

# 360° Live Video PoC with Formula 1

By Tata Communications | Category: Implemented Innovations

During the Formula 1 Singapore Grand Prix in September 2017, Tata Communications and F1 conducted the world's first-ever test of truly live 360° video from the race track, to demonstrate how the F1 racing experience could be augmented for fans worldwide, by enabling them to experience the action in and around the circuit, almost as if they were there. To date, all 360° video experiments in sports have been hampered by a 30-second delay between the 360° video and live TV feeds, preventing adoption of the technology. This service innovation enabled streaming of 360° video feeds and TV broadcast in complete sync, opening new avenues for sports properties to create new age immersive fan experience.



## The Context



**TV BROADCAST NOT GROWING**  
Young audiences not on TV. Broadcast commercial dynamics prevent reach to nice audiences globally.



**RISE OF MOBILE**  
Over 1/3<sup>rd</sup> of global population with smartphones. Mobile experiences key to engage fans.



**GROWTH OF ONLINE STREAMING**  
More and more fans want to consume content on internet on their devices.



**INTEGRATION OF WATCHING AND PLAYING**  
E-Sports and Gaming are fusing with the sports watching experience. Fans now want interactivity.



**CONNECTED VENUE EXPERIENCE**  
IoT, Wi-Fi enabled sporting venues to enhance fan experience and new revenue.



## Overcoming Challenges

**Challenge #1**  
Stitching an end-to-end integrated solution, and delivering a live 360° video feed required a large set of components to be integrated as a single solution.

**Challenge #2**  
Customer buy-in to implement as the 360° video is a new technology, and required the team to work together with F1 to convince them of the readiness of the company to deliver a truly live experience.

## The Innovation

The readiness of the live 360° video feed service was demonstrated by conducting a Proof of Concept (PoC) test that demonstrated the ability to help build a viable real-life use case for VR in sports, by doing it for F1 one of the most technologically advanced sports in the world. With hundreds of millions of fans across the world, F1 offers a great opportunity to leverage VR and create an enhanced experience of the race for the remote fans, thereby bringing them closer to the sport. Multiple cameras were deployed during the Singapore F1 GP, covering a mix of race action and behind-the-scenes environment.

The solution involved capturing 360° video at three locations on the circuit using multiple 360° cameras and delivery of the 360° video feeds from the racetrack over Tata Communications global fibre network, after transcoding this for suitable transmission using OTT technologies. This involved use of the Tata Communications media ecosystem to carry out the stitching, and to enable presentation to an appropriate mobile device interface and Google Cardboard in 4k30P format. The feeds were distributed to F1, UK, and to IBC, Amsterdam, to showcase it live to the attendees. A bespoke app was developed to view the 360° feeds with the ability to integrate it with any OTT application.