GAME ON!
HOW STREAMING SPORTS IS HEATING UP
A THOUGHT-LEADERSHIP REPORT
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>4</td>
</tr>
<tr>
<td>SLING TV</td>
<td>5</td>
</tr>
<tr>
<td>NBC SPORTS DIGITAL &amp; PLAYMAKER MEDIA</td>
<td>7</td>
</tr>
<tr>
<td>FOX SPORTS</td>
<td>10</td>
</tr>
<tr>
<td>NEULION</td>
<td>13</td>
</tr>
<tr>
<td>ETN MEDIA/STREET LEAGUE</td>
<td>16</td>
</tr>
<tr>
<td>TENNIS CHANNEL</td>
<td>18</td>
</tr>
<tr>
<td>WHISTLE SPORTS</td>
<td>20</td>
</tr>
<tr>
<td>AKAMAI</td>
<td>22</td>
</tr>
</tbody>
</table>
INTRODUCTION

Sports have been at the forefront of the streaming revolution from the start. From early successes with the NCAA basketball tournament to unprecedented streaming events like the 2016 Summer Olympics, the entire sports ecosystem has continued to push the boundaries of what is possible with online and mobile delivery. Today, teams, leagues, TV networks, digital entrants and players themselves are all embracing innovation and connecting with fans in cutting edge ways. As industry analysts and observers (and fans ourselves!), we’re constantly impressed with how the sports experience is improving, on an almost daily basis.

To better understand this spirit of innovation and which initiatives are having the greatest impact, we talked to eight industry executives for this streaming sports leaders report. As you’ll read on the following pages, all are extremely optimistic about the potential that online and mobile have to continue revolutionizing the fan’s experience. Whether it’s mobile, augmented reality, or drones, these executives see unlimited opportunities to continue breaking new ground and developing new revenue streams.

That’s not to say that challenges do not remain. Our interviews revealed that latency issues still persist and achieving the reliability of broadcast delivery is a goal still to be achieved. Device fragmentation is a headache and thorny rights issues persist, particularly between local, national, and global delivery. These challenges make unfettered access to favorite sports too confusing for many fans. That said, in some ways online and mobile already reach beyond the sports experience of traditional television, with advanced features like mosaics, multi-camera angles, in-car-cams, and multiscrreen sync.

Streaming sports have matured quickly but continue to evolve rapidly. The executives interviewed for this report have lived through this maturation process, and their hard-won experience provides invaluable insights and best practices.

We hope that their collective thoughts contained herein will help continue to drive the industry forward.

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How would you describe the state of streaming sports currently?

It’s in a phase of rapid development and rapid deployment. Whatever your baseline level of viewership is, you get a huge spike with live sports. Nobody’s system for streaming is perfect, yet they are all improving. Whatever the state of your system, it will be tested when you have a large event. Not only by the sheer number of concurrent users, but also by the rapid ramp of users. When I think about two years ago, where we were then, it’s night and day. Obviously, our scale is much greater now than it was back then. I remember most nights I’d be on some call about some issue or other. And that’s quite rare now, thankfully.

What are your key initiatives in streaming sports?

International has been a big focus for us, even before we launched Sling. And that business has continued to steadily grow, and is now quite a big business for us. That remains a focus. We have over 400 channels from around the world that we bring into the U.S. And a big focus of ours is cricket. They just had the India Premiere League, which is in April and May. And they had the Champions Trophy, which is a worldwide tournament that we had exclusively for streaming here in the U.S. That was a big, big event for us.

How has the quality and reliability of live streamed sports improved over the last year? Does it reach or beat cable TV quality?

If I graded the industry 2 years ago, I’d give it a C. Today we are a strong B. The challenge is to achieve the level of reliability that cable and satellite deliver. They had decades to work on their networks, but our rate of improvement is much faster in OTT.
What have you learned so far, and are there any best practices you can share?

One of the things that we’ve learned is that you’ve got to constantly make changes to improve, but that the most risk is when you make changes. There are always unintended consequences of changes that can end up causing problems. In the early days, we took many more risks. As we have grown, we have had to dial back the risk. Getting the balance right between making the changes and minimizing the risks is important.

Going forward, do you envision more specialized sports subscription services, like perhaps a two-week Olympics subscription, or premium charge for in-cabin-cams for car racing?

We expect to see lots of experimentation for things like that. For example, transactional streamed sports where you can buy one game. We already allow people to buy access to cricket à la carte for $10 a month. This approach is antithetical to the pay TV model. If the industry could put the genie back in the bottle they would, but they can’t because consumers are breaking the model.

Are there specific rights issues that limit the streaming sports?

There have been, but they’re getting cleaned up pretty quickly now. We are still dealing with problems like local game blackouts. And there’s still a broader issue with big leagues selling rights by the screen. But the direction is for the rights issues to be less of a problem than they have been in the past.

If you could improve just one thing about your streaming sports experience, what would it be?

The more you can control the end-to-end delivery of a live event, the better. Some sports leagues insist on doing their own encoding. Unfortunately, they tend to perform the worst. The best performing are the ones where we can control the end-to-end delivery.

Are there specific things that offering sports within an app experience enables that are advantageous?

Portability of the content. Apps let you take the game with you. That’s one big advantage. There are many more things that can be enabled that haven’t been yet. For example, Game Finder on Dish would be a good addition to Sling TV. But it’s too easy to become focused on the bells and whistles. It’s really important to keep a sharp focus on the core functionality, to get that right.
How would you describe the state of streaming sports currently?

Since starting NBC Sports’ streaming efforts back in 2006, we have seen massive growth in users and device penetration. With the growth of options and outlets, it is truly a defining moment in consumer choice and flexibility. NBC Sports continues to see double-digit, year-over-year growth in all of our content. While device fragmentation continues to challenge the industry, we feel it provides a true opportunity for programmers and content providers to create innovative solutions and services for our users.

With the launch of Playmaker Media, our white label end-to-end video streaming service, we are seeing even greater interest and depth of content offerings on an international basis. A core tenet of Playmaker Media’s offering has been operational and technical excellence to ensure consumers receive the best-in-class service, no matter where they are, or how they are connected.

What are a few of your key initiatives in streaming sports?

NBC Sports Group and Playmaker Media are continuing to push the boundaries to deliver broadcast-level experiences on all IP-delivered devices. Even with the tremendous growth in the industry, we are still in the early days in terms of low latency, redundancy, data visualizations, and scale. We are investing heavily to drive rich application experiences and flexibility for users.
What’s been your experience with quality and reliability when streaming sports? Is it TV quality now?

What we deliver today is the best we have seen in terms of quality and reliability. Bitrates continue to go up, and engagement times climb. That said, we are still in the early days in a very rapidly evolving ecosystem. The industry as a whole continues to push to broadcast standards, which have been in place now for 50+ years.

Digitally, we consistently see very high-quality experiences, but feel there is room to grow in the underlying technology of how we delivery massive scale with low latency and high quality. We believe in the next 12 months we will start to see new and innovative solutions in market from Playmaker Media that pushes even closer to TV quality, and delivers experiences that are complementary to what our world-class broadcasts deliver.

What have you learned so far, and are there any best practices?

After running well over 100,000 events, including some of the largest in digital worldwide, such as the Rio Olympics and the Super Bowl, we have many best practices. The primary lesson we learned from our broadcast operations team, and have standardized as a best practice, is to have multiple diverse redundancy plans in place and ready to execute.

The goal is always to ensure 0% end-user impact, and if a problem occurs to move on to backup plans quickly, and problem-solve the issues post-event to ensure it does not reoccur. Problems in delivery should never result in the end users knowing anything occurred — something we employ for all of our events, clients, and partners at NBC Sports Group and Playmaker.

As engineers, we have a natural instinct to solve the problem immediately. In reality, the smartest solution is to do homework and preparation before the event. It is critical to have your gameplay plan solidified and documented.

What are some of the most innovative features you’ve introduced with streaming vs. your typical linear broadcast?

We continue to push new and innovative experiences to market. From deploying the first large-scale HD stream over eight years ago, to streaming multi-camera events, we have been at the forefront of digital delivery innovation. As we get more powerful hardware from device manufactures, we are innovating how we complement the linear sports feed and are driving consumer engagement with our brand to deeper levels.

Our mosaic offering around NASCAR is a great example of our innovative features. On a connected device, you can consume our best-in-class linear product and view in-car cameras of your favorite drivers,
in either first- or second-screen experiences, in a completely time-synced fashion. When we start to marry that technology with some of the rich data-driven visualizations we do around Premier League and NHL, you will start to have a truly differentiated experience that can be deployed multi-platform.

**Are there any new technologies you’re particularly excited about for your streaming sports initiatives (e.g., VR, AR, etc.)? Any thoughts or concerns about them?**

I am very excited about AR, 4K and HDR, and low-latency delivery. As we push the boundaries of digital delivery, these new delivery techniques and higher-quality streams will be transformative to the industry. Deployment of these in a smart, safe, and scalable way will be critical to the success and engagement of this technology industrywide. We need to ensure that not only the experience gets richer, better, and quicker, but that we deploy it safely, with our best practices, to ensure a best-in-class experience for our users.

**If you were to name one big industry trend that will affect streaming sports going forward, what would it be?**

Connected device usage continues to be the big industry trend. Devices like Apple TV, Roku, Fire TV, and the various other connected large-screen platforms, continue to drive incredible usage growth. As we improve connected device practices, we are focusing on the experience around the event, increased video quality and decreased latency. With the natural development of many different ways to connect to digital video streams, we are seeing a fragmented device ecosystem that requires extra attention to not only how we deliver digital sports, but how to do so optimally for each device. We want consistent high-quality experiences no matter how a user chooses to access our content.

**How important is mobile in your streaming sports strategy?**

Mobile growth continues to be a large focus for our strategy, and presents new and unique opportunities for excellence in video delivery. While the upcoming industry trend is connected device growth, mobile growth has been present for some years now and continues to grow. The multitasking experience mobile provides requires different solutions than those streams whose primary function is to only display video.

Mobile presents the ultimate in flexibility for our users, the ability to watch a Notre Dame game while at your kids’ swim meet on a Saturday afternoon, while checking email and social networks at the same time. It is critical for us, as technologists, to continue to deliver high-quality mobile device experiences that drive engagement and take into account multitasking and connectivity. We feel the mobile experience is truly transformative as mobile devices become even more powerful, and mobile networks continue to mature to new levels of data services offered in market.
How would you describe the state of streaming sports currently?
Growing. Users are focused on accessing the content they want regardless of the platform. We are seeing increased demand for live sports, whether that be through a connected TV or on smaller screens and on the go. At the same time, most of the early hurdles are improving:

- live video players are better
- video quality is improving, and in many cases exceeds what viewers receive over cable (60 fps)
- Carrier networks can support higher-quality streams
- Users have unlimited plans to remove data anxiety
- Wi-Fi is more ubiquitous
- Devices are being built to support video consumption

What are your key initiatives in streaming sports?
Get users into the stream as quickly as possible. Make the picture quality as good as TV. Develop experiences that are taking TV to the next level.

TV Everywhere products have all done a good job of replicating the TV experience. Now we want to delight our users with an experience that is next-level TV. Currently we offer multiple bonus feeds for big events with isolation cameras streaming live to support the live event. For NASCAR, we launched a product called “Car Channels,” which is a fully automated single driver/car experience. It displays the drivers’ current stats in real time as well as showing the in-car camera, pit stops, and providing the driver/crew chief and spotter audio. The race feed and race announcers can be heard as well. This is a next-level experience.
What’s been your experience with quality and reliability when streaming sports? Is it TV quality now?

The quality of streamed live sports is incredibly high. It is possible to make it better in the near future through lower latency and better picture quality. All of these things can be done now — but we need to do it consistently.

What have you learned so far, and are there any best practices you can share?

We have learned that streaming is a complex environment with many more moving parts than you encounter in a traditional linear stream. We learn lessons with each major event we stream and with each new feature we introduce. The key is to learn from the problems we encounter and fix them quickly. We have seen a dramatic increase in stability (across the board) as a result.

Going forward, do you envision more specialized sports subscription services, like perhaps a two-week Olympics subscription, or premium charge for in-cabin-cams for car racing?

Niche sports packages have a place in the market, but with the size of rights costs these days it is challenging to deliver returns unless you can deliver on scale. That said, digital technologies provide a more flexible environment for creative and consumer-friendly pricing and packaging, not to mention a much deeper and more immersive content experience, and it is something providers have offered in Europe for a few years. I think as rights holders lean more into direct-to-consumer offerings we will see more experimentation in this area.

What specific rights issues limit your ability to stream sports?

We ensure that whenever possible we have the appropriate rights to deliver customers a 360-degree experience wherever they want to engage with FOX Sports. Sometimes that is not always available, like when some subset of rights is sold separately, but for the most part rights holders realize it is in everyone’s best interest to deliver customers the most complete, exciting experience possible, in an easy-to-use and connected way.

If you could improve just one thing about your streaming sports experience what would it be?

Latency — improving latency between TV and our streaming app.
What are some of the most innovative features you’ve introduced with streaming vs. your typical linear broadcast?

Mosaic mode for web and connected devices that allows a user to PIP a second event, dual-screen mode that presents two events side by side, and a four-event version as well. Also, video quality at 60 frames per second, which gives the viewer a TV-like experience in the palm of their hand. Based on live events running long and overlapping with the next scheduled event we will add a duplicate channel to give viewers the choice to watch the end of the event that is running long or the start of the next event.
How would you describe the state of streaming sports currently?

We are in a second phase of sports streaming — let’s call it version 2.0. Video quality, personalization, and global subscriber expansion will determine the winners. The good news is that the cost and complications in comparison to version 1.0 of streaming are much lower. With the fragmentation of content services — for example, so-called “skinny bundles;” the rise of new enthusiast networks for live streaming skateboarding, surfing, horse racing, and the like; and the build-out of other niche networks — content owners not only face the challenge of attracting viewers, they also need to focus on the experience and quality of the sports streaming service itself. That means rights holders must pick their vendors wisely and pick only a few of them. Too many moving parts from multi-vendor implementations may appear to provide best-in-class services, but they are often more expensive, too complex, and fall short of attracting and retaining viewers.

What are your key initiatives in streaming sports and with your streaming sports customers?

Our mission at NeuLion is clear: offer customers an end-to-end technology and services platform that makes the business of live sports streaming look incredible on any device. We think video quality is a must-have for the sports streaming business. This starts with state-of-the-art encoding to support sports video formats like HD, Ultra HD 4K, and 360 VR, all enhanced with new, high dynamic range HDR pixels. It also means supporting both HLS and HEVC MPEG-DASH. Next in importance to video quality are the interactive features of a sports streaming service. As these initiatives drive success, viewing data then becomes critical. As we collect viewer real-time watch, billing, and CRM data, as well as support data from our customers’ viewers, we offer NeuLion ACE Analytics. Our customers can pinpoint viewer loyalty and reduce churn for their services. The same watch data offered through NeuLion ACE Analytics can also help build “look alike” audiences that can be used for marketing campaigns to attract new subscribers. We enable customers to lower the cost of acquiring new customers while constantly measuring the lifetime value of the subscriber.
Are streaming sports at TV quality now? Are there still challenges? Are there ways in which streaming is better than TV?

Without a doubt, the video quality of live sports streaming has surpassed its legacy distribution forbearer. Cable and satellite set-top boxes are a thing of the past — and will never offer personalization that is unique to the viewer in the way that streaming services can. As the industry develops new ways to enhance the delivery of live sports streams, viewers will see the benefits. Live and on-demand video in Ultra HD 4K is meant for IP-based distribution. Cable and satellite companies will have to upgrade their boxes to IP, and consumers will find this to be just another aggravation that drives them to IP-based services delivered over broadband. As these audiences grow on the Internet, scaling to meet the demands of large audiences will be the ongoing challenge the industry must solve.

What are some of the best practices in streaming sports that you can share?

Video quality, coupled with personalization/interaction features, are today’s best practices for leaders in sports streaming — and offer lessons for content owners of news and entertainment programming. Sports fans have been early adopters of live streaming services and are highly engaged, interactive viewers. Personalized content is a best practice that will continue to define the digital streaming industry. Personalization choices drive how content is curated and presented to the viewer. Interactive features and services that offer instant replay, slow motion, and picture in picture, metadata, timeline marking — all drive longer engagement with viewers. New audio-only feeds that can be synchronized with video will offer more personalization of content for viewers. Picking different live audio tracks for different broadcast languages, coaches’ live feeds, and other celebrity announcer feeds will enhance the livestream experience.

Going forward, do you envision more specialized sports subscription services, like perhaps a two-week Olympics subscription, or premium charge for in-cabin-cams for car racing?

Livestreaming of sports is definitely where the audiences will be for content owners and rights holders. Sports rights are territorial, global, and expansive. Over 1,300 companies own sports rights to the top revenue-generating sports in the world, according to Sportscal. The ability to package, price, and deliver sports bundles globally is a big win for rights holders. For fans, it’s also exciting: You can follow the live action of your favorite passions like surfing, MMA, pre- and post-video from the world of football and beyond. If there are two billion websites in the world, could there be two billion sports streaming channels in the world? Internet TV for sports offers rights holders and fans viewing experiences that will only get better.
What specific rights issues limit the ability of providers to stream sports?

Due to the cost of sports rights, service will continue to be fragmented for viewers. This drives viewer frustration because finding the right site or channel can be time consuming. Plus, not all rights holders focus on video quality and the experience like the NBA, Univision, or Sky Sports all do. It’s just too expensive for sports rights holders in the big revenue sports to buy global rights. What the future holds in terms of new distribution platforms like Facebook, Amazon, and others will continue to drive viewing fragmentation.

What are some of the most innovative features you’ve introduced with streaming vs. your typical linear broadcast?

NeuLion has been working with sports rights holders since 2008, when we launched NHL Game Center Live. Last year, we streamed over 63,000 live events and our customer apps drove more than 40 million downloads. What is unique about these NeuLion-enabled sports services is the comprehensive experience we have created for viewers. Our interactive features increase engagement, differentiate the content, and unlock new revenue streams. These features include real-time integration of stats, social networks, and video, along with the ability to publish in-game highlights that are syndicated and marked in the player. Personalization drives the curation of content, and we can deliver live, linear channels with full EPG and ad insertion. NeuLion also offers slow-motion streaming with instant replay and jump back to live, all of which deliver a really cool experience for the sports fan that will only get better.

How important is mobile to any streaming sports provider?

The industry estimates that by 2020 there will be over 5.4 billion smartphone handsets in the world. So TV is right in front of you — always. For sports rights holders, this new paradigm offers a great opportunity to produce and deliver sports for the smartphone. Early innovators are leagues like the NBA, which produce and offer a mobile-only camera feed for viewers. As audiences grow, mobile device integration will include personalized sports schedules, short- and long-form video libraries, and personal social media feeds. Viewers will love this — and the totality of the experience will create great new ways to monetize audiences.
How would you describe the state of streaming sports currently?
We are at the dawn of an exciting new era in media. For sports in particular, the demand for live coverage of all sports is greater than ever before. And with the advent of new technologies, the expansion of fiber optic networks and “all-screens” consumer viewing behavior, the state and future of sports in the streaming age is bright.

What are your key initiatives in streaming sports?
We will continue to improve the user experience and work toward becoming the gravitation center of the skateboarding community as the sport prepares for its Olympic debut at the Tokyo 2020 games. Additionally, we’ll invest in the continued development of programming that speaks with an authentic voice and brings our audience closer to the people, places, and events that inspire millions of skateboarders and skateboarding fans around the world.

What’s been your experience with quality and reliability when streaming sports? Is it TV quality now?
Generally speaking, the video and audio quality of live streaming on small screen devices (computers, tablets, and smartphones) is excellent, while going through one of the many box/dongle solutions with direct connection to the “big screen” on the wall tend to leave room for improvement. Reliability of signal transportation from site is still wrought with challenges for producers, forcing most of us to prepare for events with triple redundancy on transmission.
What have you learned so far, and are there any best practices you can share?
Consumers are demanding high-quality live-streaming content delivered with very few “clicks,” that it is of equal or greater quality to traditional sports “broadcasts,” and includes community interaction and enhanced data (stats, telemetries, course info, etc.). The best practice we can share is that you have to build a distinctive brand voice, then listen and be responsive to your fans/audience/consumers. Doing so will enhance your brand and business, developing long-term engagement and loyalty.

Going forward, do you envision more specialized sports subscription services, like perhaps a two-week Olympics subscription, or premium charge for in-cabin-cams for car racing?
Absolutely! This is the future of most sports … If you aren’t soccer, NFL, NBA, MLB, UFC, F1, or the PGA, you either are now or will soon be re-imagining a future driven by subscription-based, one-to-one consumer relationships.

What specific rights issues limit your ability to stream sports?
Our business model for SLS is predicated on the formation of deep, international partnerships, some of which provide our local partners with control of local broadcast and cable rights. As such, careful management of the potential conflicts between live streaming digital rights and live television rights require long-term strategy and ongoing diplomatic discussions among potential rights holders.

If you could improve just one thing about your streaming sports experience what would it be?
Reliability of affordable transmission services, whether satellite or fiber.

How important is mobile to any streaming sports provider?
Mobile is the present and the future. With our core audience living tethered to their smartphones, we consider ourselves a “mobile-first” business. Consumer behavior is demanding that you play on every screen, with virtually unlimited choice and control over when, where, and how to watch. In short, If you aren’t thinking mobile, you better do it soon, or someone else will.
How would you describe the state of streaming sports currently?
The streaming sports sector is far and away the most exciting of the OTT ecosystem. It's the area where the greatest growth and experimentation is occurring. Engaging with a sports fan, compared to a consumer of general entertainment or news content for instance, is a robust opportunity allowing for all different kinds of deep fan experiences and monetization paths.

What are a few of your key initiatives in streaming sports?
Tennis Channel Plus has exceeded our most optimistic expectations. We want to leverage our leadership market position and scale, in terms of expanded content offerings and verticals, platform availability, and user experience. In essence, how can we continue to best serve the core tennis fan? We’re looking very closely at original programming opportunities as well as new verticals around the wellness, health, and instructional space.

What’s been your experience with quality and reliability when streaming sports? Is it TV quality now?
The largest growth in streaming is on connected TVs and devices. It’s not only the largest growth, it has quickly become the dominant streaming platform in terms of time viewed. So, by that definition alone, streaming sports is TV ready, because fans are watching it … on their TV.
If the question is, “Is it TV ready in terms of the quality of presentation?” then there are still some latency issues, but that doesn’t appear to have impacted the experience. And that will only get better as the delivery paths continue to evolve.

The second aspect, whether it has all the bells and whistles in terms of announcers and graphics, etc., depends upon which sport you look at. But the promise with sports streaming, and the app experience in general, is that it could be a better, more personalized experience than traditional TV.

**What have you learned so far, and are there any best practices?**

We learned that there was a thirst for the consumer to get more tennis, and not just for the biggest tournaments and the biggest stars. And fans would be willing to pay for it as long as the price was fair and the experience reliable.

The second thing we learned is that the combination of being able to utilize our TV network brand and on-air to market our subscription OTT service is a distinct competitive advantage. I’m not entirely sure I’d want to enter this space without being able to know I had the ability to market in such a compelling and efficient manner.

The third thing is that, while lots of options are valuable and part of the experience, ultimately if you can just deliver what you say you’re going to deliver, which is — if you’re saying I’m going to deliver this match, and you do it — you will be successful. Too often people focus on all the cool digital bells and whistles instead of just making it easy for a fan to watch the content they want to watch. And unfortunately, the complicated rights scheme, whether it’s sports or general entertainment, contributes to viewer frustration. When it comes to anything digital, consumers expect things to be easier, not more complicated.

**Are there any specific rights issues that limit your ability to stream sports?**

From the outset, our entire strategy was developed to strengthen the traditional TV ecosystem, not tear it down. This is about the traditional ecosystem benefiting from our streaming efforts, not competing against it.

**What are some of the most innovative features you’ve introduced with streaming vs. your typical linear broadcast?**

The ability to select the court you want and to watch a match that you may have missed.

**If you were to name one big industry trend that will affect streaming sports going forward, what would it be?**

One word: Churn.
How would you describe the state of sports online today?
Evolving but would not say maturing, yet. Its still early days and the pace of change is amazing. Whether its content, platforms, technology, the number of new entrants in to the space or globalization of content and commerce, the game is ever-changing BUT that’s what makes the opportunity SO GREAT! It seems like the content world looks very different every 2 years and we plan on being one of those companies that stays on the forefront of this digital/social first ecosystem!

How has online opened up new opportunities for sports media companies like Whistle?
As one of the first-movers in social/digital sports video, we were able to learn from pioneers in this space from other genres like fashion, food, and style and we learned you have to be multi-platform, authentic creators of content and keenly know the audience you are serving. Digital/social (not just on-line) allows you to accomplish this more directly and in a more meaningful manner since it allows a great 1:1 relationship with fans/customers.

What have you learned so far from your programming model and are there any best practices?
Empathy for todays sports fans is the key to our growth and using the amazing amount of data that todays social platforms offer to help drive better decisions. So when we implement best practices, we think about the way to best serve fans based on their behavior, on the platform of their choice, and born from knowing how and what types of content they desire.
You’ve partnered with One World Sports to stream certain Ivy League football games this past season. What did you learn from this compared with your typical on-demand model?

We learned our audience was receptive to scheduled programming, we could deliver a quality product and a great experience and while we might now of have a strong position to air live sports before, it could become another tool in our arsenal. Our fans were excited to see live football, that wasn’t such a surprise, but when you do something for the first time, you do wonder if fans/followers will come and engage. In short, they did!

Do you anticipate doing more live programming?

Yes. We will be live streaming the AUDL (American Ultimate Disc League) finals this August and are continuing to scour the landscape for other opportunities across basketball, football, baseball and other areas where our growing community is craving our social-first content. We will also continue to expand exposure to our network of digital creators by providing access to Q&As with them and behind the scenes looks at their shoots and workouts, so “live” has a very broad definition for us.

Are there any new technologies you’re particularly excited about (e.g. VR, AR, etc.)? Any thoughts or concerns about them?

Drones! Who knew how easy it would become to get a sweeping, cinematic shot of a beautiful location? Clearly, we should continue to have an open debate around regulating their use for safety reasons, but from a production standpoint, they’re a game-changer.

How important is mobile in your strategy?

It is our entire strategy. We assume all of our content is being consumed on a mobile device. It informs how we edit our video, how we format our copy and structure our overall programming strategy. Since we are digital/social first, having this sensibility is at the core of our business and every decision we make.

If you were to name one big industry trend that will affect streaming sports going forward, what would it be?

The loosening up of rights from the major sports leagues and college conferences, who will gradually want more exposure away from network TV and on streaming social or OTT platforms. Consumers are no longer tethered to the big screen so as more platforms jump in to the sports content, streaming rights will only gain more traction.
How would you describe the state of streaming sports currently?
In a word, exploding. The Internet is the perfect medium for delivering content — niche or mass appeal — to audiences around the world on any device at any time. The rights for sporting events are being cleared for Internet delivery in markets around the world. The number of live sporting events that Akamai delivers, and the number of viewers, are growing.

Are streaming sports at TV quality now? Are there still challenges? Are there ways in which streaming is better than TV?
Yes. Actually, they are surpassing TV quality because they are more interactive and personalized to the viewer. You can pick your announcer — home or away — your camera angles, you can go back to review plays or follow your favorite player. Of course, there are challenges due to the nature of live events and where they originate from. We have gotten significantly better and have built redundancy into our systems along with partners to make them more robust.

What are some of the key technologies that are making live sports streaming a better, more reliable experience?
The movement to adaptive bitrate streaming is a key one, where we can maximize the quality of the stream while minimizing the number of re-buffering events. Other innovations include the use of UDP protocols for the ingestion and delivery of streams. This makes the stream more reliable and reduces errors we see from network congestion. Next on the horizon is low latency due to work we are doing with encoders, our network, and media players to reduce the time of delivery.
What are some of the best practices in streaming sports that you can share?

Key best practices start with proper planning in advance of the event. Understanding and having a playbook to take action when the unexpected happens, which does happen. Having layers of redundancy in both signal acquisition and delivery to deal with the unexpected. The most important thing is having the right people monitoring the event and when can take action to mitigate any issues.

Going forward, do you envision more specialized sports subscription services, like perhaps a two-week Olympics subscription, or premium charge for in-cabin-cams for car racing?

Yes. Subscription will be a key monetization method for many sporting events. Sports is an area that has proven it can drive subscription revenue. Providing the fans what they want is the key to driving subscriptions. Interactivity, stats about their favorite player and team, archive footage, and alerts are all important.

What specific rights issues limit the ability of providers to stream sports?

Sports rights are normally tied to traditional TV rights, which limit geography and devices they can be transmitted to. In some cases, the leagues may sell rights for certain devices only. These restrictions are changing, and I expect to see more content available in the coming years.

What are some of the most innovative features you’ve seen with streaming vs. your typical linear broadcast?

One is trick play, where you can go back and watch key highlights at different speeds to compare to live television. Others include mixing your own camera angles to give a different perspective.

How important is mobile to any streaming sports provider?

It is critical because it brings the live event to where the sports fan is. Mobile is changing how content is consumed. In some parts of the world, it is the only screen available to large parts of the population. The quality will continue to go up as the networks get better.
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