New Frontiers for Distribution of Sports Content

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## Contents

**Executive Summary**  
Executive Summary 3  

**Evolution of sports distribution on traditional TV and online platforms**  
Evolution of sports distribution on traditional TV and online platforms 5  
The role of sport on TV 5  
Sport on pay TV: An increasingly costly but ever-desirable asset 7  
Sport on free TV: Serving mass-scale audiences 11  

**Trends in online sports distribution**  
Trends in online sports distribution 12  
Emergence of sport online – initial trial and experimentation 12  
Marquee global events: Capturing mass audiences online 12  
– Olympic Games 12  
– Football World Cup 13  
– OTT sports strategies 13  
– Pay TV operators seek new audiences for sport with standalone OTT offerings 15  
– Streaming giants foster willingness to pay for online video – including sport 16  
– Internet companies’ emergence as online sports players 16  
– Facebook 16  
– Twitter 17  
– Yahoo 17  
– YouTube 17  
– Amazon 18  

**Impact on Sports Content Processing Services**  
Impact on Sports Content Processing Services 19  
Key considerations with Live OTT 19  
Live sports is following the viewer into OTT 20  
New viewing habits are creating new monetization opportunities 20  
OTT presents several challenges 21  
Live Sport OTT is already a reality 21  

**Live OTT sport feature set and what to expect?**  
Live OTT sport feature set and what to expect? 24  
Personalisation 24  
Time and Camera shifting 24  
Incorporating the second screen 24  
Multichannel engagement and the Mosaic view 24  
Auxiliary content (live statistics) 25  
Social Media (search and recommendation) 25  
Programmatic Advertising 25  
Ecommerce 25  
Choosing a narrative 25  
Sports betting, fantasy sports and play prediction: AR, VR and beyond 26  

**Conclusion**  
Conclusion 27
Executive Summary

• Sport has the strongest reputation for delivering large audiences and/or numbers of subscribers for broadcasters and pay TV providers. This translates into significant revenue generation, be it advertising or subscription. And for public-service broadcasters (PSBs), sporting events that are considered to be of major importance are vital for strengthening relationships with their national audience

• As sport’s appeal has increased as a result of this status, so too has competition for, and the value of, key rights, cementing sport as the most sought-after marquee content in the TV business. Global sports programming spend totalled $26.5 billion in 2016, a 60% increase on spend of $16.6 billion in 2007. PSBs share of this has declined from 18.2% to 7.8% over the 10-year period

• The competition between linear incumbents and new players offering live sports is ramping up. Linear pay TV channel operators and platforms, as well as rights holders, have been forced to react and to adapt their strategies to meet new challenges

• Currently, the most important players in live sport delivery via OTT fit into three main categories:
  • Traditional pay TV operators
  • OTT platforms
  • Rights owners

• But the emergence of streaming giants foster willingness to pay for online video – including sport

• In the live streaming space, there are three main factors distinguishing OTT live with live linear broadcast: costs, monetization and features unlocked by the platform’s technological differences. Traditional broadcasting still remains 90% of the global TV revenue, but the over-the-top (OTT) delivery has become an indispensable component for many consumer-facing media companies, including niche programmers, content owners, and traditional broadcaster

• The increase in multiscreen usage is generating unparalleled amounts of personal data that is moulding the additional revenue opportunity for broadcasters with analytics-based programmatic advertising and recommendation-based content discovery being the two main opportunities. The former is allowing for targeted advertising never before achievable on live sports broadcasts while the latter is extending the consumer’s viewing time by suggesting new relevant content

• Live sports, however it is consumed, is a premium product and viewers paying for such expect a premium experience. According to IHS Markit’s consumer survey, this means seamless streaming, low latency and high quality video with no interruptions. Achieving all three is more difficult than it seems

• Within media processing and delivery, all sports genre related revenue accounted for 23.4% of the total media processing and delivery market recording $1.9bn in revenues in 2017, with a CAGR of 7.31% over 6 years period between 2015 and 2021. Europe, Middle East and Africa as the largest and fastest growing region for sport streaming market shares 42% of total market size to $811m in 2017, with a CAGR of 6.1% over 6 year period between 2015 and 202

• IHS Markit expects a high rate of innovation and a fast evolution of feature sets enhancing live OTT sports experience. According to our recent thought leadership survey, the technologies listed below are on the rise; ranging from the currently deployed to the more speculative, we expect these features to be augmenting current aggregators’ offerings:
  • Personalization
  • Time and camera shifting
• Incorporating the second screen
• Multichannel engagement and the Mosaic view
• Auxiliary content (live statistics)
• Social Media (search and recommendation)
• Programmatic Advertising
• Ecommerce
• Choosing a narrative
• Sports betting, fantasy sports and play prediction
• AR, VR and beyond
Evolution of sports distribution on traditional TV and online platforms

The role of sport on TV

Of all the main content genres, sport has the strongest reputation for delivering large audiences and/or numbers of subscribers for broadcasters and pay TV providers. This translates into significant revenue generation, be it advertising or subscription. And for public-service broadcasters (PSBs), sporting events that are considered to be of major importance are vital for strengthening relationships with their national audience. As sport’s appeal has increased as a result of this status, so too has competition for, and the value of, key rights, cementing sport as the most sought-after marquee content in the TV business.

Subscription TV players – operators and channels, and now online-first providers as well – have shown a willingness to spend big on this proven customer-acquisition tool and ARPU driver. Their spending power has made sport a linchpin of pay TV offerings and increasingly priced free-to-air broadcasters – PSBs in particular – out of key rights. The result has been a migration of some major sports from free-to-air to pay platforms – UEFA, for instance, has shifted away from licensing deals with free-to-air broadcasters like ITV and TF1 to more lucrative exclusive ones with pay TV operators like BT and SFR.

Such is sport’s value to broadcasters and subscription TV providers that the value of rights has increased significantly – across the 75-plus groups tracked by IHS Markit Channel & Programming Intelligence, global sports programming spend totalled $26.5 billion in 2016, a 60% increase on spend of $16.6 billion in 2007. PSBs share of this has declined from 18.2% to 7.8% over the 10-year period.

In addition to shifting key competitions from free to pay platforms, the marquee nature of sports content has impacted the evolution of its distribution in other ways too. Sport’s appeal as a genre to be watched live (90% of viewing is live, compared to 71% for drama, according to Comscore) and on a big screen, mean that it has not gotten the ‘Netflix treatment’ in the way other genres have yet – i.e. it has attracted less interest from online disruptors crafting SVoD-oriented offerings than movies and series. While it is common for some leagues to be able to sell ‘near live’ and time-delayed rights, these have generally not been seen to have enough value to be offered as standalone products. The high cost of live rights has also been somewhat prohibitive for new market entrants, as has the limitations of live streaming technology and infrastructure.
But the slower emergence of sport online compared to other content does not mean there is not an audience for it there – in fact, there is a growing one, which broadcasters and pay TV operators are ramping up their efforts to serve with live streaming services. This trend is being supported by increasingly favourable market conditions for live sports streaming, chiefly:

- Advances in live video streaming technology
- Growing broadband and connected device penetration
- Faster and more reliable fixed- and mobile- broadband networks

These changes have also attracted the attention of new sports-rights contenders, including players from non-traditional broadcast backgrounds, such as global technology companies Amazon, Facebook and Twitter. They have also encouraged
some sports content owners to go direct to consumer (D2C), with pseudo-sport promoter WWE and mixed-martial arts organisation UFC respectively offering subscription online services (WWE Network and UFC Fight Pass) that combine live events with an archive of on-demand content.

This new competitive dynamic represents new opportunities for online distribution of sport, which are set to foster new services, new audiences, and new consumption habits.

Indeed, ushering in advances in broadcasting is another hallmark of sport as a genre, with major events providing a platform for innovation. The forthcoming 2018 football World Cup, for instance, will showcase new ultra-high-definition (UHD) high-dynamic-range (HDR) and VR formats, following on from an emphasis on HDTV, (the ill-fated) 3DTV, multiscreen, and second-screen enhancements in previous tournaments.

**Sport on pay TV: An increasingly costly but ever-desirable asset**

Although online video subscriptions are growing rapidly, pay TV remains firmly entrenched as the most popular mode of TV reception. Sport has historically served as one of the central drivers, one that enabled many service providers to introduce swaths of free-to-air/analogue TV households to the world of multichannel TV. Successful execution of this strategy has increased competition for key sports rights, particularly as the addressable market for ‘full-fat’ pay TV services – those with extensive channel bundles attached to long-term contracts – shrinks in more-mature markets. Thus for incumbent pay TV operators building their offerings around sport and other premium content, customer retention is becoming a higher priority, as they face strong responses from multiplay service providers bidding to attract customers with the promise of superior bundles of digital entertainment and high-speed access.

The result has been a steady increase in the cost of key sports rights for pay TV operators and subscription sports channels. Looking at the top-division football leagues of the big five Western European countries, for example, their collective annual value has more than doubled since 2009 and increased by 87% since 2012, to total €5.6 billion ($6.7 billion) in 2016. The increase has been driven, in particular, by Premier League rights, with the emergence of incumbent telco BT as a premium sports broadcaster in 2012 significantly inflating the cost.

So far, rights holders have typically achieved the growth necessary to justify the rising cost of sports content – IHS Markit data shows that the major subscription sports channels (whether run by operators or channel groups) have, by and large, continued to increase their subscription base. The main exceptions are North American sports channels, such as ESPN and Canada’s TSN, which are battling declines in the overall pay TV market not unique to sport.
Global pay TV and online video subscriptions

Notes: Online is standalone + Amazon Prime Video
Source: IHS Markit © 2017 IHS Markit

Annual value of broadcast rights for selected major football leagues

Source: IHS Markit © 2017 IHS Markit
Pay TV operators having to accommodate rights-cost increases rises must find ways to absorb them and better monetise their portfolio of products. Strategies for doing this fall into three main categories:

- Aggressively target RGU growth, in the form of:
  - New pay TV sports package subscriptions
- Standalone, pay TV lite OTT subscriptions featuring flexible access to sport
- Multiplay packages that will increase the number of products per customer
- Pass the increased cost of rights on to consumers by raising prices
- Cut costs, either by reducing content spend on other sports or movies/entertainment, or by making the business more efficient in other areas

A combination of all three, to varying degrees, is likely to be executed by most operators that find themselves facing this dilemma. And it is likely to be a viable strategy for those managing more-modest rights-cost increases than some of their peers.

For non-operator-affiliated channels facing the same dilemma, the options are similar, with the notable exclusion of bundling their content with a broader range of multiplay services. For them, diversification into D2C sports offerings outside the traditional pay TV ecosystem, price rises, and cost-cutting – both in terms of rights deemed dispensable, and operations – and will all be key.
Sport on free TV: Serving mass-scale audiences

The migration of some major sports to pay TV does not mean that subscription-free TV is devoid of popular sporting events – in fact, some of the most important competitions have a home on free platforms. In Europe, this is thanks to regulation mandating that ‘events of major importance’ be reserved – either in their entirety or in part – for terrestrial viewing. The major listed events in Europe are the Olympics (Summer and Winter Games) and the finals of both the football World Cup and European Championship. Other high-profile events, both international (e.g. Rugby Union World Cup final) and local (e.g. FA Cup final in the UK and French grand prix in France) can also be listed.

For the free-to-air broadcasters acquiring these rights, in particular the commercial ones, generating a return on sports rights investments means maximising the value of the larger audience they can attract compared to pay platforms. At the very top end of the scale, the US Superbowl audience of more than 111 million in 2017 translated into TV advertising revenue of $385 million for host broadcaster Fox, or close to $3.50 per viewer.

Expanding coverage to serve online audiences is a priority for broadcasters of the most popular sporting events. UK PSB the BBC has been at the forefront of this trend, making multiplatform coverage of marquee events such as the Olympics a central part of its strategy for carrying them. For the 2016 Rio Games, 30.2 million UK browsers streamed coverage via the broadcaster’s iPlayer and BBC Sport services, with one event – the Men’s Tennis Final, featuring British player Andy Murray – recording 1.9 million online streams. Live sport streaming will only increase on the BBC, with the broadcaster recently announcing plans to make 1,000 hours of live content available each year.
Trends in online sports distribution

Emergence of sport online – initial trial and experimentation

The first attempts at streaming live sports on the Internet date back to the years following the launch of the first media players supporting video in the 1990s, but the development of the first fully commercial services did not start in earnest until the next decade. Initial moves were limited by a number of factors – the underdeveloped broadband infrastructure was probably the main factor, but caution on the part of rights holders unwilling to threaten a lucrative and growing revenue stream from TV operators was another.

Major League Baseball (MLB) was one of the most active rights holders, and in 2000, it decided to bring all media rights under its control. In 2001, the MLB signed a three-year deal with Real Networks valued at $20 million. Live audio from games was streamed via the MLB.com and Real Networks websites, enhanced with statistics and pitch animations. The league also set up an in-house department to develop websites for its teams, later to develop into MLB Advanced Media (MLBAM).

In 2002, the MLB live-streamed its first game in video – the Texas Rangers v the New York Yankees – and launched its video subscription packages the following season. A full season package costing $79.99 attracted 100,000 subscribers via the MLB.tv website. According to the MLB, the service covered its costs and even made a profit.

Also in 2002, FIFA, the organising body of the football World Cup, agreed a deal with Yahoo for management of its online coverage of the 2002 and 2006 finals. The deal included online rights to all 64 matches from the finals. Yahoo had to negotiate the online rights from KirchSport, which had licensed all media rights. Rather than selling live streams, Yahoo offered four-minute highlights from matches as a premium package costing $19.95, and could only be viewed on the Windows Media Player. According to FIFA’s accounts, the arrangement was a revenue-share where FIFA was entitled to 40% of the revenues generated from its properties online above a guaranteed sum of $8.5 million.

European football league body UEFA was also among the first wave of major rights holders to experiment with offering online coverage of its properties, including the Champions League. Video highlights and full match replays were available as part of the European version of the Real Networks SuperPass subscription service from the 2005-06 season.

Marquee global events: Capturing mass audiences online

Olympic Games

The International Olympic Committee (IOC) typically bundles in broadband and mobile rights with broadcasting rights deals. The last few Games have not only seen an increase in the number of channels dedicated to coverage of events, but also online consumption. In 2016, host broadcaster Globo aired 160 hours of programming on its flagship free-to-air channel, and offered 16 pay TV channels and another 40 online. Globo’s pay TV channel brand SporTV reported reach of 308 million viewers, 29% more than in the London Olympics in 2012. A SportTV app was downloaded 1.1 million times and 6.8 million hours of coverage were streamed to connected devices.

US rights holder NBC aired the Rio Olympics coverage on 11 networks, including free-to-air channels NBC and Telemundo, and live streamed 4,500 hours of coverage on the NBC Sports website and app. NBC said it delivered 3.3 billion streaming minutes of coverage, including 2.71 billion live streamed minutes (or 4.5 million hours).

Maximising the value of Olympics rights with the help of online distribution is the challenge facing new rights holder Discovery Communications, which in 2015 agreed an exclusive, multi-territory deal worth €1.3 billion ($1.5 billion) for the four Games (Summer and Winter) taking place between 2018 and 2022. The multiplatform agreement includes free-to-air, pay TV, mobile and online rights for 50 countries.

Recently unveiling its strategy for the forthcoming PyeongChang 2018 Games, Discovery emphasised the importance of its D2C streaming service Eurosport Player, which viewers will need to subscribe to if they want full, multi-stream
access to the event – PSBs with a sublicense will only be permitted to stream their terrestrial broadcasts. Discovery will be hoping to attract subscribers to the 4,000 hours of coverage that will be available on Eurosport Player, 900 of which will be live. Supporting this coverage will be supplementary content made available via a partnership with social networking app Snapchat, which will provide free-to-view access to behind-the-scenes video and content from athletes and ‘influencers’.

As well recouping its Olympics rights investment through Eurosport Player and via sublicensing deals with free-to-air broadcasters, Eurosport is also seeking mobile operator partnerships. The first of these was agreed with Telecom Italia in June 2017, and gives the Italian telco the opportunity to co-brand content, provide exclusive 24/7 news, highlights and short-form video, and offer innovative content using VR, AR and 360 video formats.

### Football World Cup

For the 2016 World Cup, FIFA noted an important increase in online usage, with an increase of 36% in online TV viewing and a 248% increase in mobile TV viewing compared with the 2010 finals. A total of 21.6 million people accessed video streams on Globoesporte in Brazil, while the BBC’s online coverage attracted 15.9 million unique video viewers in the UK. In China, the average unique viewing audience on the CNTV.cn CBox was 3 million, with a peak of 7.6 million viewers for the Germany v Portugal group stage match. FIFA noted that the TV audience for the same match was 44 million.

The BBC aired 140 hours of coverage of Euro 2016 across three TV channels and also streamed matches online. England’s match with Wales was viewed by an average audience of nine million on its main BBC1, while the match was comfortably the most popular programme on the BBC iPlayer, with 2.8 million requests. In Spain, 23 of the 53 matches in the tournament were broadcast by Mediaset España but the other 28 were only available online via the UEFA.com website.

### OTT sports strategies

The competition between linear incumbents and new players offering live sports is ramping up. Linear pay TV channel operators and platforms, as well as rights holders, have been forced to react and to adapt their strategies to meet new challenges.

It should be noted that a technologically advanced market for online sports is already in place, beyond the boundaries of legal services. Popular events are already widely streamed via the Internet across the world via illegitimate providers. The biggest challenge for operators is to develop a model that is economically sustainable and sufficiently appealing to consumers to replace or at least diminish pirated streams on websites and set-top boxes.
Arguably, the challenge for legitimate players is therefore not to create a new segment of demand, but to simply take back from the pirates, consumers who have already been supplied with a service provided by competitors – as well as make existing counter-measures and laws more effective.

The evolution of the market has happened in parallel with advances in the technologies necessary to operate online platforms both on fixed and mobile networks. In fact, from the middle of the last decade, new platforms have emerged, modifying their business models and adapting them to the new, evolving market.

Currently, the most important players in this segment of the market fit into three main categories:

- Traditional pay TV operators
- OTT platforms
- Rights owners

The first group includes those broadcasters that operate their own channels and distribute them on a pay TV basis – these operators have generally made large investments for acquiring the rights of major events, which constitute a major part of their premium portfolio. Generally these operators have not been particularly aggressive in launching their OTT platforms, wary of cannibalising their own core business – the pay TV lite market is growing, with some key players driving the trend.

The second category includes companies that broadcast live sports events mainly on OTT platforms. The presence of pure OTT operators is rare – most have a diversified business, running linear channels as well.

The third category includes rights owners that broadcast sports live direct to consumers on OTT platforms. Usually these operators have developed their own platforms and maximise the value of their rights distributing the events directly to consumers. This strategy pays off only if the distribution is made on a large scale, otherwise it is more profitable to sell the rights to intermediate companies.

In the last few years, the OTT platforms have adopted a wide range of business models that vary from pure subscription to pay-per-view only, but have also experimented – especially the smaller platforms in the early days of the streaming – with a model based on advertising revenues only. In this scenario, the pay TV operators have been forced to react, launching their own online platforms, attempting not to leave any segment of the market unserved.

| Multiscreen users with access to sport as a % of pay TV subscribers |
|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| US                   | 10              | 12              | 14              | 16              | 18              | 20              |
| UK                   | 8               | 10              | 12              | 14              | 16              | 18              |
| France               | 6               | 8               | 10              | 12              | 14              | 16              |
| Germany              | 4               | 6               | 8               | 10              | 12              | 14              |
| Spain                | 2               | 4               | 6               | 8               | 10              | 12              |
| Italy                | 0               | 2               | 4               | 6               | 8               | 10              |
| Japan                | 0               | 2               | 4               | 6               | 8               | 10              |
| Mexico               | 0               | 2               | 4               | 6               | 8               | 10              |

Source: IHS Markit © 2017 IHS Markit
Pay TV operators seek new audiences for sport with standalone OTT offerings

Although sports fans – especially those paying for premium content – typically gravitate to the biggest screen available and the highest resolution possible, it is crucial for pay TV operators to provide their customers with additional multiscreen viewing options to meet their expectations and add value to their subscriptions. Responding accordingly, operators are ensuring that an increasing number of pay TV customers are getting online access to sports content as part of their package – though this is much more apparent in developed markets, where multiscreen services are more common and connected-device ownership is higher.

The operator OTT opportunity is not limited to multiscreen services, though. A growing number of service providers – particularly those operating in mature markets – are targeting market segments outside their core target consumers with standalone, pay TV lite OTT services. Many of these offer access to live sports, something that helps them differentiate from the OTT competition and also target growth among cord nevers that have not previously, and are not likely to, subscribe to a full pay TV service. Notable services include Sky’s Now TV and Sky Ticket, Viasat’s Viaplay, Dish Network’s Sling TV, and Australian operator Foxtel’s Foxtel Play.

The appeal of these services is clear – they are positioned as flexible, more a-la-carte offerings that provide access to popular content without the need for a long-term commitment. Experimental packaging has seen various access periods offered, ranging from season-long packages and more typical rolling month-long contracts, to shorter, more transactional access periods, like those offered by Sky UK, which sells Week Passes for £10.99 and Day Passes for £6.99.

In addition to flexibility, one of the main features of many operators’ pay TV lite offerings has been lower pricing compared with their traditional TV services. Entertainment- and movie-based packages, for instance, have price points lower than a basic cable or satellite channel package, with Netflix and other OTT providers setting customer expectations for what a streaming service of this type should cost.

Prices for premium-sports-themed OTT packages, however, have been set higher. In addition, several operators require customers to subscribe to an entry-level package in order to access premium sports content, much like traditional pay TV. These strategies have been implemented for three main reasons:
• Content rights for premium sport are more expensive than for other genres

• There has been limited pricing pressure from pure OTT players, which are yet to compete strongly in exclusive, premium sports rights

• Operators are especially wary of pricing premium sport – pay TV’s USP – in such a way as to encourage their core customers to switch from the higher-value traditional offering to a lower-cost alternative.

Streaming giants foster willingness to pay for online video – including sport

The growing consumer acceptance of online content has more to do with moves by Netflix and Amazon – the former a platform which does not offer any live sport – rather than the various online sports services launched in intervening years. Netflix, originally a DVD-by-mail rental company, launched its Watch Instantly streaming service in the US in 2007 and rolled out next to Canada (2010), Latin America (2011) and the UK, Ireland and Nordic region in 2012 before switching on in 190 territories worldwide in January 2016.

Investments in original content by Netflix and Amazon, combined with their international rollout, have been important contributors to consumers watching video content on connected devices and being willing to pay (albeit smaller amounts than a typical pay TV package) for the additional choice and convenience.

In 2016, according to IHS Markit data, the number of households with broadband outstripped the pay TV households in North America. In Western Europe, this happened three years earlier, in 2013. At the same time, the number of audiovisual Internet-connected devices has soared, from a total of 2.7 billion at the end of 2011 to 7.8 billion by the end of 2016.

Internet companies’ emergence as online sports players

Facebook

Facebook’s interest in live sports rights is, according to CEO Mark Zuckerberg, motivated by a stated aim of ‘creating some anchor content’ to draw people to the social media site to watch video. This year has seen a series of initiatives by Facebook to stream live sports. In May 2017, Facebook and the MLB agreed a partnership to stream 20 live Friday night games on the MLB’s Facebook page. The coverage was accessible only in the US and uses coverage provided by broadcaster partners. In September 2017, Facebook agreed with the NFL to distribute the league’s official video, including highlights, game recaps, and to add NFL films to its Facebook Watch service.
Twitter

Twitter’s first major move into live sports was the acquisition of a package of live NFL streaming rights for the 2016-17 season. It reportedly paid less than $10 million for the rights to 10 Thursday night games. Twitter also showed pre-game Periscope broadcasts from players and teams, and in-game highlights. According to data released by the NFL, 2.3 million worldwide watched the season’s first game on Twitter, compared to 48.1 million watching the same game on CBS and NFL Network in the US. The average audience was 243,000, with each viewer watching an average of 22 minutes.

Twitter called the season a ‘great success’, stating that the NFL coverage generated more than 3.5 million unique viewers per game.

Twitter was outbid by Amazon for the rights the following season, but signed a separate agreement with the NFL in May 2017 which will include: a live 30-minute show airing five days a week on the platform; live pre-game coverage, and video clip highlights.

Yahoo

In October 2015, Yahoo streamed the NFL International Series Game between the Buffalo Bills and the Jacksonville Jaguars live and free of charges. The game, played in London, was streamed exclusively on Yahoo properties, including Yahoo, Yahoo Sports, Yahoo Screen and Tumblr. The game also aired on local TV stations in Buffalo and Jacksonville markets at 9.30am EST.

According to data released by Yahoo and the NFL, 15.2 million unique viewers watched the game via its platforms, with 33.6 million streams served, one third of them outside the US.

YouTube

Google signed a deal with the Indian Premier League (IPL) to live stream the first two seasons of the cricket tournament on YouTube. YouTube’s online rights were exclusive and worldwide (though live matches were not streamed in the US) - although the tournament was also aired on TV in cricket-playing countries. Revenues from advertising and sponsorship were share evenly between the two.
Amazon

Amazon acquired streaming rights to 10 Thursday night NFL games for the 2017 season, paying a reported $50 million. Amazon Prime Video reported a total of 7.1 million views for the first four games. Coverage was available in 187 territories, with the average viewing of 51 minutes.

In September 2017, ATP and ATP Media announced that Amazon Prime Video would be an official streaming partner of the ATP World Tour. The deal covers worldwide distribution of the Next Gen ATP Finals—a new tournament involving the best under-21 tennis players—through Amazon Prime Video (excluding China). The first event was held in Milan in November. The deal runs to the end of 2018.

Amazon is also reported to have acquired the UK rights to the ATP World Tour and the US Open tennis tournament. Neither deal had been confirmed by Amazon when this report was written.

As well as offering sports direct to its subscribers, Amazon is also retailing third-party services via its Amazon Channels offering. This allows Amazon Prime subscribers to add services to their subscription package for a monthly fee. Amazon Channels (then known as Amazon Streaming Partners) launched in the US in December 2015 and in the UK and Germany in May 2017. Sports and fitness-related channels available in Europe include Eurosport Player, equestrian channel H&C and the Nautical Channel and Motorvision. In Germany, the Eurosport Player includes matches from the Bundesliga, Germany’s football league championship.
Impact on Sports Content Processing Services

In the live streaming space, there are three main factors distinguishing OTT live with live linear broadcast: costs, monetization and features unlocked by the platform's technological differences. Traditional broadcasting still remains 90% of the global TV revenue, but the over-the-top (OTT) delivery has become an indispensable component for many consumer-facing media companies, including niche programmers, content owners, and traditional broadcasters.

Key considerations with Live OTT

OTT live content can be distributed via a content delivery network (CDN) while traditional broadcasting utilizes walled garden architectures such as DTH, DTT, cable and IPTV to distribute their feeds. Today CDN’s last mile require unicast connections (one feed to one viewer) while traditional broadcast distributes on a multicast model (one feed to many viewers).
The cost differences between unicast and multicast depend on the total number of concurrent viewers. For instance, satellite distribution cost approximately $160k to release a single SD MPEG-4 channel with unlimited number of viewers in satellite’s coverage area. CDN, however, sees cost scale directly with viewership meaning you need approximately $35k for 50k concurrent daily viewers, $100k for 100k concurrent daily viewers and $410k for 200k concurrent daily viewers (subject to viewers disparity).

Applying simple calculation like the above, media companies determine how to release their linear channels: via satellite or CDN, subject to their anticipated number of concurrent viewers. These cost per viewer differences allows niche programmers to stream lower viewership sports economically, but makes popular sporting events relatively expensive to stream.

**Live sports is following the viewer into OTT**

The harsh economic truths for high volume sporting events has not deterred broadcasters from pursuing this option on top of their current broadcasting commitments. There are two reasons for this: evolving viewer behaviour and new monetisation opportunities.

Consumers are increasingly demanding multiscreen experience and the ability of being reached on any device. That revolutionize how content and advertisements are consumed. In most countries viewing minutes are increasing, but linear broadcast is decreasing. In Europe, the annual average viewing time per person per day for the big 5 countries (including Italy, UK, Spain, France and Germany) increased 23.5% for the online long-form content and 13.4% online short-form content, with a decline of 1.9% in linear broadcast content between 2015 to 2016.

**New viewing habits are creating new monetization opportunities**

As viewers are deciding to watch content on the go using a growing variety of devices, broadcasters are preparing to exploit the new revenue opportunities borne about by the 2 billion new devices that are connected every year, each with 12 billion new sensors. The increase in multiscreen usage is generating unparalleled amounts of personal data that is moulding the additional revenue opportunity for broadcasters with analytics-based programmatic advertising and recommendation-based content discovery being the two main opportunities. The former is allowing for targeted advertising never before achievable on live sports broadcasts while the latter is extending the consumer’s viewing time by suggesting new relevant content.
OTT presents several challenges

Live sports, however it is consumed, is a premium product and viewers paying for such expect a premium experience. According to IHS Markit’s consumer survey, this means seamless streaming, low latency and high quality video with no interruptions. Achieving all three is more difficult than it seems.

Latency, the time delay caused by processing and delivering a live event to a viewer’s device. It is always a consideration and a concern for technology vendors, media companies, and sports fans alike. No one wants to hear his or her loud neighbour celebrate a goal before you even knew it happened. This creates a conundrum for broadcasters as higher quality compression goes hand in hand with more latency. Striking a balance between low latency and high quality can sometimes require an unhappy compromise between the two. Compounding the problem is viewers vary wildly in their expectations; a lot depends on the viewer’s internet speed, content type and their circumstance. If the viewer is watching live-streamed sports on the train, for instance, they would have a lower expectation of the quality of video but rather, connectivity would be the priority to keep the live stream uninterrupted. On the other hand, the viewer who is watching live sports on a high-resolution TV screen is less willing to sacrifice the connectivity and picture quality. Technologies exist such as ABR to mitigate against differing viewer expectations vs what circumstances allow to be streamed. Live sports fans are less forgiving of bad picture quality than other OTT viewers. The key solution to the quality latency conundrum is to anticipate viewing habits and alter one’s platform accordingly, preparing the correct bit rates and compression for the viewer’s devices, expectations and viewing behaviours.

Scalability is another challenge for OTT sports live streaming. Unlike Multicast, unicast requires strict management of capacity in order to meet demand. Before any media company starts rolling out their OTT service, they need to start considering how to build an agile infrastructure to accommodate the peaks and troughs in viewership that a multicast network can achieve at a marginal extra cost. For example, to serve 100k viewers for 3 hours with unicast, it will cost CDN $21.9m per annum and only $1.7m for one satellite transponder to provide a 24 hours multicast or unicast for 100k viewer annually. The solution is in shifting the cost burden from capex to opex by employing managed services and cloud services; this allows for better management of costs but does not bridge the cost gap with multicast at high volumes. Although the scalability challenge can be overcome over time, OTT live streaming will not replace linear broadcast. It has the potential to provide a significantly enhanced experience for viewers, and used in conjunction with linear broadcast as a value-add reducing churn and generating additional revenue in content monetisation.

Live Sport OTT is already a reality

The opportunity created by live sport OTT is of particular interest to vendors servicing the media processing and delivery industry, a segment of broadcast that has arisen to service the new media paradigm surrounding multiscreen and its proliferation of content by providing ABR, Media asset management, distribution and contribution encoding, transcoding, playout, IRD, multiplexing and CDN solutions.

The media processing and delivery market has managed to record a growth rate of 6.47% in 2016 with a further 4.53% expected this year, reaching $8.29bn in global revenue by the end of 2017. We expect a CAGR of 5.95% over a 6 year period between 2015 and 2021 with revenues reaching $10.54bn in 2021.

Within media processing and delivery, all sports genre related revenue accounted for 23.4% of the total media processing and delivery market recording $1.9bn in revenues in 2017, with a CAGR of 7.31% over 6 years period between 2015 and 2021. Europe, Middle East and Africa as the largest and fastest growing region for sport streaming market shares 42% of total market size to $811m in 2017, with a CAGR of 6.1% over 6 year period between 2015 and 2021.

IHS Markit expects the live sport OTT market to grow faster than the wider media processing and delivery market recording a CAGR of 11.7% between 2015 and 2021. The market will reach $565.9m in 2017 expecting to reach $932,855m in 2022. The largest region in 2017, North America, will be closely followed by EMEA; a dynamic expected to continue through the forecast period with North America remaining the top market for Live sport OTT revenue.

As a percentage of total media processing revenue this represents an increase both for live sport over OTT and for OTT sport (both live and non-live) as a percentage of total sport revenue. OTT sport as a percentage of total sport media
processing revenue (including CDN cost) will grow from 45.3% in 2017 reaching 51.6% in 2022. Live OTT sport as a percentage of total OTT sport revenue will grow from 64.4% in 2017 increasing to 76.6% in 2022.

The growth in live as a percentage of the total will be due to OTT's decreasing costs opening the market to a host of niche live sporting events that will take advantage of the solutions on offer as well as the continued trend of choosing to view sport increasingly in multiscreen environments.

We expect the continued shift to outsourced solutions to handle the future demands of live sport OTT.

In 2015 in the wider media management market (for all genres) 61.6% of global revenue was service-based, growing to 62.9% by the end of 2017 and expected to grow to 65.9% of global media management revenue in 2021; a trend we anticipate to unfold in the live OTT sport segment too.
This shift to services based solutions for live OTT sport will be enabled by virtualisation solutions, both in their technical capabilities and in their economics. Virtualisation allows CAPEX to be converted into less risky OPEX when confronting uncertainty in the adoption of technical standards, security protocols and legislative environments. Hence investigating the advantages and disadvantages of moving to 3rd party environment is an active line of enquiry for most media companies.
Live OTT sport feature set and what to expect?

IHS Markit expects a high rate of innovation and a fast evolution of feature sets enhancing live OTT sports experience. According to our recent thought leadership survey, the technologies listed below are on the rise; ranging from the currently deployed to the more speculative, we expect these features to be augmenting current aggregators’ offerings:

### Personalisation

Personalisation offers a lot of low hanging fruit to improve the viewer’s experience; choice of language, preferred team and subtitling are easy to implement. This can lead to a variety of options offered by the broadcaster from differing commentary and camera views to giving the viewer control over what in game graphics and notifications are shown.

### Time and Camera shifting

The top feature being exploited right now is giving the viewer the chance to direct their own live event. Enabling viewers to time shift backward to craft their own replays with options for slow motion and different camera angles. This is known to be a key engagement factor for sports that revolve around set pieces or sports that focus on climatic events; goals, K.Os etc...

### Incorporating the second screen

A staple of multiscreen in every genre is the use of the second screen to compliment the main live feed. Pushing extra feeds, statistics and social media integration to auxiliary devices has been a solution employed to avoid the complexities of incorporating every feature into one interface as well as keeping the traditional live feed reserved for pre-sold advertising; a transitional solution to allow OTT features room to grow without undermining traditional revenue streams.

### Multichannel engagement and the Mosaic view

Extension to a second screen brings in the possibility of multichannel engagement as consumers are increasingly used to dividing their attention. This is a feature set to allow viewers instant access to simultaneous events related to the central
live stream. This can be curated replays from another game programmed to appear as an overlay to having two or more games or players showing simultaneously side by side.

**Auxiliary content (live statistics)**

The mosaic view and second screen is increasing the real estate available to show auxiliary content such live statistics, polling and interactive graphics. Visual representations of data on live feeds is gaining popularity, such as heat maps for possession, shots taken, successful passes by team, by player over the course of the match, the season or their career. The use of statistics and graphics is becoming a key way to keep viewers engaged.

**Social Media (search and recommendation)**

They key for any genre of content is to keep viewers engaged and social media is proving to be an incredibly powerful tool to foment discussion, drama and hype around a live event. Transplanting aspects of fandom from the stadium to the living room is the key goal of social media chatter surrounding sport, but social media integration has further benefits for the OTT platform as the data gleaned from social media activity has immense value. The most obvious is improving search and recommendation; while this heavily relies on sophisticated metadata management at the media asset management layer, combined with the viewer's preferences and social media insights new content can be recommended confident that it will prolong viewing and engagement.

Other OTT platforms perform this superbly, so much so that youtube wormholing has become a phenomenon where a viewer watches multiple videos when planning only to view one due to the strength of subsequent video recommendations.

**Programmatic Advertising**

The proliferation of data that live OTT is producing is the key to unlocking the new monetisation opportunities. This means server side ad insertion with dynamic digital inventory management that creates advertisements on the fly as the advertising opportunity appears. This is a radical departure from pre-selling spots for events, but doesn't discount the old model, instead complimenting it.

From dynamic banner ads being inserted as the viewer pulls up an interactive overlay to customising an ad spot for the viewer based on their known player and merchandise preferences; every viewer gets their favourite player selling them their most coveted piece of sportswear.

**Ecommerce**

Dynamic ad building can translate directly into ecommerce opportunities. Serving ads with action buttons can allow viewers to shop the ad right away; this extends beyond merchandise and may find a home in location based targeting where ads can be served up promising to deliver your take away for half time. Building an ecommerce platform into a live OTT sport feed has the advantage of billing already being approved for the event itself; streamlining payments in this way could make live sport over OTT a surprisingly efficient ecommerce platform.

**Choosing a narrative**

Utilizing advanced online advertising models and translating them to live sport has repercussions well beyond the live event itself. Pre-game hype is an incredibly important and often ignored aspect of successful live sports; the focus pre-OTT was building awareness, but OTT’s new toolset allows for data collection on top of this. Broadcasters can now A/B test different narratives allowing them to pinpoint fans’ expectations for the event; whether the big draw will be a local hero’s return from injury for one set of fans to the event drawing a large number of anti-fans who need a certain result from this game to aid their native team’s prospects. This pre-event programmatic advertising allows the broadcaster to prepare content to meet the individual fan's expectations of the event.
This pre-event hype building also creates another opportunity to serve up snippets of live content to aid in hype and to monetise; from streaming training sessions and press conferences to warm up events.

**Sports betting, fantasy sports and play prediction**

From the heavily regulated and sometimes frowned upon (sports betting) to the openly accepted (play prediction and fantasy sports); new data sources and OTT’s interactivity are set to revolutionise these industries. Sports betting has seen a proliferation of in-game markets allowing punters to bet on an increasingly wide variety of outcomes from who will take the first corner to which player will be the recipient of the first foul. Player tracking technology is now set to expand the number of markets allowing punters to bet on increasingly granular aspects of the game; from a player’s top speed and distance travelled to possession, all in real time.

Integrating these live data streams into a sports betting interface on the OTT feed itself opens up a monetisation opportunity as well as creating a deeply intimate emotional connection with the event. This opportunity also extends to fantasy sports and play prediction; they share many of the emotional and engaging aspects of sports betting, but fewer of the regulatory downsides. Plugging in the fantasy and play prediction interfaces into the OTT platform keeps viewer engagement high, creates another advertising and ecommerce interface and another channel to promote pre-event hype.

**AR, VR and beyond**

AR and VR are touted as highly engaging technologies promising total immersion. The promise to sports fans is unclear, but potentially huge and it contains the interesting prospect of the technology bleeding into other forms of media. The obvious use case is placing a 360 camera as close to the action as possible and allowing the viewer to look around using his VR as if he were actually there. Put the camera in the cockpit of a Red Bull air race plane and you have an exhilarating VR experience live and unlike anything that has come before. If the aim is complete engagement the next step is using the technology to create a video gaming experience; blending VR and AR technologies during a Nascar race can allow the viewer to race real time against the professional drivers. High-end consoles are already a popular destination for live streaming so a blend of the two technologies has the potential to emerge from there. A sort of digitised version of having a spectator take a free throw at half time for a prize.
Conclusion

Sport is premium content, but licensing dynamics are changing. Traditional broadcast via free TV and pay TV networks remains important to reach masses, but live sport via OTT is growing thanks to its ability to target audiences underserved or unreachable by linear TV and to enrich the experience with a host of features including personalisation. With consumers shifting to the second screen and the holistic experience that OTT brings, it is expected that more live sport content will be available outside of traditional ways it has been consumed. Technology innovation and evolution of features available to subscribers are disrupting that dynamics even further and IHS Markit anticipates that trend to continue. Technical barriers to providing the same premium feed as in traditional broadcast are diminishing and aggregators can focus solely on the economic advantages of an OTT feed.