A Digital Revolution in Sport

Rapid advances in technology are changing the way sports fans follow their favorite teams and athletes.

by **Mathew Hernon**

Will watching sports 100 years from now be something like this?

The global spread of COVID-19 has had a huge impact on all kinds of industries, and sport is no exception. Live events, which for many spectators can help to bring a sense of belonging and a feeling of escapism from reality, were restricted for much of 2020 with many fans having to watch them remotely.

Being away from the stadium, however, does not mean fans have to miss out on the excitement. Spectators can feel as if they are close to the action even if they are hundreds of miles away thanks to groundbreaking technology from some Tokyo-based companies.

The Nippon Telegraph and Telephone Corporation (NTT), for instance, started developing an advanced Ultra-realistic Communication Technology called Kirari! in 2015. Aiming to create an ultra-realistic visual experience for viewers that makes it feel like you are right there next to the players, the current results are astounding.

They achieved their goals by using unique technology including what is known as the Extraction of Objects with Arbitrary Backgrounds. This enables images of only the moving athletes to be drawn out at real time so the audience can have a much better perspective of their speed and power.

"The technology demonstrates a high degree of freedom, using AI that studies the subject to be extracted in advance," says the public relations manager of Kirari!. "Specified players can be extracted even when there are reflections from members of the audience. In addition to sports, it has been adopted for stage performances and the future plan is to use it as a two-way communication tool."

NTT has also developed "super high-definition video stitching," an ingenious technique that breaks through the barriers of an enclosed 16:9 rectangular frame to create ultra-wide videos. This has been achieved by shooting a very wide area of the stadium with multiple cameras and composing the segments in real time. It made its debut in America at the MLB postseason baseball game between the Houston Astros and the Tampa Bay Rays in 2019.

"For those watching at a remote live viewing venue it can feel like they are actually in the stadium," adds the PR manager. "On a conventional live feed, the video is edited and arranged based on what the creator wants, whereas with this technology you can look at the whole venue and focus on what you would like to see."

Of course, watching a sporting event, whether that be attending in person or observing remotely, is not always feasible. Luckily, fans can still get the latest information on the game at any time during work or on the go via the popular sports entertainment app Player!, launched six years ago by Ookami, Inc. founder Ogata Taiyo.

"Sport is a form of entertainment that gives supporters all over the world a chance to celebrate special moments together," he says. "At the same time though, I thought it was difficult for people to share that feeling of enthusiasm with others around the globe. With Player!, everyone on the planet can be right there at the match venue, no matter where they really might be. We are able to connect with our team and the other supporters."

You can get breaking news updates in real time on all kinds of games involving professional, amateur, university, and school teams. As well as pop-up notifications that appear before, during and after matches, subscribers can use the emotion function to cheer during the match with stamps, and use the comment function to allow interaction with the teams and other fans. Also there are features that allow fans to directly support their team in some matches.

"Many sports organizations, including college athletics clubs and sports teams of corporations, are using Player! as a communication tool to engage with supporters," Ogata continues. "We are continuing to improve by receiving feedback from various people such as users as well as team members. We are also planning to implement initiatives to promote community formation centered on sports."

It is an exciting time for the sports industry. Innovative companies based in Tokyo continue to develop technology that has made it easier for spectators to feel closer to the action than ever before, not only by enhancing the viewing experience, but also by strengthening the bond between fans and their teams. Supporters from around the globe can now enjoy the action from remote locations and communicate with each other in real time without actually meeting face-to-face. It is a new way of consuming sport that is extremely beneficial to everyone.