience. Global players such as Netflix are largely restricted to English speaking audiences located in urban areas and even Amazon Prime Video’s and Hotstar’s content play is currently largely urban focused. However, the next 200 to 250 million VOD users are likely to come from the middle class, the masses and regional languages.

Once known for niche content such as select movies and catch-up TV, the OTT market is now creating content for the mainstream audience, with shows such as ‘The Timeliners’ (a new YouTube channel) the ‘Aam Aadmi Family’ which is aimed at appealing to the average middle-class Indian household. OTT players are recognising the importance of the well-tried Indian formula of family drama with comedy and clean language to attract the masses. The content strategy of ALT Digital media, by Balaji Telefilms, a platform providing original Indian, family content targeting the masses, a positioning somewhere between Netflix and prime time Hindi soaps.

Major platforms such as Hotstar, Netflix, and Amazon are also investing heavily in building local movie libraries and original content designed with a wider and more mass appeal. The recent high levels of bidding for IPL digital rights also follows the same trend.

Long form content seeing traction

The VOD content was initially seen as being consumed largely during transit/travel, and thus short form content traditionally gained immense popularity. Short comedy clips (5 to 10 minutes) from producers such as AIB and webisodes (15-20 minutes) from the likes of TVF were the mainstays of OTT platforms.

With the continual improvements in internet data speeds and technology enabling quality streaming with low data consumption, long form content has started to see greater traction. One of the most popular global series, ‘Game of Thrones’, has each episode greater than 50 minutes 21, and resulted in Hotstar gaining immense popularity amongst viewers. ‘Big Boss’, with an average episode size of around 50 minutes, is one of the biggest draws on Voot, with the platform also airing extra, unedited content to attract viewer interest22. Heavy spends by Amazon Prime Video and Netflix for acquisition of Bollywood movie rights also points to the potential of long form content viewing on OTT platforms23.

Growing popularity of large screens

The device ecosystem has also helped long form content consumption, with the likes of Amazon Fire Stick and Smart Televisions helping video streaming on large television screens. Sale of Smart TVs has increased to 18-20 per cent from 12-14 per cent of the entire TV market owing to strong urban demand (65 to 70 per cent of the entire market)24. Further, ‘High Definition’ (HD) content on large screens provides a much better viewing experience than the smartphone screen.

In the long run, the success of OTT platforms would be a direct function of increasing user stickiness, which in turn would be helped by adoption of long form content on bigger TV screens.

---
21. Game of Thrones, HBO, accessed on September 22, 2017
22. Voot to stream Bigg Boss Season 10’s ‘Unseen Undekha’ moments, Afaqs, accessed on September 21, 2017
23. New OTT Players Are Investing In Creating Original Content, Business World, accessed on September 18, 2017
24. Low data tariffs push smart TVs, Times of India; accessed on September 14, 2017
Investments in original content

The significance of content for an OTT player has led to the blurring of lines between content creators and platforms. Players such as Netflix and Amazon, which started out by licensing content, branched out to commission their own original programming with ‘House of Cards’, ‘Orange is the New Black’, ‘Mozart in the Jungle’, ‘Transparent’ etc.; the success of which has been a major factor in driving consumer adoption and stickiness on their respective platforms.\(^{26}\)

Original content primarily enables platforms to create differentiation and drive user engagement and stickiness. Additionally, for broadcast networks, original content enables cross platform user engagement and retention.

For instance, Voot offers extended ‘Bigg Boss’ clips which include content that is not otherwise aired on TV, though at no extra cost. On the back of this exclusive content, Voot generated more than hundred million views for ‘Big Boss’ in the first two months of its launch in 2016.\(^{26}\)

Additionally, with original content, the platform owns all the essential intellectual property rights from the outset. In addition to granting exclusivity, owning the underlying IP rights gives access to the potential for future licensing revenue opportunities.

Announcements regarding original content investments by OTT video platforms in India

<table>
<thead>
<tr>
<th>Platform</th>
<th>Original content budget</th>
<th>Tie-ups with companies/individuals</th>
<th>Shows in the portfolio/pipeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amazon Prime Video</td>
<td>INR 20 billion, spent about INR 5 billion of the same(^{27})</td>
<td>• Excel Entertainment • Phantom Films • Anurag Kashyap</td>
<td>• Inside Edge • Mirzapur • Made In Heaven</td>
</tr>
<tr>
<td>Sony Liv</td>
<td>&lt;INR4 billion</td>
<td>• Vikram Bhatt • Web Talkies • Arré</td>
<td>• Hadh • CM CM Hota Hai • Maid in India</td>
</tr>
<tr>
<td>Voot</td>
<td>&lt;INR4 billion</td>
<td>• Turner India • Colosceum Media</td>
<td>• It’s Not That Simple • Yo Ke Hua Bro • Shaadi Boys</td>
</tr>
<tr>
<td>Eros Now</td>
<td>&lt;INR4 billion</td>
<td>• Sanjay Leela Bhansali • Rohan Sippy • Anil Kapoor</td>
<td>• Salute Siachin • Flesh • Smoke</td>
</tr>
<tr>
<td>ALT Balaji</td>
<td>INR 1.2 billion</td>
<td>• Vaishnave Media Works</td>
<td>• Boygiri • Romil and Jugal • Karrle Tu Bhi Mohabbat</td>
</tr>
<tr>
<td>Netflix</td>
<td>NA</td>
<td>• Phantom Films</td>
<td>• The Sacred Games • Selection Day • Again</td>
</tr>
<tr>
<td>Hotstar</td>
<td>&lt;INR4 billion</td>
<td>• AIB • 4 Lions Films</td>
<td>• Tanhaiyaan • On Air with AIB • Cineplay</td>
</tr>
</tbody>
</table>

Source: Amazon spends top dollar to win prime spot in digital content race, Economic Times, accessed on 19 February, 2017

---

\(^{25}\) Golden globes 2016 best TV comedy - Mozart in the jungle; The Verge, accessed on 17 September 2017
\(^{26}\) OTT services landscape in india is getting more competitive; Broadcast and Cable Sat, accessed on September 18, 2017
\(^{27}\) Amazon spends top dollar to win prime spot in digital content race, Economic Times, accessed on September 19, 2017
Additionally, the ‘reality show’ genre is also being explored by the OTT players, with Amazon announcing three reality shows for the Indian market including, Destination Unknown, Comic Kaun and The Remix, slated to be aired in early 2018.

However, investments in original content needs to be balanced with economics given the dependence on AVOD models. Considering the fact that a 20–30-minutes fiction content on digital can cost between INR 1.5 to INR 2.0 million, higher than the content cost on television; monetisation only through an advertisement (AVOD) based monetisation model could be challenging and SVOD/Freemium models would need to be explored for long-term sustainability.

‘Live’ streaming – Emerging genre

Live streaming over digital platforms is on the rise. Major sports events, news, high-profile entertainment events, concerts and product launches are beginning to see traction in terms of being streamed live. Social networking websites like Facebook, Snapchat, Instagram, and YouTube have activated live streams where users can share their real life experiences.

Live streaming helps event organisers get access to a larger audience and incremental revenues via a new distribution medium Global brands, such as Target and BMW, have started using live streaming to launch products and run marketing campaigns. Recently, the launch of Vivo V7+ phone in India was streamed live on various social networking and OTT platforms. Other phone makers such as Xiaomi, Samsung also streamed the launch of their new models in India on Facebook and YouTube respectively.

Hotstar also streams live news from Republic TV amongst other channels such as Fox News, Fox Business, and the UK’s Sky News. Traditional players such as Times Now and NDTV are using their digital presence for events such as the Budget speech, election results among others.

However, the Sports segment has a significant value for the consumer when viewed live and lends itself well to potential monetisation. Live sport broadcasts garner high advertiser interest and ad rates both on linear television broadcast as well as live streaming, case in point being ad rates on OTT platforms, which have nearly doubled y-o-y for the IPL and Champions Trophy. The potential of this sub-segment could also be gauged by the recent IPL auctions where Facebook bid a substantial INR 39 billion for digital video rights for five years.

---

<table>
<thead>
<tr>
<th>Platform</th>
<th>Key live sports properties</th>
<th>Reach</th>
</tr>
</thead>
</table>
| Hotstar  | • Cricket - Indian Premier League (IPL);  
             – Live telecast - Subscription based  
             – 5 minute delay - Free  
             • Hockey – Hockey India League (HIL)  
             • Football – English Premier League (EPL); INR 999 for entire season; Bundesliga, Indian Soccer League  
             • Kabaddi – Kabaddi India League  
             • Motorsports – Formula 1 | • IPL – 80 million unique users in 2016, up from 35 million in 2015 |
| Sony Liv | • Cricket – Live cricket (Sri Lanka, West Indies, Zimbabwe, South Africa, Pakistan, Caribbean Premier League)  
             • Football - Live UEFA Champions League, Ligue 1, Serie A  
             • Wrestling – World Wrestling Entertainment (WWE)  
             • Golf – European and Asian Tour, Ryder Cup, US PGA tour | • Sports – 30% of the platform’s overall viewership  
             • UEFA Champions League – 20 million hits and 90 million interactions in 2016 |
| Veqta    | • Boxing - Floyd Mayweather – Connor McGregor fight  
             • Baseball - Major League Baseball (MLS) | |
| Facebook Live | • Football – Asian Football Federation (AFC) Cup matches | |

Source: Websites of Hotstar, Sony Liv, Veqta; accessed on September 21, 2017

---

28. Amazon Prime Video bets on reality shows in India, The Mint, accessed on September 22, 2017
29. Brands begin to see marketing benefits in livestreaming, FT, accessed on September 18, 2017
30. Vivo v7 plus launch price in India specifications features, Indian Express, accessed on September 18, 2017
31. Republic TV to launch on hotstar, The Hindu Business Line, accessed on September 18, 2017
32. Star India beats Facebook others wins IPL media rights with Rs 16347 cr bid, Financial Express; accessed on September 18, 2017
33. Sports OTT service Veqta bags India streaming rights for Mayweather vs McGregor bout, Economic Times; accessed on September 17, 2017
34. Facebook live to show AFC cup games in India, SoccerEx, accessed September 15, 2017
Regional language content emerges as a key focus area for OTT platforms

The growth drivers

For a nation with 1,600 dialects, 30 languages and over 234 million language internet users, content in their own language holds significant value for consumers. Regional language users, usually face difficulties in accessing English keyboards and have not had too much of a choice when it comes to accessing local language content online.

Limitations of Indian language internet users

However, with the continued increase in regional language user base, this is one segment that digital companies cannot afford to ignore. The Indian internet language user base is expected to grow steadily at a CAGR of 18 per cent to reach 536 million by 2021. Roughly 9 out of 10 new internet users in India are likely to be language users over the next five years. By 2021, Marathi, Bengali, Tamil, and Telugu internet users are expected to form ~30 per cent of the total Indian language internet user base and the number of Hindi internet users is expected to surpass the number of English users.

The regional potential

Nearly 60 per cent of regional language based internet users prefer to consume regional news, with 32 million language users consuming news exclusively on digital media.

Further, the video viewership in India is dominated by the regional language user base which is gradually increasing. Consumers today spend time about 50 to 60 per cent of the average time on Hindi videos, followed closely by 35 to 43 per cent on regional content videos with only 5 to 7 per cent on English. The OTT players are recognising the regional opportunity and thus are planning investments in creating original regional content.

OTT players launched original series offering regional content

<table>
<thead>
<tr>
<th>OTT</th>
<th>Language Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotstar</td>
<td>Tamil web series – ‘I’m Suffering from Kadhal’</td>
</tr>
<tr>
<td>Sony Liv</td>
<td>Marathi web series – ‘YOLO’ and Gujarati series – ‘Kacho Papad Pako Papad’</td>
</tr>
<tr>
<td>ALT Balaji</td>
<td>Tamil web series – ‘Maya Thirrai’, Bangla series – ‘Dhimaner Dinkaal’</td>
</tr>
</tbody>
</table>

Source: KPMG in India’s analysis, 2017

35. India languages defining market – KPMG in India’s and Google report, April 2017
36. Govt mandates Indian language support in phones from July 2017, Indian Express, accessed on September 17, 2017
37. India Union Budget – 2017, released March 2017
39. Hotstar launches premium subscription at Rs 199 per month, Star TV, accessed on September 14, 2017
40. Sun TV network launches digital content platform SUN NXT, Economic Times, accessed on September 17, 2017
 effective distribution strategy critical to reach the target audience

Effective distribution of content is among the critical factors that determine the performance and long term monetisation potential of a VOD service provider. The selected distribution model also impacts long term brand equity, viewership levels and consumer stickiness.

Creating own platform

Setting-up an own platform allows content creators to establish their brand, retain IP rights, control user experience and identify key user touch-points. Usually, own platforms are best suited for a Freemium monetisation model, as ‘for-digital’ content entails a high production costs which needs to be suitably recovered through subscription revenues.

However, platform owners have to contend with high customer/traffic acquisition costs and limited opportunities around content syndication with rival platforms.

Global majors such as Netflix and Amazon have built their own platforms and a resultant brand equity and customer recall associated with them. Disney has recently announced an end to its association with Netflix in 2019 and roll out its own platform for both television and movies, as well as ESPN. BBC has also tied up with ITV to launch a SVOD based service, BritBox in the US.

Looking at the Indian market, Broadcaster backed platforms such as Hotstar, Sony Liv, Ozee and Ditto TV (Zee), global players Amazon and Netflix; and others such as Eros Now and ALT Balaji, have created their own platforms, backed by library content and are now moving towards creating originals.

Building a presence across social media based video platforms

Hosting content on YouTube has been one of the simplest and effective distribution models, especially for pure play content players with limited resources to create an own platform. Of late, Facebook’s video platform has also gained traction with many producers distributing content through dedicated Facebook pages. These platforms provide producers with access to a large audience, at a fraction of the associated customer acquisition costs. The revenue models are AVOD based, with platforms usually withholding a substantial chunk (~50 per cent) of the CPMs as platform access fee.

However, this distribution model poses major challenges around content discovery and brand dilution, as these platforms have a large library of similar, competing channels; with the possibility of declining CPMs as bargaining power of platforms grow.

Indian content producers such as Chu Chu TV (Kid’s rhymes), AIB and TVF (Comedy) have registered immense popularity on YouTube platforms by adopting this model.

Third party licensing/syndicating content

Hosting content or syndication deals with third party OTT platforms provides content producers avenues to reach a ready user base with no investments in infrastructure. The revenue models in such cases are usually on the lines of minimum guarantee or fixed fee basis.

However, such partnerships do not result in any brand equity creation, nor user loyalty pertaining to a particular channel. Further, revenues in such models would be strictly dependent on the success of the content, which is a bit of an unknown.

Eg: Arre, a content focused player, has tied up with Yupp TV; has a presence on the Amazon Fire Stick as an App; and tied up with Facebook to premier its comic series ‘The adventures of Abbas’ in February 2017.

Telco partnerships

As a result of the rapid data uptake over the last 3 to 4 quarters, coupled with commoditisation and falling revenues on voice, content has become extremely important for telecom service providers to engage with and retain their customer base.

While operators such as Reliance Jio have some captive content (as a result of its stake in Network 18), others are trying to build out their content library through partnerships with other VOD platforms and content producers.

41. Netflix should be afraid of Disney’s OTT play, Tech Crunch, accessed on September 21, 2017
42. BBC Worldwide and ITV partner to bring new SVOD service BRITBOX to the US, BBC UK, accessed on September 18, 2017
43. KPMG in India’s analysis, 2017
44. Arre experiments web series launch on Facebook, Bestmediainfo.com, accessed on September 21, 2017
Such partnerships allow platforms and creators to access the 400+ million wireless internet user base, with minimal costs to acquire that traffic organically. The revenue models usually followed are a combination of advertisement based revenues, with a potential fixed fee component. While the content discoverability on a telco platform could be better than a YouTube, a plethora of competing content, would make brand recognition and user stickiness difficult in the long run.

Netflix in India intends to partner with Airtel, Vodafone and D2H (DTH platform), while Hotstar allows Jio Play users to access its premium content at zero cost. Amazon India is reaching out to customers through multiple avenues of distribution like cab aggregators for in-car entertainment (Ola), fixed broadband providers for VOD services along with telco partnerships (Vodafone).

Monetisation models evolving to a mix of advertisement and subscription based revenues

The rapid growth of OTT consumption in India has seen the platforms continually evaluate the monetisation models adopted by them. The Indian market is characterised by four major monetisation models – Advertisement based (AVOD), Subscription based (SVOD), Freemium being a mix of AVOD and SVOD; and Sponsored content which could co-exist with any of the other three models.

Advertisement based (AVOD) models

The advertisement based (AVOD) model essentially aims at monetising the traffic/impressions on a particular video by showcasing advertisements, which may be in the form of video or text. One of the most viewed video on demand platforms in India, YouTube, is based on the AVOD model.

The AVOD model has also been adopted by some broadcaster backed platforms in India, owing to their in-house library that forms the bulk of content available on the platforms. VOOT and OZEE currently depend on advertising for revenue realisations from their platforms. For small content producers, the AVOD model helps them realise revenues without any investments in the underlying platform.

However, given the costs associated with original content that most platforms are gravitating towards, AVOD models may not even lead to a breakeven on every video. As an illustration, assuming a CPM of USD1.5 to 2.5 with You tube’s share at 50 per cent; and cost of producing an original, ‘for-digital’ episode of 23-25 minutes at around INR 1.5 million, the video would need to touch more than 20 million paid views for the content producer to achieve a breakeven. Further, the lack of third party digital measurement makes the ROI visibility for a campaign challenging.

Subscription based (SVOD) models

The SVOD models have traditionally been deployed by global platforms such as Netflix and Amazon Prime Video, owing to their original content strategy right from the outset. The model has seen tremendous success, especially in markets such as the US, where OTT platforms emerged as alternatives to television, rather than the complimentary presence in India.

Unlike global markets, India has a robust cable TV landscape, with a wide array of channels available for INR 100 and above, and in some cases, free of cost through the DD FreeDish platform, which makes the SVOD play challenging for operators. However a SVOD play is essential for long-term sustenance of a platform, one which is especially focussed on original content.

Netflix has seen some traction on its SVOD platform in India, with the focus only upwardly mobile, English language speaking subscribers. The platform is estimated to have around 200,000 subscribers, up from 50,000-70,000 a year ago. Other operators such as Balaji Telefilms and Sun NXT have also gone the SVOD way through their own platforms.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Business model</th>
<th>Subscription price (INR/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netflix</td>
<td>SVOD</td>
<td>500 to 800 (depending on number of logins)</td>
</tr>
<tr>
<td>Sun NXT</td>
<td>SVOD</td>
<td>50</td>
</tr>
<tr>
<td>Amazon Prime Video</td>
<td>SVOD</td>
<td>First year - ~42 Second year - ~85</td>
</tr>
<tr>
<td>HOOQ</td>
<td>SVOD</td>
<td>89</td>
</tr>
</tbody>
</table>

Source: KPMG in India’s analysis, 2017

45. TRAI Performance Indicators, March 2017, Telecom Regulatory authority of India, accessed on September 21,2017
46. KPMG in India’s analysis, 2017
47. KPMG in India’s analysis, 2017; paid views defined as when an advertisement is watched for a threshold limit
48. Based on industry discussions
Freemium models

Freemium models are a mix of AVOD and SVOD, with a strategy around fostering customer engagement on a platform through a critical mass of library content and eventually looking to convert customers to a pay model through original programming.

The model is useful from the point of view of recovering a portion of operational costs through advertisement based monetisation from the library content, with subscriptions helping the platform turn profitable in the long run.

The leading OTT platform, Hotstar, follows the Freemium model, with television dramas and serials largely available for free, while latest movies, Live sports and global series such as Game of Thrones etc. available for a monthly subscription.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Business model</th>
<th>Subscription price (INR/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotstar</td>
<td>Freemium</td>
<td>199</td>
</tr>
<tr>
<td>Viu</td>
<td>Freemium</td>
<td>99</td>
</tr>
<tr>
<td>Eros Now</td>
<td>Freemium</td>
<td>50</td>
</tr>
<tr>
<td>Sony LIV</td>
<td>Freemium</td>
<td>50</td>
</tr>
<tr>
<td>dittoTV</td>
<td>Freemium</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: KPMG in India’s analysis, 2017

Digital measurements and piracy remain significant monetisation challenges

Third party digital measurement

The digital medium, by the inherent virtue of its addressability in terms of the user accessing it, is built towards targeted customer advertising. However, the industry at large is facing a significant challenge in terms of consistency amongst measurement metrics and third party validation of the viewer data.

Major global advertisers have expressed concerns around the same, citing an inability to arrive at a measureable ROI from digital advertising. In January 2017, Procter and Gamble (P&G) cut its digital advertising spends by USD140 million50, due to concerns around brand safety and ineffectiveness arising from the digital campaigns.

In India, currently no third party digital standards exist for validating ad measurement. However, Broadcast Audience Research Council (BARC) in India has teamed up with Nielsen to launch an integrated advertisement measurement systems across TV and Digital under the brand name ‘EKAM’ around the last quarter of CY’1753.

Sponsorships – An emerging and effective monetisation tool

Content producers are also realising the benefits of branded/sponsored content, which is emerging as an effective means of monetisation. The same helps in partially recovering the content production costs, while the advertiser benefit by having the brand message baked into the content, without the risk of losing customer attention due to intrusive advertising.

Arre follows the Sponsored content model for some of its content, and has roped in sponsors series like Gillette sponsoring ‘A.I.S.H.A’; while TVF’s (The Viral Fever) ‘Permanent Roommates’ had Ola Cabs as the anchor sponsor49.

Digital advertisement fraud

Fraudulent clicks on digital advertisements is one of the major challenges being face by players globally, with such ‘malvertising’ estimated to cost marketers 16.4 billion54. India is worse off with mobile advertising click fraud 2.4x higher than the global benchmarks, and stands at around 31 per cent55.

49. KPMG in India’s analysis, 2017
50. Procter gamble cut 140 million in digital ad spending because of brand safety concerns, AdWeek, accessed on September 18, 2017
51. Google follows Facebook with Media Rating Council audit of YouTube metrics, M and M Global, accessed on September 21, 2017
52. GroupM rolls out expanded viewability standards, GroupM, accessed on September 18, 2017
53. Broadcast Audience Research Council Website www.barcindia.co.in; accessed September 18, 2017
54. Businesses could lose 164 billion to online advert fraud in 2017, CNBC, accessed on September 18, 2017
55. Mobile ad fraud in India 2.4x higher than the global average, Tune, accessed on September 18, 2017
Google reported issuing refunds to hundreds of advertisers in August 2017, after detecting a large amount of bot generated fraudulent traffic. Although the refunds were around 7 to 10 per cent of the monies spent by these brands, the same was intended to build long-term trust with advertisers. However, smaller platforms are currently not technologically equipped to handle the bot behaviour. The need of the hour for the industry is to come together as one body, and implement consistent technology across digital platforms to ensure sustained growth.

**Brand safety**

The concept of brand safety is still at a nascent stage in India. However, with growing consumption on digital media, the concept will be one of the critical challenges to tackle going ahead.

Platforms like Google are globally trying to address this issue through effective filtering basis the brand guidelines. YouTube has put measure in place to ensure no advertisements are served around ‘hate speeches’. In India, organisations are coming up with algorithms which monitor content across digital platforms before letting an ad being served next to content.

**Digital piracy – The menace continues**

Digital piracy is quickly becoming a serious threat to the OTT platforms, especially SVOD based models as it provides viewers with free alternatives to otherwise paid content with no loss in experience or quality. Moreover, due to the current unregulated nature of OTT content, piracy has emerged as a real concern for the industry players.

Easy access and universal reach of the digital world allows individuals to set up peer-to-peer (P2P) sharing networks, generating a multitude of links to the same content and in effect, distributing it to the masses for free. These individuals, in turn, earn revenues through advertisements on their websites- more footfall leads to more clicks. The shutting down of some of these torrent websites has proven to be ineffective as with the closure of one, many more emerge, as has been the case with sites such as KAT, Pirate Bay, Rapidshare, Megaupload, etc.

Game of Thrones, one of the world’s most avidly watched shows, is considered to be the most pirated content globally, with many leakages dotting its 7-season history. Star TV’s Hotstar, responsible for broadcasting the show in India famously spearheaded a campaign ‘Torrents Morghulis’ after recent piracy incidents with the show.

Across mediums, piracy not only damages revenues and market shares, but also deters content creators from investing in new content, and thus the impact can be severe on SVOD platforms.

**Industry initiatives to curb the menace**

Stakeholders in the OTT value chain need to ensure 360 degree approach to security and anti-piracy to prevent loss or leakage of original or acquired content.

Although the illegal distribution of pirated content is punishable under the Indian Copyright Act 1957, the same along with the Information Technology (IT) Act and The Cinematograph Act, 1952, need to be updated taking into account the mass proliferation of digital videos.

In June 2017, global content creators and on-demand platforms launched an industry coalition called Alliance for Creativity and Entertainment (ACE), with memberships from the likes of Amazon, Netflix, BBC Worldwide, Sony Pictures Networks, Star India, Warner Bros etc. to protect and foster the market for legal content.

Closer home, a step in the right direction was taken with the Internet and Mobile Association of India (IAMAI) constituting a working group to safeguard the interest of the digital entertainment businesses. The committee consists of key stakeholders from large M&E players such as Hotstar, HOOQ, SET India, Star Plus, Digivive, Radio Mirchi, Shemaroo, Viacom 18, Netflix, Arre, Eros, among others. The group aims at fighting online piracy and establishing best practices for the digital content industry.

---

56. Game of Thrones is the most illegally downloaded TV show for the fifth year running, The Independent, accessed on September 21, 2017
57. Hotstar declares war on torrents, Game of Thrones style!, Business Insider, accessed on September 18, 2017
58. Google refunds ad companies after detecting fraud, Times of India, accessed on September 18,2017
59. Google Begins Biggest Crackdown on Extremist YouTube Videos, Bloomberg, accessed on September 21,2017
60. Global Entertainment Companies Join Forces to Launch the Alliance for Creativity and Entertainment to Reduce Online Piracy; Alliance4creativity, accessed on September 21,2017
61. IAMAI sets up committee to work on fighting online piracy, Economic Times, accessed on September 21, 2017
Industry bodies such as Motion Pictures Association of America – India arm (MPAA India) and Federation of Indian Chambers of Commerce and Industry’s (FICCI) media arm, have been actively engaging with the government to fight online piracy. Focused units such as MIPCU (Maharashtra Intellectual Property and Crime Unit) and Copyright Force (a joint initiative of Telangana Intellectual Property and Crime unit and MPAA India) are mandated to exclusively work towards curbing the online growing piracy menace in the years to come.

**Scale and economics – A balancing act for OTT platforms**

The year 2016 saw OTT platforms proliferate with the video on demand segment in its infancy. However, with increasing maturity around distribution and content strategies by stakeholders in the industry, the segment has reached a stage, where current decisions will have a significant impact on which platforms survive the VOD race in the long-run.

The key indicators for some platforms today are not around profitability margins, but more around the critical mass of customers on the platform and their resultant engagement, while for others, building a profitable business from the outset defines their long term vision.

While the customer engagement focused platforms are likely to see rapid growth in terms of active users and time spent on the platform, the traffic/customer acquisition costs and investments in content would imply a long gestation period before profitability kicks in. Such platforms however, may have more leverage, when it comes to cashing in on the large potential that online video holds.

The above does not imply that a focus on profitability is a flawed strategy. Recovery of operations and content costs to build a long-term sustainable business is probably the most critical focus areas for media organisations. However, platforms would need to be cognisant of the benefits that customer loyalty and continuous engagement bring in, and the revenue potential that operations at scale can achieve.

Business that can delicately balance the above considerations, along with compelling and discoverable content would eventually be the likeliest winners.
Road map to a new digital world
Digital is the new normal and requires a fundamental mind shift

With online video consumption gaining traction and becoming ‘mass’, traditional value chains and business models are facing widespread disruption. Players across the value chain are exploring the digital universe with some players embracing the shift while the others are still testing the waters.

Major operators in the OTT domain in India are traditional companies ranging from broadcast networks, telcos and content producers. However, operating and business models in the digital environment is very different to what traditional businesses are used to with continuously evolving technology, unclear business models, customer experience centric approach, evolving consumption patterns and rapid response time.

As a result, organisations need to be flexible, nimble and develop strategies to predict, influence and respond to customer behaviour to be able to optimise the digital opportunity and combat ever evolving challenges. This requires organisations to modify their DNA from their business and operating strategy to internal structures, processes and also the way employees think and perform their jobs across the front, middle and back offices.

Digital transformational journey requires a digital first mind-set

The road to digital transformation is an ongoing journey with iterative processes and evolving goal posts. However, we have attempted below to categorise the transformation process into four broad phases i.e. defining a digital vision and strategy, building customer proposition, developing business design and planning execution.

---

Source: KPMG in India’s analysis, September 2017
Phase 1 – Digital vision and strategy

‘Digital vision and strategy’ phase is the backbone on which digital transformation projects are born. The same encompasses

<table>
<thead>
<tr>
<th>1. Strategic context</th>
<th>To determine the macro and micro trends covering digital infrastructure and access, demographics, technology, consumption patterns, content, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Current state and digital maturity assessment</td>
<td>To determine the organisational capabilities and positioning around digital, the gaps and skills required to operate in a digital environment relative to peer and industry benchmarks</td>
</tr>
<tr>
<td>3. Operating constraints assessment</td>
<td>Is critical to determine a balance between what is feasible given the financial and operating limitations of an organisation and the optimal desired end state</td>
</tr>
<tr>
<td>4. Digital strategy and business plan</td>
<td>To determine the approach to a digital play, the business potential and the related business economics</td>
</tr>
<tr>
<td>5. Technological, cultural and operating change management</td>
<td>To identify the organisation wide changes required to operate in a digital environment</td>
</tr>
</tbody>
</table>

Strategic context – what is happening around you

While digital and OTT is at the top of the mind for many media organisations, it is critical to gain an in-depth understanding of the real digital opportunity and the role/positioning that is best suited for each organisation. This would require a thorough assessment of various elements such as:

- Evolution of digital infrastructure, digital penetration and access
- User demographics and evolution of consumption patterns
- Content trends and evolution
- Monetisation trends and potential
- Distribution models
- Technology evolution and
- Competitive landscape and strategies
**Current state and digital maturity assessment – An honest look inwards**

A clear understanding of how the organisation performs today and its level of digital maturity would provide clear direction as to where the organisation should focus its attention and strategy. Timescales and action plan can vary significantly based on maturity of an organisation's digital capability and buy-in from senior executives. Organisations need to be brutally honest in terms of assessing their digital maturity, as the tendency is to overestimate the level of digital maturity and a misdiagnosis would have severe repercussions on the digital rollout.

**Scan and map emerging digital players and innovations**

- Assess emerging disrupting technologies in media space
- Analyse the competition and gauge the revenue potential for a new entrant in digital space
- Define framework and conduct scan of emerging business models
- Recognise the well-rounded and adaptive skillset evolving in the market
- Review previous work related to digital and current beliefs about digital

**Derive key threats and opportunities (including themes)**

- Identify overarching themes across players and business models
- Link themes to specific products and revenue drivers

**Prioritise impact using profit pool data**

- Build quantification model to size potential impact of selected themes
- Assess impact over short-term, medium-term and long-term horizons
- Identify profit lines/areas facing significant threats or opportunities

**Prioritise mitigation responses**

- Define potential interventions to mitigate risks, e.g.,
  - Re-allocation of investment
  - Small ticket acquisition
  - Partnerships/equity stakes
- Take into account balance sheet impact, costs, and risk

**Source:** KPMG in India’s analysis, 2017

**Organisational SWOT**

- **Existing business insight**
  - Current state operating model
  - KPI performance
  - Channel volumetric
  - Financial KPIs
  - Functional richness compared to competition
  - Maturity assessment

- **New VOB insight**

**Immature digital organisations**

- Educate, inform and win support

**Mature digital organisations**

- Market protection, remaining competitive, innovation

**Note:** VOB refers to Voice of Business

Source: KPMG in India’s analysis, September 2017
In less mature organisations, there is a need for extensive stakeholder management and pitching of digital as a credible investment area compared to traditional, which is a more comfortable investment. Ultimately, if investment in digital goes up, it is likely to reduce investment in other business areas.

A number of traditional media organisations underestimate the challenges around a shift to a digital model, most of which stem from lack of true understanding of ‘what is digital’ for their organisation and overestimation of their state of digital maturity.

**Operating constraints – dream vs reality**

Combining the ‘outside in view’ of the market with the ‘inside out view’ of the organisation will enable a company to identify the gaps between the desired end state and the operating and financial constraints of the organisation. While media companies can opt for a high investment model focussed on market share acquisition and high customer engagement, this is likely to require significant levels of investments. Additionally, OTT business models are still evolving and as such current economics and returns may not compensate for the investments required. An organisation needs to have a clear sense of its state of digital maturity, capability to invest, expectations on returns and calibrate its desired digital end state accordingly.

It is also essential to define the KPIs to measure the success of digital transformation process since the strategy to achieve different metrics would need to be different i.e. revenue vs market share, customer experience vs profitability, etc.

**Digital strategy and business plan – the way ahead**

An integrated view of the strategic context, current state and operating constraints will enable an organisation to determine its overall digital strategy.

The objectives represent the goal that the strategy will be designed to achieve. The more clearly they are defined, the better is the chance of producing an effective strategy.

The principles underpin and inform the development of the strategy

While evaluating the desired digital end state, key aspects that should be addressed are

- Platform play vs licensing models
- AVOD vs SVOD
- Market share vs economics
- Brand building and mindshare

Once the overall digital strategy is designed, the related business case along with the core components such as timeframe, approach, investment requirements, etc. needs to be determined.
Cultural and behavioural change management – change in DNA

Culture development plays a determinant role in the success of digital transformation. The company cannot bring transformation without addressing the human element. Culture is intrinsic to any organisation and has to be addressed before embarking on to the journey of digital transformation. Thus, effective change networks and elaborate communication plans are essential to disseminate the change efforts as digital affects all areas of a business.

The leadership needs to understand the required changes that are crucial for digital transformation, including new skills, employee behaviours, organisational structures and corporate culture. With the adoption of new technologies such as artificial intelligence (AI), augmented reality (AR), virtual reality (VR), cloud, machine learning, big data and Internet of Things (IoT) into business operations, organisation would require a workforce with specialised skills that can deliver and align these technologies to drive business value. According to a recent survey, more than half of the surveyed IT services firms said that innovation and critical thinking are the key shortcomings both amongst fresh engineers and existing workforce, as they look at digital transformation.¹

¹. AI dominates: Indian IT stares at talent shortage in digital, cloud skills, Business Standard, 9 January 2017
Phase 2 – Customer proposition

Customer experience and engagement is at the core of a digital media offering. Traditional media businesses typically have a ‘one to many’ content strategy which needs to be completely pivoted into a ‘one to one’ content proposition in a digital environment. Ability to identify a user’s content tastes and engage with the user on a one to one basis is both a significant opportunity and challenge for media organisations.

Key trends which have a significant implication on content consumption patterns are:

• Change in user demographics from digital savvy youth in top cities to a more mass demographic across geographies and socio economic classes
• Increasing data speeds leading higher usage of long form content
• Growing regional consumer base
• A mobile first consumption model

It is therefore imperative for companies to understand their target audience, discover and recognise the importance of transforming digitally to avoid losing their existing customers to more-engaging competitors. However, having said that, content alone can no longer determine exclusivity or differentiation, the overall packaging and services would build a compelling product for viewers.

Customer research – the foundation of digital businesses

When designing a digital strategy, it is important to understand the following from customers:

• What are the current customer journeys when interacting with the organisation?
• What do customers think are the ‘critical interactions’ or ‘moments of truth’?
• Do customers have appetite to be digital?
• How do customers behave in the context of digital
• What are the latest digital trends affecting existing and target customers?

Four categories of customer research relevant to digital strategy

Listening to what customers tell about quality of service and what is really important to them provides great insight, but the approach also needs to focus on customer behaviour. Ethnographic research methods, such as shadowing and diary studies, are proven to successfully augment tried and tested qualitative and quantitative research methods and provide valuable insight when thinking about the products and services of the future.

A customer’s journey very often crosses multiple channels and this should be considered when carrying out customer research for digital strategy

When customers interact with companies, they often interact with a range of channels to execute what they need to do. Thus, even when designing a digital strategy, the customer research should encompass all possible channels including digital, to ensure alignment with the organisation’s overall distribution strategy.
Phase 3 – Business design
Once the customer proposition is created, it is important to evaluate internal capabilities and modifications to the current operating model.

Digital capability model
In order to proceed with the digital transformation journey, assessment of existing infrastructure capabilities and requirements is a must. Considering OTT players are working in tandem with technology players to enable seamless access to their products and offerings across multiple touchpoints, a number of options need to be evaluated and shortlisted across the below categories at this stage:

- Device support
- App/web development
- Digital enterprise
- Social media
- Customer, operational analytics
- Optimise/grow/defend/acquire
- People capabilities and skills

Operating capability model
A holistic digital transformation encompasses implementation of an organisation-wide operating strategy that links the capabilities across the front, middle and back office of a company as well as create experiences that satiate customer demands. However, digital operating strategy cannot be developed in a silo-ed way, but shall rather talk to the existing systems and processes. This makes it critical for the leadership to evaluate:

- How business organises around digital
- Alignment to customer segmentation
- Operating model design to realise required capabilities
- Channels/products/services
- Insource/outsource/partner options
- IT architecture impacts
- Potential cannibalisation of the traditional business
Phase 4 – Execution planning

The final phase before execution is developing a detailed rollout plan for the digital transformation process. This phase can broadly divided into two components - Programme design and execution plan.

A core element to assess before rollout is to determine the measure of success. The definition of success varies based on the overall digital strategy and the desired end state. Based on the definition of success, it is critical to also identify the appropriate KPIs to measure success. For example, if viewership is one of the key determinant of success for an OTT player and rather than focusing on KPIs such as video views, repeat views, user experience, feedback, resolution time, the company only stresses upon financial matrix such as cost to serve, then the end outcome expected will not be achieved.

Programme design

Prior to embarking on the digital transformation rollout, it is critical to think through the following elements to enhance success potential of the:

- Identifying the areas of uncertainty in the project in terms of open questions, implicit assumptions and prerequisites, and planning how to address them.
- An explicit verification of the project risk register against predetermined categories to provide a standardised registry of open questions.
- Ensuring a common understanding of requirements and solution by structured walk-through at an architecture level.
- Planning the detailed delivery mechanisms of the engagement.
Designing successful digital programmes is about getting three elements right:

When a digital strategy reaches this point of maturity and funding is approved to mobilise a change programme, it follows the same programme design disciplines as other programmes of change in an organisation i.e. getting the foundations in place for a programme to be set-up for success.

Execution plan

In order to ensure effective execution of digital strategy, special emphasis needs to be laid on the following:

- **Risk identification, mitigation, proving and control:** A company shall identify and assess key business risks that might emerge owing to business transformation, and a proper risk mitigation and control plan should be put into action.

- **Customer impact assessment:** All the use case shall be considered to avoid any adverse impact on customer experience owing to the company-wide changes.

- **Delivery, flexibility, speed, governance:** To build a sustainable digital business, organisations not only need a digital strategy but also require a cultural shift, agile operating model and flexibility for driving continuous innovation.

Key pillars of digital transformation

- **Digital first**
  - **Innovation focussed mindset**
  - Innovation is not a choice anymore. For digital innovation to be successful, it is pivotal for the leadership to assess their business through a number of lenses — technology, business strategy, future gap analysis, and digital road map.

- **Content security**
  - **Data protection and IP security**
  - With companies embracing digital transformation, security has become even more critical. It is important to safeguard data across systems, devices and the information on the cloud.

- **Analytics**
  - **Data analytics**
  - Data analytics is paramount for understanding customers and improving portfolios and cost structures.

- **Organisation-wide change**
  - **Integration across organisational DNA**
  - Strategy to transform that need to be holistic and inclusive of all business segments and functions, including the front, middle and back offices.
Digital first and innovation focussed mind-set

Innovation for a digital company is not a choice any more but perhaps is the only ‘business as usual’ way to go forward. It is imperative for business owners to carve out specific teams focussing on this impending change and drive transformation across the organisation. According to the survey of 131 CEOs in India in 2017 conducted by KPMG International, 60 per cent organisations plans to make significant investments towards innovation led transformation over the next three years.2

Setting up incubation centres to drive innovation

Being a comprehensive activity requiring significant changes to a business, digital transformation has driven many organisations to set up or seek support for their incubation centres to focus on turning innovative ideas into viable business models. According to the National Business Incubator Association, 88 per cent of organisations that have graduated from incubators remain in business after five years, while only 20 per cent of start-up businesses, generally, survive in the real world.3

The objectives of these incubation centres include helping an organisation achieve a vision for the future, a culture of innovation, an agile operating model, an appropriate trade-off between foundational investment and short-term wins, and an appropriate use of emerging technologies to improve customer, employee and business partner experience. Incubation centres can exist in multiple forms.

1. In-house incubation centres: In-house incubation centres perform the same tasks as any other external incubation centre; however, they are typically set up as an independent unit entrusted with developing innovative solutions to specific business issues. For example, in 2013, Arena Animation, the animation, web designing, VFX and multimedia education arm of Aptech Limited, launched its in-house incubation centre to identify industry needs and adapt its trainings accordingly.4

2. Accelerator programmes: Accelerators assist early stage start-ups with financing and mentorship in a fast-track mode, providing intense, immersive education to help them accelerate the life cycle of young companies within a few months.5 While some start-up accelerators operate in India, global M&E conglomerate Disney also runs an accelerator ‘Disney Accelerator’ that provides select companies the access to the creative expertise and resources of the Walt Disney Company to help them develop innovative products and services.6 It is a lucrative situation for both media companies and start-ups, as the former gains access to innovative ideas and solutions, while the latter gets the much-needed guidance and financial support.

3. Government-funded incubation centres: The Indian government has launched several initiatives to support and incubate budding start-ups in the country to help them scale up their businesses up to a certain required level, in addition to providing them space to operate from.7 For instance, the Government of Telangana is supporting AVGC sector; it is planning to set up an incubation centre called ‘Innovation in Multimedia, Animation, Gaming and Entertainment’ (IMAGE) in Hyderabad, which would provide an ideal environment for businesses in the animation, visual effects, gaming and comics industry.8 The Government of Gujarat is also pursuing investments to launch an AVGC lab in the state, aimed at providing a technological boost to the sector.9 Under the Start-up India Action Plan announced in early 2016, the central government would provide funding support and incentives such as tax exemptions, in addition to incubation assistance through industry–academia partnerships.

---

2. Disrupt and Grow – India CEO Outlook 2017, KPMG in India, August 2017
3. ‘Central tech opens new business incubator’, Central Tech, 12 February 2017
4. Arena Animation, Bangalore launches in-house incubation and outhouse production studio, Vedatma Animation studio, Animation Xpress, April 2013
6. https://disneyaccelerator.com/, as accessed on 15 September 2017
7. Government certifies 20 companies as incubators under Startup India, Economic Times, July 2016
4. **Third-party innovation labs**: An innovation lab is a space where partners from the private sector, NGOs, academia, government ministries, civil society and youth come together to co-create solutions for the most pressing challenges. These innovation labs help organisations to — cultivate ideas into commercially viable products, profile new capabilities, solve business challenges in new ways, gain awareness of the marketplace and gain access to technology, people and skills, and specifically developed smart assets and capabilities.

In 2017, Paypal launched two innovation labs in India, in Chennai and Bengaluru, to support innovation across multiple areas including machine learning, artificial learning (AI), Internet of Things (IoT) and virtual reality/augmented reality (VR/AR).

**Integration across organisational DNA**

**Organisation structure and reporting**

Established traditional media companies need to carry out internal changes so as to craft structures that can support digital transformation. The organisational structure needs to be flexible to promote cross pollination and to drive synergies. The governance structure should be such that it establishes the principles and policies from the hierarchy of stakeholders. It should clearly identify the homeowners of the information, map the wants of every owner, define the performance KPIs, establish collaboration and communication between teams, and manage dependencies.

The core of the philosophy is based on defining ownership and establishing a stewardship model to implement the plan. Stewardship is the key to successful implementation and stewardship is the guiding process that bridges business and users; executives and technology. The stewards oversee the implementation of the tools, manage the data integration and provide the training and management for the introduction of new workflows and business processes.

**Organisation-wide digital operating strategy**

To fully realise the potential of a digital solution, bringing a paradigm shift just in the way viewers consume content is not enough, however an organisation wide change is required. According to KPMG in India’s CEO Report 2017, 65 per cent organisations have aligned their middle and back office processes to front office operations to reflect a more customer-centric approach.

---

10. Innovation Labs, UNICEF, October 2012
11. PayPal launches two tech Innovation Labs in India, Economic Times, August 2017
12. Disrupt and Grow – India CEO Outlook 2017, KPMG in India, August 2017
Digital transformation disrupting the capabilities across

- Mobility
- Consumer analytics
- Payments
- Advertising and marketing technologies
- Customer journey mapping
- Personalised products and experience
- Support functions – IT, HR, etc.
- Process automation
- Digital labour
- Content centres
- Talent acquisition and development

• Transforming the front-office
Companies cannot get by just on the back of good content, and thus media companies and content providers have been striving to nurture superior relationships with audiences by investing in a number of front-office technologies. While mobility technologies are being leveraged to allow viewers’ access to content across devices such as smartphones, tablets, gaming consoles etc., players are also using analytical tools to capture real-time customer data. With the evolving digital payments ecosystem, companies are also trying out innovative business models, leading to new avenues of revenue generation. In addition, ad technologies such as geo-targeting and programmatic ads are also being used for added value to the advertisers.

On the whole, continued investments in digital front-office technologies would form the road map to innovation, leading to high-quality user experiences through tailored content, improved viewing recommendations, more personalised and pertinent advertisements, better viewer engagement and new possibilities of distributing and monetising content more efficiently.

• Transforming the middle-office
Improving efficiency and reducing time-to-market are key focus areas of today’s CEOs. Thereby, media companies have been integrating technology solutions — such as content delivery networks (CDN), content management systems (CMS), cloud platforms, mobile video optimisation, video compression and encoding, supply chain virtualisation, etc. — across the value chain. These solutions are benefiting media businesses by allowing them to integrate production management, digitally share assets across locations, automatically archive data sets, centrally controls versions, process content on the fly, digitally package and catalogue content. This in turn allows media companies to offer an enhanced user experience through higher picture quality at a much lower bandwidth across different sized screens. Digitisation of the entire content supply chain simplifies the efforts of content owners, thus maximising the monetisation opportunities for media companies.
• **Transforming the back-office:**
The gaps in back office operations could question a company’s ability to fulfil demand or offer desired consumer experience. The back office transformation — involving digitalisation of core functional departments, process automation, digital labour, digital contact centres, etc. — helps companies reduce expenses, improve compliance, and increase overall productivity. While robotics process automation (RPA) is helping media companies to automate repetitive processes, cloud is enabling easy processing and inter-department movement of data. Cloud allows companies to design and standardise innovative business functions for their existing back office products. Data as a service along with mobility solutions enable employees to access data anywhere anytime, which in turn enhances employee productivity and helps company scale its back office operations. Further, the integration of technologies such as artificial intelligence and cognitive computing are helping with costs.

**Technology integration**
Digital technologies are changing the business landscape, however some organisations fall behind compared to others owing to challenges pertaining to legacy systems. Legacy systems do pose a number of challenges, including:

a. Migrating older data and processes from legacy system to a new system
b. Integrating new technology functionalities such as security
c. Testing digital technologies or third-party APIs on legacy systems
d. Involving big data analytics in business decision-making

For a digital start-up, the probability of scaling up business operations is quite high as against traditional businesses that have been operating in the industry for decades now. This is for a simple reason that the legacy processes and systems of the latter define the extent of plausible business transformation rather than the other way around. However, the value associated with legacy systems and processes cannot be ignored either. The businesses have invested a lot of time, money and manpower to develop these systems and processes, which, till date, are delivering value and creating a differentiation/niche for the business in the market. It is critical for businesses to identify how best the legacy systems can be leveraged.

**Data analytics**

**Analytics is one of the most important pillars for a digital OTT organisation**
The consumers and their engagement on an OTT platform essentially defines the long-term success of the players. To drive very engagement, it is imperative to understand every facet of the consumer, right from how he/she navigates through the platform and what he/she likes watching to eventually predicting what category of content will appeal to the target audience. The role of data analytics to answer these questions is paramount, and organisations need to effectively leverage the mountains of consumer data to arrive at actionable insights.

**Data analytics – Insights across the OTT journey**
With the rapid growth in OTT video consumption, companies have to contend with multiple challenges around what to do with the data. Some of the key considerations are outlined below:

- **Data capture and integration** – Integration of massive amounts of data generated across the platform starting from customer demographic data to activities like clicks, views, shares.
- **Platform reach** – With multiple distribution models and touch-points through which a consumer can interact with the OTT value chain, an integrated view of which modes of reaching the customer are proving to be effective will help improve the long-term prospects of the platform.
- **Consumer acquisition** – To effectively acquire target consumers while effectively utilising costs is something that the platforms are looking to find ways around.
• **Knowing the consumer** – In an environment where a consumer wields the absolute power when it comes to the choice across competing platforms, companies need to have a clear understanding of consumer behaviour, preferences along with institutionalising advanced analytics around demographic and channel segmentation.

• **Content insights** – Amongst the most important aspects of any OTT platform is content strategy, and understanding the motivations behind a consumer watching a particular category of content. The insights thus derived could potentially be used as inputs for future content creation decisions.

• **Dynamic revenue models** – OTT monetisation models are continuously evolving with even ‘traditional digital’ mediums like YouTube advertising likely to see stagnation in terms of CPMs. With migration of consumers towards mobile and other online platforms, identifying the right set of consumers for potential upsell and providing advertisers with insights for their spends is of paramount importance.

---

**Data analytics - Technology framework**

The typical data analytics framework across an organisation encompasses the following:

• **Quantify** – Upload and segregation of data into identifiable patterns

• **Understand** – Insights on ‘why’ a particular behaviour is being observed, using advanced big data and machine learning techniques

• **Model** – Identify target groups and predictive modelling of potential behaviour i.e. ‘How will the consumer behave’

• **Implement** – Put hypothesis into practice and capture actual consumer behaviour

• **Measure and refine** – Validate hypothesis and refine outcomes through a virtuous cycle.

---

**Source:** KPMG in India analysis, September 2017

**Note:** TG refers to Target group
Data analytics evolution across an organisation

Media companies have varying levels of adoption of data analytics, which defines the ‘data maturity’ level they are at:

- **Level 1** – Nascent stage – Characterised by minimal awareness and importance of data; and basic issues around collection and warehousing of data
- **Level 2** – Pre-adoption – Starts off with understanding the need for analytics and involves initial investments in analytics infrastructure and education across the organisation

- **Level 3** – Early adoption – Insights around ‘why’ something has happened (descriptive analytics) and teething issues around company wide deployment of analytics tools
- **Level 4** – Corporate adoption – Operationalisation of big data, predictive analytics and emerging mind-set of analytics being essential to gain a competitive edge with respect to the competition
- **Level 5** – Maturity – Digital first mind-set institutionalised across the organisation, decision-making driven by data insights, human capital buy-in and a continuous culture of data driven innovation

Data protection and IP security

The importance of content security

Viewers are looking for a fast and secure online media viewing experience irrespective of the devices and location, protecting online media content is a multifaceted challenge for digital media platforms. With technology opening up new avenues of content delivery to consumers, the threat of digital content piracy is a major concern. As the OTT space expands across demographics, organisations need to be more diligent about protecting their intellectual property and content.

The frequency and intensity of cyberattacks in India has increased, due to which content is under a constant threat. This has made it mandatory for companies to address and manage cyber-risks. To ensure a smooth experience for consumers, broadcasters-run and pure-play OTT platforms are opting for the highest levels of content security incorporated within the core of their business operations and across several delivery platforms.

OTT platforms facing challenges around control over consumer endpoints

The rise of digital viewing has rendered the conventional measures that companies have relied upon to contain piracy, obsolete. In contrast to networks managed by broadcasting companies, the digital space lacks centralised control over the security of endpoints, such as set-top boxes.

Source: KPMG in India’s analysis, September 2017
Consequently, the service provider’s control over the devices used to decode, distribute and consume content is significantly reduced. In addition, the shift from operator-controlled endpoints to user-selected devices reduces companies’ involvement in important security decisions.

To control and manage a multi-platform and multi-service space, digital content providers must embrace a holistic security approach to address the security requirements on any type of content (live or on-demand) on any device. Different approaches can be employed right from the source of content origin to the means of distribution. The idea is not to resort to just a defensive tactic but also search for ways to implement an end-to-end framework of content security.

**Content security interventions required across all touch-points**

Securing content at source helps limit the instances of security breaches. Hence, adopting end-to-end content protection technologies such as intrusion detection systems, audit trails as well as technologies that control physical access to server facilities become critical for organisations.

Further, a major chunk of users prefer to stream OTT content on smartphones and tablets. However, natively installed apps on such devices come with a number of risks such as sensitive content leakage, insecure content transmission and unprotected data storage. This poses the risk of data sharing between apps, peer-to-peer file transfers, through cloud storage, and sharing and access allowed on social networks.

It is thus important for OTT platforms to leverage technology that delivers content securely to users’ devices so that not only the authorised viewers can access the content, but to also ensure that the content cannot be downloaded or shared illegitimately.

**Watermarking and pirate monitoring**

While dealing with content piracy at the server and the application level could be effective, it may not be a fool-proof method of protecting content. For instance, stream and screen capturing tools help pirates capture the video that is played on the screen. Insertion of digital watermarks to video content can be used to narrow down on the source of the content leakage which feeds the redistribution streaming servers.

Another important element around cyber security technology is to monitor pirate services. Companies can employ cyber-security vendors that work with the rights owner, national authorities and ISPs to take down illegal servers.

It is also critical for companies to address the timing of rights windows. Companies must control concurrent access to streamed content at the subscriber account level and exercise control over offline content access and downloads.

**The elements of content security framework**

Source: KPMG in India’s analysis, September 2017
Phase 1 – Context Setting
The first phase revolves around a review of the content acquisition and monetisation strategy along with the content management model, to identify areas where content security policy design is to be enforced. The tools and methodologies to be enforced are centred on access rights management, security controls, and content storage and archival procedures.

Phase 2 – Content Security Realisation
This is a critical phase which defines the set of processes governing the content security across a typical OTT platform. The processes comprise of:

• **Core Content Processes**
  - Content Acquisition and Development, Transfer and Broadcast, Distribution and Sales, Access and Rights Management and Content Storage and Archival

• **Content Security Processes**
  - Content Control and Exception Management, Vulnerability assessment and security process design to address the same

• **IT Processes**
  - Media Inspection and Classification, Media storage assessment, Security Monitoring, Business Continuity management processes in the case of content breach eventualities and Content Backup strategies

• **Incident Management Processes**
  - Response to Security incidences and command chain for response, risk management procedures encompassing detection, assessment and mitigation

Phase 3 – Content Security Operationalisation
The last phase is about putting into practice the processes outlined in Phase 2

• **Management Systems** – Content security Management Systems are put in place which define the entire security organisation, right from awareness at executive levels to incident teams and the protocols to be followed in case of security breaches and kicking in the business continuity and disaster recovery procedures

• **The Physical Security Layer** – Operationalisation of physical security is a critical element which helps guard against unauthorised entry into secure areas for a digital OTT organisation. The elements around the physical security layer are
  - Asset Tagging and Labelling, Transport and Facilities security systems, Alarms and Keys implemented at vulnerable locations, Access controls, Systems and area authorisations and installation of monitoring systems

• **The Digital Security Layer** – While physical security is the first layer of security control, implementing security measures across electronic devices helps build a second layer of digital security, making the systems robust in nature. The digital layer comprises of the following elements
  - Firewalls and Network security, Input and Output device security, Digital content library security management, Content tracking and transfer, Authentication servers, Server connections to outside vendors and partners.

**Conclusion**
We are now in a constant change environment, which compels organisations to rethink their processes and strategies frequently. Digital transformation is not a one-off project. Any business contemplating digital transformation would have to regularly assess the digital evolutionary path and desired digital end state.

The success of digital transformation is ascertained in large measure by the company’s ability to keep pace with technological innovation, changing customer expectations and last but not the least top management’s ability to drive a fundamental change in the organisation’s DNA. Digital can no longer be treated as an additional function, but digital strategy is rather intrinsic to business strategy.
Pivoting traditional IT function to digital
The execution planning exercise for a digital transformation is the final activity for operationalisation of the actual pivot of a traditional technology organisation into its digital avatar. The digital transformation for OTT platforms while being a business prerogative, has inherent technology underpinnings. The digital transformation process for an OTT player is a strategic shift with customer centricity at the core realised via persona profiling, on-demand digital content, and personality/demographics based suggestions, provisioned smoothly across a multitude of devices in an omni-channel environment. Delivering such a tailored experience necessitates a technological architecture that is agile, flexible and scalable on demand and technologies that are easy to implement and that give quick insights for decision-making, especially around content strategies.

For the enablement of such an orchestration, it is imperative to have an IT environment that is governed and managed. A well governed IT organisation synchronises the business and technology aspirations while a well-managed IT environment ensures consistency in delivery via reference architectures (business, data, application & technology) and leverages both IT & OT (operating technology). The objective is to ensure visibility and interdependencies of each IT component (process, application, services, data and infrastructure) across the landscape.

Two nodal frameworks for digital enablement

Digital enablement is not accidental in nature and hence mandates careful planning and course correction. Therefore, to ensure that the organisation is digitally enabled it is imperative that the CIO/CTO draft a Digital Strategy in conjunction with the Enterprise IT strategy with dedicated budgetary allocations.

Source: KPMG in India’s analysis, September 2017
Digital operationalisation

Digital operationalisation for a VOD platform could be realised via key themes based on the customer experience, digital interventions (niche products), content creation, advertising automation and enabling architecture. Enterprise and digital architectures are the core building blocks of the ecosystem. The themes in unison provide an engaging experience to the customer.

Key themes for digital transformation

- **Digital architecture**
  - Digital architecture definition
  - Digital intervention operationalisation via transition architectures

- **Enterprise architecture**
  - Business architecture definition
  - Data and BI architecture definition
  - Application architecture definition
  - Technology/infrastructure architecture definition
  - Architecture governance

- **Ubiquitous data exchange**
  - Device agnostic, service based data transfer and exchange
  - Governed data environment

- **Business workflow automation**
  - Core business process automation
  - Architecture governance process automation

- **Digital interventions**
  - Selection and prioritisation of key customer experience enabling digital interventions

- **Workflow digitisation**
  - Use-case definition and prioritisation

- **Logic and asset digitisation**
  - Asset inventory digitisation
  - Logic digitisation and decentralisation

Source: KPMG in India’s analysis, September 2017
Digital strategy and architecture realisation

The digital vision for OTT platforms and its consequent digital strategy is at the core of any transformation exercise. Based on the digital strategy and its needs, business, digital and data requirements are determined which translate into respective views. Each of these views constitute approach building blocks and in unison get translated into the respective architectures.

It is critical to remember that digital transformation impacts not only the technology landscapes but the traditional and supporting business units as well; and as such it entails business process reengineering activities that impacts the key stakeholders, KPIs and the very cultural fibre of an organisation. So a change management exercise is indispensable to ensure that the changes are understood and assimilated by all the stakeholders of the transformation.

Source: KPMG in India's analysis, September 2017
Key technology components disrupting the media industry

01
- Coherent content creation, storage, review and approval, and broadcasting workflows
- Integration with disparate sources of content via a self-service platform from external sources
- Ability to interact with centralised and/or decentralized media
- Support and integration with niche content processing platforms
- Support for digital and traditional distribution
- Dynamic content restructuring based on the device, bandwidth and granular user preferences

02
- Dynamic metadata tagging based on content shown/spoken
- Deep search capability

03
- Hyper customised content
- AI/machine learning driven content suggestions
- Customer 360
- Advertising opportunities
- Operational efficiency
- Dynamic content monetisation

04
- Highly scalable systems to manage peak loads smoothly
- Cost effectiveness
- Tapeless workflow management
- Collection, storage and analytics across large datasets

05
- Source: KPMG in India’s analysis, September 2017
Digital realisation architecture

The typical media value stream

In a rapidly evolving digital environment, consumer behaviour is shifting from traditional TV based scheduled programming to an OTT based on-demand viewing, creating new necessities for tomorrow’s media design revolving around digital consumption.

Meanwhile, the media trade is reworking, making the most of the employment of business IT-based functions and infrastructure that modify media services to be delivered as cloud-based services instead of as options of vertically integrated systems.

The media services design allows an extremely climbable, robust, secure and economical atmosphere for the delivery of live/linear streams and VOD content to consumers connected via mounted or mobile IP networks.
Key interconnects with enterprise OT/IT

Operational Technology (OT) acts in real time on physical operational systems to manage media life cycle, i.e., from pre-production to consumption. Whereas, Information Technology (IT) is the whole technology stack, including the hardware infrastructure and software applications used to transform data but it does not interfere with the physical world. While communications has always been a part of scope for IT, traditionally OT has not been considered a networked technology. OT is now getting modernised through converging with IT with required considerations for maintaining security for critical infrastructure. This convergence provides multiple advantages as set out below:

- **Lower cost of ownership for technology through standardisation**
  - OT and IT integrate multiple digital channels and provide smooth omni-channel experience to end users.
  - The framework is completely modular in order for multiple tools and technology to work together reducing the operation cost and providing increased scalability of solutions based on actual business needs.

- **Increased speed of implementation for digital projects**
  - Companies need to become skilled at faster delivery of digital projects to meet changing customer expectations.
  - Core IT project delivery principles such as well-defined reusable micro services, API-based interfaces, interoperable data, services and processes, metadata, etc. are leveraged to achieve faster implementation and deployment of digital solutions.

- **Increased project effectiveness through a coordinated approach across the whole organisation**
  - With lesser time allocated for project development, geographically spread project teams and involvement of multiple parties, communication and coordination is critical.

- **Greater automation with effective governance extended across IT and OT domains**
  - Technology governance creates a structure for aligning business strategy with digital strategy and helps in identifying opportunities and prioritising activities.
  - It facilitates ways to measure the performance and the business benefits being delivered, and establishes clear and consistent standards for people, process and technology to follow.

- **More effective asset management through predictive, condition based maintenance**
  - Effective asset management needs monitoring of actual condition of the assets to spot upcoming failure and decide when and how maintenance needs to be done, also known as Condition Based Maintenance (CBM) using certain indicators and metrics to identify signs of decreasing performance or upcoming failure.

- **Increased productivity through integrated planning and scheduling, data to support leading practices and advanced process controls**
  - The workflow includes the processes of channel planning, scheduling, segmentation, rights management, etc.
Key considerations for digital implementations
Digital transformation can be a two edged sword – if not implemented right then it can lead to low return on investments or even losses. Below are some of the key learnings while implementing digital initiatives.

**Leadership involvement**

More than 50 per cent of the time, digital transformations are driven by executives other than the CEO or the CDO and do not get top leadership support. Digital transformations typically cut through various functions (e.g. sales, marketing, etc.) and stakeholders both internal and external. If a C-level leader is not involved, then typically collaboration between functions and groups becomes difficult and the digital transformation process is disrupted due to the deadlocks on decision-making and lack of strategic view.

**Planning**

Lack of digital planning creates multiple version of truths. In an ideal scenario, with digital planning carried out from an organisation’s perspective right from the outset, the organisation would not need to rely on multiple sources of partly automated data.

**Execution**

Digital initiatives are seldom unified across the organisation. In a number of instances, organisations adopt a modular approach to digital transformation and do not commit the entire organisation to the process. While in the short-term, this may be cost effective and minimise operational disruption, in the medium to long-term, this is likely to be highly inefficient as it can put the organisation at risk of missing the market opportunity, due to the lack of a collective organisational digital transformation focus.

**Adoption**

Several digital implementations lack a change management plan due to which the investment in the digital initiative turns sour. It is critical to have a 100 day plan to start with and a continuous programme and governance structure to make the change stick.

**Expectations**

It is important to define the expected outcome from a digital initiative at the beginning of the implementation process. The KPIs identified should be measurable and continuously tracked to measure the performance of a particular digital initiative.

---

2. Based on industry discussions
We would like to thank the entire team at KPMG in India for their efforts in developing the report.

Apurva Dixit
Dev Khandwala
Jasleen Taneja
Karan Dasaor
Neha Pevekar
Priyanka Agarwal
Radhika Goel
Raahul Gautam
Rasesh Gajjar
Sahil Koul
Sameer Hattangadi
Sanjeev Bhar
Sharon D’silva
Shilpa Taneja
Shveta Pednekar
Sutirth Dasgupta
Vibhor Gauba
The 'Digital First' journey

KPMG in India contacts:

Mritunjay Kapur
Partner and National Head
Strategy and Markets
Leader – Technology, Media and Telecom
T: +91 124 307 4797
E: mritunjay@kpmg.com

Girish Menon
Co-Head
Media and Entertainment
T: +91 22 6134 9200
E: gmenon@kpmg.com

Himanshu Parekh
Co-Head
Media and Entertainment
T: +91 22 3989 6000
E: himanshuparekh@kpmg.com

Aditya Rath
Partner
Digital
T: +91 22 3989 6000
E: adityarath@kpmg.com

FICCI contact:

Leena Jaisani
Asst Secretary General & Head
Media & Entertainment
FICCI Media & Entertainment Division
T: +91 11 2373 8760/70
E: leena.jaisani@ficci.com

LA India Film Council contact:

Lohita Sujith
Director
Corporate Communications
T: +91 22 6139 7000/02
E: lohita_sujith@mpaa-india.org

Follow us on:
kpmg.com/in/socialmedia

KPMG.com/in
ficci.in

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

The views and opinions expressed herein are those of the interviewees and do not necessarily represent the views and opinions of KPMG in India.

© 2017 KPMG, an Indian Registered Partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

The KPMG name and logo are registered trademarks or trademarks of KPMG International.

Printed in India. (024_THL2917)