

A TCG Digital Whitepaper



Transforming OTT Business with Big Data & Analytics





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Consumers expect streaming content from robust OTT apps for mobile and connected TVs. But only the best brands evolve these apps into successful enterprises. Now yours will, too.

TV has proven to be one of the most influential mediums for brands to build awareness and drive sales. But over-the-top (OTT) applications are better.

OTT apps, or those that stream content without a cable box, combine the reach and power of traditional pay-TV with the scale and flexibility of the internet to create an unstoppable force for content creators, distributors, and brands everywhere.

While 70% of consumers have at least one major OTT subscription — Netflix, Amazon Prime Video, or Hulu — many look to other media outlets to fulfill their content demands. And that's where your brand can step up to fill in the gaps.

Hundreds of small and medium-sized businesses launch OTT apps every single day. What used to be a strategy only million-dollar media companies could take advantage of is now entirely within your budget and power to accomplish given the right team.

Since you can't dive headfirst into OTT creation without a plan (unless you're into wasting time, resources, and money), let this whitepaper be your guide. It covers all the bases of creating a successful OTT solution for your brand, including:

- OTT entertainment and media spending forecasts
- How UX will continue to drive OTT app engagement
- Pros and cons of direct-to-consumer TV apps vs. streaming service aggregators
- Launching/improving an OTT service in 2020: challenges and opportunities
- Growing your team: in-house vs. offshoring vs. nearshoring

With traditional pay-TV in freefall and the rise of OTT options, it's never been a better time for content creators and brands to connect with their audiences.

Subscription video on demand (SVOD) services put out more original shows than broadcast or cable for the first time in 2018. And when you launch your OTT app, your content will be a part of this next generation.

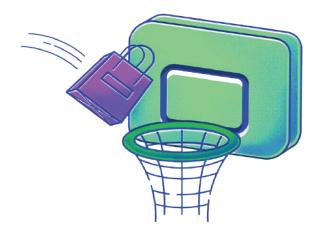


OTT Entertainment and Media Spending Forecasts

When we talk about OTT, we're generalizing any standalone, streaming content that bypasses traditional media distribution channels like cable TV providers or telecommunications networks and uses the internet instead.

The most popular OTT solutions come in the form of:

- Desktop or web-based apps
- Mobile apps for smartphones and tablets downloadable from digital storefronts
- Connected TV apps users can download on internet-compatible TVs
- Apps for third-party digital media players like Roku, Apple TV, and video game consoles



OTT video ranks second in compound annual growth to virtual reality (VR), with a steady 14% projected growth through 2020. Experts say OTT app usage will grow to a \$120 billion industry by 2022, and \$200 billion by 2024, finally beating out pay-TV within the next few years.

As findings from the PWC Global Entertainment & Media Outlook for 2019-2023 show, the pay-TV subscription model will continue to decline in the US (dropping to \$81.8bn), despite pared-down bundles, advanced set-top boxes, and 4K TV.

As consumers more frequently cut the cord with cable, they're also shifting from one OTT app or service to the next in the hope of finding their perfect fit. If you don't give your customers a way to stream your content, they'll look elsewhere. These digital platforms which take a share of your ad and subscription revenues are your strongest competitors.

So to thrive, companies need to think holistically about their brands and come up with clear strategies on how to stay relevant in a digital world where their consumers have unlimited choices on how to spend their time and money.

Create one OTT app or design a complete OTT solution, and your consumers can instantly stream and download your content (be it audio, video, or other) on their favorite devices. Your OTT apps become ubiquitous branded environments available to your consumers anytime and anywhere.

But great content alone will not succeed.



UX Drives OTT App Engagement



Do you know the top three reasons why consumers recommend their favorite OTT service over another? Content variety, ease of content discovery, and stellar original programming.

Just as valuable as your content and infrastructure, amazing UX (ie ease of content discovery) inspires brand loyalty and compels consumers to subscribe directly from you versus choosing your app from a third-party platform.

User experience: Defined and Reimagined

User experience (UX) encompasses all the details of how a product or service helps users solve problems. It's as much about aesthetics as it is about user functionality.

So besides the technical aspects, OTT UX designers must take a comprehensive approach to how consumers discover, engage, and interact with content on websites, mobile applications (Apple, Android, etc.), and connected TV apps (Roku, Amazon Fire TV, Apple TV, etc.).

This starts with a total understanding of your company's entire customer journey from beginning to end that also includes all customer touchpoints and pain points. UX intuitively predicts a subscriber's desire (like finding something interesting to watch) and rewards them (with relevant recommendations, for example).

Hitting the mark on your OTT app's user experience is the number one way to boost engagement. Bad news? It's immensely challenging for new OTT ventures to get it right.

What separates solid UX from average Design?

Anyone can create an OTT app with an okay user interface. It takes a lot more know-how and finesse to craft one that's unique, engaging, and glitch-free. Here's what you need for gold:

Intuitive interface and seamless navigation

Your OTT app's user interface should predict your subscribers' next move before the thought even occurs to them. Each screen and user action should be adapted and optimized for the platform they select.

Designing and building around users' personal preferences, gleaned from data and usage patterns, creates solutions that appeal to individual users and works for an audience of billions alike.



Personalization and tailor-made experiences

OTT apps give you a direct-to-consumer pipeline of information exchange. They also allow subscribers to set up user profiles, and different viewers within the same household or with the same login to enjoy their own curated experience. This boosts customer satisfaction and also provides a win for you: you'll snag data about their locations, interests, viewing and searching behavior, and individual preferences. Based on this data alone, creators can fine-tune customized content; your marketing team can send out tailor-made in-app and push notifications that convert. This streamlined communication ability means your customers won't ever miss new content; you'll reduce subscriber churn, and increase customer retention.

Content recommendations based on collective-behavior relationships

Subscribers stick around when there's engaging content and an easy way to find said content. An OTT app's success depends almost entirely on the ease of content discovery. Content recommendations drive 80% of shows watched on Netflix and account for 70% of YouTube views, after all.

Users like recommendations based on their viewing habits because they present personalized and relevant content that may break through their preconceived notions of what to watch next. These suggestions help them discover content they might not have otherwise thought of exploring.

Content recommendations leverage behavioral data points with machine learning algorithms to tell the OTT app how to merchandise your content best to subscribers. This can trigger several types of content recommendations, such as by ranking, search, ratings, and similarity-based themes.

All your user has to do is click through your curated selection in their personalized feed of "up next" content. This provides a clean, intuitive way to find and consume content in a satisfying, and engaging way.

Content recommendations drive

80%

of shows watched on Netflix and account for

70%

of YouTube views

"People are more demanding in how they want to consume their content, and what kind of content they want to have, and what they want to see on their home screen."

> - GUILLERMO MARTINEZ, STRATEGIC PARTNER DEVELOPMENT MANAGER FOR ANDROID TV



Collective-behavior relationships make this happen

A smart UX employs artificial intelligence (AI) to uncover collective-behavior relationships or trends that relate content and connect titles that may not have a natural relationship with each other. These types of complicated relationships are not something the average user may be thinking about, but monitoring the aggregated viewing behavior of customers over time makes these complex relationships obvious—especially to AI.

Your UX can recommend related titles based on cast, director, location, themes, and more. Global or similarity-based behavior can also be discovered by dividing collective behavior trends by demographics or specific actions. Here, you'll be able to identify personas within collective viewing trends that you can then use with new customers, based on the cohort or persona they match.

Compelling, personalized artwork

Artwork is one of the best ways to capture the attention of endless scrollers and recommend new or unfamiliar content. These small thumbnails must draw in viewers and give them a reason to think whether that new title is worth checking out.

Artificial intelligence takes artwork to the next level. All can highlight specific aspects of a title—such as an actor, location, theme, etc. and use that information to select the best artwork to connect with each of your subscribers based on their viewing preferences.

Let's say a user binge-watches movies starring Robert De Niro. Instead of merely recommending other De Niro movies, AI goes the distance to recommend content with De Niro and makes sure to feature De Niro in the artwork, even if he's not the lead.

Upon scrolling through this targeted, personalized recommendation, viewers are captured and compelled by the artwork like an enchanting doorway to a secret garden. They'll respond more favorably to the new content when it's presented alongside familiar favorites. You'll improve the overall customer experience, deliver more valuable content, and take engagement levels to new heights. That's a quality user experience.

Video previews: our #1 call to action

As content libraries expand, viewers need a quick way of grabbing information about unfamiliar titles in their feeds. Video previews are specifically designed video synopses that make it easier and faster for viewers to make confident watching decisions. They provide an overview of the story, characters, and tone of a title in a few seconds.

Video previews combat "browser fatigue," i.e., that endless cycling through thumbnails without ever finding something to watch. If the artwork gets a subscriber to stop scrolling, the video preview compels them to add the title to their list or immediately start viewing.

The user interface, personalization, and content recommendations are all part of UX. Nail these components, and your content will have everything that it needs to shine.



Benefits of UX in OTT

User experience has become increasingly important for media companies to differentiate their streaming video offerings. So what happens when you prioritize all the pieces of solid UX in your OTT app?

Clean UX = Happy Customers

Developing OTT apps can be very tricky. It would be terrible for you to spend months and thousands of dollars on a mediocre developer who delivers a buggy, clunky, ugly OTT app. So investing in UX upfront means you may significantly reduce the costs of fixing these issues down the road.

Remember, 51% of people say "accessibility/ search of desired content" ranks in their top three reasons for choosing, subscribing to, and recommending an OTT app or streaming service. Make your UX as clean and intuitive as possible, and you'll make your viewers' lives easier. If your UX helps users to quickly browse and discover content that keeps them engaged, they'll choose to subscribe to your service directly rather than through your third-party competitors.

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Higher engagement, brand loyalty, and retention

Content is king, but engagement wins it all. Personalized recommendations and an easy-to-navigate UX boost content consumption, app engagement, and customer lifetime value.

The best part about having an OTT app is the ability to control your customer's journey. Similar to working a new lead through a sales funnel, you'll be able to guide your subscriber with personalized recommendations for content every step of their journey with your brand. When you display your value by creating unique user experiences, you get return customers and brand ambassadors (i.e., people who recommend and praise your OTT app to others and amplify your reach).

As you collect stats and analyze trends, you'll score in-depth insight to help you target new niches within your subscriber base and word-of-mouth referrals as they develop in real-time. Adapting to your evolving subscriber needs with fresh content increases conversions (or desired actions you want users to take), reduces churn, and ups brand loyalty.

All this matters when your subscribers have the choice between downloading your OTT app directly or going with an OTT aggregator.



Pros and cons of direct-to-consumer TV apps vs. streaming service aggregators

How much do you want to invest in your own direct-to-consumer offerings versus relying on established companies to grow your subscription base?

Before you answer that, you must understand that the "streaming wars" aren't just about subscriptions and shifting your traditional business into the digital age. It's about the long-term and why every media and technology company is fighting over the same thing—the direct customer relationship.



OTT aggregators wrangle pipsqueaks and giants of the OTT app world in one place so users can browse for everything in a single platform. Roku and Apple TV have joined Amazon in becoming OTT aggregators via The Roku Channel and Apple TV Channels, respectively. Consumers can now purchase a video service, such as Showtime, from at least a dozen different OTT aggregators, for instance.

Should your app join their ranks or stand alone? Let's weigh all your options.

Pros of partnering with aggregators

Reach a mega audience

OTT aggregators widen your reach. People outside of your target audience will see your app as they're scrolling for their customized content. Prime Channels puts your brand in front of Amazon's 100 million subscribers, for example. We often hear clients admit that they love being a part of the Prime Channels program because the customer acquisition cost is zero dollars.

Consumers suffering from "subscription fatigue" ditched their cable bill only to assume three or more OTT subscriptions.

One-stop-shop for consumers

Market research shows that customers increasingly expect a single provider to make all the TV services they want to watch available in one place. Respondents in one focus group admitted that they would rather purchase a subscription video service through an OTT aggregator than directly from the network. Why?

Because the ease of a single-user interface (and managing a single bill) is too tempting to pass up. Consumers suffering from "subscription fatigue" ditched their cable bill only to assume three or more OTT subscriptions. That's why more than half of all direct-to-consumer subscription purchases, such as HBO, are made directly through Amazon Prime Channels. The rate's even higher for Showtime (72%) and Starz (70%).

Create your OTT app, and a popular aggregator will integrate it into their offerings so your subscribers don't have to add another subscription to their budget.





Loss of direct-to-consumer relationships

If you only partner with an OTT aggregator and don't invest in your direct-to-consumer model, you risk losing leverage with your customers. The OTT aggregators get to fend off their competition (i.e. you) by stealing your customer relationships and earning a percentage of your subscriptions. PS: OTT aggregators typically keep about 30% of your revenue.

Don't become another Toys R Us story in lost leverage. In 2000, Toys R Us signed what was supposed to be a 10-year contract as the exclusive vendor of toys on Amazon. One day, Amazon decided to change the rules and began to allow other toy vendors to sell on its site. Toys R Us sued Amazon to end the agreement in 2004. However, it took another 13 years for the company to get serious about its e-commerce brand and compete with Amazon and other online retailers. They waited until it was too late, and it led to their demise.

Toys R Us became overly dependent on a single strategy and a single affiliate partner. The retail giant completely lost its leverage and the same can happen to your company.

All consumer-facing brands must create leverage so their competitors won't render them useless. Toys R Us stopped providing customers with any reason to do business directly with them. They failed to give their customers anything more than what they could get from Amazon. So they literally gave Amazon their customers, their browsing and buying habits, and the majority of their revenue. You don't have to follow suit.

Without leverage, your brand's dead in the water

Loss of control

An OTT app allows you to speak directly to your customers and guide them with thoughtfully targeted content. When you give aggregators your content, they earn this direct chat time with your subscribers. And they control how your customer journeys from discovery to recommended titles. They reflect your brand and speak on your behalf.

But you have no idea what they're really up to. And you have no control over how they market your content to your audience.

Let's take a well-known player like HBO to demonstrate this risk. HBO is virtually non-existent in the base Prime Video offering. To watch HBO on Amazon, you have to scroll through rows of Amazon offerings first. Then when you click the HBO portal, you're taken to a crummy, impersonal landing page. Want to browse the network's movies? Have fun scrolling through the single row of 200 unorganized titles.

No subscriber wants to deal with a row of jumbled, random content like this. And HBO knows that. HBO's direct-to-consumer app gives subscribers access to 100s of movies, and they're all neatly organized by genre, to provide real value to their customers. Aggregators don't care how your content is presented. And that doesn't bode well for your customer relationships.



Pros of investing in your direct-to-consumer OTT app

Personalize your customer journey

The beauty of investing in your own direct-to-consumer OTT app is the ability to personalize the user journey with relevant messaging and video recommendations. You define customer journeys and user experiences across your website, mobile, and connected TV apps that are most conducive to your business' success. And you get to decide everything a user engages with — from the user interface, the click-through noises to the content recommendations.

You lose this crucial ability when you go with OTT aggregators. As we saw, most will simply dump your content into an unorganized heap and force your interested viewers to search for their proverbial needle in a haystack. That's not the best brand experience you can give to your customers. But your direct-to-consumer OTT can be.

Deliver exclusive content, raise the subscription price

Going in the opposite direction of the lowest-price model, giving subscribers exclusive content and original programming via your OTT app may boost subscription revenue. Subscribers will pay extra for the content they can't get anywhere else.

If you can't offer exclusivity, try early access for original programming. Releasing new episodes on your app before they're live anywhere else will prompt subscribers to choose your app over your competitors. Starz releases episodes for their popular series on their OTT app a day before they air on live TV, for instance. Peacock is offering similar early release options; both The Tonight Show Starring Jimmy Fallon and Late Night with Seth Meyers will air hours before linear TV viewers can tune in.

Offer consumers a lower price, grow subscription base

Did you know Netflix saves \$1 billion every year just by recommending the most relevant content to each user? Owning the user data from your direct-to-consumer app will help your team make smarter decisions to save money while growing revenue. Since your biggest competitors are now the digital platforms taking a share of your ad and subscription revenues, you may be able to beat them on price.

How flexible you can be on your pricing comes down to how well you can minimize your operating costs and whether you have restrictions in your existing partner agreements. Become the lowest price in town, and subscribers may soon flock your way.

Download-to-go

OTT aggregators don't offer subscribers the option of download-to-go, which lets users download content directly to their mobile devices to watch whenever they want regardless of connectivity. This feature is often standard for direct-to-consumer subscribers—and another area where you'll gain a competitive edge.

Netflix saves \$1 billion every year just by recommending the most relevant content to each individual user



Cons of partnering with aggregators

You have to budget for and create an OTT app... welp.

What happens when you ignore the aggregators in favor of creating your own OTT app? Your brand's in control and on the hook for everything. But your ROI may be well-worth the upfront investments in time, resources, and capital.

Think about this:

Back in 2001, Target signed a deal that allowed Amazon to run its e-commerce operations. Less than ten years later, Target pulled out of the Amazon deal and assumed full control over the design and management of its e-commerce technology platform, fulfillment, and guest services operations.

Target had to pony up \$2.5 billion per year to make this a possibility without tanking revenue. But they foresaw the benefits and the profit from this direct stream being worth the cost of development. Their e-commerce revenue stream became too strategically important to outsource to, essentially, their competition.

You must never stop providing customers with reasons to do business directly with your company. Offering value they won't receive elsewhere starts with your OTT app. This means you'll need to handle all the technology, infrastructure, content, retention, and billing duties. And when issues arise, you'll also need to provide customer support.

Marketing for viewership

OTT aggregators make fantastic affiliate partners thanks to their "built-in" audience. But when you create an OTT app, they'll become your direct-to-consumer threat for viewers and subscribers. You'll need to create a plan to attract enough OTT subscribers to make your app profitable. This requires a deep dive into your short-and long-term strategies for engaging with subscribers across various marketing channels to grow both sides of your business.

Only your brand knows which path is best for your audience. For most, a combination of direct-to-consumer offerings paired with an aggregator partnership makes the most sense. So how do you go about building this type of OTT solution?

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Launching and improving an OTT service in 2021: challenges and opportunities

Building a sustainable OTT service is technically complex; it requires a thorough understanding of advanced technologies that continue to evolve. If you want to launch your OTT app or expand your streaming services, you may want the help of a specific OTT expert or OTT agency. They'll know exactly where to begin and what challenges to take on first, such as:

1. Technology and infrastructure

Unlike building apps for mobile, OTT TV apps are much more fragmented, and there are clear problems creating infrastructure for every option. Roku, Amazon Fire TV, Apple TV, Android TV, Samsung Tizen, XBOX, etc. all have their separate development platforms



Then every platform has its unique coding languages and SDKs. Roku uses a language called Scenegraph, which is a mix of XML and their proprietary language, BrightScript. Android TV is based on, you guessed it, Android. Apple TV OS uses Objective-C, Swift, and Javascript. Amazon Fire TV can use either Android or HTML5. And many Smart TVs run purely on HTML5.

What about the upcoming 5G rollout? Consumers are spending more time online, yet many Americans still have insufficient bandwidth. 5G could make more complex (or heavy) UX/UI load faster, improving your app's performance despite more elaborate builds.

If you want to build apps for each platform and continue to update them as technology advances, you need a team with innumerable technical skills. And these wizards are often extremely difficult to find.

2. Content acquisition

What's the plan for your OTT content? Capturing and engaging your audience with original content is a challenge. Consumers consistently demand content, but fresh, new programming is expensive. So you'll need to create a continued content development plan that fits within your subscriber's pricing strategy.

Figure out these content decisions first:

- Type of content to offer (video, audio, etc.)
- Genre or niche to specialize in
- Amount of content to provide (unlimited, tiers or levels, etc.)
- Frequency of content releases
- Budget and target production value

3. Advertising and monetization

You may start with free branded content to inspire users to sign up for your app. But you'll want to transition to advertisements, subscriptions, pay- per-view pricing, or other revenue-generating strategies to monetize your OTT app and create a viable profit stream.

- Charging for subscriptions
- Charging for transactions
- Advertising



While the process of charging for subscriptions is self-explanatory, charging for transactions can be more confusing. However, we need not look farther than mobile to see how consumers are used to making in-app purchases. The same is true for your OTT app.

In-app purchases for content or channel subscriptions will entice your viewers to browse around, get an idea of the content they can expect, and see the value you provide before they have to commit to paying.

Advertising, like in-app purchase options, is also something many users are accustomed to and expect. As a revenue model, however, you have to dance the fine line between showing too many ads that alienate viewers or cause advertising fatigue, or else your users will drop off and you'll have no one left to show ads to.

Of course, there are hybrid models of the above. Hulu charges for subscriptions but offers a reduced rate that is combined with advertisements to attract different types of customers.

NBCU's Peacock has recently revealed new advertising plans that are somewhat similar to Hulu. The new streaming service, which promises to be light on ads, will show fewer than five minutes of ads per hour for both Peacock Premium and the free version.

For comparison, Hulu shows about nine minutes of commercials per hour, Tubi, a free streaming service, shows about four, and traditional TV networks show, on average, 11 minutes of commercials each hour.

4. UX and programming guides

You already know how important UX is to the adoption of and continuing engagement with your OTT app. So you'll need to multiply this need by every screen you plan to offer content for. Each screen presents a different challenge to the best viewing experience. And you need a multi-screen distribution strategy to leverage the strengths and weaknesses of each platform.

TV screens are still your most significant revenue generator. So OTT apps streaming to your TV will be a large profit driver. Smartphones are ideal for finding and sharing content thanks to push notifications and the ability to cast to connected screens. Tablets may be the best of both worlds: their smartphone capabilities are conducive for sharing while the "lean-back" style of immersive TV screens boost satisfaction.

5. Piracy

How will you control potential theft, copying, or hacking of your content? What about subscribers sharing passwords? Will you prevent people from downloading your content on multiple devices, or for extended periods?



6. Subscriber churn

Interesting content keeps 64% of US subscribers and 55% of UK subscribers loyal to their OTT services for more than a year. But survey responses show 38% of Americans canceled one or more OTT services in the last year, with Hulu users slightly more likely than other platform users to bail ship.

The top two reasons cited for canceling an OTT service? Subscribers either can't find enough content they like, or they don't find the service a good value for their money. Your content and UX should help here, but you'll still want someone in charge of customer engagement.

So who's going to handle all the building, analytics, troubleshooting, and maintenance of your OTT app and subscriber base?

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of Americans canceled one or more OTT services in the last year

OTT players are using data to quickly understand how to personalize consumer media experiences and build what the consumer wants versus what the business thinks it wants; as that's the way we see our future—a direct to consumer driven business coupled with partnerships between the brands, media companies, and creators who share these values. Discovery remains the biggest challenge. Consumers need a way to find all of the great content out there and data can help, but it remains disparate and decoupled between providers and platforms.

OTT players are still using social media to discover and curate content based on the trusted tastemakers of our individual networks. We still rely heavily on social media and word of mouth to find out what to watch. It's "hey friends what should I binge watch this weekend" versus having AI analytics figure that out for consumers based on a total picture of what they watch, like, share, etc. blended with their friend's data.

OTT players believe OTT is the future of the entire media & advertising ecosystem. It's direct to consumer, it's natively interactive, integrated with commerce and in the nascent stages. I've always been critical of calling it OTT because it's such an antiquated way to describe what's happening, and very few people understand its true potential. Perhaps until we find a universal way to describe Direct to Consumer Interactive Streaming Media Platforms we should just call it DTCISMP.

Identities Changing

It's not your parent's TV anymore. Today the statistics overwhelmingly identify multiple family members, often managing individual companion devices and turning the viewing experience into their own personalized programming. Generation X, Y and Z consumers, in particular, are participating in group peer experiences while watching a broadcast event.

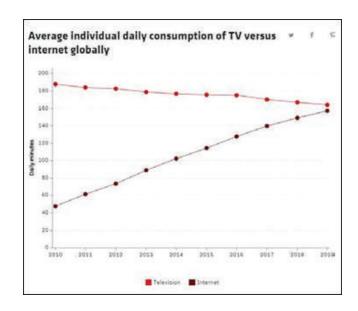


The old program guide is gone, not literally, but for most consumers, it is not relevant. Curating their content and programming preferences into a personalized entertainment program using cloud-based technology; DVR, SVOD and social media has become the norm.

Within this change, the content creators and distributors are challenged to differentiate themselves as "who" is providing the content gets confusing with the multiple service providers. Identifying providers as "television network," "channel," "service" and "platform" are currently being dissolved within the landscape of media, entertainment and technology. The MET affect as is described by the National Association of Broadcasters. Even the major digital platforms, Amazon, Google and Facebook, traditional tech companies are getting caught up in confusion over whether to be considered tech companies (preference), or media companies.

With the consumer, there are major inflexion points upon us that are defining who/ what they are. Let's start with the following; as consumers are now consuming as much internet content as television.

We also have the emergence of a generation of non-linear-only consumers. Nearly one fifth of U.S. households, 17%, exclusively get their video content through subscription video-on-demand only services, according to research from The NPD Group. The NPD group also found that among users of subscription video on demand services, 40% only subscribed to one, while 24% subscribed to three or more. Millennials were the demographic most likely to subscribe to three or more of those services, with 42% already doing so.



Then the non-linear movement quickly goes a step further when we add in the elements of time-shifting.

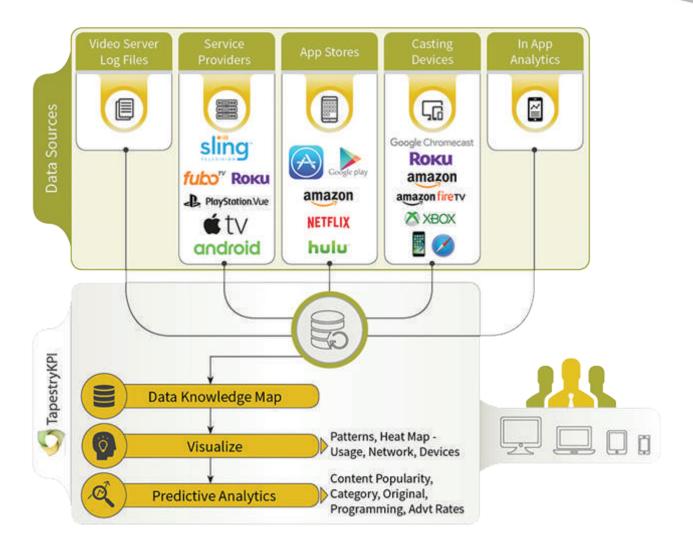
So including this overall time-shift movement, we are at a major inflexion point where more non-linear television is consumed than linear television. Let's define the term "consumption pattern" as what the consumer is consuming and how they are consuming it. Or what we could call the consumer's "digital persona." SVOD played a major role in enabling the definition since SVOD can be consumed through many different types of devices. The Gen X, Y and Z consumers also cultivated watching broadcast programming with peer groups while simultaneously interacting with others on social media.

Both these consumption patterns expand the definition through the incorporation of various second-screen companion devices.

And the consumer data on these types of viewing patterns are not only gathered from the viewer but also from all the interactions a consumer is engaged in.

This type of viewing and data intensifies as programming synchronization of companion media and data defines yet another level of consumption pattern. Today this aspect, in particular, is measured as the level of synchronization within a consumer experience from the Coalition for Innovative Media Measurement's (CIMM) Trackable Asset ID (TAXI).





Consumers are Immersing

Consider square one, where binge-watching SVOD in and of itself is an immersive experience. Today, consumers continue to consume content through a multiplicity of outlets where the more intense consumer types base their program selection on what's available through their consumption pattern du jour. As for linear television, as long as there are sporting events and news it will not die, but it must be reformatted and repositioned within the growing plethora of consumption patterns.

The challenge of the immersive experience is just beginning to be met by some of the major providers. A relatively new interactive design trend, generally known as "discovery," has arisen to meet it: from simple taxonomies to finely tuned algorithms, designs are trying every non-temporal means possible to connect consumers to content. Here the major content providers are starting to organize TV content outside the traditional "channel and time grid."

Advertising neither will escape its requirement to be immersive and relevant if the programmers and distributors want to keep consumers engaged. The possibilities for new monetization models for advertising become available as the quality of the experience becomes more effective, relevant, and immersive. The immersive advertising spots become of greater value because a) the advertiser knows in greater quantity and detail what content the consumer is immersed in, and b) the advertiser has a more expansive medium to blend in advertising and in a less intrusive manner to the consumer's experience.





One role of Big Data will be to enable telling relevant stories, and through those stories tap into the consumer's emotion, intellect and preference. The immersive experience can be used to unearth the consumer's emotional connection to any piece of programming; the sports fan, in particular, is a great example. In a recent study, 80 percent of fans claimed to be second-screening, saying they had accessed content on their mobile device whilst viewing a live event on television. This engagement typically includes participating in online conversations, watching memorable highlights from a game, as well as behind the scenes footage or interviews, and looking up interesting stats about games, teams, and players/athletes – connection and association.

The power of Big Data is the ability to differentiate consumers. While delivering the same content to different consumers, the Big Data application can source different stories for each consumer group. Storytelling in a multiplatform environment was discussed during a panel discussion at NAB 2018 with the WNBA. The WNBA in concert with the athletes has established an enhanced level of the sporting event by exposing the stories within the athlete's lives as part of the experience.

New consumption patterns are intensifying in the digital news world as well. Gen X, Y, and Z consumers are fostering unmet audience needs, particularly as news consumers who are turned off by endless punditry and talking heads. Through Big Data, addressable advertising becomes less intrusive and more relevant to the consumer. This metadata will be key to the success of the targeted ad as it contains all relevant data on the content including the rights.

Better yet, cross-platform cookies are about to emerge. Alysia Borsa, Meredith Corp.'s chief marketing and data officer acknowledges the cross-platform tracking challenge, "I do believe that identity and particularly cross-platform identity is a challenge for publishers relative to the platforms." Cross-channel identification is key to advertising messages to the same user, Borsa says. Among advertisers, she is seeing increased demand for tying web to mobile to shopper marketing.



Without quality management systems in place, viewers will abandon your content—no matter how good it is.



The Big Ad Machine is No Longer to be Feared

Advertisers and service providers have traditionally struggled with any change to the big ad machine because the current revenues are huge. The combined ad revenue for liner and digital media is over \$150 billion. These companies are not going to risk the foundation without first testing the capability, or based on some significant outside influence they must address. A current outside influence is consumers are expressing increasing weariness towards the levels of advertising they are asked to consume. A change in consumer attitude because of a plethora of unwanted ads will have a significant impact on the ad revenue generated going forward.

Consider also recent consumer sentiment towards linear programming and the overabundance of ads. This is making cord cutting and subscription models on the rise, where 7.9% of pay-TV subscribers age 18-64 years old said they were "extremely likely" to cancel their service in the next 12 months and "I don't watch enough TV to make it worth it" (29%) and "I can watch the TV shows and movies I like on the Internet," were the top two reasons for their intent to cord-cut.

Yet the ability to carefully pull the levers of the big ad machine is starting to emerge. Changing ad loads has always been around, but today adequate measures are in place to closely monitor this action. In addition, there is the ability to follow straying eyeballs to alternative outlets as the levers are moved.

Recently, Turner reduced ad-loads in hit shows such as Animal Kingdom and Good Behavior. The company gave 10 minutes back to the storytellers and saw higher commercial viewing, less tune-out, and higher ratings.

In other cases, the programming providers now offer cross-platform inventory. Hulu, for instance, does not plan to sell its live TV inventory on a standalone basis in the near future. It's selling packages across its ad-supported subscription video and live TV services, the idea being that advertisers are buying TV the way people are used to watching it: sometimes live and sometimes on-demand.





The Path to the New Era Becomes Clear

Solve for Identity

What keeps viewers engaged in broadcast events is the liveness or "electricity" of that event, particularly live broadcast. As new consumption patterns matching certain consumer types are implemented, the "electricity" of the event must be maintained in lock-step throughout the consumption pattern. The key to ensuring this electricity is maintaining synchronization with the broadcast automation playout system within the consumption pattern. As a result, the broadcast network or programmer as the provider of that "electric" event may assert and brand their electric identity throughout.

Define Quality

Broadcast events are typically a mashup of programming elements including live programming, program substitutions, file-based insertions, advertisements, and all based on varying rights management. The key to defining quality throughout the consumer experience is for the transitions to be completely seamless. A standard high-quality broadcast event is seamless because of the frame-accuracy of the production. This frame accuracy must be instituted throughout any type of distribution - part of the consumer's consumption pattern. A truly seamless experience demonstrates "broadcast quality" throughout and creates the stage for an immersive experience.



Tell Stories

Big Data is a key resource utilized for the consumer identity and thus fueling the consumption patterns. This intelligence or preference managed data is used to keep the consumer engaged as it caters to the individual persona. The promise of Big Data is to fully engage the consumer's consumption pattern with desired synchronous story content during and outside a related broadcast programming event. Big Data metadata must subsequently be processed by an appropriate cloud-based platform to assure the metadata will meet each distribution paths' requirements and to ultimately assure the immersive experience.



No Need for Tunnels

The promise of an immersive experience is to become a safe harbor for the consumers as the advertisers know extensively about them. Additionally, the richness of the multiple outlets can be leveraged to solicit to the consumer in the manner they have become accustomed. As Big Data becomes more ubiquitous in the industry, addressability will become more refined based on factors like consumer location, current sentiment, and other dynamic elements. Knowing the consumer's consumption pattern will enhance the value of addressable advertising based on the multiple levels applied while the consumer is immersed in a programming event. Gradually transitioning to the immersive mode for the consumer will enable multiple impressions on multiple screens and, in turn, further increase ad value.

Author



Amitabha SinhaVice President & Head
Data Science and Analytics

Amitabha has over 20 years of experience in technology and strategic consulting. Both on the technology as well as the digital strategy side, he has run transformation projects with Fortune 100 companies in geographies like US, Canada, UK, and Singapore. Amitabha started his career with IBM Watson Lab and has 5 patents with IBM. Thereafter, he worked for consulting majors like PwC (UK) and EY (US) and has run large BFSI ODCs based out of Singapore and Hong Kong.

Amitabha is a First Class First President's Gold Medal Winner from IIT Delhi, has an MS from Illinois Tech and a PGP from IIM Bangalore.