



VIEW FROM THE TOP

[Heroes of the 'streamverse'
on our elite 2018
Streaming Media 50 list
share their insights.]



VIEW FROM THE TOP



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What Is the ‘Streamverse’?



Joel Unickow,
VP & Publisher,
Streaming Media

OVER MY CAREER IN THE STREAMING MEDIA INDUSTRY, I’ve had the pleasure of working with a lot of companies and even more people at all levels: chairmen, CEOs, engineers, sales and product managers, and of course, all manner of marketing folks. If there’s one thing that I think we can all agree on, it’s that you can very quickly assess a company by its people. Are they happy? Are they informed, but still inquisitive? Are they passionate, or are they just punching a clock? The way a company ensures its health is most certainly not nature; it’s nurture, and it comes from the top down.

Over the years you’ve likely noticed a common theme in my articles about the degree of smoke and mirrors and push marketing that has gotten in the way of real business in our space. Yes, companies looking to sell into this industry must build a trust bridge. Yes, our industry is maturing and innovating one deal at a time. There are ways to do that, like using data and facts and thorough needs assessment to start a sales cycle. And while due diligence should be the heart of the process, I always like to remind everyone how important it is to meet the people in a company that you may be considering doing business with.

Let’s face it: The industry has been never doing bigger things, but the “streamverse” (patent pending) isn’t getting bigger. It’s getting smaller. By “streamverse,” I mean the number of companies that are really building the industry. Our editor Eric’s intro to the Streaming Media 50 list

covers that already, so I won’t be redundant, except to point out that in 2009 I had almost 100 OVPS (Online Video Platforms) in my database, and now have only a handful. I have a database of approximately 1,500 companies operating in and around our space, so changing our list from 100 to 50 this year is really quite the statement.

Our job here has always been to create transparency in a very foggy space. This year, *Streaming Media* is setting the bar for excellence higher than ever before. And you should too, whether you’re buying or selling. And if there’s one recommendation I can make, it’s to always get to know the people behind the technology. You’ll be able to make your decisions much better. That’s where the “View From the Top” comes in—only companies that made the list of excellence are offered an opportunity to participate in this section to give you their thoughts. Clearly they want you to get to know them, and I can’t recommend enough that you reciprocate, and find out why these companies are successful. Contact them, and I know you won’t be disappointed; they’re all positive and innovative people with something genuine to offer to help *your* business. To that end, I’m always honored to introduce the “Captains of our Industry” in this annual “View From the Top.”

—Joel Unickow

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VIEW FROM THE TOP

AWS Elemental



Keith Wymbs,
Chief Marketing
Officer

THE VIEWER IS IN CONTROL

Today's video consumers want it all. High-quality content on their preferred devices. Watch-on-your-own-time functionality. Access so easy they don't have to think twice. Content personalized just for them.

To meet these expectations, video providers are abandoning legacy infrastructures in favor of the flexibility,

elasticity and speed of innovation enabled by cloud-based workflows. More specifically, they're turning to AWS Elemental Media Services for file-based transcoding, live video encoding, origin and packaging, media storage, and content monetization – at scale.

Global media leaders trust AWS, including AWS Elemental Media Services, with their most valuable content. Antel, Globosat, izzi, ORF, SBS, and Telemundo Deportes powered by NBC Sports' Playmaker Media, used these services to power streaming experiences as an estimated 3.4 billion people watched the 2018 football tournament this summer. For the 2018 Commonwealth Games, Seven West Media used these services for server-side ad insertion and video transcoding on a pay-as-you-go basis to ensure content was in the right format for high QoE.

AWS media services are also enabling next-generation media ecosystems. UK-based Arqiva uses AWS for its new virtualised media management services. Viewthority, a new content distribution PaaS from Verimatrix, streamlines content management, enhances workflows, and automates analytics, using AWS Elemental Media Services. Vyvx Cloud Connect, a new service from US telco CenturyLink, provides broadcasters, studios, and stadium venues a clearer path for moving live and linear video into and out of the cloud using AWS Direct Connect.

Content owners and distributors now understand how dependable the cloud is for the mission-critical content, how seamlessly it scales for unpredictable audience sizes, how quickly they can test and deploy channels, and how they can realize savings from the pay-as-you-go model. We expect to see even greater numbers of media enterprises go up cloud migration in earnest with AWS at the core of their operations as they deploy the accessible, personalized, high-quality experiences consumers crave.

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BuyDRM



Christopher Levy,
CEO
and Founder

AS 2018 NEARS TO A CLOSE AND WITH THE LARGEST IBC EVER JUST WRAPPED LAST WEEK, THREE KEY MOVEMENTS IN THE DIGITAL RIGHTS MANAGEMENT MARKET HAVE COME TO LIGHT. In the first scenario we see a massive movement towards standardized containers like FMP4 in HLS and CMAF for the deployment of "Consumer DRM" including Apple FairPlay, Google

Widevine and Microsoft PlayReady. Using multi-DRM with a standardized container, content operators will now be able to more efficiently and affordably deliver the holy "one silo" of content across their consumer facing networks. Secondly, it's clear now, the days of CAS are numbered in four digits or less depending on who you speak to. With the Set Top Box moving into the TV, consumer multi-DRM now built into Smart TVs and Android TV on the march, the need to have vast, expensive, slow-moving CAS systems for managed devices are quickly devolving into multi-DRM managed consumer playout experiences. The last key movement in the OTT space is the nearing end of CDN caching and large storage bills. Over the next two years, the viable content operators will move to the proven model used by the studios for digital dailies, screeners, EST and voter videos. This model provides for every file for every user to be unique using real-time transcoding, watermarking, encryption and delivery. Every CDN in the business will adopt an edge computing model which will afford their clients the ability to virtually eliminate piracy and provide the ultimate security for 4K downloads and beyond. BuyDRM takes great pride in being nominated to the "Streaming Media 50" and as we enter our 19th year in business, the view from the top is not only satisfying but challenging and with great reward.

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Since 1998, streaming companies have relied on us.

Streaming. We share your passion.

The right company makes all the difference. The people at Streaming Media are *in* the industry and *from* the industry; always have been, since 1998. No other group of professionals has the depth of connections, knowledge, and experience for you to work with—no one.

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We love streaming as much as you do; we speak your language. We also understand the pressures to be successful in the industry. We know what you are up against and what it takes to make a company successful in this space. We aren't here to sell you ads; we're here to grow your business.

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Plug in today.
streamingmedia.com

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Encoding.com



Jeff Malkin,
President

CELEBRATING 10 YEARS MIGRATING COMPLEX VOD PIPELINES TO THE CLOUD

When Encoding.com launched in October 2008, no one in the video space was even using the word “cloud” let alone deploying large-scale content operations on cloud infrastructure. Gregg Heil, founder of Encoding.com and my partner

for a decade, had a vision to build a transcoding software-as-a-service on AWS to offload the need to manage the arduous task of using on-prem tools for his fledgling OVP business. Recognized as a finalist in the 2008 AWS Startup Challenge, we found ourselves receiving lots of inbound inquiries from large media companies such as MTV, ABC and even Netflix. Clearly, there was a market need to solve the inefficiencies of deploying and scaling on-prem VOD transcoding pipelines in the golden age of video.

10 years and close to a billion videos processed later, Encoding.com continues to break the mold powering complex VOD workflows for many of the largest media & entertainment brands. Our strategy has always been driven by “what can we be the best in the world at” and “how can we help our customers navigate the always-changing OTT landscape.” For us, the answer continues to focus around cloud automation and job orchestration. Encoding.com now has 40 different open-source, commercial and proprietary engines underneath its mature API, providing customers access to a large suite of microservices for transcoding, packaging, conforming, muxing, DRM, DAI and stream conditioning, technical QC, chunking and more. We operate at the orchestration layer, giving customers the flexibility to quickly adopt new services as needed and at massive scale.

For media CTOs, the question no longer is “if” we migrate content operations to the cloud, rather it’s “when and how?” Encoding.com pioneered media processing in the cloud and continues to evolve and enable large media companies to efficiently scale and deliver high quality video.

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VIEW FROM THE TOP

Encompass Digital Media



Chris Walters,
CEO

OTT STREAMING – IT'S ALL ABOUT THE VIEWER EXPERIENCE FOR DIGITAL VIDEO CONTENT

When video content became available for streaming on a variety of devices, viewers were simply excited to have access and to consume programming even if the quality was lower than traditional broadcast. A great deal of effort was

put into maximizing the viewing experience quality, specifically for the consumption of streaming VOD content, because that is what was vastly available. As a result, the viewing experience for VOD content across devices and networks is largely very good. Today, there are numerous factors driving a rapid increase in the amount of premium live/linear programming available for streaming. Digital sports rights costs are increasing dramatically, and in some cases, the only access to video content for major events is via streaming platforms. Unfortunately, unlike VOD, there are a multitude of technical and operational challenges that still need to be solved to provide the TV-like streaming experiences that viewers demand. The implications of not delivering on viewers' expectations can be incredibly damaging for the brands involved. The risk is high, and Encompass is working with customers and partners to address these challenges. As the leading global video managed service provider, we have extensive experience delivering content across multiple platforms and are constantly evaluating the latest technologies and operational approaches to support our customers in meeting their viewers' high expectations.

Encompass Digital Media

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EZDRM



Olga Kornienko,
COO and
Co-Founder

THE TOPIC OF SECURITY CAN SEEM TO BE COMPLICATED. From considerations of why you need it and how to implement it, to how DRM technologies work at making sure all your customers can see the content they are authorized to see. To some extent, the security technologists have muddied the waters with generations of product that demanded proprietary formats, esoteric interfaces and a

tendency to hide topics in a veil of secrecy that obscures the key logic and principles.

It doesn't have to be this way in the future. And the video industry now is truly working together to democratize the creation and delivery of video content. And the use of security — vital to the business dimension of every service — is bit by bit starting to feel a little less arcane.

Simplicity of this sort is arriving from at least two directions:

- **Standards:** We see the emergence of CMAF, building on DASH and HLS deployment, becoming a successful, secure, truly converged ABR format.
- **Cloud services:** Best of breed, virtualized video service building blocks are lowering the technical and commercial barriers to service deployment.

At EZDRM we believe that our offering of DRM as a Service (DRMaaS) serves as a prime example of cloud best practices and operational standards-based simplification. Using a managed, hosted cloud-based service avoids integration of different DRM technologies and provides a straightforward, future-proof interface between your workflow and secure, reliable DRM service delivery.

With DRMaaS from EZDRM, there are no functional compromises involved in the implementation and your business approach dictates functional completeness while scaling for your service's future. Your business is always your top priority, and DRM complexity should no longer be a barrier to business success. Come talk to the experts at EZDRM today: www.ezdrm.com

EZDRM

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Andreas
Kisslinger,
CEO

SUCCESSFUL MULTI-PLATFORM PUBLISHING REQUIRES A SOLID MEDIA MANAGEMENT SYSTEM

Another exciting year in the most exciting industry of all. At Lightcast.com we simply love what we do, and still, nothing excites us more than the media projects of our clients.

The launch of our new media management system – the Lightcast

Media Cloud – and the subsequent Awards, such as winning the American Business Award for the best content management system of the year, taught us that intuitive workflows for media management has become increasingly important to publishers.

While we strongly focused on frontend tools over the past years, such as the continuous improvement of our TV app templates and APKs for all major OTT platforms, we have lately invested heavily into the progression of our media management system – the Media Cloud. It is the very SaaS product and interface our customers use on a daily basis in order to upload, transcode, manage and publish all things media: video, audio, live-events, linear streams, VOD-to-LIVE, LIVE-to-VOD, and all media assets' associated metadata, images and sidecar files.

As with all good software products and technologies, we always have to listen closely to our customers. As a result, providing the capability to automate workflows, save custom workflow presets around upload and publishing, and to create and update navigation structures via our media management system in real-time across all publishing properties, became a key focus for us based on market demands.

If there is one thing we can highlight from our enjoyable journey with all of our amazing customers around the world in 2018, it would be that “better real-time control means faster response to viewer demands, which leads to greater success for any publisher”. This led to the strong investment into the Media Cloud CMS this year which will continue in 2019 – a year we expect to break all records. Again.

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Mux



Jon Dahl,
Co-Founder
and CEO

IT'S TIME TO STOP ACCEPTING PROBLEMS WITH STREAMING VIDEO

While cord-cutting is on the rise, traditional broadcast still has some advantages over streaming. First and foremost: it ... works.

When you turn on traditional television and flip to a channel, you nearly always get high-bitrate video without rebuffering. In contrast, if you

fire up an OTT or mobile app, problems are common. Rebuffering, poor picture quality, and errors are just a part of normal operating behavior.

Putting some numbers to it, the average video stream tracked by Mux Data (mux.com/data) has rebuffering every 67 seconds or so, and on average, about 5.5% of streams fail. Try going to market as a software vendor with a 94.5% SLA and see what happens.

The good news: it doesn't have to be this bad. Platforms that invest in optimization improve these numbers significantly. It's not uncommon for Mux customers to reduce failures from 6% to 1% based on insights from QoE data, or to cut rebuffering in half.

The best streaming platforms, like Netflix, deliver near-broadcast experiences. This sets the bar for everyone else. Viewers have more options than ever, and if they run into problems on one app or platform, they'll go to the next one.

If you're responsible for a streaming video platform, the wrong approach is to ignore or accept problems. The right approach is either: take quality seriously, and invest in optimization; or realize that you don't have the time or expertise, and find a platform that handles both infrastructure and optimization together [like Mux Video (mux.com/video)].

I heard a story a few years ago from a company that built a product that measurably improved user experience while watching video. But the company was having trouble selling the product. They would get a major broadcaster excited, but then things would stall out. One time, a broadcaster told them this: “We have a hard enough time just taking thumbnails from our video; how can we focus on optimization?”

Let's grow up and start focusing on optimization.

Mux

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VIEW FROM THE TOP

SeaChange International



Ed Terino,
CEO

TODAY'S OTT CONTENT DELIVERY ECOSYSTEM has changed the industry drastically, perhaps most significantly by presenting broader opportunities to build powerful and lasting relationships with viewers. The technological underpinnings for offering finely-tuned content recommendations, individually-relevant advertising, and the ability to deliver this content to the viewer, regardless of device

or location, are now available to video providers of all types.

As an industry, we've been so focused on the technology of streaming that, in many cases, the actual experience has taken a back seat. The technology lets us insert ads into OTT streams, but we show the same ad 3 times in 6 ad slots. The perfect video for the viewer is in the library, but it lacks sufficient metadata for the viewer to find it. These are business challenges, not technology ones.

Our industry today exhibits parallels to the nascent PC market. Many video platforms used by today's service providers, such as Netflix, are purpose-built from the ground up – proprietary and closed. They reflect the days before modern operating systems, when hobbyists and experts wrote software programs for each machine – Apple II, Amiga, Commodore, Radio Shack, etc. With the emergence of the Windows PC, application portability and hardware flexibility became the norm, innovation flourished, and economies of scale drove down costs. The PC's relatively open framework allowed it to compete effectively against the closed Apple Macintosh system.

If our industry is to optimize innovation and growth, and provide the experience that viewers demand, we must push toward more open systems and APIs that support rapid integration and feature portability across a wide swath of systems and viewers – helping video providers migrate from their legacy set top box solutions to a fully IP-enabled future, either gradually through incremental hybrid STB deployments, or in one bold "Bring Your Own Device" leap.

Competition is fierce, demand is increasing, and consumer expectations continue to rise. The days of developing purpose-built, closed systems are behind us. Our Panoramix video management and delivery platform and cFlow portfolio of video management solutions is the real world expression of SeaChange's advocacy for open, multi-vendor solutions that can unleash OTT video's potential.

SeaChange International

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SSIMWAVE Inc.



Dr. Abdul Rehman,
CEO

ON AN INCREASINGLY CROWDED STAGE OF NEW VIDEO SOURCES, new viewing devices and rapidly evolving network architectures, is it finally time for the wallflower category of Test and Measurement to move into the spotlight? That's my view, and why we founded SSIMWAVE Inc.

Consistently streaming superior video quality over the internet is hard. Hard for on-demand titles and even harder for low latency live. A big enough problem for the industry's biggest players to pre-pay a group of Emmy Award researchers to build a platform that didn't exist 22 months ago. Today, it is affecting the streams of tens of millions of US subscribers.

At SSIMWAVE, we solve business problems with science. The science of seeing doesn't start with trying different methods of optimizing in hopes of hitting the target. It starts with defining the target that matters most – a viewer's experience across content and devices. Then, and only then, can you balance the cost function of streaming media. You don't plan a trip based on modes of travel. You pick a destination and then decide on the best way to get there. Our platform is taking our customers from inaccurate, expensive trial and error workflows to very accurate and low-cost, get-it-right-the-first-time pipelines.

With SSIMWAVE, the wallflower category just got off the sidelines. Start making viewer intelligent decisions with the world's only unified, end-to-end monitoring solution for QoE, QoS and regulatory compliance including closed-captioning and audio loudness. SSIMPLUS Live Monitor and VOD Monitor – built for accuracy, scale, simplicity and cost-efficiency.

I encourage you to get in touch with us. Find out what all the fuss is about.

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Telestream



Scott Puopolo,
CEO

TODAY, STREAMING VIEWERS HOLD ALL THE CARDS. They expect to access content at any time, in any place and on any platform. At the same time, research indicates that consumers do not have much more incremental time that they can spend watching video. There is a battle raging where the prize is the attention of consumers.

Any video business needs great content that appeals to consumers. However, in addition to this, consumers demand a Quality of Experience (QoE) that provides flawless viewing throughout. If their expectations are not met they will move on to other channels very quickly.

In the fight for eyeballs, agility, efficiency and quality are the three pillars that support every video enterprise: agility in the ways the enterprise offers content to consumers to realize the highest dollar return on content, and efficiency in data processing, preparation and delivery.

Businesses must automate complex workflows for the capture and preparation of video content, including both file-based and live streaming media. Enterprise operations are consolidating, with content creators now looking to reach customers themselves through their own channels to market, such as HBO Go, ESPN App and BBC iPlayer. In seeking a direct relationship with consumers, our customers require a seamless way to capture, process, prepare and deliver a quality of experience that meets or exceeds consumer expectations.

Telestream solutions for automated workflows, media processing and quality management of video can be applied across a range of platforms, affording our customers all the wanted flexibility, agility, and business outcomes of cloud. However, those customers are on a transformative journey where they will operate in hybrid infrastructures of some kind in the near- and mid-term. Telestream empowers them to extend their workflows from their traditional on-premise infrastructure in ways that make sense for their business.

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Verimatrix



Tom Munro,
CEO

REIMAGINING CONTENT DISTRIBUTION VIA THE CLOUD

It's no secret that the growing complexity of the global media and entertainment industry has made it harder to deliver content in the traditional way and maintain direct control over rights negotiation, quality levels and delivery formats.

Conversations with the leaders in the field reveal a frustration among content providers to be able to easily deliver assets and enforce license agreements and playback policies, while video service operators express a desire to obtain compelling content at an accelerated pace and with simpler workflows that avoid repeated decryption/re-encryption requirements.

By reimagining the end-to-end workflow between content providers and operators, it is possible to provide new levels of transparency, efficiency and control to content distribution via a common cloud platform. Content is stored once and securely delivered everywhere. Contractual terms and business rules are centrally managed. Real-time data and reporting increase contract compliance efficiency, and provide viewer insights.

For content providers, it brings an unprecedented level of visibility into aggregated viewership data and enables them to gain insights from analytics. They also maintain greater control over their content with improved ability to eliminate or minimize re-encryption points, enforce rights and licensing terms digitally.

For operators, this platform saves cost of re-encoding and re-encrypting as content is sent pre-packaged at a set of given bit rates and file formats. It reduces friction in dealing with content providers on usage rights and contractual terms.

We have built this connected content distribution platform to help our customers enable new business models and improve competitiveness—we call it Viewthority™. Learn more about this platform-as-a-service at verimatrix.com/viewthority.

Verimatrix

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VIEW FROM THE TOP **SPONSORS**



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