

# MEDIA & BROADCAST



### **WELCOME**

Welcome to the inaugural Sports Tech Annual, brought to you by Sports Tech World Series (STWS). The Sports Tech Annual is an industry research publication that brings together the most comprehensive and complete directory of companies in the global sports tech landscape. Each Chapter features interviews with industry experts sharing their insights on the current challenges, innovative use-cases, industry trends and future predictions in sports technology.

STWS Sports Tech Annual is your resource to navigate the revolutionary impact technology is having on how sports are played, administered and consumed around the world.

### SPORTS TECHNOLOGY INDUSTRY FRAMEWORK

The 2020 Sports Tech Annual is divided into eight chapters reflecting the eight categories in the STWS Sports Technology Framework, highlighted below. This Framework was developed to give structure to the amorphous term "sports technology" and provides an exhaustive overview of the ecosystem.

Although the Framework provides an exhaustive overview of the sports tech ecosystem, each category is not mutually exclusive. There will inevitably be companies that fit amongst several categories.

Categorizations are therefore based on the company's primary function and area of product/service expertise. If a company is not present in a chapter it may be because they are better suited to another chapter/category.

This chapter focuses on companies working within Media & Broadcast, including solutions that enable and enhance the sharing and distribution of sports content such as streaming platforms, automated broadcast graphics and online content publishers.



### ATHLETE PERFORMANCE & TRACKING

Devices and platforms used to measure or track athletes with the purpose of testing and improving performance such as GPS, activity trackers and sensors.



### ATHLETE, TEAM & EVENT MANAGEMENT

Solutions that support the management of athletes, teams, leagues and events, with a focus on improving overall efficiencies at an individual and organisational level.



### **BETTING & FANTASY SPORTS**

Solutions focused specifically on the unique challenges of betting and fantasy sports.



### **DATA CAPTURE & ANALYSIS**

Data processing, capture and analysis solutions that support insights and decision making for a variety of sports related organizations.



### Esports

Solutions focused specifically on the unique challenges of Esport and gaming.



### **FAN & SPONSOR ENGAGEMENT**

Solutions designed to enhance and improve the experience of the fan, or increase the value for the sponsor, including memberships and social media engagement.



### **MEDIA & BROADCAST**

Solutions that enable and enhance the sharing and distribution of sports content such as streaming platforms, automated broadcast graphics and online content publishers.



### **STADIUMS & VENUES**

Solutions designed to improve the efficiency and customer experience in stadiums and venues. From base level technology infrastructure, such as internet connectivity, to match-day fan experience platforms.



### **ABOUT STWS**

Sports Tech World Series (STWS) is the global community for people at the intersection of sports, digital, and technology. Our mission is to be the trusted resource in helping companies, teams, and individuals excel in the global sports technology community. Founded in 2015, STWS work with our community to bring people together through our global network of physical and digital activities and services.

### **OUR SERVICES & ACTIVITIES**



Consulting for Sports Tech, to find out more contact us at consulting@sportstechworldseries.com

### STWS INVESTOR NETWORK

Online platform connecting sports tech startups and investors (sportsinvestornetwork.com)

### STWS NEWSLETTER

Weekly digest of the top news, content and industry deep dives in sports technology

### ANZSTA

Sports Tech Industry Awards (anzsta.com.au)

### STWS RESEARCH

Sports Tech Industry Research and Insights, enquire with us at research@sportstechworldseries.com

### STWS SPORTS TECH FEED

The Global Sports Technology Podcast (sportstechfeed.com)

### STWS CONFERENCE

Global Conference Series (sportstechworldseries.com/events)



### **EXECUTIVE SUMMARY**

The COVID-19 pandemic has forced sports properties, broadcasters and their partners to challenge long held assumptions on the most effective way of delivering content to their fans. It has also seen an explosion of creativity to develop new solutions or pivot existing ones.

One of these major challenges faced by sports properties in 2020 is how to produce a high quality broadcast experience for the viewer at home, with little to no fans present in the stadium to build the gameday atmosphere.

Our Industry Experts, Alexandra Willis and Tim Tubito, shared their perspectives on how the All England Lawn Tennis Club (AELTC) and NFL respectively are responding to these 2020 challenges whilst still looking ahead to the future for their fans.



Technology developments identified as particularly innovative include the creation of an immersive stadium experience for viewers at home through watch-together solutions. This enabled fans to connect directly with other fans at home, with the limited fans in the stadium, and even with the players on the field or court. The use of artificial or virtual crowd noise to replicate the human interaction in a stadium was also a subtle but incredibly important application of tech to enhance the viewing experience. Remote production solutions also saw a boost, necessitated by social distancing requirements restricting the amount of production staff on site to small teams.

Looking beyond the immediate response to COVID, a strengthening trend has been the integration of Virtual, Augmented and Mixed Reality elements into the broadcast experience. Technical and computing capabilities have caught up to the much hyped expectations of what's possible for creating a seamless viewing experience with AR. It is moving beyond a gimmick or showcase and looks to become a mainstay of broadcast going forwards.

An area for future innovation and improvement is developing a unified, modern approach to viewership metrics. The current systems of measurement are fractured, ill-defined and don't take into account the multi-screen and multi-platform consumption habits of a modern fans. Beyond even a common base level of viewership, measuring engagement is more important than just the number of eye-balls on screens. One of the first steps of being able to serve fans better is being able to develop a deeper understanding of their consumption habits and preferences.

The stand out theme from these expert insights is the hope that the innovations and learnings emerging out of response to the COVID-19 pandemic will continue to be built upon once the world returns to a new

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### **INDUSTRY EXPERT INSIGHTS**

These Experts represent the professionals, with the help of their technology partners, from some of the world's most innovative and renowned sporting properties. We would like to thank their contribution to the Annual and for their part in moving the industry forward.

# TIM TUBITO DIRECTOR, EVENT PRESENTATION & CONTENT NFL

Tim Tubito is an Emmy award winning producer and director with over 15 years of production and game presentation experience with the New York Jets, Madison Square Garden Company and most recently the NFL. In his current role Tim oversees Event Presentation and Content for all of the NFL's major tent pole events including the Super Bowl, The NFL Draft, NFL Kickoff as well as Game Presentation Strategy across all 32 teams. Prior to this Tim was at the Madison Square Garden Company where he was responsible for games and events for the New York Knicks.

In his role, he was in charge of game scripting, as well as managing all event activity, including live music, arena lighting, entertainment coordination, and partner/marketing integration. He spent 12 years with the New York Jets in several different roles including overseeing football video operations then switching to the business side with responsibility for content, Event Presentation, virtual and augmented reality initiatives, and experiential production.



# Key challenges: What are the key challenges you're facing and what role can technology play in solving them?

The key challenges, especially in the live event space, is limited or no fans. In a normal environment at our games and events we're so focused on how we make these engaging, interactive, intimate experiences for our fans. Now with limited capacity or no capacity, how do we still bring the stadium experience to the fans at home and the fan experience back to the players in the stadium?

"There were sun studies of the stadium to make sure that in each individual frame the shadows and sunlight are hitting in a natural, realistic way. That level of detail is what really makes these graphics and animation look so good."

We've done many different things on the NFL side to bring this together and all of them rely on technology. An example of this is what we call our "Fan Cams" which are basically mini watch parties where these fans are getting to watch the game and organize chants together. This creates content for broadcasts to use where they typically would have in-stadium fan shots. It's covering all the key elements: getting the fans into the game, putting that into the broadcast and creating energy for the players themselves on the field.

When we looked at how we wanted to approach creating those Fan Cams it was building off our work with bringing fans into the Virtual Draft earlier this year. The Virtual Draft solution was put together in only two weeks, so with more time we didn't want it to just look like a traditional Microsoft Teams meeting. We wanted to give it some depth and put it in a 3D environment with more graphic imagery. Working with the Famous Group and their partners we used Unreal Engine to build this out in a 3D environment and really give it a unique feel.

We also worked with our social team to develop what we call the "Showtime Cam" which allows players to celebrate with fans on a screen in the stadium. It creates content and it's a different way to engage our fans whilst getting energy up for the players.

# Innovative Use-Cases: What is the best or most innovative application of technology you've seen in the industry this year?

It's easy to point to all the flashy new technology that's being used but what NFL Films has done with the crowd audio for broadcast has been crucial in creating that authentic experience for the viewer at home. I think people take audio for granted but it's extremely jarring to the whole experience when it's not quite right. Vince Caputo and the team at NFL Films painstakingly went through a process of pulling audio from every stadium in the league that they've captured over the years and really make that sound authentic to the game that's being played. That was a process that took a lot of time and people might not realize it but when you're watching an Eagles game, you're hearing audio that's authentic to a previous Eagles game and when you're watching a Patriots game, that's the actual sounds from Foxborough.



That was important to us that you're not hearing just a generic track, you're really hearing something that's authentic to that stadium experience. The process that they went through from getting the audio from all these stadiums and training all these audio technicians to apply this to each game was a real technological feat. But it was one that's well worth it. It was also long process because the audio they captured has all these other sound elements like announcements in there. It's a real achievement to be able to isolate the sounds without all that extra stuff and make it sound unique to each stadium. The audio is nothing that's really new and cutting edge, but it's innovative in the sense of how we've applied it. I wish I could take credit for the work here but it was Vince and his team. They did an incredible job of putting that together in a very short time window in a mostly remote work environment.

# Trends: What major trends have emerged in the last 6-12 months in the application of technology, digital and data?

The use of virtual fans and bringing viewers at home into broadcasts is an easy trend to point to. However, I think probably the biggest advancements that I've seen over the past few years is the use of Augmented Reality (AR) and Mixed Reality graphics in both live events and broadcast.

When you're watching a broadcast or you're at a live event, 3D graphics being applied from the virtual world into the real world has become such a natural part of the experience. It's another thing that people don't even necessarily realize is happening because the graphics and animations look so good and look so realistic. You wouldn't even know you're watching someone in an AR studio as everything looks real, everything feels real.

It's the same with graphics as you see them in stadiums being powered by things like Unreal Engine, which has been part of this huge advancement over the past couple of years. Historically Unreal Engine started on the gaming side and now seeing how that's applied in real life and how that continues to evolve is really interesting.

The level of detail that these graphic designers are creating is just amazing. Even thinking back to the Super Bowl this year when we did the AR presentation of NFL All Time Team. There were sun studies of the stadium to make sure that in each individual frame the shadows and sunlight are hitting in a natural, realistic way. That level of detail is what really makes these graphics and animation look so good. Although the computing power and the technology is there, it still takes really great graphic designers to make this look as amazing as it does.

# Improvements: What technology would you like to see developed or adopted over the next one to two years?

Once things hopefully get back to a little bit more normal I would like to see how we could take our best learnings out of this virtual fan experience then apply it to when fans are back in stadiums.

There are some really good innovations that have come out of this with regards to creating intimate viewing experiences in fans' homes and connecting that to the stadium experience. The broadcast quality is obviously not the same when you're dealing with a feed from someone's home computer camera or their iPhone, but there's a level of authenticity to it that can certainly continue to apply to live events. As people come back to events and stadiums, how do we still apply the things we learned to continue to enhance the viewing experience?

I'm going to be interested to see how everyone handles that. I have an eye on it because I know we've learned a lot over the past eight months. We've learned a lot of what works and what doesn't work and what goes well for the fans and what they respond to. We've tried things that we would have never tried in a normal environment and where we continue to see, week by week, what we can apply and what we can push from a technology standpoint that we probably wouldn't even have considered in a normal environment.

It's accelerated the application and acceptance of new technology. I hope as an industry as a whole we won't forget to apply the things we've learned in this environment and adapt it to what we do once things get back to normal.





### **INDUSTRY EXPERT INSIGHTS**

# ALEXANDRA WILLIS HEAD OF COMMUNICATIONS, CONTENT AND DIGITAL THE ALL ENGLAND LAWN TENNIS CLUB

Alexandra Willis leads and oversees strategy and execution of communications, content and digital for the All England Club, Wimbledon, across all communications touch points including digital, publications, broadcast, social media, PR, public affairs and internal.

Her role includes managing the award-winning strategy for AELTC platforms and assisting with external platforms to deliver content and communications that ensure the quality and image of the Club, The Championships and the Wimbledon brand are maintained, while growing reach, exposure and value through quality communication, storytelling and engagement. Also includes digital marketing and commercial activation, broadcast marketing and content, operational communications, international brand development and intellectual property of the brand.

Alexandra's work includes leading the redesign of Wimbledon.com (winner of BT SIA Digital Platform of the year 2016), Wimbledon social media platforms (Twitter, Facebook, YouTube, Instagram, Pinterest, Weibo, WeChat), Wimbledon digital platforms (iPad, iPhone, Android, mobile), Wimbledon content platforms (Live @ Wimbledon Video and Radio - shortlisted for Radio Academy Awards and Broadcast Digital Awards in 2014, 2015, 2016), Wimbledon ecommerce platform (shop.wimbledon.com), Championships programme, Championships annual (shortlisted for Sports Book of the Year Awards 2014), email communications, and other publications.



# Key challenges: What are the key challenges you're facing and what role can technology play in solving them?

All businesses, including the sports industry, are facing some major challenges. Firstly, changes in consumer consumption with the move towards a celebrity culture, people being time poor and just the vast increase in terms of competition for attention. Secondly, at the same time we've seen a tremendous explosion of opportunity through what technology can enable. So if there are sweet spots in people's attention then we can work out through a combination of data, insight and clever application of tech, how to get into that individual's window of attention.

Fundamentally, as a sports property, we're trying to create more content more of the time and provide it to more people in the way that they most want to receive it. The reason for doing that is to continue to keep Wimbledon out there as a relevant sports property for the modern consumer. Because our event happens only once a year and only for two weeks a year, we're particularly feeling this pressure around competition for attention within those two weeks. The question is then how do we almost take that on the chin and say, well, it doesn't just have to be only two weeks. The two weeks is the pinnacle of our event but actually there's a role for Wimbledon to compete for attention throughout the year. It's a fascinating one because it goes to the heart of our commercial model and our commercial business, but also the way that we apply technology from a more operational perspective.

Innovative Use-Cases: What is the best or most innovative application of technology you've seen in the industry this year?

I think it will be interesting to look at that question probably in six months time when we've emerged a little bit further out of the depths of the pandemic. Because I think some of the changes have been very reactive to specific situations and it will be interesting to see how much they stand the test of time and exist as fundamental changes for the future.

One of the things that I was really impressed by was what the NBA did in putting together their watch party product. Their sport is built on fans being in the stadiums to be able to create an atmosphere for fans consuming in their own homes, through their own platforms. The watch party was innovating on the idea that you can bring both together to create that feeling of togetherness that usually only comes from attending sport in person.

I think that's something that is going to become more and more important as we continue to exist in a world where fans cannot be in stadiums. People don't want to be isolated on their own for these viewing experiences. This has been reflected in the growth of the video gaming industry with streaming. Furthermore, commercial properties are going to want to demonstrate that sport is a communal activity and they don't want sport to be consumed in isolation. The work by the NBA was something that really caught our eye.

Another innovation in the midst of the lockdown in particular, was sports properties turning to archival footage to meet the needs of their fans. What was fascinating for us to see was where properties went above and beyond to try and create a narrative around that archive in the way that it was presented. Rather than it just being something that was published all at once. There's been so much focus on Over The Top (OTT) platforms and direct to consumer (D2C) platforms for the live offering and how can you hone content around live streaming and live products to make it compelling or make it what fans want, but not so much around VOD or on the non-live content.



In the absence of the Championships this year we knitted together our archive in what we called The Greatest Championships with the focus of retelling some of Wimbledon's greatest matches that built dynamically day by day, rather than just all being published at once. We also served additional supporting content alongside that video. So you could browse the matches point by point. You could access the statistics of those points, point by point, as well as editorial, narrative and photography. That was really about trying to make it relevant to all sorts of different generations. Rather than fans saying, "I couldn't care less about John McEnroe because I'm 18 and he's a 50-year-old guy" or "I've never heard of Steffi Graf, cause she's not in the public eye now". It's all about trying to play sports relevant for multiple generations rather than just focussing on the superstars of today.

IBM, our tech partner, played a critical role in developing this Greatest Championship product through applying their AI technology to refurbish and remaster this archival footage. This was important as we're so used to being able to view things in incredible pixel quality that when you look at something recorded five years ago, let alone 25 years ago, most fans will think it's poor quality and just switch it off. So we felt that there was an opportunity to show to fans old content doesn't have to be all grainy and horrible. One of the things we drew inspiration from was filmmaker Peter Jackson restoring some of the First World War footage from black and white to color to make it more engaging for current generations. I'm not saying that we achieved that level of enhancement, but the difference was noticeable. We had to turn this around in less than eight weeks when we usually have 52 weeks to plan what we're doing so credit to IBM for being able to respond so quickly.

"The watch party was innovating on the idea that you can bring both together to create that feeling of togetherness that usually only comes from attending sport in person."

The other innovative thing that IBM did which we were interested in, actually not for us but the USA Open, was how they redeployed their Al powered highlight solution. This was based around applying Al algorithms to crowd noise to know when a match is most exciting, but they were able to update this to an environment where you had no crowds.

# Trends: What major trends have emerged in the last 6-12 months in the application of technology, digital and data?

An overarching trend we've seen for a few years is around the application of Al by sports properties in learning more about their audiences and using that to inform what they develop. This is also reflected in the drive for first party data, rather than just relying on third party.

With a particular focus on the last 6 months, the pandemic has helped companies solve business problems of how you provide broadcast experiences that were akin to being in the live environment, such as the NBA watch parties I mentioned earlier. One of the things that makes them fun is being able to insert yourself into someone else's living room to share in that experience. We're also seeing strong growth in fan engagement solutions like Virtual Reality (VR) and Augmented Reality

The other growth area that's been very interesting to witness in the pandemic, and maybe an area that has suffered before now because it hasn't been a necessity, is around remote production. Until now there have been these entities out there trying to rethink the way content is made but struggling to get that across in the context of "this is the way we've always done it and it's not broken, so why would we change it?" Then you look at the creativity that media entities, production houses and sports properties have shown this year because they haven't been able to use those traditional means of production; it's been fascinating. I really hope that creativity is something that remains when we are able to return to the traditional, big production house way of doing things.

# Improvements: What technology would you like to see developed or adopted over the next one to two years?

An area that definitely needs improvement is developing some sort of common approach to viewer measurement, especially as we move towards more and more content being consumed in more and more places, more and more of the time. The question is how do we get towards a better overview of success? Rather than needing to add up metrics on one platform and then another different platform, to try and make some sense of them together.

That's partly because of the commercial model moving towards actual quality of engagement, rather than just media exposure. It's very difficult for us as an industry to sense check how well we're doing if there isn't a sort of a common approach to success.

It comes back to the point earlier about innovating on gathering fan data and the traditional means of production. We need a new version of the traditional ways of evaluating media output so we can begin to truly track consumer behavior properly, especially with younger generations. How can we get a true view of what that younger fan wants when they're consuming across different screens and different platforms? That's a big challenge and we're really excited for the creativity that some of the tech platforms and particularly the social media entities are showing in addressing this.

The learning that sport has got to take going forwards is that it needs to be driven by consumer behavior, rather than packaging these beautifully produced programs and just throwing it out there and hoping somebody will engage with it.



### **COMPANY LISTINGS - OTT & BROADCASTERS**

### **DAZN**

LIVE AND ON-DEMAND SPORTS STREAMING

**HEAD OFFICE:** London, United Kingdom

EMPOYEES: 1,001-5,000 ESTABLISHED: 2015 WEBSITE: dazn.com EMAIL: info@dazn.com

KEY CLIENTS: Bundesliga, Premier League,

UEFA

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content, OTT

#### **SUMMARY**

DAZN is a ground-breaking live and on demand sports streaming service, giving sports fans the control and flexibility to watch their sports, their way.

You don,'t need a cable or satellite dish to watch it, so the setup is quick and simple. You can download the DAZN app and watch on multiple devices at home or on the go, all for an affordable price. It's about putting sports fans first.

#### WHAT'S EXCITING

DAZN's global service will launch this fall in more than 200 countries and territories.

From 2021, 121 out of 138 UEFA Champions League matches to be shown exclusively live on DAZN in Germany for three seasons under new agreement.

### **FLOSPORTS**

### SPORTS CONTENT PLATFORM

**HEAD OFFICE:** Austin, United States

EMPOYEES: 251-500 ESTABLISHED: 2006 WEBSITE: flosports.tv EMAIL: support@flosports.tv

KEY CLIENTS: NCAA, NBA, Tour De France,

PBA, USAC Racing

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content, OTT

### **SUMMARY**

FloSports is the innovator in live digital sports and original content. Based in Austin, Texas, we partner with event rights holders and governing bodies to unlock a world of sports coverage that true fans have been waiting for. Through live streaming of premier events, original video programming, and weekly studio shows, FloSports is growing the sports, the athletes and the fans.



### WHAT'S EXCITING

Recently, FloSports has bolstered its motorsports offering with the acquisition of the Speed Shift TV streaming platform. The deal includes all of Speed Shift TV's' assets and broadcast rights and will bring over 400 additional racing events to the FloRacing platform. FloRacing will now stream over 800 racing events a year, with the new content adding to the platform's DirtonDirt coverage, as well as a full schedule of United States Auto Club events.





### **FUBOTV**

SPORTS STREAMING PLATFORM

**HEAD OFFICE:** New York, United States

**EMPOYEES:** 251-500 ESTABLISHED: 2014 WEBSITE: fubo.tv EMAIL: info@ fubo.tv

KEY CLIENTS: ESPN, ABC, beIN, NBA League

Pass, NFL GamePass

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content



#### **SUMMARY**

fuboTV is the world's only sports-focused live TV streaming service with top leagues and teams, plus popular shows, movies and news for the entire household. We stream the most popular entertainment, news and sports programming in the world, including more than 30,000 live sporting events per year and 60,000 TV episodes and movies every month.

### WHAT'S EXCITING

In April, Fubo merged with tech-driven AR/VR company FaceBank. FaceBank, which makes avatars and characters for virtual entertainment is in the process of changing its name to that of the company it acquired. In June, Fubo TV announced a new, multi-year carriage agreement to bring 13 Discovery networks to Fubo TV's live TV streaming service, suggesting an expansion beyond the sports market is on the cards.





**Tim Tubito** NFL

Hear Tim's interview at sportstechfeed.com

THE GLOBAL SPORTS TECHNOLOGY PODCAST

### **ELEVEN SPORTS**

LIVE SPORTS BROADCASTING PLATFORM

**HEAD OFFICE:** Brussels, Belgium

**EMPOYEES:** 101-250 **ESTABLISHED:** 2015

WEBSITE: elevensports.com EMAIL: info@elevensports.com

KEY CLIENTS: NFL, NBA, Formula 1, Premier

League, LaLiga

**RELEVANT SPORTS:** Applicable across all

sports TAGS: OTT



ELEVEN is an award-winning platform delivering world-class entertainment to dedicated fans around the world since 2015. We are challenging how live sport is packaged, delivered and consumed, with a flexible offering that democratizes sport content for fans everywhere. From the world's biggest sporting events, to the best local sport, Esports and women's sport - ELEVEN makes it all available to our global community of fans wherever and however they want to consume



### WHAT'S EXCITING

Throughout the past few months, ELEVEN has reached multiple partnership and broadcasting opportunities across Europe, including LaLiga and Belgian Pro League, as well as partnering with Grassroots Broadcasting Platform MyCujoo to broadcast the Myanmar National League.



### **KAYO SPORTS**

AUSTRALIAN-BASED SPORTS STREAMING SERVICE

**HEAD OFFICE:** Sydney, Australia

**EMPOYEES:** 101-250 ESTABLISHED: 2018

WEBSITE: kayosports.com.au **EMAIL:** info@kayosports.com.au

KEY CLIENTS: ESPN, FOX Sports, belN Group **RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content

### SUMMARY

With over 50 sports instantly streamed, Live and On Demand, Aussie sports fans can enjoy their favourite sports, anytime on Kayo Sports. With access to FOX SPORTS Australia, ESPN and beIN SPORTS content, Kayo delivers over 30,000 hours of the best sport, documentaries and entertainment shows combined with game changing features. We are a cutting edge, digital business that brings both sports and technology together to deliver fans a unique, world class sports streaming experience.



### WHAT'S EXCITING

After shedding around 135,000 subscribers by May due to the COVID-19 Pandemic, Kayo managed to bounce back with a fury as Australians sought some much-needed sporting reprieve. In the final three months of the financial year of 2020, Kayo has managed to greatly expand its paying subscriber base from 331,000 to 542,000.



### **COMPANY LISTINGS - VENDORS**

### INTEL

**IMMERSIVE MEDIA EXPERIENCES** 

**HEAD OFFICE:** Santa Clara, United States

**EMPOYEES:** 10,001+ ESTABLISHED: 1968 WEBSITE: intel.com EMAIL: info@intel.com KEY CLIENTS: NFL, NBA, LaLiga

**RELEVANT SPORTS:** Applicable across all

TAGS: Computer Vision, News / Content, VR (Virtual Reality) / AR (Augmented Reality)

### **SUMMARY**

Intel's mission is to shape the future of technology to help create a better future for the entire world. By pushing forward in fields like AI, analytics and cloud-to-edge technology, Intel's work is at the heart of countless innovations. Intel Sports helps fans discover the immersive media technologies that let you watch and experience sports at the highest level, all in exciting new ways. Highperformance cameras, advanced computing power, software algorithms, and Intel True View and Intel True VR deliver all-new ways for you to watch and experience sports.



#### WHAT'S EXCITING

Intel True View is a powerful end-to-end platform that delivers views traditional cameras can't. Dozens of high-definition 5K cameras are mounted all around stadiums and arenas worldwide, capturing volumetric video. That gets processed through highly-advanced Intel Xeon processor-based servers, Intel Core processor-powered PCs, and Intel True View. It renders 360-degree replays, stunning freeze frames, and never-before looks at the most exciting plays.

### **HARMONIC**

VIRTUALIZED CABLE ACCESS & LIVE VIDEO STREAMING

**HEAD OFFICE:** San Jose, United States

**EMPOYEES:** 1,001-5,000 **ESTABLISHED:** 1988 WEBSITE: harmonicinc.com **EMAIL:** info@harmonicinc.com

KEY CLIENTS: Sky, Foxtel, Comcast, HCTC,

Telkomsel

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content, OTT

Harmonic, the worldwide leader in video delivery technology and services, enables media companies and service providers to deliver ultra-high-quality broadcast and OTT video services to consumers globally.

The company has also revolutionized cable access networking via the industry's first virtualized CCAP solution, enabling cable operators to more flexibly deploy gigabit internet service to consumers' homes and mobile devices.



### WHAT'S EXCITING

Whether simplifying OTT video delivery via innovative cloud and software-as-aservice (SaaS) technologies or powering the delivery of gigabit internet cable services, Harmonic is changing the way media companies and service providers monetize live and VOD content on every

### **DELTATRE**

WE BRING SPORT AND ENTERTAINMENT TO LIFE

**HEAD OFFICE:** London, United Kingdom

**EMPOYEES:** 1,001-5,000 ESTABLISHED: 1986 WEBSITE: deltatre.com EMAIL: info@deltatre.com

KEY CLIENTS: FIFA, UEFA, DAZN, PCCW,

Discovery

**RELEVANT SPORTS:** Applicable across all

TAGS: Official Data Provider, OTT, VR (Virtual

Reality) / AR (Augmented Reality)

Deltatre is the global leader in fan-first video experiences and is trusted by the world's largest sports federations, leagues, and media companies. Its market-leading product and services portfolio has helped redefine the way the world consumes sports, film, and TV by offering specialist innovations in over-the-top (OTT) streaming, websites and apps, graphics, data, officiating systems, user experience (UX), and product design. Over its 34-year history, the company has grown to employ more than 1,000 staff based in offices spanning 11 countries.



### WHAT'S EXCITING

Deltatre launched a new SaaS-based solution, mtribes, in 2020. The tool enables any media operator running a multiplatform digital or over-the-top (OTT) service to quickly identify user groups and their behaviors, create highly personalized user experiences (UX), and measure the effectiveness of personalization through real-time insights.



### SPORTSMEDIA TECHNOLOGY

VIDEO GRAPHICS PROVIDER

**HEAD OFFICE:** Durham, United States

**EMPOYEES:** 251-500 **ESTABLISHED:** 1986 WEBSITE: smt.com EMAIL: info@hksinc.com

KEY CLIENTS: NASCAR, IndyCar, NHL, NCAA

basketball, PGA

**RELEVANT SPORTS:** Applicable across all

TAGS: OTT, VR (Virtual Reality) / AR

(Augmented Reality)

#### SUMMARY

SMT offers an unparalleled level of technology and services unavailable anywhere else in the sports market. Our suite of products is a producer's dream, from fan favorites like datadriven graphics, clock-and-score bugs, tickers and virtual solutions to behind-the-scenes services such as video board production, talent prompters and information systems. SMT provides clients with a full-service, turnkey solution designed to bring producers and patrons the highest level of technical innovation available.



### WHAT'S EXCITING

SMT was essential in creating virtual fans for the beginning of the 2020 Major League Baseball Season for FOX Sports. The project utlized SMT's technology allowing virtual graphics to be inserted into the broadcast with geospatial precision.

### APPLICASTER

### CLOUD BASED PLATFORM FOR CONTENT DISTRIBUTION

**HEAD OFFICE:** New York, United States

**EMPOYEES:** 101-250 ESTABLISHED: 2009 WEBSITE: applicaster.com EMAIL: hello@applicaster.com

**KEY CLIENTS:** Comcast Technology Solutions,

Adobe, AWS, DirecTV, Viacom

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content

Applicaster is a world-leading cloud-based platform for app development and content distribution, providing the tools and insights needed to own and engage audiences across all platforms and devices. Our innovative platform enables nearly endless functionality, provided through formal integrations, an open plugin environment, and tools for development and design.

### applicaster

#### WHAT'S EXCITING

Applicaster recently announced it has secured \$11 million to support continued technology and customer growth amid record demand for streaming content services. The company in June launched Zapp's newest framework, called Quick Brick, which streamlines the design, deployment and management of complex video apps.

### **BROADCAST SOLUTIONS GROUP**

SYSTEM INTEGRATION INNOVATION FOR BROADCAST AND MEDIA

**HEAD OFFICE:** Bingen, Germany

**EMPOYEES:** 101-250 ESTABLISHED: 2003

WEBSITE: broadcast-solutions.de EMAIL: info@broadcast-solutions de KEY CLIENTS: Eurovision, The Grammys, Tour

De France

**RELEVANT SPORTS:** Applicable across all

TAGS: AI (Artificial Intelligence), OTT

### SUMMARY

Broadcast Solutions is one of Europe's biggest system integrators and consists of a group of companies acting worldwide. Started in Germany more than 15 years ago, Broadcast Solutions stands for innovation and engineering. With subsidiaries in Europe, Asia and the Middle East the group plans, implements and realizes projects and offers its services in all broadcast and content related areas' globally.



### WHAT'S EXCITING

German broadcast production company HD Broadcast is set to unleash its latest UHD 2 OB truck on the start of the German Football Association (DFB) cup matches for the 2020/2021 season, The stylish OB, designed and planned by Broadcast Solutions, can cope with up to 30 cameras.



### CHYRONHEGO

CREATE. MORE.

DAZN, SKY Sports

HEAD OFFICE: Stockholm, Sweden

**EMPOYEES:** 101-250 ESTABLISHED: 1966 WEBSITE: chyronhego.com EMAIL: sales@chyronhego.com KEY CLIENTS: MLB, La Liga, Bundesliga,

**RELEVANT SPORTS:** Applicable across all

sports

**TAGS:** Performance Data Analytics, Sports Officiating Tech, Video Analytics

### SUMMARY

ChyronHego is ushering in the next generation of storytelling. Founded in 1966 as Chyron, the company has played a pioneering role in developing broadcast titling and graphics systems. With a foundation built on innovation and efficiency, ChyronHego has become a household name and global leader in broadcast, with a focus on customercentric solutions. Today, the company offers production professionals the industry's most comprehensive software portfolio for designing, sharing, and playing live graphics to air with ease.



### WHAT'S EXCITING

ChyronHego is developing the world's leading tracking, coaching, and in-venue fan engagement technologies.

Ask us about TRACAB Gen 5, our FIFA certified, EMMY Award-winning optical tracking system; Click Effects PRIME 3.5 for live sports & entertainment productions; and Coach Paint- the most widely used video analysis software in professional sport.

### **CUBEE TECHNOLOGY**

SPORTS-FOCUSED BIG DATA

**HEAD OFFICE:** Shanghai, China

**EMPOYEES:** 101-250 ESTABLISHED: 2012 WEBSITE: cubee.com EMAIL: contact@cubee.com

KEY CLIENTS: Alibaba, Tencent, Baidu, Nike,

Sina Sports

**RELEVANT SPORTS: Soccer** 

TAGS: Fan Analytics, Video Analytics

### **SUMMARY**

Based in Shanghai, Cubee is China's leading sports big data company. Cubee's football data analysis service can count among its clients many of the biggest names in the Chinese media industry, including Baidu, Tencent, SSports, Sina, LeTV and PPTV. Cubee's big data team also work with the Chinese Under 15 national team and Nike SOP.



### WHAT'S EXCITING

Cubee has grown rapidly in the last couple of years, receiving initial financing from Ping An Ventures and Northern Lights. In the summer of 2016, Cubee received major investment from CMC Holdings, the Chinese sports investment company who also own 13% of Manchester City Group.





### **ENDEAVOR STREAMING**

VIDEO DISTRIBUTION FOR LIVE AND ON-DEMAND CONTENT

**EMPOYEES:** 101-250 **ESTABLISHED: 2004** 

WEBSITE: endeavorstreaming.com **EMAIL:** marketing@endeavorstreaming.com KEY CLIENTS: UFC, NFL, NBA, EFL, WWE **RELEVANT SPORTS:** Applicable across all sports

**HEAD OFFICE:** New York, United States

TAGS: News / Content, OTT

#### SUMMARY

Endeavor Streaming is a global leader in premium video distribution for live and ondemand content across the entertainment and sports industries. We combine stunning video with the most far-reaching interactive features to create personalized, over-thetop experiences on every screen imaginable. Through the global footprint of the Endeavor network and our position at the forefront of technology, Endeavor Streaming provides solutions with unmatched flexibility in content delivery, management, consumption and monetization.

### **ENDEAVOR**

#### WHAT'S EXCITING

The Endeavor Streaming team was recently shortlisted for the 2020 SVG Europe Sports TV Awards for their work with the Ultimate Fighting Championship on the newly redesigned UFC FIGHT PASS.

### LIVEU

### LIVE VIDEO STREAMING AND REMOTE PRODUCTION SOLUTIONS

**HEAD OFFICE:** Hackensack, United States

**EMPOYEES:** 101-250 ESTABLISHED: 2006 WEBSITE: liveu.tv EMAIL: marketing@liveu.tv

KEY CLIENTS: FIA World Rally Championship, NY Jets, NASCAR, Fox Sports US, Tencent Sports

**RELEVANT SPORTS:** Applicable across all

TAGS: Drones, News / Content, Social Media

#### SUMMARY

With over 3,000 customers in 130+ countries, LiveU is bringing its award-winning broadcast technology to the sports world, enabling you to cover more events with reduced costs and the highest-quality, reliable live content. LiveU offers flawless and dynamic HD/1080p60 and 4K HEVC live video streaming and a broad set of production services for every type of sporting event, based on its patented bonding and video transport technology. LiveU offers an extensive cloud-based management and video distribution solutions for live video coverage, anytime, anywhere.



### WHAT'S EXCITING

Current Projects include:

- Germany's Exo-Tennis series, working with PlaySight to deliver automated sports broadcast and SmartScore technology - Streaming live the Simulation Game of the International Skating Union
- Championships - Mexican Soccer League, LIGA MX BBVA
- live streamed virtual (Esports) tournament - NFL draft
- NASCAR races

### **NETCO SPORTS**

### TURNKEY OTT OFFERS & MULTI-PLATFORM APPLICATIONS

**HEAD OFFICE:** Paris, France **EMPOYEES:** 101-250 **ESTABLISHED: 2009** WEBSITE: netcosports.com EMAIL: contact@netcosports.com KEY CLIENTS: Canal+, BeIN SPORTS, TVA Sports Canada, Fox Sports Australia, Eurosport **RELEVANT SPORTS:** Applicable across all

TAGS: Fan Analytics, OTT, Social Media

### SUMMARY

Netco Sports are an international company designing and developing multiplatform applications and OTT solutions for Sport & Media key players. We are in the forefront of technology and integrate innovative solutions (Virtual Reality, Artificial Intelligence, Internet of Things, etc) at any step of the valuechain from video-recording to end-users applications.



### WHAT'S EXCITING

Collaborating with ISG, Netco Sports Italy recently deployed for Italian Football League Serie A virtual centre pitch logos of club partners before kickoff, at half-time and prior to the second half kick-off at stadiums.



### **PIXELLOT**

THE WORLD LEADER IN AI-AUTOMATED SPORTS PRODUCTION

**HEAD OFFICE:** Petach Tikva, Israel

**FMPOYFFS: 101-250** ESTABLISHED: 2014 WEBSITE: pixellot.tv EMAIL: info@pixellot.tv

KEY CLIENTS: ESPN, FloSports, NEP, FC

Barcelona, Real Madrid

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: AI (Artificial Intelligence), Athlete Empowerment / Promotion, Computer Vision

#### SUMMARY

Pixellot is the leader in automatic Al-based sports production solutions for the sports market. Our end-to-end technology streamlines productions using an unmanned multi-camera device. Using AI, we enable sports organizations to broadcast and monetize sporting events which would otherwise not receive coverage. In addition to the engaging video coverage, fans can enjoy real-time commentary, graphics, automated highlights, and stats, similar to a professional hrnadcast



#### WHAT'S EXCITING

Pixellot is the biggest sports production company in the world in terms of live production hours.

In two years, the company produced more than 500,000 games and is currently producing and distributing more than 40,000 live games each month on a variety of platforms (web, mobile, OTT etc.) around the world.

### SECOND SPECTRUM

**BROADCAST IMMERSION TECHNOLOGY** 

**HEAD OFFICE:** Los Angeles, United States

**EMPOYEES:** 101-250 ESTABLISHED: 2013

WEBSITE: secondspectrum.com EMAIL: info@secondspectrum.com KEY CLIENTS: NBA, Premier League, Major

League Soccer, NCAA, ESPN **RELEVANT SPORTS:** Applicable across all

TAGS: AI (Artificial Intelligence), Official Data Provider, VR (Virtual Reality) / AR (Augmented

#### **SUMMARY**

We are bringing everyone closer to the game in ways never before imagined, with new forms of interaction, immersion, and personalization. From mobile apps, to giant touchscreens, to smart TVs, to VR/AR, we deliver exactly what each fan, commentator, coach, or player wants to see. We are pushing the boundaries of deep tech; machine learning, computer vision, big data, augmented and virtual reality.



#### WHAT'S EXCITING

During the NBA's return to play for the 2020 season in it's Bubble environment, Second Spectrums "Clippers Courtvision" has been utilized to not only provide statistics to broadcast, but also allow teams to further the immersion of homecourt advantage with Augmented Reality driven sponsorships courtside and on the basketball court itself.

### **SPORTLOGIQ**

AI POWERED SPORTS ANALYTICS

**HEAD OFFICE:** Montreal, Canada

**EMPOYEES:** 101-250 ESTABLISHED: 2015 WEBSITE: sportlogiq.com EMAIL: info@sportlogiq.com

KEY CLIENTS: NHL, NFL, NCAA Football **RELEVANT SPORTS:** Applicable across all

TAGS: AI (Artificial Intelligence), Video

Analytics

Sportlogiq is an AI powered sports analytics company. We help teams win more games and broadcasters engage more viewers.

Our advanced analytics software tracks the location and actions of every player on the ice, field, or court using standard game footage. Machine intelligence techniques are then used to extract meaningful insights from the data collected, allowing teams and fans to understand and experience the game in ways previously unimaginable.



### WHAT'S EXCITING

Sportlogiq is implementing an automated content creation system powered by Arria NLG Studio, to generate data-oriented stories automatically, dynamically, and at scale. These Al-driven insights, gathered from their proprietary datasets, will provide exclusive information on underlying team performance, trends, and systems to help teams win more games and better equip broadcasters to engage more viewers.



### SPORTSCAST AUSTRALIA

SPORTS BROADCASTING

**HEAD OFFICE:** Melbourne, Australia

**EMPOYEES:** 101-250 **ESTABLISHED: 2016** 

WEBSITE: sportscastaustralia.com.au **EMAIL:** info@ sportscastaustralia.com.au KEY CLIENTS: NBL, Cricket Australia, Cycling Australia, Melbourne Vixens, Volleyball

Australia

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: Grassroots / Youth, News / Content, OTT

#### SUMMARY

Sportscast Australia are an agile sports broadcaster delivering TV quality live streams for national, state and grassroots sports. From single cam to multi-cam and everything in between, Sportscast Australia can take your productions to the next level without exploding the budget.

At a grassroots level, our proprietary cloud editing platform - Sportscast Game Analysis Platform - is helping grassroots sports maximize the power of video analytics through automated editing.



### WHAT'S EXCITING

At Sportscast Australia we have been focusing on refining our remote production solutions which are delivering national sports with cost effective solutions to cover events anywhere in the country. Our remote productions feature the full suite of broadcast enhancements including multiangle slow motion replays, live graphics, sponsorship integration and live talent interviews. Commentary can be added onsite or offsite.



### THE FAMOUS GROUP

A FAN EXPERIENCE COMPANY

**HEAD OFFICE:** Culver City, United States

**EMPOYEES:** 101-250 **ESTABLISHED:** 1997

WEBSITE: thefamousgroup.com **EMAIL:** info@thefamousgroup.com

KEY CLIENTS: NFL, WWE, Riot Games, AT&T,

Nike

**RELEVANT SPORTS:** Applicable across all

TAGS: Computer Vision, OTT, VR (Virtual Reality) / AR (Augmented Reality)

### **SUMMARY**

When you inspire and engage a live audience they become fans. For more than 20 years, we've created passionate fans for the biggest brands, venues and events in the world. We begin working with each of our client partners by deeply understanding their brand, their goals, and their audience. We then execute with award-winning creative, rock-solid production and proprietary technology.

### WHAT'S EXCITING

We've been in the experiential business for over 20 years, creating immersive fan experiences for Fortune 500 brands, professional sports events, Esports, concerts, festivals and retail environments. That includes 13 Super Bowls, Nike, the NFL Draft, Live Nation, the NBA finals, Ubisoft, NCAA Final Four, Pepsi, NHL All-Star Weekend, AT&T, and more than 90 professional sports teams and venues.





### UNIQFEED

**COMPUTER VISION SPECIALISTS** 

**HEAD OFFICE:** Zurich, Switzerland

**EMPOYEES:** 101-250 ESTABLISHED: 2015 WEBSITE: unigfeed.com EMAIL: info@unigfeed.com

KEY CLIENTS: Swiss Tennis, ATP Tour, ITTF **RELEVANT SPORTS:** Applicable across all

TAGS: Computer Vision, News / Content, OTT



#### SUMMARY

We offer highly innovative, groundbreaking and entirely software-based solutions (3 patents), which virtually overlay existing perimeter board advertisements in sports stadiums with other content of choice for the live television broadcast feed.

Our two entirely software-based solutions for live setup allow us not only to generate multiple feeds (AdApt), but also to distribute multiple feeds with lower data usage (ManiCode). uniqFEED uses only digital SDI signals as input for a non-intrusive workflow.

#### WHAT'S EXCITING

On August 1st, 2020, the annual Swiss National Day, uniqFEED will extend its geographical reach further still by joining SportWorks at the Maison du Sport International (MSI) in the Olympic Capital, Lausanne.

Swiss Tennis has partnered with virtual advertising solutions provider unigFEED, who will deploy their technology at the Securitas Pro Cup, a three-day event which took place at the Swiss Arena in July.

### WAVE.TV

SPORTS MEDIA CONTENT

**HEAD OFFICE:** Santa Monica, United States

**EMPOYEES:** 101-250 ESTABLISHED: 2017 WEBSITE: wave tv EMAIL: hello@wave.tv

**KEY CLIENTS:** Under Armour, Miller Lite **RELEVANT SPORTS:** Applicable across all

TAGS: News / Content, OTT

#### **SUMMARY**

WAVE.tv is a sports media company for today's fan. We entertain modern day sports fans with the content they love, produced for the digital platforms where they spend the most time. Our brands can be discovered across Snapchat, Instagram, TikTok, Facebook, YouTube and other core and emerging platforms. WAVE.TV media brands reach over 200M unique users monthly, (largely Gen-Z and Millennials) generating over 3 billion video views.



### WHAT'S EXCITING

WAVE.tv recently secured \$32m in Series A funding, which will allow it to grow the business into a comprehensive sports entertainment company with an eye for continued category and platform expansion, IP and talent development, e-commerce, acquisitions, sports betting, and more.

### **WSC SPORTS**

**AUTOMATED SPORTS VIDEO SOLUTIONS** 

**HEAD OFFICE:** Givatayim, Israel

**EMPOYEES:** 101-250 ESTABLISHED: 2011 WEBSITE: wsc-sports.com **EMAIL:** contact@wsc-sports.com

KEY CLIENTS: NBA, WarnerMedia, Discovery,

PGA Tour, J League

**RELEVANT SPORTS:** Applicable across all

TAGS: AI (Artificial Intelligence), News /

Content

WSC Sports' platform generates personalized sports videos for every digital platform and every sports fan - automatically and in real-

Currently being used by leading media rights owners such as NBA, MLS, FIBA, WarnerMedia, Discovery, Bleacher Report and many others, WSC Sports' platform utilizes advanced AI technologies to analyze live sports broadcasts, identify each and every event that occurs in the game, create customized short-form video content and publish to any digital destination.



### WHAT'S EXCITING

WSC Sports is a significant player in the Al revolution of sports. We grant editorial teams superpowers to multiply what they used to do and create new and innovative experiences. By working with our clients, we facilitate opportunities for sponsors and media partners to engage fans in a way that matters; whether that be for a fantasy game, a betting opportunity, social media engagement, or signing up to an OTT service.



### **GRABYO**

### CLOUD-BASED VIDEO PRODUCTION PLATFORM

**HEAD OFFICE:** London, United Kingdom

**FMPOYFFS:** 51-100 ESTABLISHED: 2013 WEBSITE: grabyo.com EMAIL: hello@grabyo.com

KEY CLIENTS: The English Premier League, MotoGP, AELTC Wimbledon, Tennis Australia,

**RELEVANT SPORTS:** Applicable across all

TAGS: News / Content, OTT, Social Media

#### SUMMARY

Grabvo is a leading cloud video production. editing and distribution platform. Grabyo's lightweight platform is the future of broadcast - equipping partners with the tools to manage agile video distribution strategies across all major digital, OTT and social platforms.

Delivered as a SaaS platform and accessed through a web browser, Grabyo is trusted by major publishers and rights holders across the world. It has strategic partnerships across OTT, social media and broadcast including Twitter, Facebook, YouTube, Instagram and Snapchat.



#### WHAT'S EXCITING

Grabyo has empowered sports broadcasters and rights holders to continue creating content and engaging audiences remotely throughout the COVID-19 health pandemic.

Grabyo's cloud-native platform is accessed from anywhere using a web browser. Its live production capabilities, including remote contribution features, are helping sports publishers to safely resume coverage of live sport as it begins again.

### KISWE MOBILE

### REMOTE CLOUD BROADCAST TECHNOLOGY

**HEAD OFFICE:** New Jersey, United States

**EMPOYEES:** 51-100 ESTABLISHED: 2013 WEBSITE: kiswe.com EMAIL: info@kiswe.com

KEY CLIENTS: NBA, Premier League, belN

Sports, ESPN, Turner Sports

**RELEVANT SPORTS:** Applicable across all

TAGS: AI (Artificial Intelligence), OTT, Social

Media

### **SUMMARY**

Driving true remote cloud broadcast capabilities. Helping content producers and broadcasters overcome capital and operating barriers and find new engagement/ monetization opportunities.



### WHAT'S EXCITING

Working with the biggest names in Sports and Entertainment to bring innovative engagements. Transform your content into personal, social and interactive experiences.

### **ON REWIND**

### **ENRICHED OTT SOLUTIONS FOR SPORTS & ESPORTS**

**HEAD OFFICE:** Paris, France **EMPOYEES:** 51-100 ESTABLISHED: 2015 WEBSITE: onrewind.com EMAIL: contact@onrewind.com

KEY CLIENTS: Proximus, MediaPro, FC RedBull Salzburg, Olympique de Marseille, AS St

**Ftienne** 

**RELEVANT SPORTS:** Applicable across all

sports TAGS: OTT

### **SUMMARY**

On Rewind (acquired in 2017 by Euro Media Group) is a major innovator in live streaming for sports and Esports, thanks to its highlyengaging end-to-end OTT solution.

With premium clients like the Belgian telco Proximus, the French Football Federation, MediaPro, the Top 14 Rugby, FC RedBull Salzburg, SFR Sports or the Olympique de Marseille among others, On Rewind is always seeking to innovate in the streaming industry by answering to the present and future needs of the broadcasters and their community.



### WHAT'S EXCITING

On Rewind has reimagined mobile video streaming with its patented interactive video player that delivers a compelling user experience designed to engage today's demanding audiences. This unique solution has been the subject of numerous press coverage in the sports and media industry. On Rewind recently merged with sister company Netco Sports, one of the world's leading providers of cross-platform sports applications, to strengthen IT development and meet growing demands of OTT market.



### **ABONAIR**

WIRELESS VIDEO SYSTEMS

**HEAD OFFICE:** Tel Aviv, Israel

**EMPOYEES:** 11-50 ESTABLISHED: 2008 WEBSITE: abonair.com EMAIL: info@abonair.com

KEY CLIENTS: NBC, France TV, LSU, FSU, UGA,

Horse Racing

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: Social Media

### **SUMMARY**

ABonAir is the leading provider of wireless video solutions for broadcasting, electronic news gathering, sports events and reality shows. ABonAir develops wireless microwave links that enable video transmission from field cameras directly to a news track, OB trucks or media center. ABonAir's customers include sport facilities, universities, news broadcasters, production companies, mobile trucks, rental houses and system integrators. ABonAir's unique technology enables it to provide exceptionally robust and reliable wireless video links.



### WHAT'S EXCITING

ABonAir's Wireless Video Systems support:

- Sub-frame delay (7 msec): For live event coverage and multi-camera production.
- High-picture quality (+52dB PSNR): Revolutionary H.264 CODEC technology.
- Teleprompter.
- Video Return.
- 4K and HD.
- Superior coverage utilizing MIMO and fiberbased antenna.
- Single-zone and multi-zone upgradable Fiber Coverage Extender (FCE) support.

### **BLINDER**

REMOTE INTERVIEW PLATFORM

HEAD OFFICE: Auckland, New Zealand

**EMPOYEES: 11-50** ESTABLISHED: 2016 WEBSITE: blinderhq.com EMAIL: hello@blinderhq.com

KEY CLIENTS: SKY Sport, The FA, US Women's Soccer, New Zealand Rugby, Atlanta Falcons **RELEVANT SPORTS:** Applicable across all

sports

TAGS: Athlete Empowerment / Promotion,

News / Content, Social Media

### SUMMARY

Blinder lets broadcasters, content producers and PR managers tell better stories, faster, from anywhere.

Our remote interview platform easily brings anyone into conversation, through any device, without the need for new software, and with multi-channel HD recordings captured to a cloud-based team dashboard.

That's changed the way athletes and coaches can connect directly with the media, fans and in-house content creators.

### WHAT'S EXCITING

Blinder was born out of frustrations juggling the demands of storytelling, content production and duty of care in pro sport. It's since been used around the world by teams from the AFL to the NFL and the NCAA to the Premier League.

By focusing on making it really easy for athletes to join Blinder calls, it turns out we made the tech incredibly easy for the media to use too. And broadcasting has been our biggest growth area in 2020.







### **CAMBOX**

### THE NEW GENERATION ACTION CAMERA

**HEAD OFFICE:** Nantes. France

**EMPOYEES: 11-50** ESTABLISHED: 2013 WEBSITE: cambox.eu/en

EMAIL: cv@camboxaustralia.com.au KEY CLIENTS: Formula One, France Galop, Mercedes, Allen Berg Racing Schools **RELEVANT SPORTS:** Applicable across all

sports

TAGS: Wearables / Smart Devices

### SHMMARY

Since 2013, the Group Cambox manufactures, produces and sells helmet cameras dedicated to equestrian sports, motorsports & outdoor sports. Our Objective: To offer an innovative solution to record your most beautiful emotions.

To meet the growing demand for this kind of products, Cambox grew up through the years by having today three offices in the world: France, USA and Australia.



### WHAT'S EXCITING

2020 marks a breakthrough in Cambox's range with the launching of a brand new model: The Cambox V4 plus & V4 pro. Cambox has a watchword : to offer the best product as possible today and for the futur. In this aim, the newest models have been thought in order to meet all our customers and prospects expectations taking into account the feedback we have had since the launching of the first Cambox.

### **CINFO**

### CLOUD-BASED AUTOMATED BROADCASTING SERVICE

HEAD OFFICE: La Coruna, Spain

**EMPOYEES:** 11-50 ESTABLISHED: 2000 WEBSITE: cinfo.es EMAIL: info@cinfo.es

KEY CLIENTS: FOX, SONY, Rakuten **RELEVANT SPORTS:** Applicable across all

TAGS: AI (Artificial Intelligence), Grassroots /

Youth, OTT

We provide advanced cloud-based automatic TV production systems, coupled with cloud settopbox technology and metadata databases. Working with Cinfo, you can create TV events using only our robotized cameras and our artificial-intelligence-based tracking software. Our systems produce standard broadcast TV signal, multicamera signals, VOD libraries, personalized promo channels or OTT streaming for any video destination platform



### WHAT'S EXCITING

Cinfo were selected by the Microsoft Global Sports Innovation Center for their "Smart Stadium" program. In turn, Cinfo have had the opportunity to work with La Liga club Real Club Sociedad's stadium to further their digital transformation process using connected technology.

### **FANCODE**

### MULTI-SPORT AGGREGATOR PLATFORM

**HEAD OFFICE:** Mumbai, India **EMPOYEES: 11-50** 

ESTABLISHED: 2019 WEBSITE: fancode.com EMAIL: help@fancode.com

KEY CLIENTS: Indian Premier League, Eredivisie, FIBA Basketball World Cup, FIVB

Volleyball World Cup, NBA

**RELEVANT SPORTS:** Applicable across all

TAGS: AI (Artificial Intelligence), Fan Analytics

### SUMMARY

FanCode is a multi-sport aggregator platform for every sports fan, focusing on long-tail sports content and contextual commerce. Founded by sports industry veterans Yannick Colaco and Prasana Krishnan in March 2019, FanCode offers a personalized, curated sports experience across live streaming, news, live match scores, in-depth game analysis and fantasy sports statistics & tips.



### WHAT'S EXCITING

From the house of Sporta Technologies (the parent company of Dream11), FanCode has already amassed over 1 crore+ app installs and won the ,'Best Sports Startup' award at FICCI India Sports Awards 2019.



### HOLOSCRIBE

IMMERSIVE EXPERIENCES - 360° AUGMENTED & VIRTUAL REALITY

**HEAD OFFICE:** London, United Kingdom

**EMPOYEES: 11-50** ESTABLISHED: 2016 WEBSITE: holoscribe.com EMAIL: hello@holoscribe.com

KEY CLIENTS: Tottenham Hotspur, EA Sports, BBC, Virgin Media, Amnesty International **RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content, Social Media, VR (Virtual Reality) / AR (Augmented Reality)

#### SUMMARY

Being able to connect with supporters in new ways on their mobiles through 360° interactive, augmented reality and virtual reality content. enables clubs and brands to make really memorable experiences.

Thanks to Holoscribe's 'off the shelf' technology, we offer a new approach to this new digital publishing option that brings down common barriers-to-entry: cost and lack of understanding, which can prevent brands from bringing their content to life.



### WHAT'S EXCITING

Holoscribe has recently worked alongside Spurs to produce a 360° interactive experience, enabling fans to interact in different ways with the club. We produced a private 360° tour of the grounds to allow fans to see parts that they never have got to see. The 360° journey includes video hotspots of mini training sessions from the players to help people progress with their football skills and get active.

aia360.tottenhamhotspur.com



### **JOYMO**

LIVE SPORTS STREAMING PLATFORM

**HEAD OFFICE:** Oslo, Norway **EMPOYEES:** 11-50 **ESTABLISHED:** 2016

WEBSITE: joymo.tv EMAIL: info@joymo.tv

KEY CLIENTS: Larvikturn, Frigg Oslo FK,

Oppsal Idrettsforening

**RELEVANT SPORTS:** Applicable across all

TAGS: AI (Artificial Intelligence), Fan Analytics,

Grassroots / Youth

### **SUMMARY**

Joymo is a streaming platform that makes it easy for any sport club, federation, league and event, anywhere in the world, to broadcast their valuable content to fans across the globe. Through innovation in technology, broadcasting, Al and automation, Joymo enables the creation of video content from any level in sport and delivers that content to fans, athletes, coaches, referees and scouts through an innovative and exciting platform.



### WHAT'S EXCITING

Joymo has 100 customers in Norway and collaborates with several associations, including a framework agreement with the Norwegian Sports Confederation as well as agreements with the Norwegian Bandy Association, the Norwegian Kickboxing Association and the Norwegian Swimming Association.



### **LIVE GRAPHIC SYSTEMS - LIGR**

AUTOMATED AND CLOUD LIVE SPORTS GRAPHICS

**HEAD OFFICE:** Sydney, Australia

**EMPOYEES:** 11-50 ESTABLISHED: 2016 WEBSITE: ligrsystems.com EMAIL: info@ligrsystems.com

KEY CLIENTS: Australian Football League, Belgium Basketball - Euromillions Basketball League, 7 FFA members including Football NSW & Football Victoria, Gravity Media,

Queensland Rugby League

**RELEVANT SPORTS:** Applicable across all

TAGS: Grassroots / Youth, Official Data Provider, Sponsorship Analytics

#### SUMMARY

LIGR is a new generation of live graphics and broadcast management software that offers TV-quality sports graphics but with no need for hardware, designers, skilled graphics operators, or developers. And because our solution is out-of-the box, we get you up and running in minutes.

Since 2016, we've offered live graphics solutions to sporting organisations and production companies. We've helped improve the quality of their live streams and monetize through powerful in-stream advertising.



### WHAT'S EXCITING

We recently raised a 7 figure seed investment round, with lead investor Alston Elliot Graphics, the leading broadcast graphics service company in the world, producing graphics for the Rugby World Cup, Cricket World Cup, Indian Premier League, English Premier League etc.

We are launching early access to our self serve SaaS platform in July 2020, with product and brand launch in May 2020.

### LIVELIKE

**CUSTOMER-DRIVEN NETWORKING** 

### **HEAD OFFICE:**

San Jose, United States **EMPOYEES:** 11-50 **ESTABLISHED:** 2015 WEBSITE: livelikevr.com EMAIL: contact@livelike.com

KEY CLIENTS: Top football teams from England

and France, French Open Tennis

**RELEVANT SPORTS:** Applicable across all

TAGS: News / Content, VR (Virtual Reality) /

AR (Augmented Reality)

#### SUMMARY

We're passionate about Virtual Reality (VR) and we've created an end to end white label solution that enables broadcasters and global sports organizations deliver an immersive, live sports viewing experience. What that means for the end user is that through our technologies and our partners content, they're able to leverage the immersive nature of VR to bring the thrill of the game-day stadium right to their living rooms.



### WHAT'S EXCITING

We've only been around since January of 2015 and we're already making waves. We've announced a successful partnership with Fox Sports and created "Fox Sports VR", which on its launch (Sept. 17, 2016) was one of the largest ever live broadcasts in VR. We've announced our Series A funding, which was lead by the likes of former NBA commissioner, David Stern.

### **MAESTRO**

WHITE-LABEL INTERACTIVE VIDEO PLATFORM

**HEAD OFFICE:** Los Angeles, United States

**EMPOYEES: 11-50 ESTABLISHED:** 2015 WEBSITE: maestro.io EMAIL: sales@maestro.io

KEY CLIENTS: Microsoft, Warner Media, Activision Blizzard, EA, Sky Sports **RELEVANT SPORTS:** Applicable across all

sports

TAGS: Fan Analytics, OTT

### SUMMARY

Maestro is the white-label interactive video platform for creators and content owners looking to build meaningful relationships with viewers. Our solution empowers anyone to go direct-to-consumer, enabling them to own, engage, and monetize their audience. Maestro contains a suite of engagement and monetization features. The platform's analytics help customers get to know their viewers, correlate engagement to key metrics, and understand how to maximize return on investment



### WHAT'S EXCITING

In April 2020, SeventySix Capital invested into Maestro, further supporting its move into Esports content. With customers such as Epic Games, Activision Blizzard and Fortnite already, SeventySix Capital Managing Partner Wayne Kimmel said "Maestro provides a unique, monetizable and customized viewer experience for traditional sports and Esports fans".



mixhale

### **MIXHALO**

REAL-TIME, HIGH-QUALITY AUDIO BROADCAST TECHNOLOGY

**HEAD OFFICE:** San Francisco, United States

**EMPOYEES: 11-50** ESTABLISHED: 2016 WEBSITE: mixhalo.com EMAIL: sales@mixhalo.com **KEY CLIENTS: STAPLES Center** 

**RELEVANT SPORTS:** Applicable across all

TAGS: VR (Virtual Reality) / AR (Augmented

Reality)

### WHAT'S EXCITING

When it comes to buying a ticket vs. watching the game on the couch, Mixhalo is fighting for the real thing. Mixhalo is the only technology that delivers color commentary in any language to an app on fans' phones at live sports events - with no delay and crystal-clear sound. Fans simply slip on earbuds and hit play to access innovative content such as the sonic action anywhere on the field and player-curated playlists. They can also view stats and participate in raffles and trivia.

### **MYCUJOO**

### DEMOCRATISING LIVE STREAMING TECHNOLOGY

**HEAD OFFICE:** Amsterdam, Netherlands

**EMPOYEES: 11-50** ESTABLISHED: 2014 WEBSITE: mycujoo.tv EMAIL: info@mycujoo.tv KEY CLIENTS: Brazilian Football

Confederation, Asian Football Confederation, Beach Soccer Worldwide, NISA, Oceania

Football Confederation

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content, OTT, Video Analytics

### **SUMMARY**

SUMMARY

Mixhalo is a real-time audio platform

delivering a high-quality, immersive

conferences, festivals, sporting events.

experience for live events including concerts.

Founded by Incubus guitarist Mike Einziger and

internationally-acclaimed violinist, Ann Marie

Simpson-Einziger, Mixhalo provides real-time

phones (via an app) and headphones. Mixhalo has been deployed by big names including

STAPLES CENTER, Aerosmith, Charlie Puth,

Incubus, Metallica, and TechCrunch.

audio delivered directly to attendees' own

We're the world's largest live football streaming platform, active in more than 150 countries, and streaming more than 50 matches a day to millions of fans each month. Our scalable, state of the art technology allows anyone to stream from a device as simple as a mobile phone, and it revolutionized the football broadcast landscape. In 2020, we launched MyCujoo Live Services, a unique, highly scalable SaaS live streaming solution built on the stack which powers MyCujoo.tv. MyCujoo Live Services provide the technology and tools to deliver a superior live streaming experience.

### WHAT'S EXCITING

Our existing partnership with the Brazilian Football Confederation was enhanced via our first ever major Esports tournament, the e-Brasileiro, with 844 games being live streamed via our in-house developed technology. We've continued to successfully support the sustainability of long-tail football through further monetization of content via our Bundles implementation, and in 2020 we launched MyCujoo Live Services, a unique, fully integrated SaaS live streaming solution.

### **SCEENIC**

### WHITE-LABEL CO-VIEWING SOFTWARE

**HEAD OFFICE:** London, United Kingdom

**EMPOYEES: 11-50** ESTABLISHED: 2014 WEBSITE: sceenic.co EMAIL: info@sceenic.co

KEY CLIENTS: BT Sport, NPO, Innpulsa

Colombia

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: AI (Artificial Intelligence), Fan Analytics

### SUMMARY

Sceenic Watch Together white-label software solution (SDKs & APIs) power the world's best co-viewing experiences for media companies, telcos, sport leagues and OTT vendors, on their own platforms. These include the Eurovision Song Contest (NPO / Avrotros), LaLiga, WeLoveGaming Esports and BT Sport among others.

### **SCEENIC**

### WHAT'S EXCITING

To coincide with the return of the Premier League, BT Sport tapped Sceenic's technology to launch a "Watch Together" feature for its customers.



### **SNAPSCREEN**

### MAKING TV AND STREAMING DISCOVERABLE AND SHAREABLE

**HEAD OFFICE:** Vienna, Austria

**EMPOYEES: 11-50** ESTABLISHED: 2015 WEBSITE: snapscreen.com EMAIL: office@snapscreen.com

KEY CLIENTS: Fox Sports Australia, Rugby

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: Computer Vision, Social Media

Snapscreen's technology makes watching TV and its content socially shareable - you simply open a browser or integrated app, snap the TV screen, that takes you to that exact moment in the broadcast/stream, you reverse forward or backward to the moment you like and share where you want, all in high definition and perfect audio.

Based in Vienna, Austria with offices in the USA and Australia, Snapscreen is a technology startup focused on the use of mobile devices and image recognition.



### WHAT'S EXCITING

Snapscreen has a B2B solution for broadcasters and streaming services that can be embedded in a native app or in a mobile website. Soon we'll launch our B2C product for the US market. Until then a whole new feature set will be implemented to personalize your snapped clips even more.

### SPORTSFAN MEDIA

### **ENGAGING SPORTS CONTENT AROUND DATA**

**HEAD OFFICE:** Ulft, Netherlands

**EMPOYEES: 11-50** ESTABLISHED: 2017 WEBSITE: footballcritic.com

**EMAIL:** paulmacdonald@sportsfanmedia.net KEY CLIENTS: Sporting Life, Zone7, John Viola

Agency, Voetbalzone, DAZN **RELEVANT SPORTS: Soccer** 

TAGS: News / Content

### **SUMMARY**

SFM operate an F1 brand known as GPFans which reaches over 3m people per month worldwide, and we have recently launched FootballCritic, our statistics and analysis platform. In the near future we have another exciting project set to launch, again in the data/ analysis field.

### WHAT'S EXCITING

FootballCritic has been live for around seven months and has been receiving superb feedback from coaches, analysts, agents, and fans alike, as we attempt to utilize football data to explain what is happening in the modern game.

### **SUPPONOR**

### SPORT VIRTUAL ADVERTISING TECHNOLOGY SOLUTIONS

**HEAD OFFICE:** London, United Kingdom

**EMPOYEES: 11-50** ESTABLISHED: 2001 WEBSITE: supponor.com EMAIL: info@supponor.com

KEY CLIENTS: LaLiga, Mediapro, Bundesliga,

NBA, NFL

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: AI (Artificial Intelligence), Sponsorship

Analytics, VR (Virtual Reality) / AR

(Augmented Reality)

Supponor pioneered and is the established market leader in modern virtual advertising technologies - having successfully completed nearly 500 live, commercially broadcast deployments across a wide variety of Tier 1 sporting events, including La Liga, the Bundesliga, FA, NHL and NBA. Supponor offers a broad range of premium, fully-integrated, broadcast-quality virtual advertising solutions, including both software and hardware-based technologies which transforms perimeter, onpitch and other signage using its commercially proven virtual advertising broadcast

### WHAT'S EXCITING

We will shortly support UHD HDR end-to-end, fully remote production and can now deliver fully downstream with dirty programme feeds offering increased quality operational efficiency and scalability. In the lab, intelligent processing of huge volumes of our unique virtual advertising event data is allowing us to complete previously unimaginable tasks and our next generation NSA3 solution immediately benefits from this work and sees 'beyond color'.





### **TEXEL**

### PERSONAL TV PLATFORM WITH CO-VIEWING/CHEERING

**HEAD OFFICE:** Herzelia, Israel

**EMPOYEES: 11-50** ESTABLISHED: 2016 WEBSITE: texel.live EMAIL: info@texel.live

KEY CLIENTS: Rakuten, DT, TVN

**RELEVANT SPORTS:** Applicable across all

TAGS: OTT, Social Media

The Texel platform was already trialed with Rakuten for the NBA games, and with T-Mobile PL and TVN for the Top Model both with the ability to control what you view, social and stat feeds, multiple camera angles, selection of alternate commentators or vloggers and watching together synchronized OTT feeds all at scale and making use of edge compute capabilities.



### WHAT'S EXCITING

We are now deploying the platform for the initial customers supporting millions of users and then the platform will be available to support any sporting event.

### THUUZ SPORTS

### AUTOMATED VIDEO HIGHLIGHT PLATFORM

**HEAD OFFICE:** Palo Alto, United States

**EMPOYEES:** 11-50 ESTABLISHED: 2010 WEBSITE: thuuz.com EMAIL: media@clearme.com

**KEY CLIENTS:** NFL, FOX Sports (US & Australia), NBC Sports, IBM, Deltatre **RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content

#### **SUMMARY**

Leveraging its automation platform, Thuuz enables Personalized Clips, Highlight Reels, and Condensed Games: any duration, any perspective, involving any set of plays, players, fantasy rosters, narratives, and themes. Thuuz also offers a Subjective Sports Metadata Service that enables its customers to deliver sports apps and guides that deliver a true personalized experience to their fans based on leveraging Thuuz excitement ratings, dynamic headlines, and real-time notifications. Thuuz customers reach well over 150 million sports fans worldwide.

### WHAT'S EXCITING

Thuuz recently did it's first integration with existing software, integrating with Adobe, giving editors access to Thuuz's highlights engine to build the most exciting highlights and clips in Premiere Pro. Through a simple export from Thuuz's SmartReels portal, the desired clips and highlights populate quickly and cleanly for the editor, making the system more efficient than ever before.

### VIEWLIFT

### DIGITAL CONTENT DISTRIBUTION PLATFORM

**HEAD OFFICE:** New York, United States

**EMPOYEES: 11-50** ESTABLISHED: 2008 WEBSITE: viewlift.com EMAIL: sales@viewlift.com

KEY CLIENTS: TEGNA, Monumental Sports Network, Lax Sports Network, Major League

Lacrosse, Arena Football League **RELEVANT SPORTS:** Applicable across all

TAGS: Fan Analytics, News / Content, OTT

### SUMMARY

ViewLift is a full-service digital content distribution platform empowering media companies, sports leagues and teams, education providers and others to monetize their content through native branded apps on major OTT devices including web, mobile, TV-connected devices, Smart TVs and gaming consoles. ViewLift's team brings years of domain experience as an operator (not just a technology provider) and strong industry relationships to offer a complete end-to-end solution for creating, launching and monetizing video applications across all major devices.

### WHAT'S EXCITING

Recently, created in partnership with ViewLift, mixed martial arts organization Professional Fighters League (PFL) launched a new direct-to-consumer streaming service, called the PFL MMA app. It will be made available on Apple TV, Roku, Fire, Android, and iOS devices.





### **VUULR**

### GLOBAL ONLINE CONTENT RIGHTS MARKETPLACE (B2B)

**HEAD OFFICE:** Singapore, Singapore

**EMPOYEES:** 11-50 ESTABLISHED: 2017 WEBSITE: vuulr.com EMAIL: info@vuulr.com

KEY CLIENTS: Disney, Turner, Legendary,

Astro, SBS, ViacomCBS,

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: Marketplace, OTT

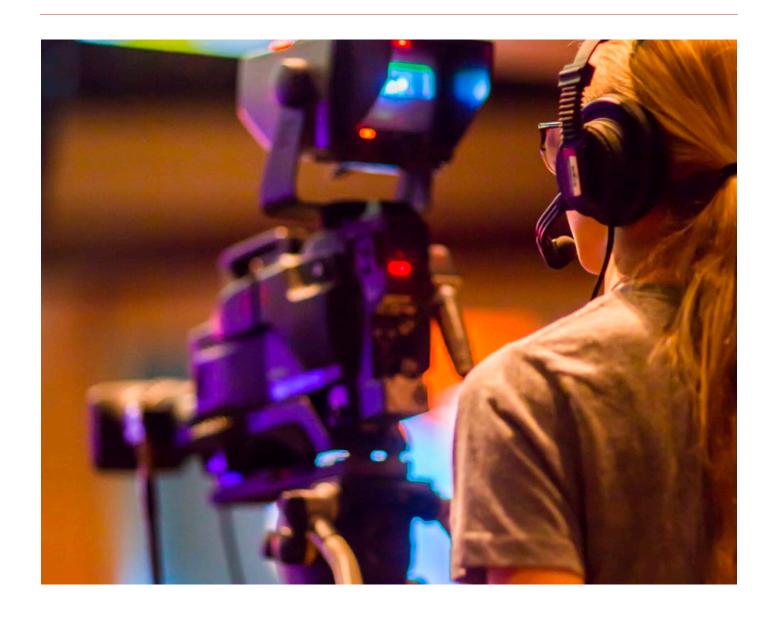
### **SUMMARY**

Vuulr is an online, B2B content rights marketplace enabling buyers and sellers of rights to reach each other, across the world ALL year round, faster, to realize more revenue and save costs.



### WHAT'S EXCITING

With travel bans and many trade shows unfortunately cancelling or having to 'go online' - forcing changes in working habits - digital marketplaces are fast becoming a critical alternative, allowing acquisition and sales to continue to flow in these unusual times. We now have over 4500 Sellers, 3500 Buyers and have processed over 7000 offers (& counting!), with huge growth this year, an average deal time that ranges from 8-10 days, and an increasing fee trend.



### **VBVR**

### RETHINK IMMERSIVE. LIVEVR SPORTS LIKE NEVER BEFORE

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**HEAD OFFICE:** San Jose, United States

**EMPOYEES:** 11-50 ESTABLISHED: 2016 WEBSITE: ybvr.com **EMAIL:** info@ybvr.com

KEY CLIENTS: Australian Open Tennis, Verizon,

BMW, Telstra, NBL

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: OTT, Ticketing, VR (Virtual Reality) / AR

(Augmented Reality)

#### SUMMARY

YBVR transforms 'watching' live sports into a live experience - immersive, interactive and personalized. YBVR's cloud-based patented technology enables Live Sports in VR like never before. YBVR's cutting edge technology enables the 'Fan In Control' paradigm shift in the sports media broadcasting industry. YBVR operates in the intersection Sports Media and 5G to drive large scale business opportunities in the live sports market. Customers such as Verizon, BMW, Rakuten, Telstra, Australian Open and Laver Cup are already trusting YBVR tech with global operations worldwide.

### WHAT'S EXCITING

Virtual Season Ticket as a tangible monetization strategy. In a reduced mobility scenario created by COVID-19, the live sports events industry is looking for innovative solutions to bring back fans into the sport from home. YBVR immersive technology allows to provide fan experiences closer to be at the stadium. YBVR is cooperating with Euroleague Basketball and some relevant basketball teams worldwide in a new concept, the virtual season ticket.



### **ZERO DENSITY**

### REAL-TIME VIRTUAL STUDIO AND AUGMENTED REALITY PRODUCTS

**HEAD OFFICE:** Izmir, Turkey **EMPOYEES: 11-50** ESTABLISHED: 2014 WEBSITE: zerodensity.tv EMAIL: sales@zerodensity.tv

KEY CLIENTS: BBC Sport, FOX Sports, Esportz Network, Star India, TF1, ESL, Ziggo Sport,

**RTBF** 

**RELEVANT SPORTS:** Applicable across all

TAGS: News / Content, VR (Virtual Reality) /

AR (Augmented Reality)



Zero Density offers the next level of virtual studio production with real-time visual effects. It provides Unreal Engine native platform, "Reality Engine", with advanced real-time compositing tools and its proprietary keying technology, Reality Keyer. Reality Engine is the most photo-realistic real-time 3D Virtual Studio and Augmented Reality platform in the industry.

World leaders of media industry rely on virtual production solutions developed by Zero Density.



### WHAT'S EXCITING

Zero Density launches its ground-breaking control, automation and workflow integration tool Reality HUB to the market. Bringing ecosystem connectivity from a single hub, Reality Hub provides a unified, HTML5 dynamic user interface for 'Reality', virtual studio and on-air graphics system powered by Unreal Engine. HUB redefines the control applications by upgrading them to a web-based technology that allows them to run on multiple platforms supporting web browsing.



🎇 analysispro

### **ANALYSISPRO**

IP CAMERA INSTALLATIONS AND PORTABLE FILMING MAST

**HEAD OFFICE:** Llanelli, United Kingdom

**EMPOYEES: 1-10** ESTABLISHED: 2011 WEBSITE: analysispro.com EMAIL: info@analysispro.com

KEY CLIENTS: English FA, Liverpool FC, Hartpury University, Cardiff Metropolitan

University

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: Computer Vision, Social Media, Video

**Analytics** 

#### WHAT'S EXCITING

Our AP Capture IP Camera solutions, including a variety of fixed multiple camera installation options and our professional and portable AP Capture Sports Mast. With our AP Capture software and bespoke configurations, we are streamlining filming workflows so that one person can capture and create high-quality video footage for video analysis, whilst also delivering a broadcast-quality live stream to platforms like YouTube and Facebook, with integrated scoreboards and sponsor image overlays.

### **CLICKNCLEAR**

### DELIVER OFFICIALLY LICENSED MUSIC TO PERFORMANCE SPORTS WORLDWIDE

**HEAD OFFICE:** London, United Kingdom

**EMPOYEES: 1-10** ESTABLISHED: 2016 WEBSITE: clicknclear.com EMAIL: music@clicknclear.com

KEY CLIENTS: International Cheer Union (and National Federations), World Dance Sport Federation, FloSports, Sony Music, Universal

Music Publishing

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: E-Commerce, Marketplace, Sports

Officiating Tech

#### SUMMARY

ClicknClear are an award winning music licensing and tech startup delivering officially licensed music to performance sports worldwide. We work directly with record labels and publishers to clear a unique bundle of rights needed by the sports ecosystem and make that music available on our marketplace. We then work with International Sports Federations to implement our license verification technology which provides a fully auditable trail of licensing for every competition.

AnalysisPro educates and enhances the

performance analysis workflows utilized at the

elite levels of competition, whilst empowering

coaches and analysts from the grassroots

levels up to replicate these effectively. We

listen to our users and the demands of the

industry to continuall evolve and provide

powerful video analysis solutions that are

affordable, truly bringing analysis for all.

and Share. Capture and live stream highquality video with our IP Cameras, analyse with

We have the tools you need to Shoot, Analyse,

software like Nacsport and then share online.



### WHAT'S EXCITING

ClicknClear have been developing a license verification system that enables performance sports teams to upload their music mixes ahead of competition, it recognizes the music being used and verifies that against the teams license agreement to deliver a fully auditable trail of licensing to the federations and event producers at all competitions in their sport. This also enables them to obtain additional rights needed such as live streaming, video on demand and broadcast.

### CONVERGENCE TECHNOLOGY

### EVENT TECHNOLOGY, BROADCAST AND MEDIA INTEGRATION

**HEAD OFFICE:** Melbourne, Australia

**EMPOYEES: 1-10** ESTABLISHED: 2014

WEBSITE: convergence.technology EMAIL: info@convergence.technology KEY CLIENTS: Channel 7 Australia, Melbourne Boomers, Australian Football League **RELEVANT SPORTS:** Applicable across all

sports TAGS: OTT

Convergence is a global event technology specialist operating in the fast-paced world of events. CTG has helped define, plan, design and deliver event technology and broadcast solutions for many of the world's leading sporting events and exhibitions. CTG also continues to develop sophisticated event technology and broadcast software solutions such as Aircast for real time event streaming and YourWay, an integrated indoor wayfinding initiative. CTG continues to work with some of the leading sports and broadcast organisations to provide customized innovative solutions



### WHAT'S EXCITING

CTG is presently engaged in some exciting software enhancements for Aircast, enabling one of the fastest video steaming services in the market, greater functionality and customization. This development will enable greater in-game perspectives and sports organizations greater access and penetration into game day markets. CTG has also partnered with Morris Goding Accessibility Consultants to develop indoor wayfinding to assist major events and venues.



### **EDISN.AI**

### AI POWERED FAN ENGAGEMENT AND MONETIZATION PLATFORM



**HEAD OFFICE:** Philadelphia, United States

**EMPOYEES: 1-10** ESTABLISHED: 2019 WEBSITE: edisn.ai EMAIL: ashok@edisn.ai

KEY CLIENTS: Comcast, NBC, EuroLeague,

Yokohama FC

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: AI (Artificial Intelligence), Computer

Vision, OTT

edisn.ai is an AI computer vision platform that delivers interactive and personalized content to viewers. Our patent-pending technology recognizes players on a live game in real-time using facial recognition, jersey numbers and colors and other tracking mechanisms. We do this without the need for additional cameras in stadiums or chips on players. This enables fans to click on their favorite players and access stats, social media and other content on demand. Content owners can leverage this platform to increase fan watch-time and also monetize.

#### WHAT'S EXCITING

- Won the Jury's Choice Award during a competition organized by EuroLeague Basketball in Barcelona

- Featured as one of the most exciting startups in North America by global consulting firm, SportechX

- One of 12 companies (from 160 that applied) as finalists of Sports Tech Tokyo, an initiative by Dentsu for sports tech startups to enter Japan

-Completed the Comcast - Techstars program in Philadelphia

### **GLORY LEAGUE**

### AUTOMATED VIDEO ENGAGEMENT PLATFORM FOR EVERYDAY SPORT

HEAD OFFICE: Auckland, New Zealand

**EMPOYEES: 1-10** ESTABLISHED: 2013

WEBSITE: gloryleague.basketball EMAIL: sales@gloryleague.com

KEY CLIENTS: Basketball Australia, Basketball New Zealand, Gold Coast Basketball, Geelong

**RELEVANT SPORTS:** Basketball TAGS: Grassroots / Youth, OTT

Glory Leagues 'virtual cameraman' technology provides automated game video, highlights, and stats for all levels of Basketball and other sports. The system includes a scoring app or integrates with partner technology. The platform automatically provides user accounts to participants and enables users to utilize content in meaningful ways e.g. for analysis, family engagement, social media etc. Glory League operates on 150+ courts in New Zealand, Australia, UK and USA.



### WHAT'S EXCITING

Development pipeline includes live streaming to third party platforms, referee and coach development portals and a platform and scoring app for Football.

Launched first Football customer in late 2019, including initial development of a Football scoring app and user portal. Will be exploring other sports opportunities.

### **HOOPFILES**

### BASETKBALL CONTENT COMMUNITY FOR THE WORLD

**HEAD OFFICE:** Austin, United States

**EMPOYEES:** 1-10 ESTABLISHED: 2019 WEBSITE: hoopfiles.com EMAIL: paul@hoopfiles.com **KEY CLIENTS:** Jerome Williams **RELEVANT SPORTS:** Basketball TAGS: AI (Artificial Intelligence), News /

Content, Social Media

A website/app for basketball fans to follow and react to trending content around their favorite players, teams, and topics.



### WHAT'S EXCITING

- Partnership with former NBA player and media personality, Jerome Williams
- Key partnerships evolving that could bring thousands of AAU, college and pro players onboard
- Partnership in discussion to produce high-profile "Web Shows"
- Interest by the Australian Basketball League to use our technology
- Potential integration with player/video recognition technology



### **LETS LIVE**

ACTION SPORTS SOCIAL-MARKETPLACE PLATFORM



**HEAD OFFICE:** Sydney, Australia

**EMPOYEES:** 1-10 ESTABLISHED: 2018 WEBSITE: letslivesport.com EMAIL: sean@letslive.com.au

KEY CLIENTS: Our most important 'client' -Passionate individuals wanting to experience

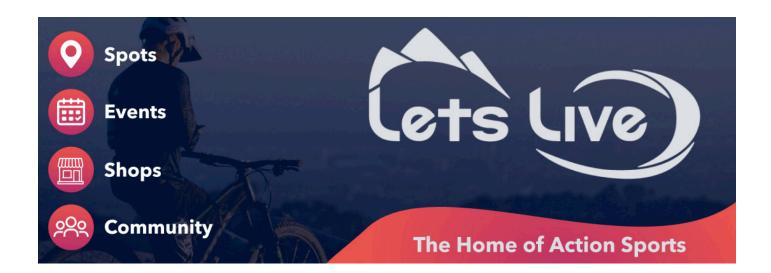
these sports!

**RELEVANT SPORTS:** Action Extreme TAGS: GPS Tracking, Marketplace, News /

Focused on the action and extreme sports industry, Lets Live is an online social network and marketplace application catering to over 55 different sporting disciplines. The Lets Live platform allows users of all ages, skill levels, locations and interests to find locations to do these sports, keep track of upcoming events, source the best local shops and connect with other like-minded enthusiasts. Lets Live aims to become the home of action sport, a \$250bn industry with 300 million participants and 1.92bn spectators growing at a mind-blowing 4.3% per year!

### WHAT'S EXCITING

Lets Live will soon be releasing the newly built, highly-anticipated version 2 of the Lets Live platform! With the inclusion of various new features allowing users to find, create and share unique content like never before. With the new platform also comes a new focus on supporting NSO's around the world, who are able to benefit from both the industry reach and data capabilities provided by Lets Live.



### LEVELUP SPORTS

EARN MONEY WHILE STREAMING YOUR SPORTS GAME

**HEAD OFFICE:** Aalborg, Denmark

**EMPOYEES:** 1-10 ESTABLISHED: 2018

WEBSITE: getlevelup.com/stream2 EMAIL: miklos@getlevelup.com

**KEY CLIENTS:** AaB **RELEVANT SPORTS: Soccer** 

TAGS: Grassroots / Youth, News / Content,

Social Media

### **SUMMARY**

We are developing a mobile application that allows sports to stream their games to Facebook in a better way. By adding the score, highlights, stream in better quality, and the ability to run fundraisers during the game.



### WHAT'S EXCITING

We came up with the concept for our app during the quarantine to help sports teams bring their games to their audience at home, and also, to help them raise money in a time of financial struggle.



### MY SPORT LIVE

LIVE STREAMING AND MEDIA SERVICES

HEAD OFFICE: Melbourne, Australia

**EMPOYEES: 1-10** ESTABLISHED: 2013 WEBSITE: mysportlive.tv EMAIL: info@mysportlive.tv

KEY CLIENTS: Australian Kart Championship, Australian Calisthenics Federation, Darts Australia, Arnold Sports Festival, Tennis Australia

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content, OTT, Social Media

#### SUMMARY

My Sport Live provides an outlet for sports organisations and event promoters to stream live events on the internet. Designed to target sporting events around Australia, it provides an end-to-end service to take a sporting event into the living rooms and pockets of sports customers' live.



#### WHAT'S EXCITING

We have been able to collaborate with a number of new clients around the world and been able to do a lot in the way of remote connective streaming on the back of the Covid-19 situation. Continuing to grow despite the drop off in sporting activities.

### **NEO 360**

### TOUCHSCREEN VIDEO CONTROL TECHNOLOGIES

**HEAD OFFICE:** Los Angeles, United States

**EMPOYEES:** 1-10 ESTABLISHED: 2001 WEBSITE: 360neo.com EMAIL: info@360neo.com

KEY CLIENTS: NFL, National Rugby League

(Australia)

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: AI (Artificial Intelligence), OTT, VR (Virtual Reality) / AR (Augmented Reality)

### **SUMMARY**

Three years ago, neo 360 developed a firstof-its-kind touchscreen video clip control technology which is now used by sports leagues such as the NFL and NRL. In August 2020, the company announced the first-ever patented live system through which users can view live streams while simultaneously controlling the highlights on the same screen with just a push or swipe on the screen.



### WHAT'S EXCITING

In the next version of our live API, highlights will be cut automatically, and when 5G is further developed, the user will be able to control the video directly on the live feed or long-form content.

### POLPO.AI

### AI POWERED LIVE CONTENT PROTECTION

**HEAD OFFICE:** Los Angeles, United States

**EMPOYEES:** 1-10 ESTABLISHED: 2019 WEBSITE: polpo.ai EMAIL: info@polpo.ai **KEY CLIENTS: N/A** 

**RELEVANT SPORTS:** Applicable across all

TAGS: AI (Artificial Intelligence), Business

Intelligence

### SIIMMARY

The content piracy problem is solvable with artificial intelligence that adapts to the arms race between pirates and content owners. Polpo offers faster discovery time, more results and lower cost compared to other market solutions. With the AI-powered antipiracy solution from Polpo your high value live content is fully protected.



### WHAT'S EXCITING

With 15 years' experience in the industry, we are experts in combating online content piracy. We are entering a time when the traditional methods used by the industry are no longer capable of appropriately protecting high value live content. We developed our proprietary AI technology to refine the existing process and minimize the human element to increase speed and accuracy while decreasing the overall cost. We train machines to detect, verify and enforce on pirate streams in seconds.



### REELY

CLIPS, HIGHLIGHTS, AND CONDENSED GAMES

**HEAD OFFICE:** Santa Monica, United States **EMPOYEES: 1-10** 

ESTABLISHED: 2016 WEBSITE: reely.ai EMAIL: info@reely.ai

KEY CLIENTS: Major League Lacrosse, St Louis Blues, University of Kansas, Nvidia **RELEVANT SPORTS:** Applicable across all

sports

TAGS: AI (Artificial Intelligence), Computer

Vision

#### SUMMARY

REELY uses computer vision and deep learning to automatically identify, clip, and distribute sports highlights. No human required! Our SaaS platform functions on a wide variety of field and gymnasium sports at every level, from little league to the major leagues. We help sports organizations save time and money while producing content that their fans will

### WHAT'S EXCITING

REELY has reached an agreement with PlayVS to provide real-time video analysis, live highlights, and condensed matches for PlayVS Collegiate Summer Showdown Fortnite tournament. REELY will also sponsor the tournament providing premium access to the RocketReel.gg Esports platform to the top three finishing collegiate Fortnite teams.



### **SALSA SOUND**

AI-DRIVEN AUTOMATED AND ENHANCED AUDIO TOOLS

**HEAD OFFICE:** Manchester, United Kingdom

**EMPOYEES: 1-10 ESTABLISHED:** 2017 WEBSITE: salsasound.com **EMAIL:** info@salsasound.com KEY CLIENTS: Premier League clubs. international broadcasters

**RELEVANT SPORTS: Soccer** TAGS: AI (Artificial Intelligence), OTT SUMMARY

We are passionate about providing tools to enable sports content creators to produce high-quality audio experiences to better engage with fans. Whether it is a sports club/ federation looking to drive more fans to their digital platforms or a broadcaster looking to produce higher quality, more cost-efficient content, we provide the tools. Our automatic audio production tools are built upon a patented AI framework and enable more immersive, more engaging bespoke content to be produced at a fraction of the cost.



### WHAT'S EXCITING

Our AI-driven mixer automatically mixes and enhances the sound from pitch-side microphones so all of the important onfield sounds are picked up and present in the mix for a dynamic and engaging audio mix for broadcast content. We also work with Premier League clubs to bring a Fan Experience that helps unite their growing global fanbase by providing an immserive sound experience of being on the Front Row of the stadium.





Helping FIBA's National Federations deliver customized multilingual commentary for the 2020 FIBA Esports Open



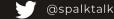
- 9 languages of commentary produced using Spalk's cloud based Virtual Commentary Studio.
- Every match published to Twitch, Facebook, Twitter and YouTube.
- Broadcasted in over 100 countries and generated 5 million social media views.



"Providing 9 languages of commentary for the FIBA Esports open via Spalk contributed significantly to the events' success and our reach with fans around the world. We found Spalk easy to work with and quick to help our National Federations get up and running on their Virtual Commentary Studio."

Nicolas Chapart, FIBA, Head of Digital







### **SPALK**

REMOTE PRODUCTION OF SPORTS COMMENTARY

**HEAD OFFICE:** Auckland, New Zealand

**EMPOYEES: 1-10 ESTABLISHED:** 2015 WEBSITE: spalk.tv EMAIL: banter@spalk.co

KEY CLIENTS: World Rugby, FIBA, NBA G

League, Formula E, Six Nations

**RELEVANT SPORTS:** Applicable across all

sports

TAGS: News / Content, OTT, Social Media

### SUMMARY

Spalk's Virtual Commentary Studio allows sports commentators to call games live from their laptops at home instead of needing to be at a studio. This software gets used by content owners around the world like World Rugby, FIBA, and ITTF to either reduce production costs or to cost-effectively produce multiple commentary options for their live events and customize content for fans. In addition to our software, we also have a portfolio of 500 professional sports commentators located in 50 countries who can be booked if as specific style or language is needed.



### WHAT'S EXCITING

Our new linear product which not only allows us to publish the game feed with perfectly synchronized audio back to any OTT platform but also to linear (TV). We are looking at more Esports events like Formula E where we are producing the Spanish commentary for their Race At Home series. Before COVID, we were covering for the World Rugby 7s and produced the matches in Japanese, Mandarin, German, Italian, French, and Spanish.

### **SPORTCOMPASS**

SWISS ARMY KNIFE FOR SPORTS BAR MANAGERS

**HEAD OFFICE:** Copenhagen, Denmark

**EMPOYEES:** 1-10 ESTABLISHED: 2018 WEBSITE: sportcompass.dk EMAIL: ssu@sportcompass.dk

KEY CLIENTS: The Dubliner (Copenhagen, Denmark), The Shamrock Inn (Copenhagen, Denmark), Pub og Sport (Copenhagen, Denmark), The Local (Minneapolis, MN, USA) **RELEVANT SPORTS:** Applicable across all

sports

TAGS: AI (Artificial Intelligence), Business Intelligence, Social Media

### SUMMARY

Sport Compass provides a SaaS product designed to be a bar manager's best friend. Our easy-to-use platform allows sports bars to effortlessly find upcoming matches, organize and optimize viewing schedules, and alleviate the stresses of social media and online marketing tasks. Coupled with providing metrics for data-driven insights to help spur customer growth and retention, this is the Swiss Army knife for sports bar managers.



### WHAT'S EXCITING

Pre-Covid, we had several users in Copenhagen, Malmo and Minneapolis. The slowdown during the pandemic allowed us to optimize the sales strategy, improve the product, and define the brand identity. In the first 2 months of the sports bar industry re-opening, we've reached a 150% increase in new user acquisition in Copenhagen. Having a strong foothold in the capital, we are now looking into covering 40% of independently owned bars in Denmark by the end of 2020.

### SPOTFAV TECHNOLOGIES

LIVE CAMERAS AND WEATHER DATA ON WATERSPORTS SPOTS

**HEAD OFFICE:** Tarifa, Spain **EMPOYEES:** 1-10 ESTABLISHED: 2012 WEBSITE: spotfav.com **EMAIL:** info@spotfav.com **KEY CLIENTS:** Wet Watersports **RELEVANT SPORTS: Sailing** TAGS: News / Content

Spotfay offers live video streaming at the best watersports spots in Spain, Morocco and Germany, as well as real-time weather data.



### WHAT'S EXCITING

We are developing a stunning new mobile app to offer a better user experience, introducing weather forecast and more amazing features.

In addition, we are expanding our camera network along Spanish coastline and Southern Europe very soon!



