

2022 BEST INNOVATIONS

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INNOVATIONS OF THE YEAR 2022

The sports industry never stops moving and growing. As we all know, and we have seen again with the latest FIFA World Cup, sport has this fantastic ability to unite and make an impact on people's life. Nevertheless, it is everyday more complex for sports organizations, sponsors, media and other stakeholders to drive new incomes, to increase fan engagement..., and stakeholders are always looking for solutions to optimize results and get a competitive advantage.

In this document, we share some of the many solutions that were very interesting this 2022 year.

Check them out!

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A REVOLUTIONARY FIFA WORLD CUP BALL AL RIHLA

Al Rihla was the first World Cup Official Match Ball to feature this **innovation, providing precise ball data, which was made available to Video Match Officials in real-time combined with player position data and artificial intelligence**; the innovative connected ball technology collaborated with FIFA's semi-automated offside technology, offering valuable tools to the Video Assistant Referees helping them make their decisions.

What are the main features of this connected ball technology? The match ball has the new Adidas Suspension System in the centre of the ball hosts and stabilises a 500Hz inertial measurement unit (IMU) motion sensor, which provides unprecedented insight into every element of the movement of the ball while making this technology unnoticeable for players and not affecting its performance whatsoever. The sensor is powered by a rechargeable battery, which can be charged by induction.





FIFA

KINEXON

Adidas has developed this new technology in close collaboration with FIFA and KINEXON. This enabled the Video Match Officials to review live data for the first time by automatically providing very accurate information, 500 times per second, on when a player has touched the ball, allowing accurate detection of the kick point.

Dr Maximilian Schmidt, Global Sports Lead at **KINEXON**, stated, *“As FIFA Preferred Provider for Live Player and Ball Tracking, our goal with Adidas is to use state-of-the-art technology to improve the experience for everyone involved without changing the game of football. We are confident that with accurate live ball data, the connected ball technology will enable a new age of football analytics and fan experience.”*

Johannes Holzmüller, Director of Football Technology & Innovation at **FIFA**, said, *“This technology is the culmination of three years of dedicated research and testing by FIFA and our partner Adidas to provide the best possible experience for the referees, teams, players and fans who will be heading to Qatar later this year.”*



FIFA+ STADIUM EXPERIENCE

For those in Qatar, the ground-breaking FIFA+ Stadium Experience revolutionised how fans enjoy the games.

It was available on **the app for fans** who attended the matches in the stadium; the function allows FIFA+ users to experience the action like never before - with a live augmented reality overlay of stats, heatmaps, insights, different camera angles, VAR replays as on TV, and much more. The all-new viewing experience was designed to complement and enhance those actions on the ground.

Johannes Holzmüller, FIFA, Director of Football Technology & Innovation, stated: *“The FIFA World Cup 2022 in Qatar is the first competition where fans at the stadium can see via the FIFA+ App what the referee is checking during an on-field review. The same live footage what TV viewers can watch at home”.*



STADIUMS IN QATAR

Seven of the eight stadiums for the 2022 World Cup feature an **Advanced Cooling Tech - a revolutionary technology that will keep the atmosphere inside the stadium cooled**. There is an energy centre near the stadium, from where chilled water is brought in a pipeline to the venue. Once it arrives, cold air is pushed onto the field of play and spectator seating areas. Sensors around the stadium will keep the temperature constant and adjust air flows for seats in the shade or sun.

Besides, Al Thumama Stadium had SunPave, an **Innovative Solar Panel Technology**. The stadium witnessed innovative solar panel technology (SunPave) installed in the stadium's surrounding area to serve the fans.

Fans who attended the tournament matches at Al Thumama Stadium could **charge their mobile devices through modern charging sockets** powered by solar energy, resulting from the use of SunPave panels in the vicinity of the stadium.



BEIJING 2022, ALL THE OPERATIONS AND ORGANISATION WERE THROUGH THE CLOUD

The Beijing 2022 edition was the first Olympic Games to replace traditional Information Technology (IT) with an organisation and operation of the games through the cloud. **Everything that covers part of the logistics and information of the Games was processed with cloud computing technology in Ali Cloud, a tool developed by Alibaba**, a partner since 2017 of the International Olympic Committee.

The Olympic Broadcasting Services (OBS) used the Cloud system, and broadcasters think the cloud used at Beijing 2022 can transform sports coverage in the future, driving more efficient, flexible and creative broadcasts. Several broadcasting chiefs have described new broadcasting technology used at the Winter Olympics as "**one of the most profound technological changes**" to coverage of the Games.



For instance, this technology **could change coverage decisions for broadcasting companies**; as Alibaba Cloud intelligence international business manager **Selina Yuan** mentioned, *"Transmitting live content through the cloud is a beneficial resource for broadcasters who cannot attend the Olympic Winter Games in person or afford the heavy upfront investment of on-premise infrastructure; We hope that cloud technologies will not only reduce the cost associated with broadcasting but also bolster the coverage"*.

Following this idea, **Yiannis Exarchos**, **OBS** chief executive, claimed: *"OBS Cloud is one of the most profound technological changes to our operation: it not only offers broadcasters unprecedented efficiency but also enables endless opportunities for innovation and to seamlessly deliver the excitement of the Olympic Games to the widest possible audience."*



THE REDEEM TEAM, THE FIRST DOCUMENTARY BETWEEN IOC AND NETFLIX

'The Redeem Team' was the first collaborative feature documentary between the International Olympic Committee (IOC) and Netflix.

'The Redeem Team' is a new film documenting the story of the USA men's basketball team who went to the Beijing 2008 Olympic Games, bidding to restore their nation's reputation.

Executive produced by two members of the Beijing squad who had tasted defeat at Athens 2004 - LeBron James and Dwyane Wade - it features never-seen-before footage from the Olympic archives as well as new behind-the-scenes material from NBA Entertainment.

The Olympic Channel was part of the production process, and **Mark Parkman**, former General Manager at Olympic Channel, told at SiS Masters: *"I want us to do these documentaries. It was the first time that we had distributed any of our content on a worldwide streaming platform that we had produced. We wanted to hit a wider audience, and we used it somewhat as a test case to see how the content would do and if there would be a market outside of our own platforms for that. Now I think it's an opportunity to build that Olympic brand"*.



MINNESOTA TWINS AND AROUND LAUNCHED AN AUGMENTED REALITY APP FOR FANS

This past fall, **ARound** and the Minnesota Twins introduced the next generation of live sports entertainment and fan engagement through stadium-wide shared AR experiences that bring audiences together and into the action like never before. Using just a phone's camera, fans around a stadium can all see the same 3D effects and participate in the same shared experiences allowing for new forms of interactive entertainment and sponsorship integration.

The platform allows attendees to play games, see the same real-time 3D effects, unlock unique content tied to what's happening on the field and play virtual games together on matchday at Target Field. Using the ARound app, fans point their smartphone at the field to open up several multi-user AR games such as Batter Up, Blockbuster, and Fishin' Frenzy – all designed to be played by interfacing with the physical ballpark and fellow fans in real-time.



Fans can see and interact with real-time content led by action on the field, such as after home runs, mascot races, or when the Twins take the field.



Chris Iles, the **Twins'** senior director of brand experience & innovation, declared to SiS: *"We're thrilled to have partnered with ARound to introduce the world to shared augmented reality," said Chris Iles, Senior Director of Innovation and Growth for the Minnesota Twins. "Not only did it have a significant impact on our youngest fans, the implications of this technology in a Web 3 world are immense. We look forward to further developing these next-level fan experiences aimed at future fans with our friends at ARound and with our partners at Major League Baseball. This platform is tailor-made for sponsorship activation, and we look forward to incorporating a forward-thinking partner in the future."*

Josh Beatty, founder and CEO of ARound, told SiS: *"The ARound platform provides something new and exciting for everyone, but the most immediate impact has been with the young fans where we can couple entertainment with education, helping them follow along with the action, learn about baseball and interact with the players and team. All while increasing their engagement with the game, in hopes of turning them into lifelong fans."*

Rather than escaping reality in the metaverse, ARound's new app is designed to augment it by layering graphics, games, data and interaction onto a live experience in a physical space, starting with Target Field. **The team sees the potential not just for fan engagement but for sponsorships.**

ZONE7 SUPPORTED AN OUTSTANDING LIVERPOOL SEASON!

Liverpool had a fantastic season; they won two titles and fought for all the titles until the end. In season 2020-2021, the Merseyside club had **several key players' injuries that affected their performance and turned into a trophyless season.** Learning from that experience, for this season, they found a secret weapon to boost their results, helping Jürgen Klopp's squad reduce injury recovery time or avoid it.

Zone7, an artificial intelligence company based in Silicon Valley, helped Liverpool's performance with its cutting-edge computer algorithms that detect injury risk and recommend pre-emptive action. The magic behind Zone7's predictive capabilities lies in an AI algorithm that improves analysis of the vast amount of data collected on players by clubs. They use measurements relating to biometrics, strength, sleep and stress and data from games and training to help flag if a player is at risk of imminent injury. That information is then directly delivered via an app to a club's key decision-makers, from the manager to his sports science, medical and coaching staff.





Tal Brown, the chief executive and founder of Zone7, stated: *"Football has become very data rich, and if you can extract deep value from the data, then you can have a competitive advantage. This is already very well established in talent identification, and it is now starting to happen in measuring and trying to optimise player wellbeing and performance."*

Conall Murtagh, Liverpool's first-team fitness coach, declared: *"Zone7 has been a helpful resource over the last nine months, supporting our internal load monitoring systems to help optimise the level of care that the Fitness and Medical Team provides to each player daily. The platform's innovative features, underpinned by artificial intelligence, have the ability to harness all forms of athlete performance data."*

Sports organisations are looking for alternatives that could help their performance, and the positive impact of Liverpool's decision to link up with Zone7 is evident according to this season's data. It will be interesting to analyse if this stays at the same levels next season or even improve.

TELSTRA AND AFL, NEW TECH TO TRANSFORM THE LIVE-GAME EXPERIENCE FOR VISUALLY IMPAIRED FANS!

The **Telstra 5G Touch and Track device** is a collaborative effort between Telstra, the AFL, Field of Vision and the many vision-impaired AFL fans who attend games every week. It's a way to make **the game even more accessible** for those who may have difficulty following the action on the field.

It is a wireless, portable tactile device about the size of a large tablet with an outline of an AFL field carved into it. **It has a magnetic ring sitting on top of the device that moves in sync with how the actual footy is moving around the field at a game.** As key moments like goals are scored, the device provides different **vibration responses for a haptic feedback experience.**

According to Telstra, over 400,000 people in Australia are either blind or have low vision, and a third of them support an AFL Club. In response, Telstra has developed the 5G Touch and Track prototype to create an enjoyable experience for fans with visual impairments.





How does it work? Using a magnet that moves inside the body of the device, as the ball is kicked and handballed around the pitch, a steel ring on the surface moves precisely to its location.

With 5G's near real-time responsiveness, the ball's movement through the device will match the crowd's roar in the background. The physical tablet device is 3D printed with the layout of the field debossed into it – the opposite of embossing, which creates the raised bumps of the Braille alphabet.

Telstra sports technology lead, **Chris Harrop**, said: *“We want vision impaired fans to have access to the technology they need to bring a live AFL match to life. It’s all about the fans and we believe that 5G Touch and Track has real potential to revolutionise the live sports experience at Marvel and beyond. We are currently piloting this technology at the stadium, and our ambition is to eventually offer the 5G Touch and Track to visually impaired fans at stadiums across the country.”*

Currently in the prototype stage, Telstra and Field of Vision will continue to develop the 5G Touch and Track device to produce a more refined product in the coming years. Working closely with supporters such as Vision Australia, AFL and AFL Blind, the user experience will be at the forefront of the prototyping process.

It’s just a prototype, but it’s a great example of using technology to innovate for those in need.

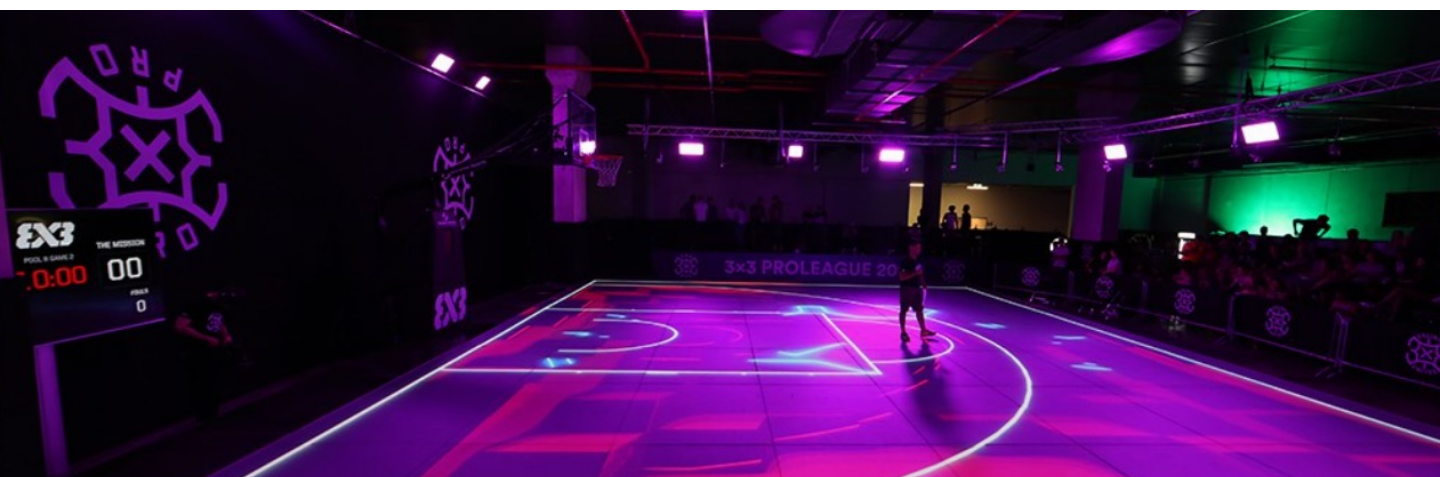
FIBA GLASS COURT

IMAGINE PLAYING ON A GLASS COURT!

Seeking innovations in the game, **FIBA approved LED glass courts in elite-level tournaments at FIBA's national team and club competitions, allowing innovations in broadcast and commercial, new fan experiences and sponsorships activations.**

Previously, Level 1 competitions, such as the FIBA Basketball World Cup, were mandated to utilise wooden floors for safety and safeguard the competition's credibility. Nonetheless, with the advancements in glass floor technology, the governing body now allows the system to meet the highest player safety and performance standard. This way, competition organisers will soon be able to select FIBA approved wooden or glass flooring for their following events.

Fiba currently accepts two glass floors manufactured by the German company ASB. **The ASB MultiSports and ASB LumiFlex.** The ASB MultiSports floor has LED marking lines under it, but the ASB LumiFlex floor has an entire video floor that allows for interactive training applications and increased show staging, as well as extra advertising choices.



The flooring also features **the ability to add player tracking to the video floor**, making it possible to display athletic achievements on the floor and data that improve the viewing experience both in the arena and on the broadcast.

ASB claims that its flooring has **the best level of shock absorption and flexibility to reduce strain on player joints and provides the rebound value that sports like basketball require**. The company has partnered with FIBA's Equipment & Venue Centre since 2017.

Bart Prinsen, Head of FIBA Equipment & Venue Centre, declared: *"We are excited to see innovations that offer a holistic experience for both fans and sponsors being accepted at more FIBA competitions. This change of rule certainly opens doors for more innovative products"*.

Christof Babinsky, ASB chief executive, stated: *"We see FIBA as the global organisation to move basketball forward. For this, we have a joint vision. We have developed a no-compromise sports floor with, firstly, the athlete in mind. The glass floor features ceramic dots for grip, that provide completely equal levels of control across the surface without causing skin burn when falling as well as higher elasticity at equal ball rebound. FIBA Level 1 is the most valuable approval in the world of indoor sports and enables our clients to hold high-end basketball tournaments, integrating unseen elements for audience entertainment and advertising"*.

It will be interesting to see how the capacity to show real-time statistics and graphics on the court will reduce the gap between the in-venue and at-home experience. **Besides, this will provide multi-sports arenas with the capacity to use the same surface for different events, enhancing economic operations.**

MORE THAN A NEW STADIUM, EUROPA PARK STADION GENERATES ITS OWN ENERGY!

German football club SC Freiburg has inaugurated a **2.38-MWp solar photovoltaic (PV) power system** on the roof of its stadium in **Freiburg**, which is set to come into operation in the second half of September, as planned.

BadenovaWaermeplus, a subsidiary of municipal utility company Badenova, began setting up more than 6,000 solar modules on the roof of the Europa Park Stadion in May after the end of the Bundesliga season and is now working on completing the installation.

The system takes up an area of 15,000 square metres on the roof of the 35,000-capacity stadium. It was officially inaugurated last weekend as Freiburg hosted friendly matches against Rayo Vallecano and Stade Rennais.

The solar plant, **one of the world's largest photovoltaic installations on a stadium so far**, is expected to generate about 2.3 million kWh of green power per year. This will be enough to meet the annual electricity needs of Europa Park Stadion. **The electricity corresponds to the yearly power consumption of 1,600 households.**





BadenovaWaermepus has invested about **EUR 2.3 million** in the project and signed a contract to operate the PV system for at least 20 years.

The Bundesliga club said that the system's technical grid still requires connecting, and it is hoped that the solar roof can begin operation in the second half of September.

One of the most interesting facts about Europa Park is its robust, sustainable energy scheme. Apart from the photovoltaic system, the stadium uses waste heat from the nearby industrial zone.

The stadium's parking lot is also home to several electric vehicles charging stations. At the same time, however, it also features a diesel-powered generator if there is an energy outing. The generator is aimed explicitly at powering television broadcasts.

Europa Park was officially opened in October 2021, when Freiburg played a friendly game with FC St Pauli.



CARLSBERG SHOWED ITS 'BEER BOTTLE OF THE FUTURE' AT DENMARK SAILGP!

The **'beer bottle of the future'**, a 100 percent bio-based and reusable Fiber Bottle, has been unveiled in Copenhagen by Carlsberg Denmark and is making its debut at the ROCKWOOL Denmark Sail Grand Prix, taking place August 19-20.

The 100% bio-based and reusable bottle will be available over the counter for the first time in Denmark at Champions for Change, SailGP's exclusive thought leadership program that brings leaders and sustainability advocates together to talk about their approach to the climate crisis and share valuable learnings.

With the event focussing on 'how Denmark is staying ahead in the Race for the Future', it was the perfect opportunity for Carlsberg to showcase the brewery's sustainable initiatives.



SailGP is the first climate-positive sports and entertainment property and uses its platform to champion a better world powered by nature. Carlsberg's Fiber Bottle is a natural extension of its sustainable profile.



The bottle, created in its innovative collaboration with Paper Bottle Community, consists of wood fibres. In contrast, the internal barrier consists of a plant-based mass that keeps the beer fresh and full of flavour.

Fiona Morgan, SailGP global director of purpose and impact, mentioned: *"With our ambition to be the world's most sustainable and purpose-driven global sports platform, we have always had a strong focus on collaborating with like-minded brands to find sustainable solutions, so we are really excited to work with Carlsberg and launch the 'bottle of the future' that, from our point of view, shows real innovation in packaging and design."*

Tenna Skov Thorsted, Sustainability Manager at Carlsberg Denmark, stated, *"We're now introducing the bottle to the ROCKWOOL Denmark Sail Grand Prix to collect feedback and continue working with our partners. The vision is that the Fiber Bottle should have a CO2 release that is 80% lower than a disposable glass bottle."*



In addition to Denmark, the Fiber Bottle has been tested in seven European markets over the summer, where feedback has also been collected. Carlsberg has the intention to commercialise the bottle.

WARNER BROS DISCOVERY SPORTS TAKES ITS AUDIENCES INTO THE METAVERSE!

Warner Bros Discovery Sports has partnered with Infinite Reality on a multi-year deal to create its **first metaverse experience** for one of its European sports properties. **The agreement is aimed at reaching and engaging new audiences using Web3 technologies.**

WBD Sports was formed by the merger of WarnerMedia and Discovery earlier this year, comprising Turner Sports in the US and Eurosport in Europe. The joint venture combines the assets of BT Sport and Eurosport into a single entity.





With this, WBDS and Infinite Reality will **explore new ways to use Web3 technology and create immersive experiences to engage fans and via which for fans to interact in the metaverse with athletes, retail outlets, and brands.**

The multi-year agreement with Warner Bros. Discovery Sports Events will see the two companies collaborate and launch new ways for sports communities, athletes and brands to interact with each other within unique virtual environments developed explicitly around upcoming Discovery Sports Events properties.

WBDS has said the partnership marks the first time it will have harnessed Web3 technology for its sports properties in Europe by bringing an international event experience to the metaverse. Another aim of WBDS is to build audiences for its events and provide new commercial opportunities for partners and advertisers.

We hope you have enjoyed these innovations.

Please share with us your news and solutions.
We might have an interesting conversation !

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TO DRIVE GROWTH AND POSITIVE IMPACT
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