



## Hello, OTT 2.0

At the start of 2018, the broadcast industry is stepping into an “OTT 2.0” era: companies in the space are harnessing the hard-earned OTT lessons learned over the past few years of experimentation and rising competition. They’re evolving to meet new business demands and opportunities with more original digital content, more direct offerings to consumers, more data, and more advanced technologies.

In other words — just more.

Meanwhile, consumers continue to carry video on the go, while the battle for their attention, data (and wallets) grows more intense by the hour. As of the Q1 2018, OTT has come squarely into its own and is now leading broadcasters as they take the next bold steps in their video evolution.

Welcome to the new era.

### CONSUMERS

TV is now digital and digital is TV. Content and screens have become inextricably intertwined and today’s viewers don’t think much about how they’ll watch; they just expect that they can get content anywhere, anytime and ‘anyscreen.’ Thus, the fragmentation of content presentation and consumption continues, while devices propagate and diversify. Video has also become a social butterfly, attracting new audiences and revenue, and pollinating new platforms as it flies well beyond the living room.

#### All Content, All Screens

The industry has passed the tipping point on many OTT consumption fronts: Arumai has found that the majority of content on every screen — be it connected TVs, desktop or mobile — is now long-form, and the share of global digital video plays on mobile devices is nearly 60%. That’s to be expected, given that The NPD Group has found that in the U.S. alone, about 57% of smartphone users stream video monthly. Per Parks Associates research studies, over half of U.S. broadband households now stream content to television, and over half of U.S. OTT subscription households now take more than one OTT service, up from 20% just four years ago. Meanwhile, Netflix’s U.S. subscriber base has now passed that of cable TV — a clear signal that consumer viewing tastes have changed in favor of OTT. And the list goes on. Driving these trends? The ubiquitous consumer desire for content choice, convenience and lower costs, and the advancements in technology to support all of that.

Consumers are being set free. Mobile device penetration is increasing, particularly in regions like Asia-Pacific and Latin America, and broadband networks around the world can accommodate more data traffic and content every day — spurring higher speeds, screen resolutions and video quality. In fact, a recent Ericsson Mobility Report said that video will account for 75% of mobile



data traffic by 2022. In the U.K. alone, viewers now watch over a billion minutes of TV content online weekly. In the U.S., 13% of homes are now broadband-only.

Every type of content is up for grabs on every type of screen today, but that screen is more likely now to be a mobile one. Zenith Media forecast that consumers would spend over 28 minutes daily, on average, watching mobile video content in 2017, up 35% from the year before.

As mobile viewing rises, pay-TV cord-cutting and trimming continue to accelerate. Cord-cutting is also an international trend now, despite regional differences in what is driving that behavior, according to S&P Global Market Intelligence. The Magid Media Futures study has noted that in the U.S., cord-cutting is driven more now by OTT options than by the costs for pay TV. In addition, TV sets are vanishing from the home and live TV viewing among adults has dropped in favor of other connected devices, streaming services and wherever viewing. That last point is key: consumers have fundamentally shifted their viewing habits.

As content availability grows, so does the segmentation of viewers. There are still “binge watchers” (nearly 75% of us say we watch that way) but now also “content connoisseurs,” “sometime streamers” and “OTT service stackers.” Bundling SVOD services is becoming common among consumers, especially in the U.S. and Scandinavia.

People who cut the cord consume 60% more OTT content than other viewers, according to comScore, while skinnier content packages are quickly becoming a popular pit stop on the way to a true à la carte mecca. A recent TiVo survey found that respondents only need 18 channels on average to create their ideal à la carte channel lineup; however, consumers and providers seem to be still far apart on pricing expectations. Look for them to come closer together soon.

A Hub Entertainment research study suggests that we’re also approaching the tipping point on what audiences can handle: 49% of respondents said that there are now too many TV programs to choose from. Look for streamlined authentication and content curation, higher quality delivery, easier search and discovery, and personalization of user experiences to become more critical components of service offerings — as companies try to appease overwhelmed viewers, attract tech-savvy consumers, and stand out in a standing-room-only market.

OTT viewers themselves are changing. Older consumers, who are providing growth opportunities in markets such as the U.K., are hot on the trail of Millennials and Generation Z, the most dominant streaming audiences.

90% of 18-34 year-olds stream at least some of their content, per Horowitz Research, and they’re abandoning traditional TV with gusto. 35% of Millennials never even had pay TV to begin with, so there’s not much hope in getting them to change their ingrained digital habits now en masse. Yet research also indicates that Millennials think there are already too many streaming services and they’re not fully getting what they want from them, so expect to see those consumers influence future changes.



There are stark differences even between the younger generations: The average age that today's teens got their first smartphones (age 12) was younger than for both 18- to 24-year old Millennials (age 16) and 25- to 30-year old Millennials (age 20). Their mobile viewing habits are being wired in at an earlier stage of life. OTT products are emerging to engage younger viewers, like the PBS Kids Plug & Play streaming stick and Netflix's choose your-own-adventure stories. Comcast, for one, has been expanding its connected campus offerings to hook college students on their services as they form their adult viewing preferences.

Engaging formats are also being introduced to attract mobile-savvy audiences and respond to a smaller screen environment. Netflix is trying mobile-specific versions for some of its series, while the BBC launched a daily news show in a vertical video format. And Vivendi has expanded its Studio+ short-form video offering from Europe and Latin America to the U.S. Expect major 2018 live events like the Winter Olympics in South Korea and British royal wedding to attract global audiences and break existing mobile viewing records.

As mobile video viewing advances, streaming services and pay-TV providers are not the only ones who've noticed.

The most nascent broadcasters are decidedly social, and harnessing their deep data reserves and engagement with viewers to bring video to the masses in bold new ways.

“In Q3 we saw more than 58% of all video starts occur on mobile devices, the highest number of mobile video plays we've seen, and most were on smartphones. There were even more mobile plays in Asia-Pac, which has quickly become the pacesetter for mobile video consumption.”

### **The Social Season**

Social video has officially grown up, moving beyond cat videos to premium content with A-list talent and budgets to match, and attracting growing masses of users. Teens in particular (no surprise) have shifted much more of their media time and habits toward social and video.

Consequently, the major social platforms including Facebook, Twitter, Snapchat and Instagram have been chasing YouTube's lead, expanding investments in short-form and long-form video. They're looking to enhance their existing strong engagement with younger audiences, and grab attention (and ad dollars) from other digital platforms and entertainment options. The vast amounts of data they already have on consumers should help light the way.

Snapchat, for one, has continued to stake its claim on Millennials and the future of television. NBC furthered its robust digital media investments with a \$500 million stake in the company, started a daily news show on its Discover platform, and formed a joint venture to produce short-form, scripted mobile content. ESPN Sportscenter joined the platform as well. However, Snapchat has seen its struggles of late in pivoting its business from mere instant photo and video messaging, and is battling increased competition from Facebook-owned Instagram. That company has its popular



Instagram Stories video offering and 800 million monthly active users (more than 80% of whom are outside of the U.S.). Expect this rivalry to get even more intense in the coming year.

Meanwhile, Facebook has long-form television in its sights, with an up to \$1 billion content spend planned for originals this year. On the heels of bringing audience communities, partners and advertisers together via Facebook Live, the social goliath launched its Facebook Watch tab with original programming and personalized video recommendations on its platform. Like Twitter, it also continues to pursue major OTT sports content deals. And, the grande dame of the social video party, YouTube, has been diversifying its content approach with its YouTube TV bundle of networks and building premium offerings on its main website with a slate of scripted shows. These moves are in addition to continued support for its YouTube Red subscription service, which has yet to gain a strong foothold with audiences. YouTube now attracts 1.5 billion logged-in monthly users who spend, on average, more than an hour per day watching the platform's content on mobile devices.

Amazon, in turn, is marching into the social space across its properties in order to stem engagement erosion to these other platforms. Expect to see all of the social companies make even more aggressive moves into video in 2018, as the major OTT providers make similar pushes into social. They're all starting to collide over premium content, advertisers and consumers, as the industry continues to contract and expand in new ways.

“More video content is uploaded to the web every 30 days than the three major U.S. television networks have created in 30 years.” — Tubular Insights (formerly ReelSEO data), as reported in Forbes

## **TAKEAWAY**

What was once a steady consumer march into mobile video is now an all-out sprint. Content providers from linear, digital and social worlds are following them there, with short and long-form content in play to engage and satisfy. Look for the impact of companies colliding over the consumer and managing the plethora of available content options to be more clear this year.

## **INDUSTRY**

Content providers are facing and embracing a new business reality moving into 2018. Pay-TV subscribers are untangling themselves from the cord and are off in search of new content treasures. Companies are navigating new direct-to-consumer routes and reaching beyond borders to global markets. They're also re-imagining and improving their content to connect with more demanding consumers everywhere

### **Take the Direct Route**

2017 saw another flurry of network and telecom deals globally as a reaction to a changing broadcast industry and a growing desire to merge content, technology and monetization opportunities. Discovery bought Scripps, QVC bought HSN, and Fox is selling most of its assets



to Disney, amidst trying to gain full control of Sky. Time Warner and AT&T were set to come together but as this White Paper goes to print, that marriage is in jeopardy over antitrust concerns. In 2018, many of the content and distribution restrictions that were placed on Comcast and Universal when they merged are being lifted, which opens the door for more OTT activity there. Look for more deals to come.

A core impetus for this continued groundswell? The impact of OTT and its potential to not just augment linear TV but replace it — which is becoming perhaps painfully obvious now to traditional broadcasters and operators. When all the counts are in, 2017 likely will have seen the starkest annual drop in U.S. pay-TV subscribers yet; Q3 2017 alone saw a loss of over 400,000 net video subscribers among the top U.S. cable providers, per Leichtman Research Group. Pay TV password sharing is not helping matters. Conversely, Amazon Prime memberships alone are on track to surpass pay-TV households soon.

Broadband delivery continues to be a bright spot on U.S. operator balance sheets as it funnels OTT, internet and advanced technology options into homes. Further, a recent

Deloitte survey noted that while nearly 75% of U.S. homes are pay-TV subscribers, about two-thirds said the fact that it's bundled with internet service is why they keep pay TV. Broadband capacity advances will also continue to be essential to future OTT growth, as at least one estimate points to the fact that less than a quarter of U.S. homes have enough internet bandwidth at this point to support multiple streaming devices.

Another key factor in OTT growth? Virtual MVPD (vMVPD) skinny bundles — the poster child of the OTT 2.0 world. These include Sling TV, PlayStation Vue, DirecTV Now, and sports-free Philo TV (a joint AMC, Discovery and Viacom offering), which are gaining traction in the U.S. market (with over 3 million subscribers). Telcos also are getting into the mix: TMobile recently announced a 2018 service and Verizon is rumored to have one on the way as well.

Operators are turning to these offerings to hold on to at least some cord drifters with pared-down and customized OTT channel packages at lower price points and live TV options. Also in play are packages pitched as add-ons for current customers, like Dish Flex Pack.

Meanwhile, Amazon recently decided to forgo its own bundle, citing network programming costs, but is planning an AVOD service to sit alongside its subscription service Amazon Prime. Look for more bundling experiments like this in 2018 as companies balance network licensing fees and carriage restrictions with their own revenues. Consumers are impatient, and as they demand experiences that are simpler and better, with access to individual channels at a lower price, expect to see the industry inch ever closer to true à la carte content menus as noted earlier.

Operators and programmers are adapting as consumer interests shift online, saturation in some markets grows, future linear carriage remains uncertain, and technology companies push into traditional broadcaster territory.



They're increasingly finding that partnerships across multiple business areas including distribution and ancillary smart home services will need to be a part of their strategy and revenue mix. Comcast, for example, is selling its Xfinity TV service via a Roku app so customers don't need a set top cable box — another sign that STBs are not long for this world, along with forecasts that the equipment shipments will start to fall this year.

Also critical for the future? Direct OTT access to consumers. In the U.S. alone, over 200 OTT services currently are active with more planned for 2018, including CenturyLink.

Globally, 2017 saw a wave of announcements for niche services: HBO Nordics and Turner launched kids' streamer Toonix, the BBC and ITV came together to introduce Britbox to the U.S., the CBC started its ad-free streaming service in Canada, and Lionsgate launched both a Spanish-language service and a comedy one.

Disney is planning to launch ESPN and Disney-branded OTT services this year, and more services by more companies are sure to come. Premium service offerings like HBO Now, and broadcast network ones like CBS All Access, which have strong brand names, in-demand originals and marketing dollars behind them, have been particularly successful. Parks Associates research has noted that OTT churn rates seem to be steadying around 19% of U.S. broadband households after a period of increase, and U.S. services Netflix, Amazon and Hulu have seen their churn rates decrease, likely in part due to more original content and newer features like downloadable content. Through new programmer deals, Comcast is said to now have the rights to offer its service nationwide and compete head-on with OTT services, lifting a longtime barrier to any such endeavor.

Yet the industry has also recently seen the demise of services including NBC's niche Seeso and Comcast Watchable, along with Fullscreen's SVOD service and Vimeo's plans for one, as the struggle for revenue and audience share remains — particularly among smaller and nascent services. With all of the dizzying options in the marketplace for consumers, it remains likely that a continued shakeout of services and re-aggregation among content players is on the horizon to address the business realities of competition and simplify the viewer experience. A new age of bundles may be just around the corner.

Another sign of pending shifts: new regulations and the repeal of many others, which are promising to change the game. As this report was going to print, net neutrality in the U.S. was cut down by the FCC, changing the face of the open internet, and who might deploy OTT (and how) going forward. Smaller niche OTT services will be particularly vulnerable. Already repealed in late 2017 were U.S. rules that restricted broadcast ownership of multiple media outlets in a market, which promises to spur more consolidation. And, FCC data privacy regulations were stripped, lightening consent restrictions on how U.S. ISPs can collect, use and share customer data. However, across the pond, the European General Data Protection Regulation (GDPR) will go into effect in 2018, placing more requirements on consumer data collection, use and management that will impact all global companies.



Expect regulation, deregulation, and their impact on video to be major discussion points worldwide this year, as OTT providers continue to envision global expansion as a way to fulfill and grow their broadcast aspirations.

### **Go Global, Think Local**

Content providers are charting a global course these days, looking to scale OTT services and bundles beyond their traditional regional reach to capture new audiences and revenue. In the U.S. alone, Parks Associates has noted that nearly 60% of households subscribe to an OTT streaming service. A Digital TV Research report predicts that OTT TV episode and movie revenues for the top 138 countries will hit \$83 billion in 2022, more than double what it was two years ago. Expansion is not without its ongoing challenges, including business regulations for market entry, licensing restrictions and piracy issues, multi-language versioning requirements, payment options, and network and broadband capability. These can all still vary significantly by region, thus impacting how companies approach market development across the world.

Yet, OTT is growing everywhere. Asia-Pacific will soon lead the way in SVOD and AVOD services and the region's OTT video advertising market is being increasingly led by China according to separate studies by Digital TV Research. Australia's SVOD subscriber base is expected to overtake that of pay TV this year. Notably, Japan's SVOD market has been growing substantially over the last few years to become the world's fifth largest despite the historic resistance to SVOD services from consumers who preferred free TV content. Latin America will see its SVOD market double by 2020, driven in large part by Brazil and Mexico, and Western Europe SVOD revenues are expected to grow to \$6.5 billion by 2022.

Along with premium video that works across international markets, local content continues to be a critical differentiator for regional success — driving audiences, premium pricing and ultimately, revenue. India is just one country seeing fierce OTT competition and a rise in niche programming that's popular locally, such as cricket and Bollywood movies. Mexico is another market seeing a burst of local content activity, and multiple countries in Latin America now have state-funded OTT platforms with local VOD content.

Netflix and Amazon have built up their content libraries and original production due to increased market competition.

Netflix will see its international subs reach nearly 130 million within the next four years and is investing in many markets including Europe, and also Canada, where it's putting \$400 million into producing French and English language original content for the country. The company also prioritizes elements that help it scale and personalize series globally, such as precise dubbing and translations, consistent picture quality, and in-depth content tagging.

Amazon, meanwhile, has launched its Amazon Channels content bundle in the U.K. and Germany. This OTT activity has affected how the industry does business; in the U.K. for instance, new financing options have emerged to cater specifically to OTT service production and payments.



## **TECHNOLOGY**

Technology is making many new broadcast and service opportunities possible for broadcasters, while video and consumers are becoming bonded together via deep data, wild immersion and artificial intelligence. The future of video is here and now.

“TV is going to go to a much more personalized, one-to-one experience. Where you might have previously sat down with your family and consumed your favorite show together, it’s going to be online and much more personalized with additional features such as virtual and augmented reality.”

### **Immersed in Video**

The industry has been gearing up for advances that will enable greater adoption of more robust video: 5G wireless services will bring higher data speeds and video streaming quality to mobile devices and broadband, with lower latency (Asia-Pacific is one region poised for rapid 5G growth). They also promise to catapult new delivery technologies like fixed wireless, which is already being tested by top operators, and boost demand for more robust video content. Similarly, U.S. broadcasters are anticipating deployment of the ATSC 3.0 transmission standard, which will enable greater ties between linear and digital delivery, and more interactive and personalized opportunities around video content.

Both of these new capabilities are sure to propel adoption of higher broadcast resolution offerings like high dynamic range (HDR) and 4K. 4K TV sales were expected to make high gains in 2017, and companies around the world, including Spain’s top operators, are prioritizing it for their services. The leading OTT providers also remain strong drivers of 4K content as a continued point of differentiation to consumers and as a means for justifying premium pricing. Social companies are following suit: Facebook, for one, has recently embraced 4K video. While HDR is helping to drive 4K TV set shipments, non-4K, HDR TV set sales are also booming due to their ability to offer sharp picture quality at a lower price point. Even 8K is now on the table for the industry; in 2018, TV sets will start being deployed in Europe and Asia-Pacific, and the broadcast format is being tested in Japan to get ready for a larger rollout in time for the 2020 Summer Olympics in Tokyo. Expect to see high resolution video offerings to be embraced more widely this year as consumer hardware starts to catch up with demand.

Another area where that is also true concerns a similar beneficiary of faster speeds and superior quality: immersive video. This includes virtual reality (VR), augmented reality (AR) and 360-degree video technologies, all of which are ramping up in the marketplace.

VR is still battling issues over a luke warm consumer reception for headsets (although the IDC forecasts VR/AR headsets to reach 80 million by 2021 and in a separate study, China to be the frontrunner). A Thrive Analytics survey published by eMarketer noted that while cost is one factor holding consumers back from headset adoption,



a more important one depending on who you ask is that people simply aren't all that interested in them. Another problem cited was the lack of quality content. This is in part driven by the need for stronger user experiences.

And companies are still trying to determine how to make real money from VR once audiences lean in, which will ultimately make or break it. Advanced video players like the Ooyala Player are helping to address these concerns by not only enabling VR and 360-degree content playback but by also allowing broadcasters to monetize that content via ads or other means. Expect to see companies dig in deeper this year to continue experimenting with the technology, build great stories and consumer experiences, and address these challenges head(set) on.

And it's none too soon: An Ericsson Consumer Lab study forecast that one in three global consumers will use VR by 2020. Other research has indicated that VR will be a \$75 billion market by 2021. Gaming, entertainment and live events like sports are still among the frontline opportunities for the technology and the 2018 Winter Olympics will start to offer real applications of it on a global scale. In the meantime, YouTube introduced its VR180 video format, Facebook has its social VR hangout Facebook

Spaces, Discovery and Google have a VR series, and Turner and Intel are giving viewers access to NBA game VR broadcasts. Mobile VR is likely to be a key conduit to success and faster adoption; perhaps that's why companies like AMC and BT already have VR apps available. Look for more to come this year.

Many industry observers are also bullish on AR. Compared to VR, AR is less solitary, less technically challenging, and less encumbered by the need for a headset — although Apple, for one, sees possibilities in headsets. Pure 360-degree video, despite its own format challenges for producers, is gaining traction as well, including by BT Sport which is providing game highlights in the format.

All this excitement around high resolutions and immersive video notwithstanding, the industry is also going even deeper with video technologies, where data and machines are charting a new course of adventure.

## **PROGRAMMING**

Content budgets are blowing up and originals are riding high. Revenue models are changing, new strategies are emerging, and if live OTT is the new 'it girl' in town, sports content is her first starring role.

### **The Sky's the Limit**

Competitive pressures, consumer content demands and advertising revenue opportunities are raising the stakes on industry programming and production budgets and premium content output. This is creating a more urgent need to decrease costs and increase efficiencies throughout the video lifecycle.



As tech companies like Apple move into the ring, “peak TV” is looking more like base camp one. There are far more distribution options now, but everyone is battling over top talent and ideas that will register with their core audiences.

SVOD services are also seeing many network acquisition deals expire or costs rise, as the networks are pulling back after seeing their content help build what have become competitive offerings. HBO is one network doing just that.

Program ownership and in-season stacking rights models are changing, too. All this despite the inconvenient fact that digital platforms can also help lengthen a program’s shelf life and amortization of costs. As the Magid study found, originals and exclusives drive consumer decision making for OTT subscriptions. Consequently, among many of the largest SVOD and social companies alone, annual spending on originals for each has tipped over into the billions, making it even more difficult for smaller companies and traditional television networks to compete. More consolidation could be afoot soon.

Production budget figures like \$20 million for a programming hour have been bandied about as *Game of Thrones* on HBO is already hitting \$15 million; even costs for non-scripted originals are rising as some companies like A&E shift fully in that direction. Expect to see show marketing budgets and activities increase in tandem to help viewers find content, and companies to lose patience for letting shows go too long to find an audience with those types of cost outlays — even those not beholden to advertisers and ratings. Netflix, for one, is already increasing the pace of cancellations. Too much of a good thing will likely lead to further content shakeout around the industry this year.

Amidst all this, companies continue to pivot to hybrid revenue models that combine subscription with advertising or transactions, or even all three. Netflix, for one, is moving into merchandising for its shows. Premium video-on-demand (PVOD) for theatrical movies in the home is the latest potential entrant to the mix as the industry determines how it could work; U.K. theatrical chain Curzon Cinemas is launching its own SVOD streaming service while it waits.

Amazon and Netflix also are dabbling in the film territory as they continue to look at theatrical distribution to increase exposure for their film content — albeit with different strategies about how to do that based on their particular goals and business models. FX and AMC now have ad-free subscription OTT options for their networks deployed on Comcast’s Xfinity platform, to start, for an additional monthly fee. All in an attempt to match SVOD offerings, gain revenue, and give their consumers more choice. Expect to see similar moves by other broadcasters soon.

Content providers are also exploring new ways of producing content and doing business as a means to deal with the realities of a changing marketplace. The BBC lets its iPlayer catch-up service users binge-watch select shows before they air on the linear channel. Starz is going deeper into niche content with kids and Spanish-language programming, and expanding its library in general. Amazon is looking to eschew pilots for straight-to-series orders to keep up with the pace of the



industry. And many are looking at live video to change the linear and OTT industry dynamics for good.

Netflix will spend \$8 billion on content in 2018 to make its library 50% original programming.

## **Live Thrives**

Live OTT is set to soar going forward.

While live TV viewing remains tops overall, there has been a continued shift to live connected device consumption. In a 2017 study, half of 500 industry execs surveyed said they expected live-linear OTT viewing to surpass typical broadcast TV viewing globally by 2020, as live is putting the two sectors on equal footing. A 2017 USB Evidence Lab survey published by eMarketer noted that over a third of internet users had watched live video; the study also found that over 40% of Millennials had made their own live video.

These figures highlight how important the immediacy of video is to consumers now.

The social giants like YouTube and Facebook are clearly a prime conduit for live events; Twitter has even partnered with the BBC for live video and news content. Local broadcasters like Disney/ABC Television Group stations are eyeing live OTT video opportunities. But SVOD services also are growing up and embracing live video to compete with linear, social platform and vMVPD offerings. Hulu, for example, debuted its take on the format, which includes a live network bundle, its existing VOD service, and a keen focus on personalization and discovery, such as enabling customers to follow their favorite sports teams.

Speaking of sports, it remains a prime component of live content whether on TV or increasingly, OTT and social platforms via mobile devices; recent Arumai research indicates that globally, smartphones are used most often to watch live sports online<sup>1</sup>. The BBC, for one, is on a push for more live sports across its platforms. However, in the U.S., the broadcast networks continue to see a free fall in live TV sports viewing, including a steep drop in NFL ratings throughout the 2016-17 season. These foreboding slides are driven by lower Millennial interest in not only traditional TV but traditional sports as well.

A recent PwC survey of sports fans found that 82% would cut or trim their pay TV subscription if they could get live sports elsewhere. In some areas, such as Argentina, a lack of available live sports options for online-committed viewers is driving them towards pirated content instead of back to pay TV. This suggests that consumers in other markets could be similarly losing their appetite for pay TV and turning first to piracy to get what they want if it's not online.

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<sup>1</sup> Arumai recently filed a non-provisional U.S. Patent Application – System and Method for OTT Bitrate Optimization of Smartphones



ESPN, which continues to see large declines in pay-TV subscribers (12 million over the last six years), now has an iOS app which lets viewers watch four live streams simultaneously and helps keep them tied to the brand.

NBCUniversal launched a \$50 “Premier League Pass” live streaming subscription service to U.S. customers, with no cable subscription required. Verizon and the NFL closed a new agreement on digital streaming rights. Amazon got into the fray last year, too, by live-streaming NFL Thursday Night Football on a non-exclusive basis, a likely boon to Amazon Prime subscriptions.

Amazon also owns Twitch, a leader in live eSports, which by at least one estimate could be a \$20 billion company by 2020, and sees its highest reach in the Americas. Twitch is also starting to program beyond that genre. Facebook has built multiple league sports deals, including with Fox Sports to live stream the UEFA Champions League matches to users in the U.S. Meanwhile, many leagues are offering their own direct-to-consumer (DTC) live offerings and becoming broadcasters themselves. Look for the flurry of live OTT sports rights deals and experiments to continue unabated this year, with more direct competition for rights between linear networks and OTT companies, and exclusive content to become a core element of offerings.

High video stream quality, reliability and low latency remain paramount to the live experience for not only sports but all live content. However, broadcasters are quickly finding that live TV is not just about the live stream, it’s about creating the entire end-to-end experience holistically — from channel setup, playback and monitoring to linear integration, live-to-VOD conversion and monetization. Advances like Arumai’s cloud-based platform and centralized live network operations center (NOC) are being deployed; expect to see more 2018 innovations in live video and the platforms to support its growth across the globe.

This emphasis on live video comes at a great time, as advertising on digital is firmly making the leap from live linear TV in many exciting ways.

“36% of smartphone users live stream videos on social media.” — IHS Market Consumer Survey, August 2016, published in Benefits of Utilizing a Cloud-Based Solution for Live OTT, November 2017.

## **TAKEAWAY**

With the rise in competition, content budgets are exploding and companies are trying to keep up with the Joneses. Keeping costs down by increasing efficiencies in other areas, and finding new ways to make money is becoming a priority. Meanwhile, another competitive battle is heating up over live TV, which brings parity to broadcast and OTT. Expect to see more content skirmishes erupt in these areas in 2018.

## **CONCLUSION**

OTT is growing up and moving beyond what the broadcast industry has seen before. In the world of OTT 2.0, success will come to those companies that can dance with the consumer, and embrace



technology, data, and new ways of thinking about video content and how to monetize it. It's not a time to hold back but a time to charge forward and meet the future.

### **ARUMAI TECHNOLOGIES, INC.**

Arumai is the only leading, independent, pure play OTT products and solutions company in the industry today. Arumai's groundbreaking video frame manipulation techniques, proprietary streaming systems and methods, and OTT Video Suite of products make any video content universally enjoyable in high quality on any screen, by any viewer, across any network, at any time enabling a pure play OTT products and solutions company. Arumai Cloud Based Transcoding and Streaming System for Media Companies is prepared to deliver millions of content streams to mobile phones/handhelds, tablets/laptops/PCs, Blu-ray Players, Game Consoles, and Smart TVs, and in every market in the world on behalf of content owners, mobile service providers, cable companies, satellite companies, telecom operators, streaming video providers, and later through a constellation of multiple private CDN nodes in real time based on real conditions – OTT products and solutions.